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1975 Performance of Cotton Varieties



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by P.E. Hoskinson

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COVER: Harvesting cotton plots with a spindle picker.

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Data for 1975 with summaries of results of previous years. Station Hatch Project No. 403:

Cotton Production and Varietal Adaptation

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RECOMMENDED COTTON VARIETIES

Early — Auburn M, Hancock
Mid-Season to Early — Coker 310, Delcot 277[1], Stoneville 603
Mid-Season — Stoneville 213
Mid-Season to Late — Deltapine 16

[1]Especially recommended where Verticillium Wilt is prevalent.
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CHARACTERISTICS OF RECOMMENDED COTTON VARIETIES

AUBURN M: A determinate, very early maturing variety released by Missouri. Has performed especially well, comparatively, when planted after May 15. Yields well on bottom soils, but may cut-out too quickly on upland soils when moisture is scarce. Auburn M was a yield leader during 1974 and 1975. Has excellent Fusarium wilt resistance, but little Verticillium wilt tolerance. Auburn M's earliness enables it to set a good crop of bolls when wilt conditions are moderate. Lint percentage has ranged from 36 to 38.5. Fiber properties of mechanically-harvested lint for 3 years, 1972-1974, averaged: Length (1.10), strength (17.09), micronaire (3.88), and yarn tenacity (10.7).

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 possesses good Fusarium wilt resistance, but little or no Verticillium wilt tolerance. Coker 310 has yielded well in all Tennessee tests prior to 1975. Has the longest fiber of any currently recommended variety, but lacks fiber length uniformity. Fiber strength and micronaire are very satisfactory. Averaged fiber properties are: Length (1.18), strength (18.87), micronaire (3.88), and yarn tenacity (11.5).

DELCOT 277: Possesses higher Verticillium wilt tolerance than any variety currently grown in Tennessee. Has large bolls with average lint percentage of 37.5 to 40.0. Delcot has been a yield leader during the 3-year period, 1973 to 1975, but yields were erratic during the preceeding 3 years. Maturity has ranged from very early to mid-season. Some lodging of loaded plants may occur, but plants usually become erect as the bolls open. Lint of Delcot 277 is longer than most varieties and is stronger than other varieties recommended for Tennessee. Micronaire values are frequently lower (finer or immature fiber) than other varieties and don't always fall within the premium range. Averaged fiber properties are: Length (1.17), strength (19.43), micronaire (3.59), and yarn tenacity (12.1).

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 semi-smooth leaves, average seedling vigor, and are tolerant to Verticillium wilt. Tends to yield better on bottom soils than on upland soils. Excellent grades have been obtained from Deltapine 16 lint. Gin turnout is higher than its lint percentage suggests. All fiber properties are above average and their combination suggests a desirable fiber for wide end-usage. Fiber properties are: Length (1.15), strength (18.23), micronaire (4.03), and yarn tenacity (11.3).

HANCOCK: A very early, large-boll variety with lint percentage of 39 to 41. Good seedling vigor and gin turnout characterize this variety. Has been the Tennessee Variety Test yield leader for several years. Has yielded especially well on upland soils across Tennessee. Is susceptible to Verticillium and Fusarium wilts. May show rank growth in some bottom soils, but tends to grow and fruit longer than more determinate varieties on dry, upland soils. May be slightly shorter staple than many other varieties, but its fiber length is more uniform than that of many varieties. Averaged fiber properties are: Length (1.08), strength (17.13), micronaire (3.93), and yarn tenacity (10.8).

STONEVILLE 213: Very widely adapted in Tennessee. Yields well on both upland and bottom soils. Possesses 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. Weather conditions in 1975 inhibited boll opening of Stoneville 213 more than many varieties and often caused disappointing yields. It is highly responsive to available moisture and may be early under some conditions and late under others. Has average plant height. Fiber properties are: Length (1.11), strength (17.76), micronaire (4.21), and yarn tenacity (10.8).

STONEVILLE 603: Has yielded very well in all Tennessee cotton variety tests. 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 been below average. Will lodge under a heavy green boll load, but plants become erect as bolls open. Fiber length is equal to that of Stoneville 213, is slightly stronger, and has a better micronaire. Fiber properties are: Length (1.11), strength (18.13), micronaire (3.84), and yarn tenacity (11.0).

PERFORMANCE OF COTTON VARIETIES

The 1975 Cotton Variety Tests were conducted at the West Tennessee Experiment Station, Jackson; Ames Plantation, Grand Junction; Milan Field Station, Milan; and on private farms in Lake County and Lawrence County. All West Tennessee tests consisted of 24 entries, while 16 were planted in Lawrence County. The tests at Lake County, Milan, and Jackson were harvested twice. A one-row spindle picker was used to harvest the tests at Jackson and Ames Plantation. The other tests were harvested with two-row spindle pickers. Average lint yield and other characteristics are given in Tables 1 and 2. Averages for classer's data are shown in Table 3.

Table 1. Lint yield of 24 cotton varieties grown at four locations in 1975

Variety	Avg.	LOCATION			
		Lake[1] County	Milan[2]	Jackson[3]	Ames[4] Plantation
		Pounds per acre			
Stoneville 603	736	860	814	903	365
Deltapine 652	735	765	918	851	406
Delcot 277	714	822	808	785	440
Hancock	700	784	805	782	430
Coker 304	693	816	851	759	345
Auburn M	692	753	826	805	382
Deltapine 16	684	743	838	817	336
T59-538	664	739	801	746	370
Coker 310	662	775	745	775	353
Stoneville 213	661	841	739	760	303
Stoneville 256	660	788	751	813	289
Dixie King 3	660	828	629	837	346
Deltapine 25	647	741	808	695	342
McNair 612	640	575	770	806	407
Brycot 4	639	787	707	767	295
Coker 1104	631	643	790	798	293
New Rex	627	643	778	750	337
Pee Dee 9241	614	629	811	627	388
Vail 5	614	746	733	725	250
McNair 3033	611	619	656	879	288
Deltapine 61	591	723	730	611	299
Coker 201	579	602	658	748	309
Paymaster 909	439	533	593	428	200
Acala 1517-70	266	382	323	244	116
Average	631	714	745	737	329
Min LSR .05		108.3	139.8	133.2	54.0
Max LSR .05		134.6	173.7	165.5	67.1
CV%		13.3	16.4	15.8	14.4

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

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

[3]Dexter silt loam (2% to 5% slopes).

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

Near equal yields were obtained from Milan, Lake County, and Jackson. These tests were planted on April 28, April 29, and May 2, respectively. Ames Plantation and Lawrence County were planted

Table 2. Average lint yield and other characteristics of 24 cotton varieties grown at three locations[1] in 1975

Variety	LINT YIELD PER ACRE			Gin[2] turnout	Lint[3]	Bolls per lb.	Seed index
	Total	First Harvest					
	Lb.	Lb.	%	%	%	No.	
Stoneville 603	859	641	75	32.5	37.1	73	12.8
Deltapine 652	845	563	67	35.8	41.3	73	11.3
Coker 304	809	611	76	34.8	41.7	77	11.6
Delcot 277	805	620	77	33.4	40.1	64	12.8
Deltapine 16	799	516	65	33.9	39.2	70	12.4
Auburn M	795	652	82	32.3	38.0	66	13.7
Hancock	790	623	79	34.1	40.5	63	12.2
Stoneville 256	784	556	71	34.1	40.4	74	11.7
Stoneville 213	780	510	65	33.5	39.5	71	12.5
Coker 310	765	580	76	34.5	41.5	71	11.8
Dixie King 3	765	564	74	32.9	40.0	67	11.9
T59-538	762	591	78	33.1	38.0	67	12.3
Brycot 4	754	517	69	33.2	39.8	74	12.2
Deltapine 25	748	515	69	34.5	40.9	73	12.1
Coker 1104	744	551	74	33.5	39.1	63	13.2
Vail 5	735	531	72	32.0	38.2	73	12.7
New Rex	724	562	78	30.8	36.9	64	13.2
McNair 3033	718	555	77	34.4	41.6	89	11.2
McNair 612	717	550	77	34.7	43.0	80	11.5
Pee Dee 9241	689	469	68	34.4	40.4	73	13.0
Deltapine 61	688	442	64	33.5	38.6	71	12.5
Coker 201	669	487	73	33.8	41.9	71	11.8
Paymaster 909	518	365	71	31.6	36.8	59	15.2
Acala 1517-70	316	214	68	28.4	37.3	76	13.7
Average	732	533	73	33.3	39.6	70	12.5

[1]Lake County, Milan, and Jackson.

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

[3]Lint percent, bolls per pound, and seed index derived from hand-picked samples obtained before first harvest in Lake County only.

later and both tests yielded considerably less lint per acre.

Insects were adequately controlled in all tests. However, adverse weather conditions inhibited proper boll opening of all varieties in all tests. Yields at Ames Plantation were hurt most. The test at Ames

Table 3. Average classer's grade index[1], staple, and micronaire values for 24 cotton varieties mechanically harvested at four West Tennessee locations in 1975

Variety	FIRST HARVEST			SECOND HARVEST[2]		
	Grade index	Staple in 32's	Micronaire	Grade index	Staple in 32's	Micronaire
Stoneville 603	84	33.8	4.00	87	34.3	3.37
Deltapine 652	89	33.5	4.00	93	34.0	3.53
Delcot 277	88	33.8	3.65	86	34.0	3.37
Hancock	88	33.3	4.05	86	33.7	3.67
Coker 304	89	33.8	4.12	88	34.0	3.67
Auburn M	89	33.8	3.85	86	33.0	3.67
Deltapine 16	93	34.0	4.15	94	33.7	3.77
T59-538	83	34.3	3.55	84	33.3	3.13
Coker 310	84	33.8	4.05	86	34.0	3.70
Stoneville 213	88	33.8	4.35	88	34.0	3.97
Stoneville 256	91	33.5	4.38	88	33.7	3.53
Dixie King 3	85	33.5	4.00	88	34.0	3.67
Deltapine 25	91	34.0	4.30	88	34.3	3.63
McNair 612	91	34.0	4.30	89	33.7	3.87
Brycot 4	88	33.5	4.25	88	34.0	3.57
Coker 1104	89	33.8	4.20	90	34.0	3.60
New Rex	91	33.5	3.93	87	33.7	3.47
Pee Dee 9241	90	34.8	3.97	86	34.3	3.73
Vail 5	89	34.5	3.90	85	34.0	3.50
McNair 3033	89	34.3	4.05	88	34.0	3.67
Deltapine 61	91	33.5	4.30	89	33.7	3.83
Coker 201	90	33.8	4.20	86	34.0	3.93
Paymaster 909	87	33.5	4.15	86	32.7	3.90
Acala 1517-70	79	33.8	3.40	75	34.0	3.20
Average	88	33.8	4.05	87	33.8	3.62

[1]Middling White (31) is 100. Larger index numbers indicate higher grades.
[2]Lake County, Milan, and Jackson only.

was planted on May 6. Torrential rains retarded seedling emergence and early season growth. Plants became tall, rank, and the crop was late. Many unopened or partly-opened bolls were not harvested. Harvested yields were less than half those of recent years. Grades of most varieties were low at Ames Plantation, but staple length and micronaire were satisfactory. Delcot 277 and Hancock were the leading yielders in this test.

The Delta Regional Test at Lake County matured earlier than other locations. Grades and micronaire values from lint obtained at both harvests were very satisfactory. Four of the six leading yielders were Stoneville varieties.

Cotton in the Milan test emerged to an excellent stand and grew rapidly. Low temperatures during September and late season rainfall retarded maturity and increased boll rot. The test was defoliated on October 6. Fiber properties of lint obtained at first harvest were highly acceptable, but micronaire values of the second harvest were low.

Plants in the Jackson test were tall and rank. Boll rot decreased yields sharply. Observations indicated that some varieties were more susceptible to boll rot than others. Varietal yield differences were larger than at any other location. Staple lengths were short and micronaire values were lower than expected.

The Lawrence County test was planted on a Mountview silt loam (shallow phase). Torrential rainfall, immediately after planting on May 14, caused poor stands of late emerging cotton. However, cotton fruited well and the test was reasonably uniform. There was a considerable amount of "Knotty" cotton in this test. Highest yielding varieties had the fewest number of "Knotty" bolls. New Rex yielded more than other varieties planted in this test.

Stoneville 603 and Deltapine 652 were the leading yielders in the 1975 tests. Stoneville 603 was first at Jackson and Lake County, while Deltapine 652 was the yield leader at Milan and did well at every location except at Lake County. Early maturing varieties performed better at Ames Plantation than at other locations. Deltapine 16, which yielded well at Jackson, Milan, and Lawrence County, appeared to open better and have less boll rot than most other varieties. Yields of the unadapted Acala 1517-70 were sharply cut by excessive boll rot and partially opened bolls that could not be machine-picked.

Five new varieties and/or experimentals were included in the 1975 tests for the first time. New Rex, Pee Dee 9241, and McNair 3033 yielded well at one or two locations, but were not consistent. Deltapine 61 is a semi-smoothleaf variety designed for spindle pickers or strippers. Paymaster 909 is a Texas High Plains stripper cotton. Neither of these varieties appear adapted to Tennessee.

Two 150-boll samples of each regional standard variety were taken at all four West Tennessee locations before first harvest. The hand-picked samples were ginned on a 10-saw laboratory gin. Lint percentage, seed index, and boll size were obtained from these samples. A subsample 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. Gin turnout from the modified gin was used to calculate lint yields and lint samples were used to determine grade, staple length, and micronaire values.

Classer's data are presented from first harvests. At the three locations where two harvests were made, the second picking had a slightly longer staple and lower micronaire values (0.3 to 0.7) than the first picking. However, higher grades were often attained at second harvest.

Fiber data are not available for 1975, because it takes several months to process samples in the laboratory. The 2.5% and 50% span length, micronaire fineness reading, fiber strength (T_1 and E_1), and yarn tenacity for 1974 are presented. The 2.5% span length and 50% span length were measured on a Digital Fibrograph; 2.5% span length approximates classer's length, while 50% span length indicates the modal length of a fiber in the measured bundle and is useful in determining length uniformity. The micronaire reading is a relative reading of fineness of the fiber. Fibers with micronaire values above 4.9 are penalized for being too coarse, while fibers with micronaire values less than 3.5 are penalized for being immature. 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. E_1 is the percentage elongation (stretch) at break of the center one-eighth inch of the fiber bundle measured for T_1 strength on the Stelometer. Yarn tenacity is the strength of 27-tex yarn. Higher yarn tenacity values indicate better spinning qualities at 27tx.

All yield data were analyzed statistically using Duncan's New Multiple Range Test of Significance for comparing varietal mean values at the 0.05 probability level. Min. LSR is the minimum least significant range and may be used for comparing two adjacent means when they are averaged in ascending or descending order of magnitude. Max. LSR 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 LSR values. The Coefficient of variation (C.V.%) 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 4 to 18.

Table 4. Lint yield and other characteristics of 24 cotton varieties grown in Lake County in 1975[1]

Variety	LINT YIELD/A.			CLASSER'S		
	Total	First harvest	Gin turnout	Grade	Staple in 32's	Micro-naire
	Lb.	Lb.	%			
Stoneville 603	860	613	31.5	LM	34	4.2
Stoneville 213	841	466	33.1	LM	34	4.9
Dixie King 3	828	592	32.7	LM	34	4.3
Delcot 277	822	622	33.2	LM+	34	4.0
Coker 304	816	593	33.6	LM	34	4.5
Stoneville 256	788	534	33.3	SLM	35	4.8
Brycot 4	787	530	32.6	LM+	34	4.8
Hancock	784	609	33.5	LM+	34	4.2
Coker 310	775	573	33.9	LM	34	4.7
Deltapine 652	765	474	36.1	LM+	33	4.4
Auburn M	753	654	31.5	LM	34	4.1
Vail 5	746	523	31.2	LM+	35	4.2
Deltapine 16	743	398	34.1	SLM	33	4.7
Deltapine 25	741	455	34.7	SLM	34	4.8
T59-538	739	543	32.3	LM+	35	3.8
Deltapine 61	723	373	33.9	SLM	33	4.5
New Rex	643	440	28.8	SLM	33	4.3
Coker 1104	643	411	32.2	LM	34	4.8
Pee Dee 9241	629	332	34.6	LM	35	4.4
McNair 3033	619	436	33.1	LM+	34	4.4
Coker 201	602	416	32.7	SLM Lt. Sp.	34	4.8
McNair 612	575	433	33.2	SLM	34	4.7
Paymaster 909	533	326	31.8	LM+	34	4.7
Acala 1517-70	382	240	29.3	LM Lt. Sp.	34	3.8
Average	714	483	32.8		34.0	4.5
Min LSR .05	108.3	85.6				
Max LSR .05	134.6	106.4				
CV%	13.3	15.5				

Planted April 29; harvested October 1 and October 24.

[1]Tiptonville silt loam (0% to 5% slopes).

Table 5. Lint yield and other characteristics of 24 cotton varieties grown at Milan in 1975[1]

Variety	LINT YIELD/A.			CLASSER'S		
	Total	First-harvest	Gin turnout	Grade	Staple in 32's	Micronaire
	Lb.	Lb.	%			
Deltapine 652	918	604	37.1	LM+	34	4.1
Coker 304	851	643	36.8	SLM	34	4.1
Deltapine 16	838	538	34.3	SLM	34	3.8
Auburn M	826	650	33.1	SLM	34	4.0
Stoneville 603	814	571	33.2	LM	34	4.0
Pee Dee 9241	811	597	35.8	LM+	35	3.8
Deltapine 25	808	572	35.6	SLM	34	4.1
Delcot 277	808	592	33.7	LM+	33	3.5
Hancock	805	607	34.7	LM+	33	4.1
T59-538	801	637	33.8	LM	34	3.4
Coker 1104	790	607	34.7	LM+	34	4.1
New Rex	778	630	31.7	SLM	34	3.9
McNair 612	770	594	35.5	LM+	34	4.3
Stoneville 256	751	520	34.0	LM+	33	4.4
Coker 310	745	535	35.1	LM+	34	3.8
Stoneville 213	739	469	34.0	LM+	34	4.1
Vail 5	733	522	33.2	LM+	35	3.8
Deltapine 61	730	489	34.6	SLM	34	4.2
Brycot 4	707	447	33.1	LM+	34	4.3
Coker 201	658	456	34.1	SLM	35	4.1
McNair 3033	656	499	35.3	LM+	35	4.1
Dixie King 3	629	415	32.3	LM+	33	3.9
Paymaster 909	593	440	33.1	LM+	33	4.2
Acala 1517-70	323	215	29.4	LM Lt. Sp.	35	3.1
Average	745	535	34.1		34.0	4.0
Min. LSR .05	139.8	151.4				
Max. LSR .05	173.7	188.2				
CV%	16.4	24.7				

Planted on April 28; harvested October 14 and November 12.

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

Table 6. Lint yield and other characteristics of 24 cotton varieties grown at Jackson in 1975[1]

Variety	LINT YIELD/A.			CLASSER'S		
	Total	First harvest	Gin turnout	Grade	Staple in 32's	Micro-naire
	Lb.	Lb.	%			
Stoneville 603	903	740	32.9	LM+	33	3.9
McNair 3033	879	731	34.6	SLM	34	3.9
Deltapine 652	851	611	34.3	LM+	33	3.5
Dixie King 3	837	685	33.7	LM	33	3.8
Deltapine 16	817	612	33.2	SLM	34	4.0
Stoneville 256	813	614	34.9	SLM	33	4.1
McNair 612	806	623	35.4	SLM	34	4.0
Auburn M	805	651	32.1	LM+	33	3.5
Coker 1104	798	634	33.7	SLM	33	4.0
Delcot 277	785	647	33.2	LM+	34	3.6
Hancock	782	654	34.0	LM	33	3.8
Coker 310	775	632	34.4	LM	33	3.8
Brycot 4	767	575	33.9	SLM Lt. Sp.	33	3.8
Stoneville 213	760	595	33.2	SLM Lt. Sp.	33	4.2
Coker 304	759	596	34.1	LM+	33	4.0
New Rex	750	615	31.9	SLM Lt. Sp.	33	3.7
Coker 201	748	588	34.7	SLM	33	3.7
T59-538	746	593	33.1	SGO	33	3.5
Vail 5	725	548	31.6	SLM Lt. Sp.	34	3.6
Deltapine 25	695	518	33.2	SLM Lt. Sp.	34	4.2
Pee Dee 9241	627	478	32.7	LM+	34	3.9
Deltapine 61	611	465	31.9	SLM Lt. Sp.	33	4.2
Paymaster 909	428	330	29.8	SLM Lt. Sp.	34	3.8
Acala 1517-70	244	186	26.6	LM Lt. Sp.	33	3.2
Average	738	580	33.1		33.3	3.8
Min. LSR .05	133.2	126.0				
Max. LSR .05	165.5	156.9				
CV%	15.8	19.0				

Planted on May 2; harvested on October 21 and November 13.

[1]Dexter silt loam (2% to 5% slopes).

Table 7. Lint yield and other characteristics of 24 cotton varieties grown at Ames Plantation in 1975[1]

Variety	Lint yield per acre	Gin turnout	CLASSER'S		
			Grade	Staple in 32's	Micro-naire
	Lb.	%			
Delcot 277	440	33.0	SGO+	34	3.5
Hancock	430	33.0	LM	33	4.1
McNair 612	407	35.1	LM	34	4.2
Deltapine 652	406	34.7	LM	34	4.0
Pee Dee 9241	388	33.0	LM	35	3.8
Auburn M	382	31.7	LM	34	3.8
T59-538	370	31.9	SGO+	35	3.5
Stoneville 603	365	30.4	SGO	34	3.9
Coker 310	353	32.8	SGO	34	3.9
Dixie King 3	346	31.7	SGO+	34	4.0
Coker 304	345	33.2	LM	34	3.9
Deltapine 25	342	32.1	LM	34	4.1
New Rex	337	28.7	LM	34	3.8
Deltapine 16	336	32.9	LM+	35	4.1
Coker 201	309	32.1	SGO+	33	4.2
Stoneville 213	303	31.1	SLM Lt. Sp.	34	4.2
Deltapine 61	299	32.6	LM	34	4.3
Brycot 4	295	30.5	SGO+	33	4.1
Coker 1104	293	30.8	LM	34	3.9
Stoneville 256	289	30.7	LM	33	4.2
McNair 3033	288	32.0	LM Lt. Sp.	34	3.8
Vail 5	250	28.5	LM	34	3.6
Paymaster 909	200	27.6	LM Lt. Sp.	33	3.9
Acala 1517-70	116	24.9	SGO	33	3.5
Average	329	31.6		33.9	3.9
Min. LSR .05	54.0				
Max. LSR .05	67.1				
CV%	14.4				

Planted May 6; harvested November 19.

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

Table 8. Lint yield and other characteristics of 16 cotton varieties grown at Lawrence County in 1975[1]

Variety	Lint yield per acre	Gin turnout	CLASSER'S Grade	CLASSER'S Staple in 32's	CLASSER'S Micronaire
	Lb.	%			
New Rex	585	33.5	LM+	34	3.9
Vail 5	510	36.5	LM	34	3.8
Deltapine 652	501	37.3	LM+	33	3.9
Deltapine 16	500	37.6	SLM	33	3.8
Auburn M	500	34.6	LM	34	3.8
Pee Dee 9223	499	37.8	LM	35	3.4
Stoneville 213	480	36.4	LM	34	4.6
Coker 304	465	38.0	LM	34	3.9
Coker 1104	464	36.5	LM+	34	3.9
Stoneville 603	453	34.6	LM+	33	3.5
Hancock	447	35.7	LM	34	4.1
Coker 310	446	37.0	LM	33	4.0
T59-538	411	36.5	SGO+	33	3.2
Delcot 277	409	35.6	LM Lt. Sp.	34	3.8
McNair 612	363	36.3	LM	34	4.0
Dixie King 3	332	34.2	LM	33	4.0
Average	460	36.1		33.7	3.9
Min. LSR .05	84.9				
Max. LSR .05	103.2				
CV%	16.0				

Planted May 14; harvested on November 24.

[1]Mountview silt loam, shallow phase (2% to 5% slopes).

Table 9. Lint yield and other characteristics of seven cotton varieties planted June 2 at Milan in 1975[1]

Variety	Lint yield per acre	Gin turnout	Grade	Staple in 32's	Micronaire
	Lb.	%			
T59-538	115	28.2	SGO	34	3.2
Stoneville 213	112	26.5	SGO	34	3.0
Deltapine 16	104	28.0	GO	34	3.1
Stoneville 603	95	26.0	SGO	34	3.1
Auburn M	94	25.6	GO	34	3.1
Hancock	84	26.3	GO+	34	3.2
Coker 310	81	27.2	SGO	33	3.4
Average	98	26.8		33.9	3.2
Min. LSR .05	N.S.				
CV%	48.4				

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

Table 10. Lint yield and other characteristics of seven cotton varieties planted June 2 at Milan in 1975[1]

Variety	Lint yield per acre	Gin turnout	Grade	Staple in 32's	Micronaire
	Lb.	%			
Auburn M	212	31.3	SLM	34	3.8
T59-538	161	28.8	SGO	34	3.1
Coker 310	158	32.5	LM+	34	3.7
Stoneville 603	144	29.2	LM	34	3.6
Hancock	144	30.9	LM	34	4.0
Stoneville 213	112	28.9	LM	34	3.9
Deltapine 16	102	30.4	SLM	34	4.2
Average	148	30.2		34.0	3.8
Min. LSR .05	N.S.				
CV%	33.1				

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

Table 11. Three-year average lint yields and other characteristics of 14 cotton varieties grown in the Tennessee Cotton Variety Tests[1]

Variety	Yield per Acre	First harvest	Lint	Bolls per Lb.	Seed index	Gin turnout
	Lb.	%	%	No.		%
Hancock	684	76	39.8	66	11.8	34.0
Auburn M	668	77	37.2	67	13.1	32.5
Delcot 277	655	71	38.5	66	12.2	33.5
Stoneville 603	651	70	37.2	74	11.9	32.6
Stoneville 213	639	67	38.4	74	11.7	33.5
Coker 310	621	69	39.8	74	11.3	34.4
Deltapine 652	615	64	39.9	75	11.0	35.0
Stoneville 256	613	68	39.0	74	11.3	33.6
Brycot 4	595	67	38.2	75	11.5	32.9
Dixie King 3	594	66	38.7	66	11.7	32.9
Deltapine 16	576	63	38.2	72	11.7	33.0
McNair 612	573	69	40.8	74	11.4	34.3
Deltapine 25	557	65	39.5	75	11.3	33.9
Coker 201	535	66	39.9	72	11.4	33.7

[1]Averages for 12 tests during the 3-year period, 1973-1975.

Table 12. Two-year average fiber data from first harvest of 14 cotton varieties mechanically harvested in the Tennessee Cotton Variety Tests[1]

Variety	Length			Strength		Micronaire	Yarn tenacity 27 tx
	.50 SL	2.5 SL	UI	T_1	E_1		
Hancock	.49	1.09	45	17.27	7.51	4.01	10.7
Auburn M	.49	1.10	45	17.33	8.12	3.91	10.6
Delcot 277	.52	1.17	44	19.25	9.31	3.61	11.9
Stoneville 603	.50	1.11	45	18.40	8.78	3.84	11.0
Stoneville 213	.50	1.12	44	17.91	7.89	4.15	10.9
Coker 310	.51	1.18	43	19.05	7.73	3.96	11.5
Deltapine 652	.50	1.13	44	18.11	8.34	4.08	11.3
Stoneville 256	.49	1.11	44	17.76	7.10	4.13	11.1
Brycot 4	.49	1.10	45	17.66	7.15	4.11	11.0
Dixie King 3	.49	1.10	45	18.15	7.64	3.98	11.5
Deltapine 16	.51	1.15	44	18.36	9.36	4.09	11.3
McNair 612	.51	1.13	45	18.42	7.33	4.28	11.3
Deltapine 25	.50	1.12	45	18.75	8.06	4.12	11.5
Coker 201	.50	1.12	45	18.17	7.55	4.16	11.2
Average	.499	1.122	44.5	18.19	7.99	4.03	11.2

[1]Averages for 12 tests during the 2-year period, 1973-1974.

Table 13. Average fiber data from first picking of 22 cotton varieties mechanically harvested at four locations in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Stoneville 213	.48	1.12	43	17.51	8.05	3.57	11.0
Auburn M	.48	1.10	43	16.83	8.60	3.50	10.5
Hancock	.48	1.09	44	17.05	7.94	3.68	10.8
Hy-Bee 200A	.50	1.14	43	17.59	8.92	3.56	11.3
Deltapine 45A	.50	1.11	45	18.02	9.05	3.49	11.2
Coker 201	.49	1.13	43	17.91	8.19	3.69	11.1
Deltapine 16	.50	1.16	43	18.28	9.77	3.54	11.4
Delcot 277	.51	1.17	44	18.64	9.61	3.27	11.8
Stoneville 603	.49	1.11	44	18.17	9.08	3.33	11.0
Coker 310	.49	1.16	42	18.72	8.09	3.50	11.6
Acala 1517-70	.52	1.18	44	22.14	7.14	3.48	13.4
McNair 511	.50	1.11	45	19.18	8.53	3.71	11.9
Deltapine 25	.48	1.12	43	18.57	8.48	3.46	11.6
Brycot 4	.47	1.10	42	17.34	7.55	3.44	10.8
Lockett 4789A	.47	1.09	43	17.45	8.46	3.44	10.9
Dixie King 3	.48	1.09	44	17.77	8.05	3.58	11.5
Deltapine 652	.48	1.12	42	17.74	8.78	3.41	11.4
Stoneville 256	.48	1.11	43	17.42	7.47	3.49	11.1
McNair 612	.49	1.12	44	18.12	7.98	3.78	11.5
Vail 5	.48	1.12	43	17.52	7.84	3.44	11.3
Coker 202	.48	1.13	43	17.58	7.77	3.60	10.9
Coker 1104	.50	1.16	43	18.53	7.28	3.60	11.7
Average	.487	1.126	43.3	18.13	8.28	3.52	11.46

Table 14. Fiber data from first harvest of 24 cotton varieties mechanically harvested at Lake County, Tennessee in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Stoneville 7A	.51	1.15	44	17.63	7.17	4.68	10.6
Stoneville 213	.50	1.12	44	19.11	7.29	4.76	11.0
Auburn M	.49	1.10	45	17.83	7.64	4.64	10.4
Hancock	.49	1.10	44	19.19	6.54	4.81	10.6
Hy-Bee 200A	.52	1.14	45	18.70	8.17	4.74	11.1
Deltapine 45A	.53	1.11	48	18.90	8.48	4.80	11.0
Coker 201	.51	1.14	45	18.58	6.92	5.11	10.9
Deltapine 16	.53	1.16	45	19.31	8.73	4.90	11.0
Delcot 277	.55	1.17	47	19.82	8.74	4.45	11.8
Stoneville 603	.52	1.14	45	18.96	8.44	4.40	11.0
Coker 310	.52	1.17	45	19.21	6.89	4.90	11.5
Acala 1517-70	.56	1.21	46	23.81	6.19	4.65	14.2
McNair 511	.51	1.10	47	19.04	7.15	5.24	11.5
Deltapine 25	.50	1.11	45	19.48	8.17	4.77	11.7
Brycot 4	.50	1.13	44	18.46	6.33	4.75	11.3
Lockett 4789A	.48	1.08	44	18.31	6.87	4.48	10.9
Dixie King 3	.50	1.08	46	18.62	6.98	4.93	11.2
Deltapine 652	.49	1.11	44	18.05	7.75	4.70	10.9
Stoneville 256	.51	1.13	45	18.48	6.20	4.75	11.2
McNair 612	.52	1.13	46	19.02	6.39	5.23	11.1
Coker 312	.53	1.20	44	19.81	6.60	5.01	11.4
Vail 5	.52	1.14	45	18.07	6.50	4.68	10.9
Coker 202	.50	1.12	45	18.61	6.51	5.15	10.6
Coker 1104	.52	1.16	45	19.17	6.23	5.11	11.5
Average	.51	1.13	45.1	19.01	7.20	4.82	11.20

Table 15. Fiber data for 23 cotton varieties mechanically harvested at Milan in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Stoneville 213	.47	1.11	42	16.08	8.40	2.76	10.7
Auburn M	.46	1.09	42	16.06	8.46	2.90	10.3
Hancock	.47	1.09	43	15.27	8.15	2.91	10.5
Hy-Bee 200A	.47	1.14	41	16.04	8.18	2.68	11.0
Deltapine 45A	.47	1.12	42	17.19	8.92	2.86	11.1
Coker 201	.46	1.12	41	16.83	8.32	2.87	10.7
Deltapine 16	.47	1.13	42	16.92	9.42	2.69	11.1
Delcot 277	.47	1.15	41	17.65	9.39	2.61	11.7
Stoneville 603	.46	1.09	42	17.09	8.84	2.74	10.8
Coker 310	.46	1.15	40	17.44	7.98	2.74	10.8
Acala 1517-70	.49	1.16	42	21.65	7.50	2.70	12.6
McNair 511	.48	1.10	43	19.32	8.88	2.79	11.8
Deltapine 25	.46	1.11	41	18.15	8.92	2.58	11.0
Brycot 4	.44	1.08	40	17.03	7.68	2.62	10.3
Lockett 4789A	.47	1.12	42	18.16	8.82	2.86	10.9
Dixie King 3	.47	1.09	43	17.41	8.08	2.62	11.2
Deltapine 652	.45	1.10	41	17.99	9.33	2.55	11.0
Stoneville 256	.47	1.11	42	17.28	7.90	2.69	11.1
McNair 612	.45	1.10	41	17.73	8.28	2.86	11.4
Coker 304	.46	1.17	39	19.20	8.33	2.64	11.3
Vail 5	.44	1.10	40	17.76	8.15	2.70	10.8
Coker 202	.46	1.13	41	17.74	7.87	2.71	10.8
Coker 1104	.46	1.15	40	17.68	7.22	2.69	11.3
Average	.462	1.116	41.4	17.55	8.39	2.73	11.02

Table 16. Fiber data for 23 cotton varieties mechanically harvested at Jackson in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Stoneville 213	.47	1.11	42	16.97	8.58	2.79	10.7
Auburn M	.48	1.11	43	16.48	9.51	2.86	10.7
Hancock	.49	1.10	44	16.86	8.81	3.16	10.9
Hy-Bee 200A	.50	1.15	43	17.80	9.93	3.00	11.6
Deltapine 45A	.49	1.12	44	18.10	9.21	2.84	11.3
Coker 201	.48	1.13	42	17.84	9.21	2.95	11.1
Deltapine 16	.51	1.18	43	18.76	10.85	3.00	11.8
Delcot 277	.50	1.16	43	18.46	10.09	2.66	11.9
Stoneville 603	.47	1.10	43	18.05	9.82	2.76	10.7
Coker 310	.50	1.18	43	18.76	9.18	2.84	11.7
Acala 1517-70	.49	1.16	42	21.02	8.04	2.84	12.6
McNair 511	.49	1.11	44	18.61	10.09	2.92	11.7
Deltapine 25	.48	1.12	43	17.82	8.61	2.89	11.8
Brycot 4	.46	1.10	42	16.75	8.45	2.61	10.5
Lockett 4789A	.47	1.09	43	16.50	9.65	2.79	10.4
Dixie King 3	.48	1.10	44	17.78	8.85	2.94	11.8
Deltapine 652	.47	1.14	41	17.62	9.31	2.74	11.7
Stoneville 256	.46	1.10	41	17.11	8.31	2.66	10.7
McNair 612	.49	1.11	44	17.29	9.19	3.00	11.3
Coker 304	.47	1.16	41	18.70	8.77	2.70	11.3
Vail 5	.48	1.13	42	17.07	9.35	2.69	11.8
Coker 202	.48	1.13	42	17.15	8.71	2.85	10.9
Coker 1104	.50	1.17	42	18.62	8.35	2.86	11.8
Average	.480	1.127	42.6	17.83	9.17	2.84	11.32

Table 17. Fiber data from first harvest of 23 cotton varieties mechanically harvested at Ames Plantation in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Stoneville 213	.50	1.13	44	17.89	7.93	3.95	11.6
Auburn M	.48	1.10	43	16.93	8.77	3.59	10.7
Hancock	.49	1.09	45	16.89	8.27	3.83	11.2
Hy-Bee 200A	.50	1.14	44	17.81	9.40	3.81	11.6
Deltapine 45A	.51	1.12	45	17.90	9.58	3.47	11.4
Coker 201	.50	1.13	44	18.37	8.31	3.83	11.8
Deltapine 16	.50	1.16	43	18.11	10.08	3.55	11.9
Delcot 277	.52	1.19	43	18.64	10.20	3.37	12.0
Stoneville 603	.50	1.12	44	18.59	9.22	3.43	11.3
Coker 310	.50	1.17	42	19.47	8.29	3.50	12.5
Acala 1517-70	.53	1.19	45	22.06	6.84	3.72	14.2
McNair 511	.52	1.12	46	19.75	7.99	3.89	12.6
Deltapine 25	.50	1.15	44	18.82	8.21	3.58	11.9
Brycot 4	.48	1.11	43	17.13	7.74	3.77	11.4
Lockett 4789A	.48	1.08	44	16.81	8.51	3.61	11.3
Dixie King 3	.49	1.08	45	17.26	8.30	3.84	12.0
Deltapine 652	.50	1.14	44	17.29	8.72	3.63	12.1
Stoneville 256	.48	1.12	43	16.80	7.47	3.86	11.6
McNair 612	.50	1.13	44	18.44	8.06	4.02	12.1
Coker 304	.50	1.20	41	18.89	8.09	3.36	12.6
Vail 5	.48	1.12	43	17.17	7.35	3.68	11.9
Coker 202	.49	1.13	43	16.81	7.97	3.70	11.3
Coker 1104	.52	1.17	44	18.66	7.30	3.74	12.2
Average	.496	1.132	43.8	18.11	8.37	3.68	11.86

Table 18. Fiber data for 16 cotton varieties mechanically harvested in Lawrence County in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Stoneville 213	.40	1.04	38	16.23	7.77	2.62	8.8
Auburn M	.43	1.05	40	16.14	8.88	2.84	9.6
Hancock	.43	1.04	41	16.41	8.38	2.81	10.0
Hy-Bee 200A	.42	1.08	39	17.40	9.44	2.69	10.1
Deltapine 16	.43	1.10	39	17.69	9.54	2.56	10.3
T59-538	.42	1.07	39	15.95	8.71	2.51	8.9
Delcot 277	.41	1.08	38	17.15	8.55	2.50	10.7
Stoneville 603	.40	1.03	39	18.19	8.70	2.53	9.7
Coker 310	.40	1.08	37	18.46	8.96	2.67	10.0
McNair 210	.45	1.09	41	18.15	8.58	2.89	10.3
Dixie King 3	.44	1.07	41	17.12	8.21	2.66	9.9
Deltapine 652	.41	1.11	37	18.27	8.45	2.49	9.9
Stoneville 256	.41	1.05	39	17.73	8.17	2.45	9.5
New Rex	.44	1.10	40	15.49	8.49	2.80	8.8
Coker 304	.43	1.13	38	17.93	8.31	2.61	9.4
Vail 5	.43	1.10	39	17.24	8.21	2.60	9.3
Average	.420	1.071	39.2	17.22	8.58	2.64	9.68

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 varieties were tested at 11 locations in 10 states. The commercial varieties included were one standard Southeastern variety (Coker 310), one standard Delta variety (Deltapine 16), 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. Lint yields and maturity were similar to those obtained in the adjacent variety test at Jackson. Two experimental strains yielded significantly more than other entries in the test. The four leading yielders were all early maturing, while the five poorest-yielding entries were later maturing than the test average. Lint obtained from the strains had longer staple at first harvest, but

shorter staple at second harvest than the adjacent variety test. Grades and micronaire values of the two tests were essentially equal.

Fiber data for 1975 are not available; however, data for 1974 are reported since many of the entries were the same as those in 1975. Data are presented in Tables 19 to 21.

Table 19. Lint yields and other characteristics of 17 cotton varieties and experimental strains grown in the Regional High Quality Strains Test at Jackson in 1975[1]

Variety	LINT YIELD PER ACRE			Gin turnout	Plant height
	Total	At 1st harvest	First harvest		
	Lb.	Lb.	%	%	In.
DES 06-020-24	948	756	80	34.3	53
McNair 3036	942	746	79	32.9	48
MO. 63-277 BBR	842	661	78	32.9	52
Coker 310	837	655	78	34.4	53
Stoneville 429	803	581	72	31.9	49
PD 9240	752	531	71	32.8	53
PD 0113	738	540	73	31.6	53
Deltapine 16	729	482	66	31.4	54
PD 0111	708	532	75	31.3	48
Brycot 350	699	492	70	30.3	55
PD 1227	690	490	71	33.1	53
PD 0251	669	519	78	34.9	55
Coker 420	641	462	72	32.3	53
Coker 8103	606	440	73	31.5	55
Stoneville 1299	585	418	72	29.8	54
Coker 71-511	557	380	68	29.4	54
Acala 1517-70	225	157	70	24.0	53
Average	704	520	74	32.1	52.6
Min. LSR .05	78.0	82.6			4.0
Max. LSR .05	95.2	100.8			4.8
CV%	9.6	13.8			6.5

Planted May 2.
Harvested October 21 and November 13.
[1]Dexter silt loam (2% to 5% slopes).

Table 20. Classer's grade, staple, and micronaire for 17 cotton varieties and experimental strains mechanically harvested in the Regional High Quality Strains Test at Jackson in 1975

	FIRST HARVEST			SECOND HARVEST		
Variety	Grade	Staple in 32's	Micro-naire	Grade	Staple in 32's	Micro-naire
DES 06-020-24	SLM Lt. Sp.	34	4.1	LM	33	3.6
McNair 3036	LM	34	4.0	LM	33	3.5
MO. 63-277BBR	SLM Lt. Sp.	34	3.5	LM Lt. Sp.	33	3.1
Coker 310	LM	34	3.5	LM Lt. Sp.	33	3.4
Stoneville 429	SLM Lt. Sp.	34	4.7	LM	33	3.9
PD 9240	LM+	35	3.8	LM	34	3.1
PD 0113	SLM Lt. Sp.	34	4.0	LM	34	3.6
Deltapine 16	SLM Lt. Sp.	34	3.8	SLM Lt. Sp.	33	3.1
PD 0111	LM+	34	4.0	LM Lt. Sp.	33	3.5
Brycot 350	SLM Lt. Sp.	33	3.9	LM Lt. Sp.	33	3.3
PD 1227	SLM Lt. Sp.	33	4.4	LM	34	3.8
PD 0251	SLM Lt. Sp.	34	4.2	LM Lt. Sp.	33	3.7
Coker 420	M Lt. Sp.	34	3.8	LM Lt. Sp.	33	3.4
Coker 8103	SLM Lt. Sp.	35	3.8	LM	34	3.4
Stoneville 1299	LM	34	3.7	LM Lt. Sp.	33	3.3
Coker 71-511	SLM Lt. Sp.	32	3.9	SLM Lt. Sp.	33	3.6
Acala 1417-70	SGO+	33	3.3	Below Grade Lt. Sp.	33	3.0
Average		33.8	3.9		33.2	3.4

Table 21. Fiber data for 21 cotton varieties and experimental strains mechanically harvested in the Regional High Quality Strains Test at Jackson in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Acala 1517-70	.50	1.16	43	21.93	7.49	2.92	13.7
Coker 310	.49	1.20	41	19.58	8.37	2.98	12.1
Deltapine 16	.50	1.15	43	18.68	9.79	3.10	11.9
Bayou 7769	.47	1.10	42	19.63	9.03	2,83	12.6
Brycot 350	.45	1.12	40	17.51	8.64	2.83	11.5
Coker 11067	.50	1.14	44	19.88	8.30	3.21	12.8
Coker 71500	.50	1.17	43	18.99	8.44	3.04	12.7
CP 0803	.53	1.17	45	19.94	7.84	3.19	12.6
Deltapine 6582	.51	1.12	45	20.89	8.74	2.91	12.8
McNair 71418	.50	1.15	44	18.25	8.39	3.05	12.5
McNair 2-420	.47	1.10	43	17.72	8.99	3.19	11.6
Mo. 63-277 BR	.49	1.17	42	18.42	9.12	2.84	12.3
La DASS 5175	.47	1.10	43	17.73	7.74	3.03	11.5
PD 0109	.54	1.21	45	21.02	8.56	3.32	13.4
PD 0111	.54	1.21	44	21.21	9.06	3.19	13.7
PD 0113	.48	1.14	42	20.62	7.89	2.89	12.9
PD 9223	.51	1.15	45	19.21	7.07	3.20	13.0
PD 9241	.50	1.16	43	19.54	8.40	2.91	12.9
Stoneville 429	.49	1.13	43	18.81	6.99	3.47	12.1
Stoneville 1082	.46	1.14	40	19.00	8.94	2.90	12.2
Stoneville 151	.47	1.13	42	19.38	8.30	2.96	11.0
Average	.492	1.138	43.2	19.43	8.39	3.05	12.43

ADVANCED STRAINS TEST

An Advanced Strains Test consisting of 14 experimental strains and two commercial checks was planted at Milan in 1975. Advanced strains from various breeding programs were included in the test. Numerous varieties that are currently available were included in the Advanced Strains Test before they were released. Strains that do not perform well in previous tests are discarded.

All entries yielded very well in this experiment, and seven strains yielded more than Hancock. A number of experimentals had special characteristics in addition to yield. Three nectariless experimentals were included and one (Stoneville 731N) was released as a commercial variety in late 1975.

PD 9223 has superior fiber qualities. Stoneville 733BBR is resistant to bacterial blight. Ga 3-332 has okra leaves and frego bracts, is nectariless, and has red stems and leaves. All of these characteristics have been associated with insect tolerance. Okra leaf also inhibits boll rot. A higher percentage of lint at first harvest was obtained from Ga 3-332 than from other entries in this test. An extremely low gin turnout and its tendency to lodge are two serious problems with Ga 3-332. Grade, staple, and micronaire were adequate at first harvest. Several entries had short staple length at second harvest.

Fiber data for 1974 are given, since 1975 fiber data are not available. Data are presented in Tables 22 to 24.

Table 22. Lint yield and other characteristics of 16 cotton varieties and experimental strains grown in the Advanced Strains Test at Milan in 1975[1]

Variety	LINT YIELD PER ACRE			Gin turnout
	Total	First harvest		
	Lb.	Lb.	%	%
Deltapine 67101-0184-12	1019	710	70	34.4
Coker 530	993	698	70	35.0
Stoneville 731N	990	688	69	34.6
PD 9223	990	722	73	36.1
DES 2134-056	967	700	72	33.4
Stoneville 733 BBR	964	686	71	34.5
Deltapine 652-1117	957	604	63	34.8
Hancock	956	723	76	32.7
Stoneville 504	949	612	65	34.5
Coker 8103	949	688	73	33.4
T73-1	935	664	71	33.4
DES 21326-04	929	666	72	32.5
Deltapine 70100N	891	601	67	34.0
Deltapine 16	884	551	62	33.8
GA3-846	880	670	76	32.9
GA3-332	826	688	83	28.9
Average	942	667	71	33.7
Min. LSR .05	93.1	81.1		
Max. LSR .05	113.2	98.5		
CV%	8.6	10.5		

Planted on April 28
Harvested on October 6 and November 12
[1]Memphis silt loam (2% to 5% slopes).

Table 23. Classer's grade, staple, and micronaire for 16 cotton varieties and experimental strains mechanically harvested in the Advanced Strains Test at Milan in 1975

Variety	FIRST HARVEST			SECOND HARVEST		
	Grade	Staple in 32's	Micronaire	Grade	Staple in 32's	Micronaire
Deltapine 67101-0184-12	SLM+	34	4.8	SLM	34	4.4
Coker 530	SLM	34	4.4	SLM	34	4.2
Stoneville 731 N	LM+	34	4.9	SLM	34	4.4
PD 9223	SLM	35	4.2	SLM	34	4.0
DES 2134-056	SLM	34	4.5	LM	33	4.1
Stoneville 733 BBR	SLM	34	4.4	SLM	34	4.2
Deltapine 652-1117	LM+	35	4.4	SLM	33	4.2
Hancock	LM+	34	4.2	LM	33	4.1
Stoneville 504	LM	34	4.8	LM+	33	4.1
Coker 8103	SGO	33	4.4	LM	33	4.2
T73-1	LM+	34	4.6	SLM	34	4.3
DES 21326-04	LM+	35	4.2	LM+	34	3.8
Deltapine 70100N	SLM+	34	4.3	SLM	34	4.1
Deltapine 16	SLM	35	4.6	SLM	32	4.3
Ga 3-846	SLM	34	4.0	SLM Lt. Sp.	31	4.1
Ga 3-332	LM	34	4.0	LM+	33	3.8
Average		34.2	4.4		33.3	4.1

Table 24. Fiber data from first harvest of 16 cotton varieties and experimental strains mechanically harvested in the Advanced Strains Test at Milan in 1974

Variety	Span length			Strength		Micronaire	Yarn tenacity 27 tex
	.50	2.5	UI	T_1	E_1		
Hancock	.49	1.08	45	16.55	8.40	3.54	11.1
T59-538	.49	1.16	42	16.80	8.56	3.08	11.4
McNair 210	.50	1.11	45	18.90	7.70	3.57	11.9
T73-1	.50	1.08	46	19.80	7.79	3.73	12.6
Deltapine 70100N	.50	1.15	43	18.21	11.11	3.29	11.9
Deltapine 6829	.50	1.07	47	18.43	9.23	3.64	12.7
Stoneville 504	.52	1.15	45	17.24	8.41	3.66	11.6
Stoneville 164	.48	1.09	44	17.67	9.81	3.37	11.6
Stoneville 731N	.49	1.11	44	16.30	8.48	3.69	11.2
Stoneville 633 BBR	.50	1.13	44	16.10	9.22	3.64	11.1
Coker 220	.53	1.19	44	17.85	9.12	3.29	12.3
Coker 111	.51	1.16	44	17.94	9.87	3.26	12.4
Coker 11067	.53	1.17	45	18.55	9.09	3.55	12.5
New Rex	.49	1.11	44	15.22	9.78	3.41	10.8
T70-1	.48	1.11	43	16.68	9.46	3.36	11.3
Deltapine 16	.48	1.13	43	16.98	12.07	3.34	11.7
Average	.497	1.122	44.3	17.45	9.26	3.46	11.72

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