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ANNUAL COTTON QUALITY SURVEY

Summary of Results of
Fiber and Processing Tests
from Selected Production Areas

CROP of

1964



Washington, D. C. March 1965

UNITED STATES DEPARTMENT OF AGRICULTURE
Consumer and Marketing Service

CONTENTS

	<u>Page</u>
Introduction.....	4
Sampling procedures.....	4
Laboratory procedures.....	5
Test results:	
Table 1 - Area summary.....	9
Table 2 - State summary.....	10
Table 3 - Grade and staple summary.....	14
Table 4 - Variety and state summary.....	18
Table 5 - Short staple results:	
Southwestern Area.....	22
Western Area.....	34
Table 6 - Medium staple results:	
Southeastern Area.....	36
South Central Area.....	46
Southwestern Area.....	66
Western Area.....	70
Table 7 - Long staple results:	
Southwestern Area.....	80
Western Area.....	80
Table 8 - Extra long staple results:	
Western Area.....	86
Table 9 - Simple correlation results for short staple samples...	88
Table 10 - Simple correlation results for medium staple samples..	90
Table 11 - Simple correlation results for long staple samples....	92

CONTENTS (Continued)

	<u>Page</u>
Table 12 - Multiple correlation results for classification and supplemental fiber measurements.....	94
Table 13 - Multiple correlation results for selected fiber measurements.....	96
Basis for interpretation:	
Classification.....	98
Fiber tests.....	99
Yarn processing tests.....	105
Table 14 - Spinning test procedures.....	108
Chemical finishing tests.....	114

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ANNUAL COTTON QUALITY SURVEY

Summary of Results of Fiber and Processing Tests from Selected Production Areas, Crop of 1964

INTRODUCTION

This is one of a series of annual reports containing information on fiber properties and spinning performance of cotton from all major commercial production areas of the United States. It consolidates and gives supplemental information on data published in biweekly reports from August 1964 through January 1965. These reports are entitled "Cotton Fiber and Processing Test Results, Crop of 1964" and are numbered CT (1964) 1 through 12.

The annual quality surveys are designed to facilitate planned production and orderly marketing of cotton. The data provide farmers and breeders with basic quality information of cottons produced under field conditions, and help cotton merchants and manufacturers locate sources of cotton having properties and spinning performance desired for specific end uses. The surveys also provide historical data for use in studying the relationships between various fiber property measurements and processing performance.

Some of the production areas represented in the 1964 survey have been included in the studies each year since 1946. This affords, in some instances, comparisons of test results over a 19-year period. Thus an indication of the variation in fiber and spinning qualities of cotton grown in the same areas for 19 successive years may be observed by making comparisons of the results presented in reports for previous years. However, direct comparisons should be made only for those lots tested under the same processing organization.

SAMPLING PROCEDURES

The procedures for selecting samples for the 1964 survey were designed to represent all major varieties in each crop reporting district and to provide additional selections in proportion to production. In most cases, each survey point or gin community selected for collection of samples represents approximately 30,000 to 100,000 bales of the specified variety in the general production area. Pure variety gins, however, were selected when available regardless of production.

Variety selections were based on the predominant varieties grown in each district as reported by the Cotton Division in "Cotton Varieties Planted, 1960-1964." Survey points with at least 70 percent of ginnings of one variety were designated as that variety and the percentage given, but those with less than 70 percent one variety were designated as mixed varieties. No attempt was made to maintain the purity of the variety

except by selection of representative gin points. This method is similar to the conditions faced by the cotton trade in merchandising cotton and provides a more adequate representation of the districts than the 100 percent one-variety methods employed in earlier years. The locations of the market areas selected for the 1964 survey are shown in the figure on page 6.

For the most part, the areas included in the study produce large enough quantities of cotton of the specified varieties to enable buyers to obtain lots of even-running grade and staple. Test lots were collected from each production area or survey point at intervals of once in three weeks during harvesting season to represent predominant grade and staple being classed at the time of collection. Obviously, the other qualities are available in lesser quantities in each area as a result of normal seasonal, soil, harvesting and other variations. Many of the production areas also produce cotton of varieties other than those included in the survey.

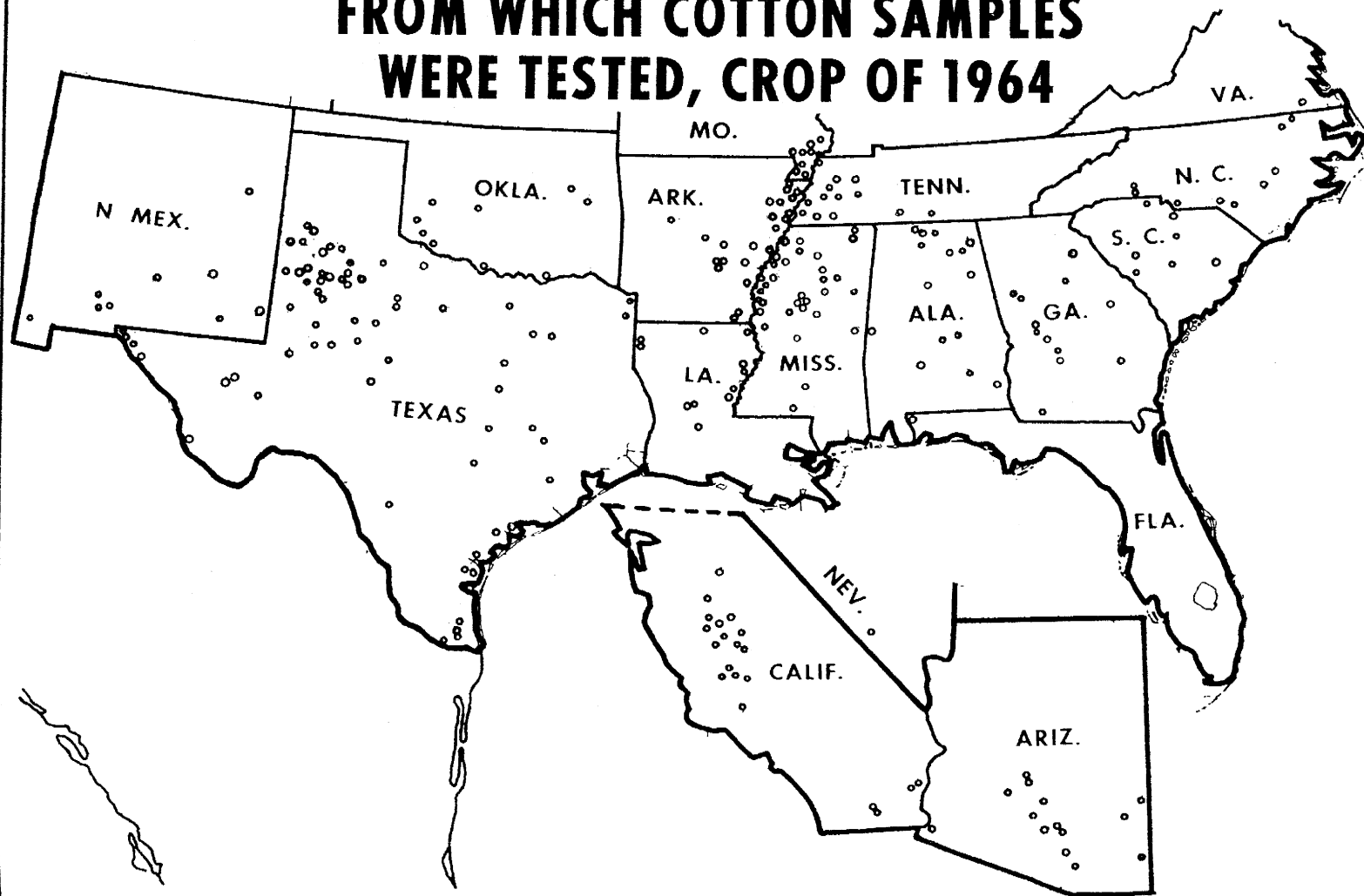
LABORATORY PROCEDURES

Fiber, yarn processing and chemical finishing tests were performed by standardized laboratory procedures for each triweekly sampling from each production area. Most of the fiber tests were performed in the standard atmospheric conditions of 65 percent relative humidity at 70 degrees F. employing the standard test procedures outlined by the American Society for Testing and Materials. Other tests not covered by ASTM were performed by commonly accepted procedures as outlined by instrument manufacturers' instructions. Pinches of cotton were extracted from each bale sample of each test lot and were blended to provide representative specimens for the various fiber tests.

Yarn processing or spinning tests were performed by a technique developed in the Cotton Division laboratories for processing small lots of cotton on standard-type textile machines. The bale samples for each lot were thoroughly composited by hand-mixing before being fed to the first process picker. This hand-mixing is similar to the machine mixing normally obtained in cotton textile opening equipment which is not used in the small scale test procedure. Observations were made at each process to measure processing behavior, and the yarns produced were tested to measure product quality.

On the basis of past performance, the cottons were grouped according to the staple length expected in their specified areas of growth. These groups were carded at production rates and spun into numbers that reflect the manufacturing value of the varieties tested. In general, the rates of carding and yarn numbers spun from the 1964 crop are as follows:

DISTRIBUTION OF PRODUCTION AREAS FROM WHICH COTTON SAMPLES WERE TESTED, CROP OF 1964



Group 1.--Short staple cottons, carded at 12-1/2 pounds per hour and spun into carded 8s and 22s yarns with a twist multiplier of 4.40 plus a carded yarn spinning potential test for selected lots.

Group 2.--Medium staple cottons, carded at 9-1/2 pounds per hour and spun into carded 22s and 50s yarns with a twist multiplier of 4.00 plus a carded yarn spinning potential test for selected lots.

Group 3.--Long staple cottons, carded at 6-1/2 pounds per hour and spun into both carded and combed 22s and 50s yarns with a twist multiplier of 3.80 plus a carded yarn spinning potential test for selected lots.

Group 4.--Extra long staple cottons, carded at 4-1/2 pounds per hour and spun into combed 50s and 80s yarns with a twist multiplier of 3.60.

Skeins of yarn from each spinning test lot were bleached and dyed after bleaching by a technique developed in the Cotton Division laboratories for small scale finishing tests. Color tests were made on skeins of gray and chemically finished skeins as measures of the bleaching and dyeing behavior. Skeins of yarn from each combed yarn lot were also mercerized and tested for luster and strength.

TEST RESULTS

Each spinning test lot used in this study was made up of 20 to 30 samples from individual bales of the same grade and staple length which were classed for producers under the Smith-Doxey Act. Samples representing the predominant grade and staple length being classed from each area at the time of collection were grouped to provide enough lint for a spinning test lot. These even-running lots of samples were then tested at Cotton Division fiber and spinning laboratories. While this method of collecting samples does not provide data for all qualities in the crop, it does provide average test results for those qualities in largest supply.

The average fiber properties of the 1964 cottons tested in this study show essentially the same length, but slightly higher length uniformity than last year. The micronaire reading is higher than a year ago while zero gauge fiber strength is lower. Strength by the 1/8-inch gauge test remains the same. Shirley Analyzer nonlint content, and picker and card waste are higher than a year ago. Average yarn properties show lower strength and higher appearance grades while yarn imperfection count is higher than last year (table 1).

The Southeastern Area includes the states of Virginia, North Carolina, South Carolina, Georgia, Florida, and Alabama. Average results from this area show cottons with approximately the same fibrograph 2.5% span length, length uniformity and fineness. Fiber strength by both the zero gauge and 1/8-inch gauge tests is lower. Nonlint content and picker and card waste are slightly higher. Average yarn strength and yarn appearance grades are lower, while yarn imperfection count is higher.

The South Central Area includes, the states of Tennessee, Missouri, Mississippi, Arkansas, and Louisiana. Average results of tests made on samples from this area show shorter 2.5% span length, but slightly higher length uniformity. The average micronaire reading was the highest reported since 1960. Other properties which show higher averages are zero and 1/8-inch gauge fiber strength tests, Shirley Analyzer nonlint content and picker and card waste. Yarn strength and yarn appearance grades are higher than last season, while yarn imperfection count is lower.

The Southwestern Area includes the states of Oklahoma and Texas, except District 6 (west of the Pecos River). Samples from this area show slightly longer fibers with higher length uniformity, and higher micronaire reading. Fiber strength by zero gauge test remains the same, while 1/8-inch gauge test shows a slight increase. Shirley Analyzer nonlint content is slightly higher than last year, but picker and card waste remain on the same level. Yarn skein strength is slightly lower while yarn appearance grade is higher. Yarn imperfection count remains on the same level as last year.

The Western Area includes the states of California, Arizona, Nevada, New Mexico, and District 6 of Texas. Samples tested from this area show a substantial increase in 2.5% span length, and a slight increase in length uniformity. Fiber fineness decreased slightly, while fiber strength by both the zero and the 1/8-inch gauge tests show increases over last year. Shirley Analyzer nonlint content and picker and card waste took reverse directions. The nonlint content is slightly higher, while the picker and card waste is slightly lower. Yarn skein strength and yarn appearance grades are higher than last year. Yarn imperfection count is higher than a year ago.

Table 1.--Cotton: Average results of classification, fiber and processing tests for American upland samples from selected gin points, crops of 1963 and 1964 ^{1/}

Area and crop year	Lots tested	Classification		Fiber test results						Processing test results			
		Grade	Staple	Fibrograph		Micro- naire	Fiber strength		Shirley Analyzer nonlint	Picker & card waste	Skein strength 22s yarn	Appear- ance 22s yarn	Yarn imprfctns 22s
				2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge					
	No.	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Lbs.	Index	No.
Southeast:													
1963	137	98.3	33.3	1.04	45	4.2	79	20.8	2.0	6.5	108	104	24
1964	142	94.2	33.6	1.05	44	4.1	74	19.7	2.5	7.5	100	103	30
South Central:													
1963	249	97.2	34.1	1.08	45	4.4	81	21.4	2.2	6.5	106	110	26
1964	240	96.7	34.0	1.06	46	4.6	82	21.8	2.3	6.9	107	112	25
Southwest:													
1963	231	95.4	30.6	.94	45	4.1	81	20.8	2.8	7.5	95	109	38
1964	204	93.3	30.7	.95	46	4.2	81	21.0	3.0	7.5	94	110	38
West:													
1963	160	95.7	34.6	1.07	45	4.2	86	23.6	2.6	7.2	118	108	33
1964	137	97.0	34.7	1.09	46	4.1	87	24.2	2.7	7.1	123	109	37
U. S. Average:													
1963	777	96.7	33.0	1.03	45	4.2	82	21.6	2.4	6.9	106	108	31
1964	723	95.3	33.1	1.03	46	4.3	81	21.6	2.6	7.2	105	109	32

^{1/} Based on a limited number of samples of modal quality.

Table 2.--Cotton: Average results of classification, fiber tests, and carded yarn processing tests by state for American upland samples from selected gin points, crops of 1963 and 1964

Area, state and crop year	Spinning lots tested	Classification		Fiber length		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer Total	Color of raw stock			Picker & card waste
		Grade	Staple	2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge			Reflect- ance	Yellow- ness	Com- posite	
	No.	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Rd	+b	Index	Pct.
SOUTHEAST AREA:														
<u>Alabama</u>														
1963	47	98	33.3	1.04	45	4.1	79	20.7	5.9	2.0	75.7	8.5	99	6.5
1964	45	96	33.4	1.04	44	4.1	77	20.3	6.4	2.1	75.0	8.9	99	7.1
<u>Florida</u>														
1963	3	96	32.7	1.02	45	4.2	73	19.4	6.1	2.3	73.2	9.0	96	7.2
1964	3	83	33.3	1.05	44	4.3	74	19.4	6.3	4.4	68.1	8.9	87	9.6
<u>Georgia</u>														
1963	39	98	33.4	1.04	45	4.1	79	20.9	5.7	2.1	75.2	8.7	99	6.6
1964	39	95	33.6	1.05	45	4.1	73	19.5	6.6	2.5	73.2	9.0	96	7.6
<u>North Carolina</u>														
1963	21	100	33.3	1.04	46	4.5	79	20.9	6.2	1.7	76.7	8.4	101	6.1
1964	27	92	33.7	1.06	44	4.1	72	19.2	6.9	2.9	72.2	8.4	94	7.7
<u>South Carolina</u>														
1963	25	99	33.4	1.03	45	4.2	80	20.7	5.7	2.1	74.7	8.6	98	6.5
1964	27	93	33.9	1.06	45	4.1	72	19.3	7.0	2.7	73.0	8.5	95	7.7
<u>Virginia</u>														
1963	3	97	33.0	1.04	47	4.1	76	21.8	6.4	2.8	77.2	7.6	100	6.9
1964	1	94	34.0	1.07	44	4.0	77	21.7	6.6	3.7	71.0	8.4	92	6.9
SOUTH CENTRAL AREA:														
<u>Arkansas</u>														
1963	84	97	34.1	1.05	44	4.4	82	21.2	5.7	2.4	75.7	8.5	99	6.5
1964	67	95	34.0	1.06	47	4.6	83	21.8	6.4	2.6	74.9	8.4	98	7.0
<u>Louisiana</u>														
1963	37	98	33.8	1.05	45	4.7	83	21.7	5.8	1.9	75.7	8.7	99	6.4
1964	30	96	33.6	1.05	47	4.6	81	21.9	6.4	2.3	74.4	8.6	97	7.2
<u>Mississippi</u>														
1963	74	98	34.3	1.14	45	4.3	80	21.5	6.1	2.1	76.2	9.1	106	6.9
1964	79	98	34.3	1.07	45	4.7	81	22.1	6.7	2.2	76.0	8.6	100	6.8
<u>Missouri</u>														
1963	24	95	33.9	1.06	45	4.4	81	21.3	6.2	2.6	74.9	8.3	98	6.6
1964	25	94	33.8	1.04	46	4.4	83	22.1	6.2	2.6	74.1	8.7	97	7.0
<u>Tennessee</u>														
1963	30	100	33.9	1.04	46	4.3	80	21.0	5.8	1.6	77.3	8.5	101	6.0
1964	39	99	33.9	1.05	45	4.3	81	21.3	6.4	1.8	76.6	8.7	101	6.6
SOUTHWEST AREA:														
<u>Oklahoma</u>														
Short staple:														
1963	28	96	29.8	.92	45	4.5	81	19.6	6.1	2.6	72.9	9.5	96	6.9
1964	22	90	29.7	.92	46	4.6	80	20.2	6.4	2.9	69.3	9.5	90	7.5
Medium staple:														
1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	6	90	31.8	1.00	46	4.7	83	21.3	6.0	3.0	71.0	8.6	92	7.8
<u>Northwest Texas</u>														
Short staple:														
1963	122	94	30.0	.92	46	3.9	80	20.8	6.6	3.3	73.4	9.1	96	7.8
1964	106	93	30.1	.93	47	4.1	80	20.9	6.7	3.2	72.5	9.0	95	7.5

Table 2.--Continued

Area, state and crop year	Spinning lots tested	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns		Color 22s bleached yarn			Color 22s dyed yarn		
		22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
	No.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Rd	+b	Index	Rd	-b	Index
SOUTHEAST AREA:															
<u>Alabama</u>			50s		50s		50s		50s						
1963	47	109	35	6.5	4.9	104	95	24	20	84.0	2.7	104	28.0	26.5	104
1964	35	103	35	6.4	4.9	105	95	28	20	84.3	2.7	104	27.0	26.7	107
<u>Florida</u>															
1963	3	101	33	6.6	4.9	97	93	25	21	84.3	2.7	105	28.0	26.8	105
1964	3	88	27	5.8	4.2	103	97	33	25	84.0	3.0	102	27.3	26.8	107
<u>Georgia</u>															
1963	39	108	36	6.3	4.8	103	95	27	21	84.3	2.7	105	27.9	26.6	105
1964	39	100	34	6.5	5.0	102	93	32	23	84.5	2.7	105	27.1	26.7	107
<u>North Carolina</u>															
1963	21	107	34	6.4	4.9	110	102	19	15	83.8	2.5	104	27.3	27.2	108
1964	27	100	35	6.7	5.2	106	97	28	19	83.5	2.8	102	27.2	26.3	105
<u>South Carolina</u>															
1963	25	107	35	6.2	4.7	103	95	24	19	83.6	2.6	103	28.3	26.5	104
1964	27	100	35	6.6	5.1	100	95	33	24	84.1	2.7	104	27.0	26.6	107
<u>Virginia</u>															
1963	3	116	38	7.1	5.5	110	105	15	12	84.4	2.6	106	26.6	27.5	111
1964	1	110	39	7.1	5.5	120	110	21	13	84.3	2.6	105	27.5	25.8	102
SOUTH CENTRAL AREA:															
<u>Arkansas</u>															
1963	84	102	36	5.6	4.4	115	100	28	21	84.0	2.7	104	27.4	26.9	107
1964	67	105	35	6.1	4.6	115	101	29	21	83.5	2.6	103	27.1	26.9	108
<u>Louisiana</u>															
1963	37	101	35	5.5	4.3	116	99	26	20	83.5	2.6	103	27.5	27.0	107
1964	30	102	33	5.9	4.5	111	95	33	26	83.3	2.5	103	26.9	27.1	109
<u>Mississippi</u>															
1963	74	112	38	6.5	5.1	104	95	26	20	83.4	2.3	109	26.9	27.8	108
1964	79	110	38	6.4	4.9	110	100	21	14	83.9	2.3	105	26.7	27.2	109
<u>Missouri</u>															
1963	24	103	36	5.8	4.6	116	100	28	20	83.3	2.8	102	26.8	27.1	109
1964	25	106	35	6.0	4.6	116	101	27	18	83.5	2.7	103	26.5	27.2	110
<u>Tennessee</u>															
1963	30	110	36	6.5	4.9	104	95	22	18	84.2	2.5	105	26.9	27.3	109
1964	39	109	38	6.4	4.9	107	98	23	17	84.1	2.4	105	26.4	27.1	110
SOUTHWEST AREA:															
<u>Oklahoma</u>															
Short staple:			8s		8s		8s		8s						
1963	28	87	279	5.4	6.1	112	119	32	52	83.2	3.2	100	27.5	26.6	105
1964	22	87	277	5.6	6.3	112	120	36	60	81.6	3.7	94	28.3	25.6	100
Medium staple:			50s		50s		50s		50s						
1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	6	90	28	5.2	4.2	117	105	30	21	82.8	2.8	101	28.2	26.3	103
<u>Northwest Texas</u>															
Short staple:			8s		8s		8s		8s						
1963	122	95	302	5.9	6.7	105	116	44	69	82.7	3.2	99	26.9	26.4	106
1964	106	94	300	6.2	7.0	108	118	42	68	81.7	3.7	95	27.1	26.0	104

Table 2.--Cotton: Average results of classification, fiber tests, and carded yarn processing tests by state for American upland samples from selected gin points, Crops of 1963 and 1964--Continued

Area, state and crop year	Spinning lots tested	Classification		Fiber length		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer Total	Color of raw stock			Picker & card waste
		Grade	Staple	2.5% span	50/2.5 unif.		Zero gauge	1/8" Gauge			Reflect- ance	Yellow- ness	Com- posite	
	No.	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Rd	+b	Index	Pct.
SOUTHWEST AREA: (Continued)														
Northwest Texas (Cont'd)														
Long staple:														
1963	4	96	36.0	1.14	43	3.8	94	25.8	5.0	2.5	74.6	8.7	98	7.6
1964	4	96	35.8	1.13	43	4.1	96	26.0	5.7	2.0	74.2	9.0	97	7.0
Central Texas														
Short staple:														
1963	24	97	29.5	.91	45	4.2	84	20.4	5.7	2.3	73.4	10.0	98	7.4
1964	21	92	28.6	.88	45	4.2	82	20.0	6.0	3.0	71.0	10.1	93	8.3
Medium staple:														
1963	21	98	33.9	1.06	45	4.4	84	22.0	6.2	1.7	76.4	8.8	101	6.3
1964	18	96	33.6	1.05	47	4.7	83	21.9	6.4	2.2	74.6	8.8	98	6.9
South Texas														
Short staple:														
1963	9	97	30.0	.92	45	4.4	79	20.1	6.3	2.4	73.0	9.7	97	8.0
1964	3	99	30.3	.93	47	4.3	81	20.5	5.9	1.8	75.5	9.4	100	6.6
Medium staple:														
1963	23	96	32.3	1.00	46	4.8	79	21.0	6.1	2.3	74.8	9.1	99	7.5
1964	24	94	32.7	1.01	46	4.2	85	21.8	5.6	2.5	73.7	9.2	97	7.5
WESTERN AREA														
Arizona														
Medium staple:														
1963	40	96	33.6	1.04	44	4.5	83	22.0	6.6	2.6	75.6	8.4	99	7.1
1964	25	95	33.8	1.06	46	4.5	81	22.1	6.8	2.7	74.5	8.9	98	7.1
Long staple:														
1963	8	98	36.5	1.16	43	3.4	84	25.2	6.2	2.4	78.1	7.9	102	7.2
1964	9	97	36.6	1.18	44	3.6	84	24.7	6.9	2.8	77.3	8.1	101	7.4
California														
1963	74	94	34.3	1.05	46	4.3	90	24.3	6.1	2.5	73.8	7.9	96	7.0
1964	59	97	34.6	1.07	47	4.2	92	25.5	6.1	2.6	75.7	8.1	99	6.9
Nevada														
1963	3	100	37.0	1.17	45	3.6	85	25.4	5.9	2.7	79.8	7.8	104	7.7
1964	3	103	37.0	1.17	43	3.2	89	25.1	6.3	2.8	80.0	8.1	105	8.0
New Mexico														
Short staple:														
1963	3	89	30.0	.88	45	3.3	81	20.5	6.4	4.4	73.9	9.1	97	11.0
1964	4	92	30.2	.93	47	3.7	82	22.9	6.8	3.8	75.0	8.3	98	7.7
Long staple:														
1963	16	97	36.8	1.17	44	3.4	85	24.9	6.0	3.2	77.0	8.2	101	8.0
1964	17	98	36.6	1.19	44	3.7	87	25.2	6.8	3.0	77.0	8.1	101	7.7
West Texas														
Short staple:														
1963	3	101	33.3	1.03	43	4.0	76	19.9	7.9	1.9	76.8	8.6	101	6.3
1964	6	97	31.5	.96	46	4.0	74	19.0	6.3	3.0	75.0	9.0	99	7.5
Medium staple:														
1963	6	100	34.0	1.05	43	3.9	78	20.4	7.0	2.0	78.1	8.4	102	6.3
1964	6	100	34.3	1.08	46	4.4	79	21.6	6.8	1.9	77.4	8.2	101	6.1
Long staple:														
1963	9	97	36.8	1.17	44	3.6	87	25.0	5.8	2.5	75.3	8.5	99	7.3
1964	8	99	36.6	1.17	44	3.7	88	24.8	6.6	2.5	76.9	8.2	101	7.2

Table 2.--Continued

Area, state and crop year	Spinning lots tested	Yarn strength		Yarn elongation		Yarn appearance		Yarn Imperfects		Color-22s bleached yarn			Color-22s dyed yarn		
		22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
	No.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	R _a	+b	Index	R _a	-b	Index
SOUTHWEST AREA:															
(Continued)															
<u>Central Texas</u>															
Short staple:			8s		8s		8s		8s						
1963	24	87	280	5.2	5.9	108	116	39	62	83.8	3.0	102	26.7	27.3	110
1964	21	77	255	5.2	5.9	106	117	47	75	83.7	3.1	102	28.2	26.1	102
Medium staple:			50s		50s		50s		50s						
1963	21	107	37	5.7	4.5	115	98	27	21	84.1	2.6	105	27.0	27.3	109
1964	18	105	34	5.9	4.4	116	100	29	21	83.4	2.6	103	27.4	26.8	106
<u>South Texas</u>															
Short staple:			8s		8s		8s		8s						
1963	9	89	283	5.5	6.4	110	118	43	66	84.0	3.2	102	26.2	27.2	110
1964	3	93	300	6.2	6.8	103	120	31	48	84.2	2.8	104	26.4	27.1	109
Medium staple:			50s		50s		50s		50s						
1963	23	99	34	5.5	4.2	116	103	26	19	84.0	2.7	104	26.8	27.0	108
1964	24	100	33	5.7	4.2	114	100	29	22	83.6	2.8	103	27.5	26.5	105
WESTERN AREA:															
<u>Arizona</u>															
Medium staple:															
1963	40	103	36	5.6	4.4	110	96	34	26	83.8	2.5	104	27.9	26.8	105
1964	25	104	35	6.1	4.7	114	96	36	25	83.5	2.7	103	27.2	27.0	108
Long staple:															
1963	8	135	49	7.1	5.7	98	92	32	23	84.4	2.5	106	27.5	26.3	104
1964	9	132	50	6.9	5.7	97	87	47	32	84.5	2.6	105	27.5	26.2	104
<u>California</u>															
1963	74	119	44	5.7	4.7	114	100	29	21	83.2	2.8	102	27.8	26.3	104
1964	59	129	47	6.2	4.9	114	97	34	25	82.7	2.8	101	26.7	26.8	108
<u>Nevada</u>															
1963	3	140	52	7.1	5.7	97	90	28	21	84.3	2.6	105	27.7	26.0	103
1964	3	132	49	7.1	5.8	93	83	28	20	84.7	2.6	106	26.9	26.0	104
<u>New Mexico</u>															
Short staple:			8s		8s		8s		8s						
1963	3	100	322	6.5	7.3	100	110	77	112	83.2	3.4	99	26.8	26.0	104
1964	4	105	328	6.7	7.4	105	120	45	63	83.0	2.9	101	27.2	26.6	106
Long staple:			50s		50s		50s		50s						
1963	16	138	51	7.0	5.7	91	81	46	34	84.0	2.7	104	26.8	26.6	107
1964	17	135	51	6.7	5.6	99	92	37	25	83.6	2.6	103	26.4	26.5	108
<u>West Texas</u>															
Short staple:			8s		8s		8s		8s						
1963	3	96	307	6.7	6.9	100	117	40	61	83.5	2.6	103	26.1	26.8	109
1964	6	87	280	6.1	6.9	107	118	47	69	83.6	3.0	102	27.5	26.5	105
Medium staple:			50s		50s		50s		50s						
1963	6	103	36	6.3	5.1	103	90	36	30	84.4	2.9	104	27.1	26.8	107
1964	6	107	36	6.4	5.0	113	97	31	24	83.5	2.6	103	27.0	26.2	105
Long staple:															
1963	9	139	50	6.8	5.5	98	88	37	24	83.4	2.8	102	26.8	26.4	106
1964	8	135	51	6.6	5.5	98	89	35	25	83.6	2.6	103	26.8	26.3	105

Table 3.--Cotton: Average results of fiber and carded yarn processing tests by grade and staple combinations for American upland samples from selected gin points, crop of 1964

Staple group, area, staple and grade	Spinning lots tested	Fiber length		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer	Color of raw stock			Picker & card waste	
		2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge			Reflect- ance	Yellow- ness	Com- posite		
		No.	In.		Pct.	Rdg.		Mpsi					G/tex
SHORT STAPLE GROUP													
<u>Southwest Area</u>													
7/8" staple: SIMltsp	7	.86	45	4.6	82	19.6	5.9	3.4	68.7	9.9	89	8.2	
29/32" staple: Mltsp	13	.89	46	4.2	83	19.5	5.4	2.6	73.2	9.7	97	7.5	
SIMltsp	6	.88	46	4.2	83	19.8	5.6	3.4	69.1	9.8	89	8.2	
SIMsp	6	.90	46	4.4	77	19.5	6.9	3.6	66.0	10.2	84	8.8	
15/16" staple: M	10	.93	47	4.5	81	20.6	6.2	2.1	75.3	8.9	99	6.7	
Mltsp	17	.93	46	4.4	80	20.2	6.3	2.5	73.0	9.3	96	7.0	
SIM	20	.92	47	3.9	80	21.4	7.2	3.1	73.4	8.4	96	7.3	
SIMltsp	22	.92	47	4.1	80	21.1	6.7	3.8	70.0	9.3	91	8.1	
31/32" staple: M	5	.95	47	4.2	80	21.4	6.9	2.0	76.4	9.0	101	6.2	
Mltsp	4	.96	46	4.1	80	20.7	6.6	2.9	73.0	9.7	97	7.8	
SIM	13	.95	47	3.8	78	21.2	7.3	3.3	73.3	8.2	96	7.2	
MEDIUM STAPLE GROUP													
<u>Southeast Area</u>													
1-1/32" staple: SM	4	1.06	46	4.4	76	20.4	6.5	1.5	78.8	9.0	104	6.0	
M	10	1.03	45	4.1	73	19.7	7.1	1.7	76.3	9.0	101	6.8	
SIM	22	1.03	44	4.0	74	19.7	6.6	2.2	72.6	8.8	95	7.4	
LM	15	1.04	44	3.9	73	19.5	6.7	3.7	69.7	8.2	89	9.0	
1-1/16" staple: SM	5	1.06	45	4.3	76	20.9	6.3	1.5	78.7	8.9	104	6.1	
M	28	1.06	45	4.3	74	20.1	6.6	1.8	76.7	9.0	101	6.6	
SIM	21	1.06	44	4.0	74	19.6	6.8	2.6	73.3	8.7	96	7.2	
LM	15	1.06	44	4.1	71	18.8	7.0	4.1	69.2	8.2	88	9.1	
1-3/32" staple: M	4	1.11	46	4.2	74	20.3	6.9	1.8	77.0	9.2	102	6.8	
<u>South Central Area</u>													
1-1/32" staple: M	7	1.02	46	5.0	82	21.5	6.6	1.6	76.5	8.8	101	6.2	
SIM	18	1.03	45	4.4	81	21.4	6.3	2.5	73.4	8.5	96	7.1	
1-1/16" staple: SM	21	1.04	46	4.8	83	21.8	6.6	1.4	78.7	8.9	104	5.9	
M	56	1.06	46	4.7	81	21.8	6.6	1.8	76.8	8.7	101	6.5	
Mltsp	6	1.05	45	4.5	79	20.9	6.4	2.5	74.2	9.0	98	7.1	

Table 3.--Continued

Staple group, area, staple and grade	Spinning lots tested	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color--22s bleached yarn			Color--22s dyed yarn		
		22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
	No.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Rd	+b	Index	Rd	-b	Index
SHORT STAPLE GROUP															
<u>Southwest Area</u>															
7/8" staple: SIMltsp	7	74	8s 243	4.7	8s 5.5	110	8s 120	39	8s 67	82.7	3.4	98	28.9	25.6	99
29/32" staple: Mltsp	13	84	272	5.4	6.2	113	119	34	57	82.7	3.3	98	27.5	26.3	104
SIMltsp	6	83	267	5.2	5.8	112	120	40	65	82.3	3.5	97	28.8	25.3	98
SIMsp	6	81	266	5.6	6.4	108	118	46	77	80.6	5.1	86	28.1	24.9	97
15/16" staple: M	10	93	296	6.2	6.8	115	120	28	44	83.0	3.2	100	26.6	26.8	108
Mltsp	17	90	286	5.8	6.6	109	118	40	66	82.0	3.5	96	26.9	26.3	105
SIM	20	97	310	6.5	7.3	104	117	46	73	81.4	3.5	94	27.2	25.9	103
SIMltsp	22	94	296	6.0	6.8	107	117	46	73	81.5	3.8	94	27.7	25.6	101
31/32" staple: M	5	97	310	6.4	7.0	112	120	29	45	83.4	2.9	102	26.1	27.1	110
Mltsp	4	91	283	6.1	6.7	100	112	40	71	82.6	3.4	98	26.6	26.4	106
SIM	13	99	315	6.8	7.5	102	117	49	77	81.5	3.5	95	27.2	25.9	103
MEDIUM STAPLE GROUP															
<u>Southeast Area</u>															
1-1/32" staple: SM	4	107	50s 36	6.7	50s 5.2	110	50s 95	20	50s 14	84.9	2.4	107	26.0	27.4	112
M	10	102	35	6.8	5.3	108	97	24	17	85.0	2.8	106	26.5	27.1	110
SIM	22	98	33	6.3	4.8	103	92	33	24	83.8	2.9	103	27.8	26.2	103
LM	15	95	33	6.3	4.9	101	92	38	26	82.7	2.8	100	28.3	25.8	101
1-1/16" staple: SM	5	107	37	6.7	5.2	108	98	25	17	85.3	2.4	108	25.6	27.9	115
M	28	106	37	6.8	5.2	105	98	24	17	84.8	2.6	106	25.8	27.5	112
SIM	21	102	35	6.6	5.2	104	97	30	21	84.4	2.8	105	27.2	26.5	106
LM	15	96	33	6.4	4.9	101	95	37	25	83.3	2.8	102	28.0	25.8	101
1-3/32" staple: M	4	109	39	6.6	5.2	102	98	27	20	84.6	2.6	106	25.4	27.4	113
<u>South Central Area</u>															
1-1/32" staple: M	7	101	31	5.8	4.2	114	100	20	15	83.6	2.4	104	26.8	27.5	110
SIM	18	100	33	5.9	4.4	111	97	29	22	83.3	2.6	103	27.7	26.7	105
1-1/16" staple: SM	21	109	36	6.4	4.9	114	102	16	12	84.4	2.1	107	25.6	28.2	115
M	56	108	36	6.3	4.8	112	100	22	16	83.9	2.4	105	26.5	27.3	110
Mltsp	6	102	35	6.1	4.8	113	100	23	17	83.6	2.7	103	27.3	26.6	106

Table 3.--Cotton: Average results of fiber and carded yarn processing tests by grade and staple combinations for American upland samples from selected gin points, crop of 1964--Continued

Staple group, area, staple and grade	Spinning lots tested	Fiber length		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer Total	Color of raw stock			Picker & card waste
		2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge			Reflect- ance	Yellow- ness	Com- posite	
	No.	In.	Pct.	Rdg.	Mps1	G/tex	Pct.	Pct.	Rd	+b	Index	Pct.
MEDIUM STAPLE GROUP												
<u>South Central Area</u> (Continued)												
1-1/16" staple (Cont'd):												
SIM	85	1.06	46	4.4	82	21.8	6.3	2.6	74.2	8.4	97	7.1
LM	4	1.07	46	4.0	83	21.9	6.3	5.4	72.4	7.9	94	9.2
1-3/32" staple:												
M	11	1.10	47	4.9	81	22.8	7.2	2.0	77.7	8.9	102	6.5
SIM	15	1.10	45	4.4	81	22.2	7.0	2.7	74.7	8.2	98	7.4
<u>Southwest Area</u>												
1-1/32" staple:												
M	5	1.02	46	4.7	83	21.7	5.9	1.9	76.0	9.1	100	6.6
SIM	12	1.03	46	4.3	83	22.3	6.0	2.4	73.7	9.0	97	7.3
1-1/16" staple:												
M	4	1.04	46	4.4	81	22.5	6.6	1.8	76.7	8.9	101	6.8
SIM	6	1.06	46	4.5	83	22.5	6.6	2.4	74.4	8.4	98	7.1
1-3/32" staple:												
SIM	4	1.09	47	4.6	81	22.6	6.6	2.8	74.6	8.0	98	6.8
<u>Western Area</u>												
1-1/32" staple:												
SIM	6	1.04	45	4.5	85	22.8	6.5	2.7	75.3	8.2	99	7.1
1-1/16" staple:												
M	5	1.06	47	4.9	86	23.5	6.4	2.2	77.0	8.4	101	6.8
Mltsp	8	1.06	45	4.7	82	23.1	6.9	2.5	74.9	9.2	99	6.9
SIM	10	1.07	46	4.6	84	22.6	6.4	2.6	75.2	8.0	98	6.9
1-3/32" staple:												
M	25	1.08	48	4.2	94	26.4	6.1	2.5	77.4	8.3	101	6.8
SIM	16	1.08	48	4.0	92	25.6	6.0	2.6	75.6	7.6	97	6.8
LONG STAPLE GROUP												
<u>Western Area</u>												
1-1/8" staple:												
M	6	1.16	43	3.4	86	23.4	6.7	2.8	77.6	7.8	102	7.2
SIM	6	1.17	43	3.3	84	24.7	6.7	4.0	77.0	8.0	101	8.6
1-5/32" staple:												
M	17	1.19	45	3.9	88	25.7	6.8	2.2	77.1	8.2	101	7.1

Table 3.--Continued

Staple group, area, staple and grade	Spinning lots tested	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color-22s bleached yarn			Color-22s dyed yarn		
		22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
	No.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	R _d	+b	Index	R _d	-b	Index
MEDIUM STAPLE GROUP															
<u>South Central Area</u> (Continued)															
1-1/16" staple (Cont'd)			50s		50s		50s		50s						
SIM	85	106	36	6.1	4.7	112	99	28	20	83.5	2.6	103	27.1	26.7	107
IM	4	108	37	6.2	4.8	108	98	45	30	82.8	2.8	101	27.0	26.6	106
1-3/32" staple:															
M	11	115	40	6.5	5.1	113	103	22	16	83.8	2.1	106	25.7	27.8	114
SIM	15	112	39	6.6	5.1	109	99	31	22	83.8	2.6	104	26.5	27.0	109
<u>Southwest Area</u>															
1-1/32" staple:															
M	5	103	33	5.8	4.2	116	102	27	19	83.8	2.5	104	27.7	26.7	105
SIM	12	101	34	5.7	4.3	112	99	30	22	83.3	2.8	102	27.8	26.3	104
1-1/16" staple:															
M	4	111	38	6.6	5.2	115	100	30	22	84.2	2.3	106	26.6	27.2	110
SIM	6	107	36	6.0	4.5	117	98	30	22	83.4	2.6	103	26.5	27.2	110
1-3/32" staple:															
SIM	4	112	39	6.4	5.0	112	100	30	20	83.5	2.3	104	26.7	27.0	108
<u>Western Area</u>															
1-1/32" staple:															
SIM	6	105	34	5.8	4.4	115	95	34	23	82.6	2.6	101	27.0	26.9	108
1-1/16" staple:															
M	5	111	37	5.8	4.5	118	100	29	21	83.0	2.5	102	26.8	27.1	109
Mitap	8	108	37	6.1	4.8	116	100	31	22	83.7	2.6	104	26.5	27.4	110
SIM	10	107	36	5.9	4.5	112	96	36	26	83.0	2.6	102	27.8	25.6	105
1-3/32" staple:															
M	25	136	50	6.4	5.2	114	99	31	22	82.9	2.7	101	26.0	27.0	110
SIM	16	134	49	6.2	5.0	116	98	31	22	82.8	2.8	101	27.6	26.3	104
LONG STAPLE GROUP															
<u>Western Area</u>															
1-1/8" staple:															
M	6	129	49	6.7	5.5	98	90	38	26	83.4	2.8	102	27.3	26.2	104
SIM	6	132	49	6.9	5.6	93	80	58	39	83.9	2.7	104	27.2	26.1	104
1-5/32" staple:															
M	17	136	51	6.7	5.6		92	31	22	84.1	2.5	105	26.4	26.5	107

Table 4.--Cotton: Average of classification, fiber tests, and carded yarn processing tests by variety for American upland samples from selected 100 percent one-variety gin points, crop of 1964

Processing group, variety, and state	Spinning lots tested	Classification		Fiber length		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer	Color of raw stock			Picker & card waste
		Grade	Staple	2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge			Reflect- ance	Yellow- ness	Com- posite	
No.	Index	32d in.	In.	Pct.	Rdg.	Mps1	G/tex	Pct.	Pct.	Rd	+b	Index	Pct.	
.SHORT STAPLE														
<u>Lankart</u> Central Texas	9	91	28.3	.88	46	4.3	81	19.4	6.1	3.0	69.8	10.3	91	8.2
<u>Lankart 57</u> Northwest Texas	3	96	30.7	.96	47	4.0	69	19.2	9.1	2.9	73.7	8.8	96	7.2
<u>Lankart 611</u> Northwest Texas	3	96	31.3	.95	47	3.9	70	20.0	8.6	3.0	74.1	8.3	97	7.1
<u>Lockett 88A</u> Northwest Texas	3	96	29.7	.90	48	4.1	77	20.2	6.5	2.6	75.4	8.2	99	7.0
<u>Lockett 4789</u> Northwest Texas	3	89	31.7	1.00	47	4.7	87	23.2	5.5	4.0	69.7	9.2	90	7.9
<u>Paymaster 54B</u> Northwest Texas	3	96	30.3	.92	46	3.6	75	20.9	7.7	2.7	75.4	8.4	99	7.0
<u>Paymaster 101A</u> Northwest Texas	6	94	30.0	.92	47	4.3	88	23.3	6.4	3.4	73.0	8.9	96	7.1
<u>Paymaster 111</u> Northwest Texas	3	94	31.0	.96	47	3.6	81	22.3	6.6	3.3	73.3	8.2	96	7.1
MEDIUM STAPLE														
<u>Acala 4-42</u> California	48	97	34.9	1.08	48	4.1	93	26.1	6.0	2.6	75.8	8.0	99	6.9
<u>All-In-One</u> South Carolina	3	96	34.0	1.04	46	3.9	70	19.0	7.5	2.5	74.4	8.8	98	7.1
<u>Auburn 56</u> Alabama	3	97	33.3	1.04	44	4.2	73	20.1	6.8	1.9	75.4	9.2	100	6.5
<u>Auburn M</u> Missouri	4	94	33.8	1.04	46	3.8	82	22.2	6.8	2.4	73.8	9.0	97	7.2
<u>Carolina Queen</u> Alabama	3	98	33.0	1.06	44	4.6	80	21.3	6.3	1.8	74.6	9.5	99	6.5
Georgia	3	96	34.0	1.07	45	4.5	74	20.3	6.6	2.3	74.9	9.2	98	7.4
North Carolina	3	100	34.0	1.08	46	4.5	75	20.6	6.6	1.8	76.7	8.2	100	6.5
South Carolina	3	100	34.3	1.08	46	4.5	77	20.1	6.8	1.8	76.8	8.8	100	6.3
<u>Coker 100</u> Alabama	6	98	33.3	1.05	45	4.2	74	20.3	6.6	2.1	76.3	8.9	100	6.6
South Carolina	6	93	34.5	1.10	45	4.0	72	19.6	7.5	3.3	74.0	8.3	97	8.1
<u>Delfos 9169</u> Arkansas	3	94	35.0	1.11	45	4.1	80	21.6	6.8	3.1	74.2	8.3	98	7.7

Table 4.--Continued

Processing group, variety, and state	Spinning lots tested	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns		Color-22s bleached yarn			Color-22s dyed yarn		
		22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
	No.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	R _a	+b	Index	R _a	-b	Index
SHORT STAPLE															
<u>Lankart</u> Central Texas	9	75	<u>8s</u> 251	5.1	<u>8s</u> 5.7	111	<u>8s</u> 119	43	<u>8s</u> 70	83.5	3.2	101	28.2	26.1	102
<u>Lankart 57</u> Northwest Texas	3	89	290	7.6	8.6	110	110	47	79	81.4	3.7	94	27.0	26.0	104
<u>Lankart 611</u> Northwest Texas	3	90	294	6.8	7.7	103	113	52	80	82.0	3.5	96	26.5	26.8	108
<u>Lockett 88A</u> Northwest Texas	3	94	304	6.4	7.2	110	120	32	50	80.4	2.9	95	26.8	26.3	105
<u>Lockett 4789</u> Northwest Texas	3	103	319	5.7	6.6	117	120	30	54	81.5	3.3	95	27.0	26.1	104
<u>Paymaster 54B</u> Northwest Texas	3	93	299	6.9	7.9	100	113	45	70	83.5	3.2	101	26.9	26.0	104
<u>Paymaster 101A</u> Northwest Texas	6	105	332	6.1	7.0	115	116	39	62	81.3	3.3	96	26.8	25.9	104
<u>Paymaster 111</u> Northwest Texas	3	103	329	6.9	7.4	103	116	53	84	81.5	3.3	96	27.2	25.8	103
MEDIUM STAPLE															
<u>Acala 4-42</u> California	48	135	<u>50s</u> 49	6.3	<u>50s</u> 5.1	114	<u>50s</u> 97	34	<u>50s</u> 24	82.8	2.8	101	26.7	26.6	107
<u>All-In-One</u> South Carolina	3	100	35	6.9	5.2	97	90	35	30	84.6	2.9	105	26.5	27.0	109
<u>Auburn 56</u> Alabama	3	101	34	6.5	5.1	103	90	21	15	84.1	2.7	104	27.0	26.7	107
<u>Auburn M</u> Missouri	4	107	36	6.3	5.0	115	98	29	19	84.1	2.6	104	26.7	27.0	108
<u>Carolina Queen</u> Alabama	3	103	33	5.9	4.5	107	97	23	16	83.7	2.9	102	26.8	26.8	107
Georgia	3	104	35	6.6	5.1	103	97	24	17	84.0	2.7	104	25.6	27.4	112
North Carolina	3	113	40	7.1	5.5	110	100	22	14	84.0	2.8	103	25.3	27.3	113
South Carolina	3	108	38	6.6	5.2	110	100	18	13	84.2	2.4	106	25.2	27.7	115
<u>Coker 100</u> Alabama	6	104	36	6.5	5.0	105	95	30	21	84.6	2.6	106	26.9	27.0	108
South Carolina	6	106	38	7.1	5.6	100	98	31	20	84.1	2.8	104	26.5	26.5	107
<u>Delfos 9169</u> Arkansas	3	109	38	6.3	4.9	107	93	37	28	84.2	2.9	104	27.4	26.9	107

Table 4.--Cotton: Average of classification, fiber tests, and carded yarn processing tests by variety for American upland samples from selected 100 percent one variety gin points, crop of 1964--Continued

Processing group, variety, and state	Spinning lots tested	Classification		Fiber length		Micro- maire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer	Color of raw stock			Picker & card waste
		Grade	Staple	2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge			Reflec- tance	Yellow- ness	Com- posite	
										Total				
	No.	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Ra	+b	Index	Pct.
MEDIUM STAPLE (Cont'd)														
<u>Dixie King</u>														
Alabama	6	90	33.3	1.04	45	3.8	78	20.7	6.2	3.1	73.4	8.6	96	8.4
Georgia	3	98	33.3	1.03	46	4.1	77	19.8	6.5	2.3	73.7	9.2	97	6.9
<u>DPL-15</u>														
Mississippi	6	96	34.5	1.06	47	4.7	81	22.8	6.8	2.2	75.6	8.6	99	6.8
<u>DPL Smooth Leaf</u>														
Arkansas	9	97	34.0	1.05	46	4.7	82	22.4	7.5	2.2	75.4	8.4	99	6.9
Louisiana	6	100	33.7	1.05	47	5.0	82	22.2	6.6	1.8	75.7	8.6	100	6.5
Mississippi	10	98	34.5	1.09	46	4.9	82	23.6	7.3	2.0	76.5	8.6	101	6.6
Tennessee	3	99	34.3	1.09	44	4.7	83	23.8	7.6	1.7	77.2	8.1	101	6.4
Arizona	18	95	33.7	1.06	46	4.6	81	22.1	7.1	2.8	74.4	9.1	98	7.1
California	11	95	33.4	1.05	45	4.6	86	23.0	6.3	2.5	75.5	8.4	99	7.0
<u>Empire</u>														
Alabama	3	95	33.0	1.03	42	3.7	81	20.5	5.9	2.3	74.6	8.8	98	7.4
Georgia	6	98	34.0	1.06	46	4.1	76	19.6	6.4	2.5	75.0	8.7	98	7.0
<u>Fox 4</u>														
Mississippi	2	97	34.0	1.06	48	5.4	91	23.6	5.4	2.6	75.3	9.0	100	7.6
<u>Rex</u>														
Alabama	3	94	33.3	1.02	43	4.1	79	20.0	6.2	2.3	73.5	9.0	96	7.1
North Carolina	3	101	33.0	1.04	45	4.0	74	19.5	7.2	1.4	75.6	8.8	100	6.5
Arkansas	3	88	34.3	1.08	46	4.1	82	20.5	5.9	5.0	73.0	8.3	95	8.2
<u>Rex Smooth Leaf</u>														
Arkansas	3	96	34.0	1.06	46	4.4	84	21.0	5.7	2.5	74.8	8.7	98	7.2
<u>Stoneville 7A</u>														
Arkansas	6	94	34.2	1.06	46	4.4	84	21.6	5.8	3.4	74.0	8.3	97	7.8
Mississippi	6	94	34.8	1.08	46	5.0	88	22.0	5.7	3.2	74.4	8.4	97	7.4
Central Texas	3	94	33.3	1.06	48	5.1	86	21.8	5.3	2.7	72.3	9.6	95	7.1
<u>Stoneville 213</u>														
Arkansas	6	99	34.0	1.05	48	5.1	85	22.2	5.8	1.9	76.5	8.6	100	6.0
Mississippi	12	98	34.4	1.08	46	5.0	83	22.4	6.3	2.5	75.9	8.6	100	7.0
LONG STAPLE														
<u>Acala 1517C</u>														
New Mexico	3	96	36.7	1.18	44	3.5	84	24.7	6.9	4.8	76.1	7.9	100	9.1
<u>Acala 1517D</u>														
Arizona	3	97	37.0	1.20	45	3.7	84	25.0	7.2	3.1	77.4	8.0	101	8.0

Table 4.--Continued

Processing group, variety, and state	Spinning lots tested	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns		Color -22s bleached yarn			Color-22s dyed yarn		
		22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	22s or 26.8 tex	Second number	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
	No.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Rd	+b	Index	Rd	-b	Index
MEDIUM STAPLE (Cont'd)															
<u>Dixie King</u>			50s		50s		50s		50s						
Alabama	6	106	37	6.4	5.0	103	97	35	24	83.3	2.8	102	27.7	26.1	103
Georgia	3	100	35	6.2	4.8	103	97	24	17	84.7	3.1	104	27.2	26.4	105
<u>DPL-15</u>															
Mississippi	6	116	40	6.5	5.1	115	103	21	14	83.7	2.3	105	26.8	27.3	110
<u>DPL Smooth Leaf</u>															
Arkansas	9	107	36	6.4	4.9	114	100	30	22	83.3	2.6	103	26.8	26.9	108
Louisiana	6	105	34	5.9	4.4	120	103	18	14	83.1	2.5	103	26.5	27.3	110
Mississippi	10	114	39	6.5	5.0	109	99	22	16	83.4	2.2	105	26.4	27.3	110
Tennessee	3	113	39	6.8	5.1	107	100	20	16	83.7	2.1	106	25.1	27.8	115
Arizona	18	106	36	6.2	4.8	116	98	33	23	83.6	2.7	103	27.1	27.0	108
California	11	106	35	5.7	4.3	113	95	35	25	82.7	2.6	101	26.7	27.2	110
<u>Empire</u>															
Alabama	3	103	35	6.3	4.7	100	90	33	24	84.0	3.0	103	27.8	26.1	103
Georgia	6	104	36	6.4	5.0	103	97	32	23	84.3	2.9	104	26.8	26.4	106
<u>Fox 4</u>															
Mississippi	2	110	36	5.6	4.0	105	100	30	19	82.8	2.4	102	26.6	27.4	110
<u>Rex</u>															
Alabama	3	94	29	6.0	4.4	103	90	30	22	83.5	3.3	100	28.1	26.3	103
North Carolina	3	103	36	7.1	5.5	110	97	25	18	83.7	3.5	100	26.8	26.1	105
Arkansas	3	105	36	6.2	4.9	117	103	36	23	83.6	2.7	103	26.3	27.1	110
<u>Rex Smooth Leaf</u>															
Arkansas	3	105	36	6.0	4.8	117	97	26	18	83.4	2.7	103	27.2	26.7	106
<u>Stoneville 7A</u>															
Arkansas	6	104	36	6.0	4.5	113	98	36	24	83.8	2.6	104	27.2	26.9	107
Mississippi	6	105	34	5.7	4.2	117	103	16	10	83.2	2.4	104	28.1	26.4	104
Central Texas	3	104	34	5.6	4.0	120	107	22	15	83.2	2.7	102	26.8	27.1	109
<u>Stoneville 213</u>															
Arkansas	6	104	34	5.8	4.3	118	105	20	15	83.1	2.4	103	27.4	27.1	108
Mississippi	12	109	37	6.2	4.8	108	100	21	13	83.6	2.3	105	26.7	27.4	110
LONG STAPLE															
<u>Acala 1517C</u>															
New Mexico	3	133	49	7.0	5.7	100	93	31	22	84.2	2.5	105	25.9	26.7	109
<u>Acala 1517D</u>															
Arizona	3	139	53	7.1	5.9	100	90	49	30	84.7	2.7	105	26.9	26.4	106

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple														
	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rq	+b	Index	Code	
SOUTHWEST AREA															
SOUTH TEXAS															
PORTLAND															
		LANKART 611				70 PERCENT									
M	30	0.92	49	4.2	82	40.6	21.7	5.8	0.7	1.4	75.0	9.5	99	303	
M	31	0.94	46	4.4	81	40.1	20.0	5.9	1.1	1.8	76.3	9.2	101	302	
M LT SP	30	0.92	46	4.3	81	40.1	19.8	6.1	1.2	2.3	75.2	9.6	100	303	
CENTRAL TEXAS															
FORNEY															
		LANKART				99 PERCENT									
M SP	28	0.84	44	3.6	82	40.6	19.3	5.2	1.5	2.9	72.9	10.6	97	304	
M LT SP	28	0.84	45	4.1	83	41.1	19.2	5.9	1.8	3.1	73.7	10.1	98	303	
LM LT SP	28	0.86	45	4.0	81	40.1	20.2	5.8	2.6	4.7	63.5	9.3	79	554	
ITASCA															
		LANKART				100 PERCENT									
M SP	28	0.83	46	4.2	82	40.6	18.8	5.9	1.7	2.7	71.9	10.4	95	354	
M LT SP	28	0.87	45	4.2	83	41.1	19.2	6.1	1.5	2.7	73.8	10.1	98	303	
SLM LT SP	28	0.85	46	4.7	82	40.6	19.7	6.6	2.4	3.9	67.5	10.1	87	454	
LOCKHART															
		ANTON				98 PERCENT									
M LT SP	31	0.95	45	4.0	84	41.6	21.5	5.8	1.4	2.4	72.5	10.1	96	353	
M LT SP	31	0.96	47	3.9	83	41.1	20.9	6.1	1.5	2.5	73.9	9.8	98	303	
M LT SP	29	0.88	46	4.0	82	40.6	19.3	5.9	1.3	2.5	73.8	10.1	98	303	
PILOT POINT															
		LANKART				100 PERCENT									
M SP	28	0.84	46	4.1	83	41.1	19.5	5.5	1.5	2.3	71.1	10.5	94	354	
SLM LT SP	28	0.87	46	5.0	79	39.1	20.1	6.6	1.5	2.8	67.3	10.0	86	454	
SLM LT SP	29	0.90	46	4.8	76	37.6	18.5	6.6	2.1	3.4	69.3	10.0	90	404	
TAYLOR															
		LANKART 57				98 PERCENT									
M LT SP	30	0.91	43	3.3	81	40.1	20.6	6.2	1.9	3.4	75.1	9.9	100	303	
M LT SP	29	0.91	46	3.8	84	41.6	20.1	6.3	1.4	2.5	73.8	10.2	98	303	
M LT SP	29	0.87	46	4.0	80	39.6	19.0	6.2	1.4	2.8	73.9	10.1	98	303	
WACO															
		LANKART 57				100 PERCENT									
M LT SP	29	0.88	47	3.8	83	41.1	19.9	5.9	1.3	2.5	72.0	10.4	95	354	
SLM SP	28	0.86	44	3.5	81	40.1	19.5	5.3	1.7	3.1	67.9	11.3	88	405	
SLM LT SP	29	0.90	46	4.6	78	38.6	19.3	6.6	1.7	3.2	67.7	9.5	86	454	
WILLS POINT															
		LANKART				90 PERCENT									
SLM LT SP	28	0.87	45	4.7	83	41.1	19.5	5.8	1.5	3.0	68.6	9.6	89	454	
SLM LT SP	28	0.86	45	4.6	84	41.6	19.6	5.8	2.2	3.5	69.0	10.0	89	404	
SLM LT SP	28	0.86	46	4.8	82	40.6	17.7	5.5	1.9	3.5	71.2	9.9	94	353	

Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																				
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfec- tions		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn				
			8s or	22s or	8s or	22s or	8s or	22s or	8s or	22s or		8s or	22s or	Reflec- tance	Yellow- ness	Com- posite	Reflec- tance	Yellow- ness	Com- posite	Reflec- tance	Blue- ness	Com- posite
			73.8 tex	26.8 tex	73.8 tex	26.8 tex	73.8 tex	26.8 tex	73.8 tex	26.8 tex		73.8 tex	26.8 tex	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
Grade	Staple																					
32d in.		Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index		
SOUTHWEST AREA																						
SOUTH TEXAS																						
PORTLAND																						
		LANKART 611										70 PERCENT										
M	30	6.3	308	93	6.9	6.2	120	110	42	27	40	68.8	11.9	96	84.8	3.2	104	25.8	27.3	111		
M	31	5.8	300	95	6.5	6.2	120	110	42	29		70.6	11.5	99	83.5	2.6	103	27.0	26.9	108		
M LT SP	30	7.7	293	91	6.9	6.3	120	90	60	38		69.4	12.2	99	84.3	2.5	106	26.5	27.0	109		
CENTRAL TEXAS																						
FORNEY																						
		LANKART										99 PERCENT										
M SP	28	8.5	257	75	6.2	5.3	110	90	94	69	30	67.6	13.4	100	84.9	3.2	104	28.7	25.4	98		
M LT SP	28	9.3	241	68	5.9	4.9	110	100	80	46		69.3	13.2	103	84.0	3.2	102	28.2	26.4	103		
LM LT SP	28	10.0	232	66	5.4	4.4	120	110	90	58		62.0	12.0	83	82.9	3.6	98	30.4	25.1	94		
ITASCA																						
		LANKART										100 PERCENT										
M SP	28	8.8	244	70	5.6	4.8	120	110	85	50	27	68.1	13.1	100	84.3	3.1	103	28.3	26.4	103		
M LT SP	28	8.7	255	74	5.9	5.3	120	110	70	40		68.8	12.9	100	83.0	3.4	99	27.0	26.8	107		
SLM LT SP	28	8.2	238	68	5.4	4.4	120	110	81	50		64.5	12.7	90	83.1	3.4	99	28.7	25.9	100		
LOCKHART																						
		ANTON										98 PERCENT										
M LT SP	31	6.6	285	95	6.7	6.1	120	110	62	34	43	67.5	12.6	96	83.0	2.8	101	26.2	26.9	109		
M LT SP	31	8.7	285	95	5.9	6.1	110	100	70	40		68.2	12.6	98	83.6	2.9	102	26.5	26.6	107		
M LT SP	29	7.8	274	87	6.3	5.9	120	110	52	35		68.5	13.1	100	84.6	3.0	104	27.9	26.3	103		
PILOT POINT																						
		LANKART										100 PERCENT										
M SP	28	7.7	254	74	5.6	5.0	120	110	74	48	28	65.4	13.0	93	83.6	3.3	101	26.9	26.7	107		
SLM LT SP	28	7.7	226	66	5.1	4.5	120	110	63	34		64.4	12.2	88	82.6	3.2	99	28.7	25.8	99		
SLM LT SP	29	8.5	239	73	5.5	5.1	120	120	61	37		64.8	12.2	88	83.3	3.2	101	29.9	24.7	93		
TAYLOR																						
		LANKART 57										98 PERCENT										
M LT SP	30	7.9	268	83	6.5	5.8	100	90	116	79	32	70.2	12.6	102	84.3	2.9	104	27.5	26.4	105		
M LT SP	29	8.2	266	83	6.3	5.5	110	90	88	65		67.4	12.7	97	84.0	3.2	102	27.7	26.4	104		
M LT SP	29	8.2	266	82	6.7	5.8	120	100	81	49		68.1	12.8	98	84.3	2.9	104	28.1	26.5	104		
WACO																						
		LANKART 57										100 PERCENT										
M LT SP	29	7.4	282	88	6.6	5.9	120	110	57	39	37	67.0	13.4	98	83.7	3.1	102	27.5	26.4	105		
SLM SP	28	8.4	257	77	5.5	4.9	110	110	74	51		62.8	13.4	88	84.4	3.5	102	28.2	25.7	100		
SLM LT SP	29	8.4	266	81	6.5	5.7	120	110	62	41		64.4	12.1	88	83.8	2.8	103	28.4	26.4	103		
WILLS POINT																						
		LANKART										90 PERCENT										
SLM LT SP	28	8.2	239	68	5.4	4.2	120	110	74	44	27	64.7	12.1	88	83.5	2.8	102	28.8	26.3	102		
SLM LT SP	28	8.4	242	74	5.2	4.8	120	110	72	42		65.1	12.2	90	83.1	3.4	99	28.8	25.9	100		
SLM LT SP	28	8.2	240	70	5.3	4.2	120	110	72	36		66.8	12.0	92	83.5	3.1	101	29.5	25.1	95		

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elongation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>3rd in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHWEST AREA--CONTINUED															
NORTHWEST TEXAS															
ACKERLY		WESTERN STORMPROOF				94 PERCENT									
M LT SP	29	0.89	46	4.3	84	41.6	20.3	5.6	2.3	3.5	74.4	9.4	98	353	
M LT SP	29	0.90	47	4.5	73	36.1	18.2	6.1	1.6	2.9	73.9	9.2	97	353	
M LT SP	29	0.90	48	4.8	80	39.6	20.2	5.5	1.5	2.6	73.2	8.9	96	403	
AFTON		LANKART 57				90 PERCENT									
M	31	0.96	47	4.4	85	42.1	20.7	6.8	0.9	1.3	75.4	9.4	100	303	
M	30	0.90	46	4.8	83	41.1	20.0	6.0	0.6	1.6	74.8	9.2	99	353	
M	30	0.94	47	4.4	74	36.6	19.1	7.1	1.3	2.4	73.3	9.2	96	353	
SLM	30	0.94	46	4.3	78	38.6	20.3	7.4	1.5	3.2	71.9	8.5	93	402	
AIKEN		PAYMASTER 54B				100 PERCENT									
M	30	0.92	47	3.9	72	35.6	20.1	8.4	0.8	1.8	76.9	8.7	101	302	
SLM	31	0.91	46	3.4	78	38.6	21.1	7.4	2.0	3.4	74.2	8.1	97	402	
SLM	30	0.92	46	3.5	76	37.6	21.6	7.4	1.5	2.8	75.2	8.4	99	352	
ANTON		LANKART 57				100 PERCENT									
M	32	0.98	48	4.6	69	34.2	19.2	8.8	1.1	2.1	76.9	8.8	101	302	
SLM	30	0.96	47	4.0	69	34.2	18.9	9.0	2.0	3.4	71.2	8.6	92	453	
SLM	30	0.94	46	3.4	70	34.6	19.5	9.4	1.6	3.1	73.0	9.1	96	403	
BIG SPRING		WESTERN STORMPROOF				85 PERCENT									
M LT SP	29	0.89	43	3.9	85	42.1	20.4	5.0	1.1	2.0	73.2	9.6	97	353	
M	30	0.94	47	4.5	80	39.6	19.7	5.3	1.4	2.7	75.4	9.0	100	302	
M	30	0.93	47	4.6	80	39.6	20.9	5.7	2.0	3.2	74.0	8.8	97	352	
SLM LT SP	30	0.90	46	4.1	84	41.6	20.2	5.4	1.7	3.2	71.7	9.5	94	403	
DIMMITT		GREGG				90 PERCENT									
SLM	30	0.89	48	4.4	90	44.6	22.4	6.2	1.9	3.4	73.2	8.4	96	402	
SLM	30	0.90	49	3.6	80	39.6	22.0	7.4	1.7	2.6	74.0	8.4	97	402	
SLM	30	0.91	47	3.5	81	40.1	23.1	7.2	1.8	3.2	74.3	8.4	98	402	
DOUGHERTY		LANKART 57				90 PERCENT									
SLM	31	0.96	49	3.9	80	39.6	22.7	6.4	2.6	3.8	73.7	8.4	96	402	
SLM	31	0.98	47	4.2	75	37.1	20.1	7.5	2.3	3.7	74.9	8.1	98	402	
SLM	31	0.98	46	4.1	74	36.6	20.8	8.2	1.6	2.9	73.1	8.0	95	402	
EARTH		GREGG				95 PERCENT									
LM+	30	0.94	47	3.6	86	42.6	23.1	6.2	2.9	4.2	72.5	8.4	94	402	
LM+	31	0.92	48	3.5	83	41.1	22.5	7.0	2.6	3.5	73.9	8.2	96	402	
SLM	30	0.89	48	3.3	83	41.1	22.5	7.0	2.0	3.4	73.8	8.6	97	402	

Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			8s or 73.8 tex	22s or 26.8tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
Grade	Staple																				
		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHWEST AREA--CONTINUED																					
NORTHWEST TEXAS																					
ACKERLY																					
			WESTERN STORMPROOF								94 PERCENT										
M LT SP	29	7.9	280	87	5.9	5.0	120	110	47	32	36	69.6	12.0	98	83.2	3.4	99	25.9	26.9	110	
M LT SP	29	6.9	269	82	6.0	4.9	120	110	55	28		69.0	11.2	94	81.6	3.2	96	27.7	25.8	101	
M LT SP	29	7.4	273	85	6.2	5.6	120	120	49	25		69.1	11.3	96	81.5	2.5	99	26.7	26.5	107	
AFTON																					
			LANKART 57								90 PERCENT										
M	31	5.8	314	99	7.2	6.5	120	120	45	27	46	70.2	12.0	100	83.3	3.0	101	25.8	27.5	112	
M	30	6.4	289	92	7.5	6.7	120	120	44	28		70.2	11.8	99	82.7	3.3	99	28.1	26.1	102	
M	30	7.6	279	87	6.7	6.1	120	110	63	42		68.5	11.5	95	82.8	3.2	99	27.5	26.3	104	
SLM	30	7.3	290	90	6.8	6.0	120	100	79	50	42	66.1	10.6	87	79.1	3.4	90	28.0	24.8	97	
AIKEN																					
			PAYMASTER 548								100 PERCENT										
M	30	6.6	288	89	8.2	7.2	120	110	42	29	43	72.3	11.2	101	85.0	3.0	105	25.8	27.1	111	
SLM	31	7.3	298	95	7.8	7.1	110	90	90	53		70.1	10.7	95	82.9	3.4	98	27.7	25.2	99	
SLM	30	7.0	312	95	7.7	6.4	110	100	78	52		69.7	11.1	95	82.5	3.1	99	27.1	25.7	103	
ANTON																					
			LANKART 57								100 PERCENT										
M	32	6.9	294	92	9.1	7.8	110	120	50	29	44	71.3	11.6	100	83.8	3.1	102	26.1	27.3	111	
SLM	30	7.5	284	87	7.9	7.4	110	100	81	50		66.3	10.8	88	81.1	4.3	91	27.1	25.4	101	
SLM	30	7.3	292	89	8.7	7.7	110	110	107	62		67.4	11.1	90	79.2	3.8	88	27.7	25.2	99	
BIG SPRING																					
			WESTERN STORMPROOF								85 PERCENT										
M LT SP	29	7.0	269	84	5.4	5.1	120	120	70	36	34	68.1	12.2	96	82.6	3.3	98	27.4	26.3	104	
M	30	7.1	297	94	7.3	6.8	120	120	40	22		71.3	11.6	100	83.5	3.2	101	25.8	27.5	112	
M	30	7.2	274	88	6.2	5.6	120	110	63	29		68.8	11.1	94	81.8	3.2	97	26.5	26.6	107	
SLM LT SP	30	7.7	282	86	6.1	5.4	120	110	67	48	34	66.5	11.8	91	79.5	3.6	90	28.0	24.9	98	
DIMMITT																					
			GREGG								90 PERCENT										
SLM	30	7.7	322	103	6.7	5.9	120	100	51	34	40	69.3	10.9	94	80.3	3.6	92	27.7	25.4	100	
SLM	30	7.3	319	100	7.2	6.9	120	100	83	47		70.0	11.5	98	83.9	3.0	103	27.4	26.1	104	
SLM	30	7.9	327	104	7.4	6.6	120	100	70	41		70.2	11.2	97	82.1	3.5	96	26.6	26.3	106	
DOUGHERTY																					
			LANKART 57								90 PERCENT										
SLM	31	7.4	337	105	7.0	6.4	120	110	83	56	47	69.6	11.3	96	83.5	3.8	98	26.5	26.4	106	
SLM	31	6.8	311	98	7.6	6.9	120	100	63	45		69.6	10.4	93	81.7	3.3	96	27.5	25.6	101	
SLM	31	7.1	304	97	8.0	7.4	120	100	66	39		69.3	10.9	94	81.6	3.2	96	26.9	26.4	106	
EARTH																					
			GREGG								95 PERCENT										
LM+	30	8.0	333	105	7.0	6.5	120	110	72	44	40	68.7	11.0	93	81.7	4.3	92	27.5	25.7	101	
LM+	31	8.4	342	108	7.1	6.5	120	100	76	50		69.1	11.4	96	82.0	4.3	93	27.6	25.9	102	
SLM	30	7.5	327	106	7.3	6.5	120	110	69	50		68.8	11.2	94	81.7	4.3	92	27.1	25.5	102	

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHWEST AREA--CONTINUED															
NORTHWEST TEXAS HALFWAY		PAYMASTER 101A 90 PERCENT													
M	31	0.95	47	3.8	79	39.1	22.5	7.2	1.4	2.6	77.3	8.8	102	302	
SLM	32	0.99	46	3.9	79	39.1	22.0	7.2	2.8	3.9	73.9	8.6	97	402	
SLM LT SP	30	0.92	47	3.4	73	36.1	20.9	7.9	2.1	3.6	72.6	9.0	95	403	
HART		GREGG 80 PERCENT													
SLM LT SP	30	0.90	48	3.8	82	40.6	21.1	6.6	3.1	4.5	70.2	8.9	91	453	
SLM	31	0.92	47	3.8	82	40.6	22.1	6.8	2.6	4.3	72.3	8.5	94	402	
SLM LT SP	29	0.90	47	3.4	80	39.6	21.6	7.1	2.7	4.6	70.9	8.8	91	453	
IDALOU		LANKART 611 100 PERCENT													
M	32	0.96	47	4.5	71	35.1	20.6	8.3	1.0	2.1	76.1	8.5	100	352	
SLM	31	0.94	47	3.5	71	35.1	19.4	8.3	2.2	3.8	72.9	7.9	95	452	
SLM	31	0.94	46	3.8	68	33.7	18.7	9.1	1.9	3.1	73.2	8.4	96	402	
LAKEVIEW		GREGG 85 PERCENT													
SLM LT SP	30	0.91	47	3.6	84	41.6	23.5	5.7	2.1	3.8	70.1	8.9	91	453	
SLM LT SP	30	0.93	46	3.6	84	41.6	23.9	6.9	2.6	4.0	72.1	9.7	95	353	
SLM LT SP	30	0.92	47	3.6	79	39.1	21.1	6.7	2.7	4.2	70.4	9.2	91	403	
LAKEVIEW		PAYMASTER 101A 100 PERCENT													
SLM LT SP	30	0.89	47	3.8	91	45.0	23.5	5.8	3.0	4.3	72.3	9.0	95	403	
SLM LT SP	30	0.94	46	3.8	88	43.6	23.2	6.7	3.7	5.0	72.3	8.9	95	403	
SLM LT SP	30	0.92	47	3.8	82	40.6	22.6	6.7	3.2	4.3	71.8	9.2	94	403	
MORTON		RILCOT 90 MIXED 60 PERCENT													
SLM	30	0.92	47	4.1	84	41.6	24.0	6.8	2.3	3.5	75.3	8.5	99	352	
SLM	30	0.92	49	3.6	82	40.6	22.3	7.2	2.1	3.4	72.9	8.6	95	402	
SLM	30	0.93	47	3.8	82	40.6	22.0	7.1	1.8	3.0	74.1	8.9	98	352	
MULESHOE		GREGG 93 PERCENT													
SLM	30	0.92	47	3.6	81	40.1	22.8	7.0	2.1	3.4	72.1	8.4	94	402	
LM*	31	0.92	47	3.4	83	41.1	23.5	7.1	2.6	3.8	73.9	8.2	97	402	
SLM	30	0.89	47	3.3	80	39.6	23.1	7.7	1.9	3.4	74.1	8.1	97	402	
NEWCASTLE		WESTERN STORMPROOF 90 PERCENT													
M LT SP	30	0.93	47	4.4	85	42.1	20.3	4.7	1.2	2.1	75.1	9.0	99	352	
M LT SP	29	0.90	46	4.2	88	43.6	19.5	4.7	1.4	2.5	73.1	9.1	96	353	
M SP	30	0.94	47	3.3	80	39.6	20.6	6.0	1.8	3.2	70.0	10.8	92	355	

Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn impurities		Spin. poten- tial	Color-22s grey yarn			Color-22s bleached yarn			Color-22s dyed yarn			
			8s or	22s or	8s or	22s or	8s or	22s or	8s or	22s or		Reflec- tance	Yellow- ness	Com- posite	Reflec- tance	Yellow- ness	Com- posite	Reflec- tance	Blue- ness	Com- posite	
			73.8 tex	26.8 tex	73.8 tex	26.8 tex	73.8 tex	26.8 tex	73.8 tex	26.8 tex		Rd	+b	Index	Rd	+b	Index	Rd	-b	Index	
Grade	Staple																				
		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHWEST AREA--CONTINUED																					
NORTHWEST TEXAS																					
HALFWAY																					
		PAYMASTER 101A								90 PERCENT											
M	31	7.2	318	98	7.0	6.4	120	100	41	25	45	71.3	11.4	100	83.7	3.2	102	26.9	26.0	104	
SLM	32	8.0	328	103	8.0	6.5	110	100	68	47		68.5	10.8	92	82.5	3.5	97	26.5	26.3	106	
SLM LT SP	30	7.6	303	97	7.8	6.7	120	110	60	37		68.2	11.4	93	80.8	4.5	89	28.0	25.5	100	
HART																					
		GREGG								80 PERCENT											
SLM LT SP	30	8.6	312	97	7.0	5.9	120	110	65	46	40	66.0	11.3	88	79.1	5.3	82	27.1	25.1	100	
SLM	31	7.9	327	103	7.3	6.3	120	100	70	44		68.4	11.0	92	81.3	4.0	92	27.0	26.0	104	
SLM LT SP	29	8.6	299	98	7.4	6.4	120	120	69	45		67.5	11.2	91	80.9	4.0	91	27.5	25.5	101	
IDALOU																					
		LANKART 611								100 PERCENT											
M	32	6.7	296	91	7.6	6.9	120	110	67	42	43	70.9	11.4	99	83.5	3.4	100	25.0	27.6	114	
SLM	31	7.1	294	90	7.7	6.7	110	100	98	66		68.8	10.1	90	81.4	3.7	94	27.5	26.3	104	
SLM	31	7.6	291	90	7.9	6.9	110	100	75	49		68.4	10.4	90	81.1	3.3	95	27.0	26.6	106	
LAKEVIEW																					
		GREGG								85 PERCENT											
SLM LT SP	30	8.3	322	103	6.6	6.0	110	100	89	59	38	67.4	12.1	95	81.9	3.7	95	27.4	25.5	101	
SLM LT SP	30	7.2	314	105	7.4	6.5	120	110	86	54		66.0	12.4	92	82.6	3.4	98	27.2	25.5	102	
SLM LT SP	30	8.7	315	102	7.3	6.5	110	90	108	76		65.8	12.4	92	82.6	3.4	98	27.1	25.2	101	
LAKEVIEW																					
		PAYMASTER 101A								100 PERCENT											
SLM LT SP	30	8.8	315	101	6.7	6.0	110	110	81	49	39	67.9	12.2	96	81.8	3.7	95	27.0	26.3	105	
SLM LT SP	30	7.9	330	105	7.0	6.3	120	120	61	46		66.7	11.8	92	81.0	3.4	94	27.8	24.9	98	
SLM LT SP	30	7.5	344	107	7.8	6.6	110	100	97	58		67.0	12.2	94	81.6	3.2	96	26.8	25.3	102	
MORTON																					
		RILCOT 90 MIXED								60 PERCENT											
SLM	30	7.7	333	103	7.5	6.7	120	100	69	44	43	71.1	11.2	99	82.3	3.4	97	26.6	26.2	105	
SLM	30	7.6	320	100	7.3	6.7	120	100	96	60		67.6	11.2	91	81.9	3.6	95	26.5	26.4	106	
SLM	30	6.6	334	105	7.4	6.3	120	110	50	34		68.6	11.4	94	81.5	4.0	93	26.6	26.6	107	
MULESHOE																					
		GREGG								93 PERCENT											
SLM	30	7.9	335	103	6.9	6.4	110	100	96	62	41	68.2	10.3	91	81.5	3.8	94	26.9	26.1	105	
LM+	31	7.7	343	109	7.5	6.7	120	100	74	52		70.4	11.2	97	82.7	3.4	98	26.9	26.6	107	
SLM	30	7.5	328	101	7.6	6.8	110	100	84	52		69.2	11.1	95	82.1	3.6	96	27.2	25.5	102	
NEWCASTLE																					
		WESTERN STORMPROOF								90 PERCENT											
M LT SP	30	6.4	286	93	5.8	5.4	120	110	62	36	41	70.0	11.4	97	82.9	3.2	99	26.5	26.4	106	
M LT SP	29	6.8	278	86	5.7	5.2	120	120	57	30		67.4	11.6	92	82.9	3.3	99	26.6	26.9	108	
M SP	30	7.4	295	92	6.9	6.1	120	100	81	45		63.4	13.3	90	83.2	4.0	97	27.4	24.9	99	

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rq	+b	Index	Code
SOUTHWEST AREA--CONTINUED															
NORTHWEST TEXAS															
NEW HOME		LANKART 57 85 PERCENT													
M	31	0.95	47	4.3	74	36.6	20.4	8.0	0.9	2.1	76.1	8.8	100	302	
M LT SP	30	0.93	48	4.2	72	35.6	18.6	7.9	1.7	3.2	73.1	8.8	96	402	
M LT SP	30	0.96	46	4.2	72	35.6	19.3	8.2	1.8	3.1	72.4	8.5	94	402	
O BRIEN		NORTHERN STAR 70 PERCENT													
M LT SP	30	0.94	46	4.8	82	40.6	20.4	5.0	0.9	2.0	70.0	10.1	91	404	
SLM LT SP	31	0.96	46	4.2	75	37.1	19.1	7.1	2.2	4.0	68.9	9.3	88	453	
SLM LT SP	30	0.94	46	3.6	73	36.1	19.0	5.4	2.2	4.2	70.0	10.1	91	404	
PADUCAH		PAYMASTER 101A 100 PERCENT													
M	30	0.94	48	5.0	92	45.5	23.7	5.8	0.8	1.8	76.1	8.2	100	352	
M LT SP	30	0.92	47	4.7	87	43.1	24.1	6.4	1.3	2.4	73.0	9.3	96	353	
M LT SP	30	0.94	49	4.6	86	42.6	22.8	6.7	1.8	2.8	72.5	8.8	95	403	
PETTIT		GREGG 80 PERCENT													
SLM	30	0.91	49	4.1	86	42.6	23.2	6.8	2.7	3.9	73.0	8.2	95	402	
LM+	30	0.88	48	3.6	80	39.6	22.8	7.3	3.2	4.2	74.4	7.8	97	402	
LM+	29	0.84	50	3.8	82	40.6	22.9	7.4	3.3	4.5	73.8	8.0	96	402	
PLAINVIEW		LANKART 611 80 PERCENT													
M	31	0.97	48	4.2	82	40.6	23.5	6.7	1.5	2.4	77.0	8.6	101	302	
SLM	31	0.96	45	3.8	80	39.6	20.8	7.0	1.9	2.7	72.2	8.1	94	452	
SLM	32	0.95	46	3.8	83	41.1	22.2	7.0	1.8	3.2	73.9	8.1	96	402	
RALLS		PAYMASTER 111 100 PERCENT													
SLM	31	0.96	48	3.7	79	39.1	21.2	6.7	2.2	3.7	73.2	8.2	95	402	
SLM	31	0.94	47	3.4	84	41.6	23.8	6.2	1.8	3.2	73.5	7.8	96	402	
SLM	31	0.97	47	3.8	79	39.1	21.9	6.9	1.7	3.0	73.1	8.6	96	402	
RALLS		LANKART 57 98 PERCENT													
M LT SP	30	0.94	47	4.4	77	38.1	21.3	7.2	1.9	3.1	72.9	9.1	96	403	
M LT SP	30	0.94	47	4.4	74	36.6	19.5	7.4	1.6	2.6	72.7	8.8	95	403	
SLM	30	0.93	45	4.4	75	37.1	20.5	7.8	1.8	3.3	73.1	8.5	96	402	
RALLS		LANKART 57 90 PERCENT													
M LT SP	31	0.96	46	4.2	76	37.6	20.8	7.2	2.4	3.8	73.0	9.2	96	353	
SLM LT SP	30	0.93	46	4.2	73	36.1	18.6	7.9	3.2	4.8	69.9	9.2	90	453	
SLM	31	0.97	46	4.3	69	34.2	18.8	8.2	1.6	2.8	74.0	8.2	97	402	

Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. potential	Color-22s grey yarn			Color-22s blchd. yarn			Color-22s dyed yarn			
			8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex		Rflect-ance	Yellow-ness	Com-posite	Rflect-ance	Yellow-ness	Com-posite	Rflect-ance	Blue-ness	Com-posite	
			Grade	Staple	Lbs.	Lbs.	Pct.	Pct.	Index	Index		No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd
SOUTHWEST AREA--CONTINUED																					
NORTHWEST TEXAS																					
NEW HOME		LANKART 57									85 PERCENT										
M		31	6.0	298	93	7.0	6.4	120	110	51	33	41	70.8	11.2	98	83.3	2.7	102	25.4	27.8	114
M LT SP		30	7.2	272	85	7.4	6.6	110	100	91	52		67.9	11.2	92	81.2	3.4	95	26.9	26.2	104
M LT SP		30	7.7	278	88	7.8	6.9	120	110	96	45		66.8	10.6	88	80.5	3.5	93	26.2	26.4	107
D BRIEN		NORTHERN STAR									70 PERCENT										
M LT SP		30	6.9	277	86	5.6	5.1	120	120	36	21	37	66.3	12.6	94	82.9	3.8	97	26.9	26.9	108
SLM LT SP		31	7.6	279	89	7.0	6.1	110	100	60	37		64.5	11.2	85	81.8	4.1	93	27.2	25.8	103
SLM LT SP		30	9.1	258	80	6.4	5.4	120	110	70	40		66.8	12.4	94	83.7	3.5	100	28.5	24.7	96
PADUCAH		PAYMASTER 101A									100 PERCENT										
M		30	6.4	336	108	6.5	5.8	120	120	30	20	43	70.7	10.4	95	82.0	2.8	99	26.0	26.9	110
M LT SP		30	5.8	334	105	6.8	5.9	120	120	48	30		66.6	11.7	91	80.6	3.3	94	26.8	26.1	105
M LT SP		30	6.1	335	106	7.0	5.9	120	120	54	30		67.8	11.6	93	80.9	3.2	95	26.4	26.0	105
PETTIT		GREGG									80 PERCENT										
SLM		30	7.9	331	104	7.2	6.5	120	110	70	42	44	68.8	10.4	91	81.2	3.5	94	25.8	26.7	109
LM+		30	8.0	341	106	7.7	6.9	120	110	78	47		70.1	11.5	98	82.6	3.1	99	26.0	26.7	109
LM+		29	8.2	321	103	7.3	7.2	120	110	61	36		69.6	10.7	94	81.7	3.0	97	26.5	26.1	105
PLAINVIEW		LANKART 611									80 PERCENT										
M		31	6.0	319	101	7.1	6.5	120	120	46	30	47	71.5	11.5	100	83.2	3.1	100	25.3	27.4	113
SLM		31	7.1	318	100	7.3	6.6	120	100	65	47		67.8	10.1	88	79.9	4.0	89	27.9	25.0	98
SLM		32	6.4	333	106	7.3	6.7	110	100	74	47		68.6	10.7	92	81.0	3.8	93	26.9	26.1	105
RALLS		PAYMASTER 111									100 PERCENT										
SLM		31	6.7	326	104	7.4	6.9	110	100	87	56	49	69.4	10.8	94	81.7	3.5	96	26.6	26.2	105
SLM		31	7.3	332	104	7.2	6.7	120	110	81	48		69.9	10.8	95	82.0	3.0	98	27.4	26.1	104
SLM		31	7.3	328	101	7.7	7.0	120	100	83	54		68.6	10.7	92	80.9	3.4	94	27.6	25.1	99
RALLS		LANKART 57									98 PERCENT										
M LT SP		30	7.6	296	91	7.1	6.3	120	110	67	43	41	67.9	11.7	94	82.9	4.2	95	26.5	26.5	107
M LT SP		30	6.0	295	92	7.7	6.3	110	100	77	48		68.2	11.4	93	81.9	4.0	94	28.1	25.2	98
SLM		30	7.8	278	87	8.1	6.5	120	100	77	47		68.9	11.3	94	82.4	3.4	97	27.2	26.1	104
RALLS		LANKART 57									90 PERCENT										
M LT SP		31	8.4	286	90	7.3	6.3	110	100	64	37	43	67.9	11.8	94	83.4	3.7	99	26.5	26.5	107
SLM LT SP		30	8.4	282	88	7.4	6.3	110	100	89	55		67.8	11.2	92	80.5	5.0	87	28.1	24.6	96
SLM		31	7.3	283	87	7.6	6.8	120	100	76	39		69.6	10.6	93	81.6	2.9	98	27.5	26.1	103

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHWEST AREA--CONTINUED															
NORTHWEST TEXAS															
ROBY															
			WESTERN STORMPROOF			90 PERCENT									
M LT SP	30	0.92	46	4.4	88	43.6	19.0	4.9	1.0	1.6	73.6	9.6	98	303	
M LT SP	29	0.90	46	4.4	86	42.6	19.1	4.8	1.5	2.5	72.5	10.1	96	353	
M LT SP	30	0.94	47	4.4	79	39.1	18.4	5.8	1.3	2.2	72.1	9.4	94	403	
SLM LT SP	29	0.90	45	4.0	87	43.1	19.6	4.7	1.8	3.8	69.7	10.4	90	404	
ROPESVILLE															
			LOCKETT 88A			100 PERCENT									
M	30	0.90	49	4.2	79	39.1	20.5	6.2	1.7	3.0	76.9	8.2	101	351	
SLM	29	0.88	48	4.0	76	37.6	20.1	6.6	1.4	2.5	74.8	8.3	98	402	
SLM	30	0.92	48	4.0	77	38.1	20.0	6.7	1.3	2.3	74.5	8.0	97	402	
RULE															
			TPSA 41			75 PERCENT									
SLM LT SP	30	0.96	46	4.6	81	40.1	20.7	6.7	2.3	3.7	68.0	9.7	87	454	
SLM LT SP	30	0.95	47	4.8	81	40.1	20.9	6.8	2.9	4.3	69.4	9.6	90	403	
LM LT SP	30	0.98	47	4.4	80	39.6	20.5	7.0	4.1	5.3	68.1	9.4	87	453	
SEAGRAVES															
			GREGG			90 PERCENT									
SLM	31	0.97	46	4.1	92	45.5	24.2	5.8	2.0	3.0	72.8	8.3	95	402	
SLM	30	0.93	47	3.8	86	42.6	22.0	6.7	1.9	3.1	73.1	8.4	95	402	
SLM LT SP	30	0.89	46	3.4	84	41.6	22.3	6.9	2.2	3.6	71.2	9.1	93	403	
SHALLOWATER															
			LANKART 57			85 PERCENT									
M LT SP	31	0.96	44	4.4	77	38.1	19.6	7.2	1.6	3.0	72.7	9.6	96	353	
M LT SP	30	0.92	45	4.1	72	35.6	19.0	7.9	1.3	2.8	70.8	9.2	92	403	
SLM	30	0.91	45	4.0	72	35.6	18.9	8.2	1.5	2.6	72.7	8.3	95	402	
SNYDER															
			WESTERN STORMPROOF			95 PERCENT									
M	30	0.94	44	4.3	87	43.1	21.0	5.4	0.7	1.6	75.8	9.4	100	303	
M LT SP	29	0.86	46	4.3	85	42.1	18.6	4.9	1.2	2.3	73.1	9.8	97	353	
M LT SP	29	0.84	47	4.4	82	40.6	18.6	4.8	1.0	2.2	72.8	10.1	96	353	
M LT SP	30	0.90	45	4.0	81	40.1	19.6	5.5	1.4	3.1	72.6	9.4	95	353	
VERNON															
			LOCKETT 4789			100 PERCENT									
SLM LT SP	32	1.00	48	4.6	88	43.6	23.5	5.4	2.5	4.0	71.1	9.3	92	403	
SLM LT SP	31	0.98	46	4.9	89	44.1	23.5	5.3	2.4	3.9	69.1	8.9	89	453	
SLM LT SP	32	1.01	47	4.6	85	42.1	22.5	5.8	2.8	4.1	69.0	9.3	89	453	
WALL															
			LANKART			80 PERCENT									
M LT SP	30	0.92	48	4.3	83	41.1	20.2	5.8	1.1	2.2	74.2	9.8	99	303	
SLM SP	29	0.91	43	4.4	78	38.6	19.4	7.0	1.8	3.1	67.5	10.2	87	454	
SLM LT SP	28	0.86	45	4.2	84	41.6	19.5	5.4	3.0	4.2	69.8	10.0	90	404	
SLM SP	29	0.89	46	4.4	73	36.1	19.5	7.0	2.4	4.3	66.4	9.9	84	454	

Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfections		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd. yarn			Color-22s dyed yarn		
			8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex		Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Yellow- ness	Com- posite	Reflect- ance	Blue- ness	Com- posite
Grade	Staple	32d in, Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHWEST AREA--CONTINUED																				
NORTHWEST TEXAS																				
ROBY		WESTERN STORMPROOF										90 PERCENT								
M LT SP	30	6.7	266	83	5.4	4.9	120	120	53	32	36	67.1	12.2	94	82.2	3.6	96	26.6	26.6	107
M LT SP	29	7.8	271	85	6.8	5.4	120	120	55	34		66.9	12.7	96	81.3	4.4	91	27.6	26.0	103
M LT SP	30	7.3	269	83	5.9	5.4	120	120	64	43		66.8	11.4	90	81.9	3.6	95	26.3	26.7	108
SLM LT SP	29	8.1	264	83	5.7	4.8	120	110	72	40	34	64.8	12.6	90	81.3	3.8	93	27.7	25.7	101
ROPEVILLE		LOCKETT 88A										100 PERCENT								
M	30	7.4	308	96	6.8	6.4	120	110	49	28	40	71.9	11.0	99	82.1	2.9	99	26.9	26.2	104
SLM	29	7.2	295	91	7.1	6.5	120	110	56	37		69.4	10.2	92	80.1	2.9	94	26.6	26.5	107
SLM	30	6.4	309	96	7.8	6.4	120	110	44	32		68.8	10.3	91	79.1	3.0	91	27.0	26.3	105
RULE		TPSA 41										75 PERCENT								
SLM LT SP	30	8.6	290	90	6.3	5.6	120	110	51	34	43	65.2	12.4	90	82.8	4.1	96	26.5	26.3	106
SLM LT SP	30	8.7	286	90	6.6	5.7	120	100	51	33		67.8	12.1	95	83.3	3.6	99	28.2	26.2	102
LM LT SP	30	10.0	297	93	7.2	6.1	120	110	80	50		64.7	12.1	88	81.3	3.8	93	27.6	24.9	98
SEAGRAVES		GREGG										90 PERCENT								
SLM	31	7.0	342	110	7.5	6.1	120	110	66	41	46	68.5	10.9	92	79.3	3.7	89	26.3	25.8	105
SLM	30	7.3	316	100	7.0	6.2	120	110	76	50		68.0	10.3	89	80.0	3.3	92	28.0	25.3	99
SLM LT SP	30	7.7	333	107	6.9	6.5	110	100	86	58		66.3	11.2	89	79.9	3.3	92	26.6	26.4	106
SHALLOWATER		LANKART 57										85 PERCENT								
M LT SP	31	7.5	276	83	6.8	5.9	110	90	89	50	41	68.6	11.5	94	80.5	4.4	89	27.1	25.7	102
M LT SP	30	7.6	263	81	7.0	6.0	120	90	83	56		65.4	11.1	87	79.3	5.2	83	27.6	25.1	99
SLM	30	7.7	277	86	7.4	6.6	110	90	74	51		68.2	10.6	90	80.8	3.7	93	27.9	26.2	103
SNYDER		WESTERN STORMPROOF										95 PERCENT								
M	30	6.2	295	92	6.0	5.4	120	120	40	27	40	70.2	12.0	100	83.1	3.4	99	25.9	27.3	111
M LT SP	29	7.4	268	85	6.8	6.1	120	120	43	24		69.0	12.5	99	81.7	4.0	93	28.5	25.7	100
M LT SP	29	7.0	247	74	5.3	4.4	120	120	43	26		69.4	12.1	99	81.6	3.5	95	28.0	25.9	102
M LT SP	30	6.6	273	88	5.9	5.4	120	110	61	31	37	67.2	11.7	92	80.0	3.9	90	27.3	25.1	100
VERNON		LOCKETT 4789										100 PERCENT								
SLM LT SP	32	8.5	318	103	6.3	5.6	120	110	57	34	40	66.4	12.1	92	81.6	3.7	94	27.4	26.0	103
SLM LT SP	31	8.3	313	100	6.4	5.6	120	120	48	28		65.9	11.8	89	81.7	3.1	97	27.1	26.0	104
SLM LT SP	32	7.0	325	105	7.2	6.0	120	120	58	29		65.5	12.2	90	81.1	3.2	95	26.6	26.3	106
WALL		LANKART										80 PERCENT								
M LT SP	30	7.6	304	97	6.7	6.1	120	110	75	46	42	67.7	12.7	97	83.4	3.3	100	25.5	27.5	113
SLM SP	29	8.2	268	82	6.5	5.6	120	120	78	50		68.1	12.6	98	82.2	4.1	94	28.2	26.0	102
SLM LT SP	28	8.4	279	88	6.9	6.3	120	110	57	37		66.1	12.8	94	81.6	4.3	92	28.7	25.3	98
SLM SP	29	9.2	251	76	6.3	5.2	110	100	94	50	32	62.9	12.6	86	82.1	4.3	93	28.3	25.1	98

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mps1</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Ra</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHWEST AREA--CONTINUED															
NORTHWEST TEXAS															
WINTERS		LANKART				90 PERCENT									
SLM SP	29	0.90	46	4.2	80	39.6	19.0	6.7	3.0	4.2	64.9	10.8	82	455	
SLM SP	29	0.86	46	4.2	82	40.6	19.7	6.3	2.3	3.7	63.9	10.3	80	505	
SLM SP	28	0.85	46	4.8	78	38.6	19.1	6.2	3.3	4.5	67.3	10.0	86	454	
SLM SP	29	0.92	46	4.4	74	36.6	19.2	7.3	2.0	3.0	67.6	9.7	86	454	
LM LT SP	29	0.89	45	4.6	78	38.6	19.1	6.5	2.4	4.7	64.9	9.7	81	504	
OKLAHOMA															
ALTUS		NORTHERN STAR				70 PERCENT									
M LT SP	30	0.94	47	4.8	80	39.6	21.1	6.8	0.9	1.6	73.0	9.4	96	353	
M	30	0.93	47	4.7	83	41.1	19.6	6.1	1.0	1.7	74.6	9.0	98	352	
SLM LT SP	30	0.92	46	4.3	82	40.6	21.0	6.2	1.5	2.8	70.4	9.3	92	403	
BURNS FLAT		LANKART 57				80 PERCENT									
SLM SP	30	0.94	46	4.6	74	36.6	20.6	8.2	1.5	2.4	67.1	10.0	86	454	
SLM SP	29	0.92	46	4.8	75	37.1	20.2	7.2	1.6	3.0	65.9	10.6	84	455	
SLM LT SP	31	0.96	45	4.4	73	36.1	19.9	7.9	1.6	3.0	67.0	9.5	85	454	
FREDERICK		LANKART 57				95 PERCENT									
M SP	29	0.88	46	4.8	82	40.6	20.9	6.3	1.6	3.2	68.3	10.6	89	405	
SLM LT SP	30	0.92	46	4.9	78	38.6	21.2	7.2	1.7	3.2	66.9	9.0	85	503	
SLM LT SP	30	0.91	47	4.5	81	40.1	21.1	7.0	1.8	3.6	67.1	9.9	86	454	
HASKELL		STONEVILLE 62				95 PERCENT									
M LT SP	30	0.91	46	5.0	87	43.1	19.4	5.0	1.0	2.2	71.9	9.4	94	403	
SLM	30	0.94	45	4.6	86	42.6	20.2	5.4	1.8	2.8	75.1	8.4	99	352	
SLM	30	0.93	48	4.8	81	40.1	19.2	5.4	1.6	3.1	72.2	8.3	94	402	
MANGUM		LANKART 57				90 PERCENT									
SLM LT SP	30	0.92	48	5.0	77	38.1	19.4	6.7	1.7	3.0	69.9	9.6	90	403	
SLM LT SP	30	0.94	47	4.7	76	37.6	20.7	7.3	1.4	2.9	69.9	9.1	90	453	
SLM LT SP	30	0.93	46	4.4	77	38.1	19.9	7.4	1.8	2.8	69.0	9.4	89	453	
MINCO		LANKART 57				95 PERCENT									
SLM LT SP	30	0.94	46	4.6	79	39.1	19.3	7.0	2.0	3.3	68.5	9.5	88	453	
SLM LT SP	30	0.94	47	4.6	76	37.6	20.4	7.1	2.3	3.6	67.2	9.6	86	454	
LM LT SP	29	0.90	44	4.6	76	37.6	19.5	7.4	2.5	4.5	65.1	9.5	87	504	
TERRAL		PARROT				70 PERCENT									
SLM LT SP	29	0.84	45	3.8	94	46.5	20.2	3.9	1.7	2.5	69.1	10.0	89	404	
M LT SP	29	0.90	47	4.5	85	42.1	20.5	4.6	1.4	2.7	71.4	9.7	94	403	
SLM LT SP	29	0.84	48	4.8	95	42.1	19.9	4.9	1.9	2.9	68.0	9.8	87	454	
SLM LT SP	28	0.87	45	4.5	83	41.1	20.7	5.6	1.8	3.0	67.8	9.5	86	454	

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28
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Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex	8s or 73.8 tex	22s or 26.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHWEST AREA--CONTINUED																					
NORTHWEST TEXAS																					
WINTERS		LANKART										90 PERCENT									
SLM SP	29	9.5	285	87	6.3	5.6	120	100	94	60	34	61.8	13.3	86	79.0	6.5	77	27.3	24.4	97	
SLM SP	29	8.6	254	76	5.9	5.4	120	110	68	33		60.8	12.6	82	78.8	6.2	78	28.9	23.9	92	
SLM SP	28	9.7	256	77	7.1	5.7	120	110	58	34		64.3	12.8	90	81.4	4.9	89	29.4	25.3	97	
SLM SP	29	9.4	260	79	6.6	5.4	120	110	64	43	35	65.3	12.3	90	82.5	3.8	96	28.3	25.5	99	
LM LT SP	29	9.2	247	73	5.9	4.9	120	110	75	47		64.2	12.0	87	80.9	4.4	90	29.1	24.1	92	
OKLAHOMA																					
ALTUS		NORTHERN STAR										70 PERCENT									
M LT SP	30	6.0	292	92	6.9	6.1	120	120	41	24	38	67.2	11.9	93	82.7	3.1	99	26.7	27.0	109	
M	30	6.2	290	90	6.3	5.6	120	120	32	23		68.5	11.0	92	82.6	3.4	98	27.5	26.2	103	
SLM LT SP	30	7.5	289	91	6.7	6.0	120	110	71	39		65.2	11.8	88	82.2	3.5	97	27.8	25.7	101	
BURNS FLAT		LANKART 57										80 PERCENT									
SLM SP	30	7.2	269	85	6.4	5.8	120	100	73	45	38	62.7	11.8	84	80.3	5.2	85	26.9	25.5	102	
SLM SP	29	7.6	275	86	6.9	6.2	120	110	65	40		61.1	12.4	82	78.9	5.8	80	27.8	24.3	96	
SLM LT SP	31	6.7	294	91	7.7	6.2	120	120	59	36		62.7	11.8	83	80.0	4.0	90	27.6	25.1	99	
FREDERICK		LANKART 57										95 PERCENT									
M SP	29	8.2	273	83	7.0	6.1	120	110	51	32	31	64.8	13.1	92	81.7	4.6	91	28.6	25.4	98	
SLM LT SP	30	7.9	277	85	6.9	5.8	120	110	58	34		63.3	11.8	85	81.2	3.3	95	28.4	26.0	101	
SLM LT SP	30	7.5	287	91	6.7	5.8	120	120	54	35		62.4	12.2	84	80.0	4.2	89	28.3	24.3	95	
HASKELL		STONEVILLE 62										95 PERCENT									
M LT SP	30	7.5	254	78	5.1	4.6	120	120	35	24	34	68.0	11.8	94	82.8	3.0	100	28.8	26.0	100	
SLM	30	6.6	278	92	5.6	5.4	120	120	56	29		69.6	11.5	97	83.7	3.3	101	27.2	26.5	106	
SLM	30	6.4	284	91	6.0	5.6	120	120	41	25		68.0	10.7	90	81.3	3.2	96	28.9	25.5	98	
MANGUM		LANKART 57										90 PERCENT									
SLM LT SP	30	7.3	269	85	6.2	5.7	120	110	63	33	36	66.3	12.0	91	82.0	3.2	97	28.3	25.8	101	
SLM LT SP	30	7.1	277	88	6.7	5.9	120	110	71	43		65.0	11.7	88	82.0	3.5	96	28.0	26.6	104	
SLM LT SP	30	8.2	273	86	6.5	5.8	120	100	68	36		64.3	11.8	87	81.6	3.8	94	27.7	25.5	101	
MINCO		LANKART 57										95 PERCENT									
SLM LT SP	30	8.2	275	86	6.5	5.9	120	110	88	51	39	64.6	11.6	87	81.4	3.8	93	28.1	25.9	101	
SLM LT SP	30	8.7	283	87	6.7	5.7	110	110	77	53		64.3	11.7	86	81.7	3.5	95	28.9	26.2	101	
LM LT SP	29	9.1	268	80	6.7	5.6	120	100	94	59		62.6	11.7	83	81.3	3.2	96	30.0	24.7	93	
TERRAL		PARROTT										70 PERCENT									
SLM LT SP	29	7.6	272	84	4.9	4.4	120	100	72	48	30	63.8	12.6	88	82.3	3.9	95	29.4	24.5	93	
M LT SP	29	7.8	287	90	6.6	5.6	120	120	39	25		67.8	12.6	97	82.0	3.7	95	28.2	25.9	101	
SLM LT SP	29	8.1	261	80	5.1	4.5	120	110	54	32		65.0	12.2	89	82.2	3.3	97	29.7	25.0	95	
SLM LT SP	28	8.2	273	83	5.4	4.7	120	110	51	29	33	63.5	11.8	86	81.4	3.8	93	29.2	25.1	96	

Table 5.--Cotton: Fiber test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>R_a</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
WESTERN AREA															
NEW MEXICO															
TUCUMCARI		GREGG				90 PERCENT									
SLM	30	0.91	48	3.8	84	41.6	22.5	6.5	2.7	3.8	75.3	8.5	99	352	
SLM	30	0.94	47	4.0	83	41.1	23.2	6.4	2.2	3.4	76.5	8.3	100	352	
LM	30	0.91	47	3.4	80	39.6	23.4	7.3	4.1	5.5	75.1	8.2	98	402	
HOBBS		MXD-MNLY GREGG				50 PERCENT									
SLM	31	0.96	47	3.6	82	40.6	22.6	7.0	1.3	2.4	73.3	8.1	96	402	
WEST TEXAS															
MCCAMEY		MXD-MNLY LOCKETT				50 PERCENT									
M LT SP	31	0.91	47	4.2	75	37.1	18.0	5.2	1.4	3.1	73.4	9.4	97	353	
M	31	0.94	46	4.4	73	36.1	18.2	5.3	1.4	2.7	74.4	8.8	98	352	
M LT SP	31	0.94	46	4.0	77	38.1	20.1	7.1	2.0	2.8	75.6	9.2	100	302	
VERHALEN		MXD-MNLY LANKART 57				50 PERCENT									
M	32	0.95	47	3.8	69	34.2	17.6	6.2	1.2	2.2	75.3	9.3	100	303	
SLM	32	0.97	43	3.3	75	37.1	20.1	7.0	1.9	3.1	76.7	8.2	101	352	
SLM	32	1.02	46	4.0	77	38.1	20.2	7.0	2.6	4.0	74.5	8.8	98	352	

Table 5a.--Cotton: Carded yarn processing test results for short staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blebd.yarn			Color-22s dyed yarn			
			8s or	22s or	8s or	22s or	8s or	22s or	8s or	22s or		Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Blue- ness	Com- posite	
			73.8 tex	26.8 tex	73.8 tex	26.8 tex	73.8 tex	26.8 tex	73.8 tex	26.8 tex		Rd	+b	Index	Rd	+b	Index	Rd	-b	Index	
Grade	Staple																				
		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
WESTERN AREA																					
NEW MEXICO																					
TUCUMCARI		GREGG																		90 PERCENT	
SLM	30	8.2	323	102	7.2	6.2	120	100	61	41	41	72.0	11.8	102	83.7	2.9	103	26.9	26.5	106	
SLM	30	7.2	329	109	7.4	6.7	120	110	63	39		72.2	11.1	100	83.5	3.0	102	27.5	27.0	107	
LM	30	8.2	340	107	7.8	7.0	120	110	74	55		71.5	11.5	100	83.6	3.0	102	27.0	26.4	106	
HOBBS		MXD-MNLY GREGG																		50 PERCENT	
SLM	31	7.1	322	102	7.1	6.8	120	100	75	45		69.2	10.4	92	81.3	2.7	98	27.2	26.7	106	
WEST TEXAS																					
MCCAMEY		MXD-MNLY LOCKETT																		50 PERCENT	
M LT SP	31	8.7	265	82	5.8	5.5	120	100	60	38	36	69.4	12.4	100	83.1	3.0	101	27.9	26.5	104	
M	31	6.8	263	82	6.6	5.4	120	120	50	34		70.1	11.4	98	83.4	3.1	101	28.5	26.3	102	
M LT SP	31	7.1	309	96	7.5	6.6	120	120	61	44		69.6	12.2	99	84.0	3.3	102	26.9	27.0	108	
VERHALEN		MXD-MNLY LANKART 57																		50 PERCENT	
M	32	7.2	249	77	6.3	5.9	120	100	89	57	35	70.3	12.0	100	83.7	2.7	103	27.2	26.3	105	
SLM	32	7.7	300	93	7.5	6.7	110	90	81	62		72.2	11.6	102	84.7	2.5	106	26.8	26.8	108	
SLM	32	7.4	297	93	7.4	6.3	120	110	72	45		69.5	11.8	98	82.5	3.1	99	27.5	26.1	103	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index	Code
SOUTHEAST AREA															
ALABAMA															
BELLE MINA															
		CAROLINA QUEEN				100 PERCENT									
SM	33	1.05	44	4.4	83	41.3	22.6	6.2	0.4	1.2	78.8	9.1	104	202	
M LT SP	33	1.06	45	5.0	81	40.2	20.8	5.9	0.5	1.9	73.1	10.3	98	303	
SLM	33	1.08	43	4.4	77	38.0	20.4	6.7	1.2	2.2	72.0	9.0	94	403	
BOAZ															
		DIXIE KING				100 PERCENT									
M LT SP	34	1.06	46	4.0	75	37.2	20.3	6.0	1.2	2.1	75.9	9.2	100	302	
LM	34	1.04	44	4.0	76	37.6	20.0	6.2	3.4	4.6	70.7	9.0	92	453	
LM	33	1.03	43	3.6	78	38.6	20.7	5.9	3.4	4.5	72.5	8.4	95	402	
CROSSVILLE															
		DIXIE KING				85 PERCENT									
SM	33	1.04	46	4.2	75	37.0	19.5	6.2	0.6	2.2	79.0	9.2	105	202	
SLM	33	1.01	45	3.8	77	38.2	20.2	6.7	1.6	2.2	73.9	8.6	97	402	
LM	33	1.03	46	3.4	81	40.0	20.7	6.5	3.5	4.3	72.5	7.9	94	452	
DECATUR															
		REX				100 PERCENT									
SLM	34	1.02	42	3.9	81	39.9	20.4	6.2	1.7	2.7	76.0	8.8	100	352	
SLM	33	1.03	45	4.4	78	38.6	20.1	6.2	1.1	2.6	73.5	9.0	97	353	
SLM	33	1.02	41	4.1	78	38.5	19.4	6.1	0.8	1.7	71.0	9.2	92	403	
ELKMONT															
		EMPIRE				75 PERCENT									
M	34	1.01	44	4.2	81	40.0	21.2	6.3	0.8	1.8	79.0	8.7	104	252	
M	34	1.06	44	3.8	78	38.7	19.7	6.3	0.8	2.0	78.0	9.0	103	252	
SLM	33	1.03	43	3.4	83	41.3	19.1	6.2	1.5	2.7	74.8	8.4	98	402	
GERALDINE															
		COKER 100				100 PERCENT									
SM	34	1.05	46	4.2	74	36.8	20.1	6.2	0.8	2.0	79.0	8.9	104	252	
SLM	33	1.03	42	3.8	73	36.3	19.3	7.0	1.2	2.2	72.5	9.3	95	403	
SLM	33	1.03	43	3.6	78	38.7	21.9	6.6	2.3	3.3	74.8	8.7	98	352	
HUNTSVILLE															
		EMPIRE				100 PERCENT									
SLM+	34	1.04	42	3.9	85	42.0	21.8	6.1	1.6	2.5	77.8	8.7	107	302	
SLM	32	1.03	42	3.7	78	38.8	19.8	6.2	1.4	2.6	73.0	9.3	96	353	
SLM	33	1.03	43	3.6	79	39.2	19.9	5.4	1.1	1.7	73.0	8.4	96	402	
NEWVILLE															
		MXD.MNLY.CAR.QUEEN				65 PERCENT									
SLM	33	1.02	41	4.1	71	35.0	18.7	6.2	1.1	1.5	71.8	9.4	94	403	
M	33	1.01	45	4.1	73	36.3	19.9	6.6	0.6	1.5	75.8	9.0	100	302	
SLM	33	1.00	44	4.0	69	34.3	20.0	6.2	1.1	1.8	72.0	8.5	94	402	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHEAST AREA																					
ALABAMA																					
BELLE MINA		CAROLINA QUEEN				100 PERCENT															
SM	33	5.8	109	35	6.2	4.8	100	90	25	18	55	74.3	11.2	104	34.7	2.6	106	26.1	27.3	111	
M LT SP	33	6.7	99	30	5.5	4.1	110	100	21	16		68.9	12.4	98	83.0	2.9	101	26.7	26.7	107	
SLM	33	7.0	102	35	6.1	4.6	110	100	22	13		67.2	11.4	91	83.4	3.3	100	27.7	26.3	104	
BOAZ		DIXIE KING				100 PERCENT															
M LT SP	34	7.4	108	39	6.6	5.1	110	90	42	30	53	71.4	12.1	102	84.4	2.8	104	27.1	26.8	107	
LM	34	9.8	100	34	6.0	4.6	100	100	36	25		67.2	11.2	90	84.7	2.9	105	27.3	26.1	104	
LM	33	9.4	105	37	6.5	4.9	100	90	47	27		70.1	11.4	97	83.5	2.6	103	28.2	25.9	101	
CROSSVILLE		DIXIE KING				85 PERCENT															
SM	33	5.9	104	35	6.7	4.9	110	90	22	16	55	73.9	11.2	103	85.4	2.3	109	27.3	26.9	107	
SLM	33	7.5	103	36	6.4	5.1	100	90	35	27		69.2	11.3	96	84.3	3.0	104	27.7	26.9	106	
LM	33	8.7	104	37	6.2	4.8	100	80	50	32		69.5	10.9	94	83.0	3.0	100	27.7	25.7	101	
DECATUR		REX				100 PERCENT															
SLM	34	6.8	95	30	6.4	4.5	100	90	31	22	45	72.3	11.2	101	83.6	3.5	100	26.7	27.2	109	
SLM	33	7.4	94	29	5.9	4.2	100	90	30	21		69.9	11.2	96	83.8	2.7	104	28.5	26.5	103	
SLM	33	7.1	92	29	5.8	4.6	110	90	28	24		65.3	11.2	88	83.0	3.8	97	29.1	25.1	96	
ELKMONT		EMPIRE				75 PERCENT															
M	34	6.6	109	38	6.4	5.3	110	100	16	11	59	73.6	11.3	103	83.8	2.4	105	26.1	27.9	114	
M	34	7.6	110	39	6.8	5.3	100	90	28	21		73.0	11.2	102	85.7	2.7	108	26.7	26.6	107	
SLM	33	7.8	104	37	6.2	4.8	100	90	32	24		69.8	11.2	96	83.3	3.2	100	28.4	25.6	100	
GERALDINE		COKER 100				100 PERCENT															
SM	34	6.7	101	34	6.5	4.9	100	90	42	29	54	73.6	11.2	103	34.7	2.4	107	26.8	27.4	110	
SLM	33	7.9	97	32	6.2	4.6	100	80	47	34		67.0	11.3	90	83.8	2.7	104	28.1	25.4	99	
SLM	33	7.6	104	37	6.6	5.2	90	90	49	35		69.5	11.5	97	83.7	2.8	103	28.5	25.8	100	
HUNTSVILLE		EMPIRE				100 PERCENT															
SLM+	34	6.6	108	37	6.7	4.8	100	100	29	22	60	73.0	11.0	101	85.0	2.4	108	26.6	27.6	111	
SLM	32	8.2	98	34	6.0	4.6	100	90	34	24		68.2	11.4	94	84.1	3.2	102	28.5	25.6	99	
SLM	33	7.5	104	35	6.1	4.7	100	80	36	27		69.4	10.9	94	82.8	3.4	98	28.4	25.2	98	
NEWVILLE		MXD.MNLY.CAR.QUEEN				65 PERCENT															
SLM	33	7.2	86	27	5.9	4.3	100	90	47	35	48	66.5	11.0	88	83.9	2.5	105	25.4	27.3	112	
M	33	7.0	97	35	6.2	5.3	100	90	36	23		71.2	11.1	99	85.8	2.3	110	26.2	27.8	113	
SLM	33	7.8	90	29	6.0	4.1	100	90	41	30		68.1	10.7	91	84.6	2.6	106	27.6	25.9	102	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mps1</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHEAST AREA--CONTINUED															
ALABAMA															
PANOLA		DPL-15		60 PERCENT											
SM	34	1.07	45	4.3	81	40.0	22.6	5.8	0.9	1.3	78.9	8.9	104	252	
M	34	1.08	45	4.5	80	39.8	20.8	6.1	0.3	1.8	79.0	8.8	104	252	
SLM	33	1.03	44	4.2	78	38.5	21.7	6.5	1.2	2.1	72.7	8.8	95	403	
PIEDMONT		DIXIE KING		100 PERCENT											
M	33	1.03	48	3.9	78	38.5	20.2	6.2	0.8	2.3	77.8	9.0	102	252	
LM	33	1.02	45	3.8	80	39.7	21.6	6.4	1.7	2.9	70.5	8.0	90	452	
LM	33	1.04	46	3.6	83	41.3	21.6	6.6	2.0	2.4	72.7	7.8	94	452	
PINE APPLE		COKER 100		80 PERCENT											
M	35	1.09	46	4.4	72	35.8	20.5	6.8	1.0	1.4	76.0	9.6	101	303	
M	33	1.03	43	4.4	73	36.3	20.2	7.0	0.8	1.4	77.6	9.2	103	252	
M	33	1.03	45	4.0	74	36.8	19.6	6.4	1.0	1.6	75.8	9.0	100	302	
PRATTVILLE		AUBURN 56		100 PERCENT											
SM	34	1.06	45	4.2	72	35.9	20.8	6.9	0.5	1.5	78.8	9.2	104	202	
SLM	33	1.04	43	4.1	74	36.4	20.1	6.7	0.9	2.2	75.0	9.6	100	303	
SLM	33	1.02	43	4.2	74	36.7	19.5	6.8	1.2	2.1	72.5	8.9	95	403	
TROY		AUBURN 56		70 PERCENT											
M	34	1.07	46	4.4	74	36.5	20.0	6.8	0.8	1.2	75.9	9.4	100	303	
M	33	1.02	43	4.1	71	35.3	19.5	7.4	1.0	1.6	77.0	9.6	102	253	
SLM	33	1.02	44	4.0	72	35.5	18.8	7.3	1.1	1.6	72.0	9.0	94	403	
WARRIOR		CAROLINA QUEEN		75 PERCENT											
SM	34	1.05	47	4.4	76	37.6	20.1	6.7	0.7	1.4	78.3	8.7	103	252	
SLM	34	1.05	44	4.0	76	37.5	20.5	6.6	0.8	1.7	72.5	9.0	95	403	
SLM	34	1.06	45	3.9	75	37.3	20.0	7.0	1.2	1.9	72.0	8.4	94	452	
WETUMPKA		COKER 100		100 PERCENT											
SM	33	1.09	47	4.6	72	35.4	20.2	6.6	0.8	0.9	78.8	8.7	104	252	
M	33	1.04	46	4.6	74	36.8	19.9	7.4	1.1	1.6	78.7	9.2	104	202	
SLM	34	1.05	44	4.1	75	37.2	20.3	6.0	1.8	2.8	74.2	8.8	98	352	
FLORIDA															
GRACEVILLE		COKER 100		70 PERCENT											
LM	34	1.07	43	4.6	76	37.5	19.4	6.3	2.7	3.4	67.0	8.9	85	503	
LM	33	1.03	44	3.9	71	35.1	19.5	6.9	3.9	5.1	70.5	8.9	91	453	
LM LT SP	33	1.04	44	4.4	75	36.9	19.4	5.6	3.2	4.7	66.7	8.8	84	503	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd. yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
Grade	Staple		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
SOUTHEAST AREA--CONTINUED																				
ALABAMA																				
PANOLA		DPL-15 60 PERCENT																		
SM	34	5.9	111	38	6.2	4.8	120	110	14	10	60	73.6	11.1	102	84.9	2.4	107	26.0	27.9	114
M	34	5.9	111	38	6.6	5.0	120	110	14	11		73.9	10.9	102	85.7	1.9	111	26.2	28.0	114
SLM	33	6.6	104	35	6.0	4.6	110	100	16	12		69.0	10.8	93	84.7	2.7	106	28.6	25.8	100
PIEDMONT		DIXIE KING 100 PERCENT																		
M	33	8.0	107	37	6.5	5.0	110	100	17	12	63	71.8	11.3	100	83.8	2.6	104	27.0	26.5	106
LM	33	8.2	108	38	6.5	5.3	100	100	36	23		65.4	10.3	85	80.7	3.1	95	27.8	25.3	100
LM	33	7.8	108	38	6.4	5.1	100	100	33	25		68.6	10.5	91	82.6	2.8	100	28.7	25.8	100
PINE APPLE		COKER 100 80 PERCENT																		
M	35	6.5	105	37	6.3	5.1	100	100	31	21	62	71.0	11.4	99	83.9	2.5	105	25.3	27.6	114
M	33	6.6	103	36	6.8	5.3	110	100	24	17		72.8	11.3	102	85.9	2.5	109	26.2	27.5	112
M	33	6.4	101	35	6.3	4.8	110	100	20	16		70.8	10.8	97	85.1	2.6	107	25.9	27.3	111
PRATTVILLE		AUBURN 56 100 PERCENT																		
SM	34	6.0	105	37	6.9	5.5	100	90	16	10	58	74.3	11.3	104	85.3	2.6	108	25.3	27.8	115
SLM	33	6.6	101	33	6.4	4.9	110	90	23	19		71.6	11.5	101	84.0	2.6	104	27.5	26.4	104
SLM	33	7.0	96	32	6.3	4.8	100	90	24	17		69.8	11.3	97	83.0	3.0	100	28.1	25.8	101
TROY		AUBURN 56 70 PERCENT																		
M	34	5.9	103	35	6.6	5.4	110	100	15	11	59	71.6	11.4	100	84.3	2.7	105	25.0	27.8	115
M	33	6.6	103	35	7.1	5.5	110	100	19	11		71.8	11.3	100	86.1	2.5	110	26.8	27.4	110
SLM	33	8.1	91	30	6.2	4.7	100	90	28	19		66.6	11.2	89	84.4	3.1	103	26.7	27.1	109
WARRIOR		CAROLINA QUEEN 75 PERCENT																		
SM	34	6.2	108	37	7.1	5.4	110	100	28	20	57	73.0	11.1	101	86.1	2.5	110	24.5	28.5	119
SLM	34	7.6	104	37	6.4	5.1	100	100	27	20		67.4	10.9	90	84.4	2.6	105	27.7	26.4	104
SLM	34	6.3	106	38	6.7	5.4	110	100	23	17		68.2	11.0	92	83.3	2.8	102	27.9	25.3	99
WETUMPKA		COKER 100 100 PERCENT																		
SM	33	5.4	109	37	6.7	5.3	120	100	10	6	64	73.0	11.2	102	84.9	2.3	108	24.6	28.5	119
M	33	5.2	107	37	6.8	5.3	120	110	12	8		73.3	11.3	103	86.2	2.5	110	25.3	28.6	118
SLM	34	7.0	103	36	6.3	4.8	100	100	22	14		69.7	10.8	95	84.4	2.9	104	28.3	26.3	103
FLORIDA																				
GRACEVILLE		COKER 100 70 PERCENT																		
LM	34	8.9	83	25	5.3	4.0	100	100	36	29	45	62.9	10.9	82	83.7	3.2	101	25.9	27.3	111
LM	33	10.1	94	30	6.3	4.7	110	90	29	20		65.4	10.7	85	84.3	2.8	104	27.7	27.2	107
LM LT SP	33	10.0	86	27	5.7	3.9	100	100	35	27		63.4	10.5	82	83.9	3.1	102	28.2	26.0	102

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rq</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHEAST AREA--CONTINUED															
GEORGIA															
ARABI		CAROLINA QUEEN				70 PERCENT									
M	33	1.04	44	4.0	71	34.9	19.1	7.4	2.0	2.8	75.9	9.0	100	302	
SLM LT SP	33	1.03	43	4.0	72	35.6	18.3	6.3	1.9	2.8	68.7	9.6	88	454	
LM	33	1.04	43	3.8	70	34.9	19.3	7.0	1.9	3.8	69.5	8.8	90	453	
BAXLEY		COKER 100				95 PERCENT									
M LT SP	34	1.08	46	4.4	72	35.9	20.4	6.9	1.3	2.0	74.5	9.2	98	353	
SLM LT SP	34	1.07	44	4.4	73	35.9	18.4	6.3	1.6	2.5	69.9	8.9	90	453	
LM LT SP	33	1.04	41	4.2	67	33.3	17.7	6.4	3.6	5.3	66.0	9.2	83	503	
LM LT SP	33	1.03	41	4.2	69	34.2	18.6	6.7	3.4	4.7	65.7	8.4	82	553	
BUTLER		EMPIRE				85 PERCENT									
SM	34	1.07	44	4.2	78	38.5	20.7	5.9	0.8	1.3	78.7	8.8	104	252	
M	34	1.06	44	4.1	79	39.0	20.4	5.8	0.7	1.4	76.5	9.2	101	302	
SLM	34	1.05	45	4.2	77	38.0	19.5	6.2	1.0	2.3	74.5	8.8	98	352	
CAIRO		COKER 100				70 PERCENT									
LM	33	1.08	45	4.2	73	36.0	20.8	6.5	3.3	4.7	68.2	8.8	87	503	
LM	34	1.06	43	3.9	70	34.9	19.6	6.3	2.1	3.0	68.9	8.5	88	503	
LM	34	1.06	44	4.1	70	34.8	19.1	7.0	2.7	4.3	68.7	8.5	88	503	
COMER		COKER 100				100 PERCENT									
M	34	1.07	44	4.3	75	37.0	19.8	6.1	0.9	2.2	77.5	9.1	102	252	
M	34	1.06	44	4.3	72	35.9	19.2	6.9	0.4	2.1	77.0	8.9	102	302	
SLM	33	1.04	47	4.4	74	36.8	19.1	7.2	2.5	3.3	72.0	8.2	93	452	
HARALSON		EMPIRE				100 PERCENT									
M	35	1.09	48	3.8	75	37.1	19.9	6.2	1.0	2.0	77.2	9.1	102	252	
M LT SP	34	1.04	46	3.8	78	38.5	20.1	6.2	1.9	2.5	72.7	8.6	95	402	
SLM	34	1.05	47	3.8	80	39.6	19.4	6.0	1.7	3.1	73.8	8.2	96	402	
MADISON		CAROLINA QUEEN				100 PERCENT									
M	34	1.07	45	4.7	74	36.9	19.9	6.3	1.3	1.8	77.0	9.5	102	252	
M	34	1.07	44	4.4	75	37.0	21.0	7.0	1.3	2.4	77.8	9.0	102	252	
SLM LT SP	34	1.06	45	4.4	74	36.5	20.0	6.4	1.8	2.8	70.0	9.0	90	453	
NEWMAN		DIXIE KING				100 PERCENT									
M	34	1.03	47	4.1	77	38.2	20.5	6.1	0.6	1.9	76.8	9.4	102	252	
M LT SP	33	1.01	44	4.1	80	39.4	20.0	6.2	0.8	2.2	71.5	9.3	94	403	
M LT SP	33	1.04	46	4.0	75	37.0	18.8	7.3	1.9	2.7	72.8	9.0	96	403	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHEAST AREA--CONTINUED																					
GEORGIA		CAROLINA QUEEN										70 PERCENT									
ARABI																					
M		33	8.0	99	34	7.1	5.3	100	90	27	23	57	71.3	12.0	99	85.9	2.3	110	27.2	27.5	110
SLM LT SP		33	8.7	91	30	6.6	5.0	100	90	43	33		63.8	11.4	85	84.7	2.7	105	26.6	27.3	110
LM		33	9.2	92	32	6.5	4.8	100	80	52	34		66.0	10.5	86	84.7	2.9	105	27.9	25.9	102
BAXLEY		COKER 100										95 PERCENT									
M LT SP		34	6.8	105	37	6.8	5.3	100	90	28	19	60	70.0	11.4	97	84.9	2.5	107	26.5	27.6	111
SLM LT SP		34	8.7	92	32	6.4	4.7	100	90	30	21		65.3	10.8	86	84.8	2.4	107	28.2	26.7	104
LM LT SP		33	11.2	80	25	5.6	4.1	90	80	51	42		62.7	10.6	81	84.1	3.0	103	29.7	25.2	95
LM LT SP		33	10.2	82	27	6.0	4.4	90	80	48	32	42	62.7	10.5	81	83.0	2.8	101	29.9	25.2	95
BUTLER		EMPIRE										85 PERCENT									
SM		34	5.9	109	39	6.6	5.4	110	100	23	17	63	72.4	10.9	100	85.6	2.3	110	25.6	28.0	115
M		34	6.4	109	38	6.4	5.2	100	90	27	21		71.6	11.5	101	85.1	2.6	107	26.7	26.8	108
SLM		34	7.0	106	36	6.3	4.7	100	90	28	19		71.0	10.8	97	84.6	2.6	106	26.7	26.9	108
CAIRO		COKER 100										70 PERCENT									
LM		33	9.8	98	33	6.7	4.9	100	90	46	32	59	64.6	10.8	84	83.1	3.1	100	27.1	26.8	107
LM		34	9.4	97	33	6.7	5.1	100	90	46	30		65.2	10.8	86	84.4	2.8	105	28.2	25.6	100
LM		34	9.5	96	34	6.2	4.9	100	90	36	27		63.9	10.5	82	83.6	2.8	103	27.5	26.2	104
COMER		COKER 100										100 PERCENT									
M		34	6.8	104	36	6.7	5.4	100	100	27	18	59	72.6	11.2	101	85.4	2.7	107	26.0	27.1	110
M		34	6.4	104	34	6.4	4.8	100	100	24	17		72.3	11.1	101	85.2	2.5	108	26.2	27.1	110
SLM		33	7.2	100	35	6.5	5.2	110	100	30	19		67.9	10.6	90	83.1	2.7	102	27.7	26.0	103
HARALSON		EMPIRE										100 PERCENT									
M		35	6.9	110	40	6.6	5.1	100	90	37	28	65	72.6	11.4	102	84.5	2.7	105	25.9	26.5	108
M LT SP		34	7.8	102	36	6.2	4.8	100	90	42	30		68.5	11.2	93	83.9	3.2	102	26.8	26.1	105
SLM		34	7.2	101	36	6.3	4.8	110	100	33	26		69.9	10.1	92	83.7	3.4	101	28.3	25.8	101
MADISON		CAROLINA QUEEN										100 PERCENT									
M		34	6.3	107	37	7.0	5.5	110	100	20	15	60	72.7	11.6	103	84.7	2.4	107	24.8	28.5	118
M		34	6.8	108	36	6.4	4.9	100	100	24	18		71.7	11.4	100	84.0	2.5	105	24.8	27.9	116
SLM LT SP		34	9.1	98	33	6.4	4.8	100	90	28	18		65.6	11.4	88	83.4	3.2	101	27.1	25.9	103
NEWNAN		DIXIE KING										100 PERCENT									
M		34	6.6	103	36	6.1	4.8	100	100	23	19	59	71.7	11.7	101	85.2	2.9	106	26.4	27.1	110
M LT SP		33	6.7	98	33	6.1	4.7	110	100	22	16		67.8	11.6	93	84.8	3.4	103	28.4	25.3	98
M LT SP		33	7.4	99	35	6.4	4.8	100	90	27	17		68.4	11.5	94	84.1	3.0	103	26.7	26.8	108

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHEAST AREA--CONTINUED															
GEORGIA															
OGLETHORPF		AUBURN 56		80 PERCENT											
M	34	1.05	47	4.1	71	35.0	19.3	7.5	1.2	2.1	77.1	9.2		102	252
SLM	33	1.04	44	4.0	71	35.2	19.1	6.2	1.3	2.1	75.8	9.0		100	302
M	33	1.04	43	4.0	69	34.4	19.2	7.7	0.8	1.7	76.1	9.1		100	302
SLM	33	1.02	44	4.0	69	34.0	19.2	7.4	1.8	2.5	72.0	8.3		93	452
PINEHURST		MXD.MNLY.DIXIE KING		41 PERCENT											
M	34	1.05	45	4.2	69	34.1	19.7	7.3	1.1	2.0	76.8	9.4		102	252
SLM	33	1.04	44	4.0	73	36.0	19.1	6.5	1.3	2.1	72.0	9.2		94	403
SLM	33	1.05	46	4.2	71	35.3	19.6	7.1	1.9	2.6	71.2	9.1		93	403
REYNOLDS		CAROLINA QUEEN		75 PERCENT											
M	34	1.06	45	4.4	74	36.9	20.6	6.1	0.7	1.7	75.8	9.6		101	303
M	34	1.07	46	4.2	70	34.9	19.8	6.6	0.7	1.5	76.0	9.2		100	302
SLM	33	1.03	43	4.1	70	34.9	19.8	7.0	0.7	1.7	70.8	8.8		92	453
WRENS		CAROLINA QUEEN		80 PERCENT											
M	34	1.07	46	4.2	73	36.1	19.9	6.8	0.9	1.7	75.5	9.6		100	303
SLM	34	1.07	44	4.0	76	37.7	19.4	6.0	1.6	2.5	73.8	9.2		98	353
SLM	34	1.04	42	4.2	73	36.3	18.6	6.6	1.3	2.1	69.8	9.0		90	453
SLM LT SP	33	1.02	43	4.0	76	37.4	18.6	6.2	1.5	2.9	68.5	8.4		88	503
NORTH CAROLINA															
HALIFAX		COKER 100A		80 PERCENT											
M	34	1.08	46	4.6	75	37.2	20.7	7.0	1.2	1.8	76.1	9.0		100	302
LM	34	1.08	45	4.2	72	35.7	19.0	7.3	3.3	3.6	68.0	8.2		86	503
LM	33	1.03	45	4.2	70	34.8	19.1	7.1	3.7	4.7	68.7	7.9		88	502
JACKSON		REX		95 PERCENT											
M	34	1.11	44	4.5	77	38.3	20.2	6.1	0.8	1.6	76.9	8.9		101	302
SLM	34	1.07	45	4.0	70	34.6	19.0	6.7	1.4	1.9	70.3	8.7		91	453
SLM	33	1.02	43	4.0	68	33.4	19.2	7.2	1.5	2.4	71.5	8.2		92	452
LAURINBURG		REX		80 PERCENT											
SLM	34	1.10	44	4.0	72	35.5	20.2	7.2	1.8	2.8	73.5	8.5		96	402
LM	34	1.07	41	3.8	67	33.1	18.0	7.8	3.4	4.4	69.5	8.5		89	453
LM	33	1.05	45	3.8	69	34.0	19.0	7.0	2.9	3.9	70.7	7.3		90	502
LUMBERTON		COKER 100A		75 PERCENT											
M	34	1.05	43	4.2	71	35.1	18.8	6.6	0.9	1.9	74.0	9.0		98	353
LM	34	1.08	42	4.2	68	33.7	18.0	7.2	2.9	3.6	69.2	8.4		89	503
LM	34	1.05	44	3.8	69	34.1	18.0	6.5	2.0	3.5	69.5	7.9		89	502

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite	
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		Rd	+b	Index	Rd	+b	Index	Rd	-b	Index	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHEAST AREA--CONTINUED																					
GEORGIA																					
DGLETHORPE		AUBURN 56 80 PERCENT																			
M	34	6.1	105	36	7.2	5.5	100	100	23	15	60	72.9	11.6	103	85.7	2.4	109	25.7	28.3	116	
SLM	33	7.6	99	34	6.7	5.2	100	90	31	25		71.4	11.2	99	85.2	2.7	107	27.6	26.8	106	
M	33	7.1	97	33	6.7	5.2	100	90	29	22		72.4	11.2	101	84.8	2.5	107	26.3	27.1	110	
SLM	33	7.6	96	33	6.6	5.2	100	90	36	21	61	67.4	10.6	89	82.9	2.6	102	28.6	25.7	100	
PINEHURST		MXD.MNLY.DIXIE KING 41 PERCENT																			
M	34	6.8	101	35	7.0	5.7	100	90	30	19	58	72.6	11.8	103	85.5	2.5	108	26.5	27.7	112	
SLM	33	7.8	101	35	6.8	5.3	100	90	43	29		67.3	11.2	91	84.7	2.8	105	26.6	27.3	110	
SLM	33	7.6	100	35	6.4	4.9	100	100	41	28		66.0	11.0	87	85.1	2.8	106	26.4	26.9	109	
REYNOLDS		CAROLINA QUEEN 75 PERCENT																			
M	34	6.1	104	37	7.1	5.4	100	90	26	20	60	70.2	11.8	99	85.1	2.8	106	26.1	27.2	110	
M	34	6.5	103	37	6.6	5.1	100	90	31	23		71.8	11.3	100	84.4	2.4	106	25.7	27.7	114	
SLM	33	7.3	100	38	6.6	5.2	110	90	32	21		67.2	10.9	89	84.1	3.2	102	29.5	25.3	96	
WRENS		CAROLINA QUEEN 80 PERCENT																			
M	34	6.8	104	36	6.7	5.3	110	100	24	14	63	70.6	11.8	100	84.5	2.6	106	26.1	27.2	111	
SLM	34	7.4	104	37	6.8	5.2	120	100	31	20		69.4	11.4	96	85.4	2.6	108	27.6	26.5	105	
SLM	34	7.3	95	32	5.9	4.7	110	100	26	20		65.0	11.0	86	84.3	3.0	104	28.7	25.7	99	
SLM LT SP	33	8.6	87	27	6.1	4.2	100	90	32	23	46	65.3	10.5	86	83.2	2.5	103	28.4	25.8	100	
NORTH CAROLINA																					
HALIFAX		COKER 100A 80 PERCENT																			
M	34	6.7	109	38	7.1	5.6	110	100	21	14	65	71.4	11.3	100	84.7	2.7	106	24.8	28.0	116	
LM	34	8.5	108	39	6.9	5.5	110	100	25	18		64.0	10.1	82	82.0	2.7	99	27.4	25.9	103	
LM	33	9.4	98	34	6.6	5.0	110	100	23	18		64.9	9.5	82	81.2	2.8	97	29.1	25.3	97	
JACKSON		REX 95 PERCENT																			
M	34	6.2	107	38	7.1	5.2	110	100	20	14	63	72.1	11.2	100	84.7	2.5	106	24.6	28.0	117	
SLM	34	7.9	100	35	6.5	5.1	110	100	21	17		66.7	10.7	88	83.0	3.0	100	27.5	26.0	103	
SLM	33	6.8	96	33	6.4	4.9	110	100	15	14		67.0	10.1	87	82.7	3.2	99	28.5	25.6	99	
LAURINBURG		REX 80 PERCENT																			
SLM	34	7.4	102	35	6.9	5.5	100	90	31	22	60	69.1	10.8	94	85.1	2.6	107	26.5	27.3	110	
LM	34	9.3	94	32	6.6	5.3	100	90	42	25		64.9	10.2	84	83.5	2.6	103	28.0	25.9	102	
LM	33	9.3	91	32	6.9	5.2	110	100	39	24		68.5	9.4	88	83.3	2.7	102	28.9	26.0	100	
LUMBERTON		COKER 100A 75 PERCENT																			
M	34	6.6	97	33	6.7	5.0	100	100	33	23	58	68.7	11.0	93	84.9	2.6	106	27.1	27.2	109	
LM	34	8.5	94	31	6.4	4.7	100	100	29	23		65.2	10.0	84	83.7	2.6	104	28.7	25.4	98	
LM	34	8.2	84	28	6.1	4.6	100	100	32	20		64.6	9.8	82	82.7	3.0	100	29.7	25.1	95	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results											
		Digital Fibrograph		Micro- naire	Fiber strength			Elongation 1/8"	Shirley Analyzer		Color of raw stock		
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge			Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite
Grade	Staple												
	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index Code
SOUTHEAST AREA--CONTINUED													
NORTH CAROLINA MONROE		COKER 100A			80 PERCENT								
SLM	35	1.07	47	4.2	71	35.0	19.4	6.8	2.0	2.7	71.8	8.7	94 403
LM	34	1.08	47	3.8	73	36.0	20.5	7.6	5.2	5.9	71.5	8.0	92 452
SLM	34	1.08	45	3.8	75	37.3	20.0	7.5	2.7	3.9	75.0	8.4	99 352
MT. OLIVE		CAROLINA QUEEN			60 PERCENT								
SLM	34	1.11	43	4.4	76	37.8	19.4	6.2	1.0	1.8	73.1	8.9	96 403
LM	33	1.04	43	3.9	70	34.7	18.6	6.7	1.6	2.8	68.0	8.4	86 503
LM	33	1.03	43	4.0	67	33.2	17.5	7.0	2.5	3.8	67.8	8.2	86 503
SALEMBURG		CAROLINA QUEEN			60 PERCENT								
SLM	34	1.07	44	4.3	73	36.0	18.7	6.6	2.8	3.2	73.3	8.7	96 402
LM	34	1.06	42	4.4	69	34.4	17.5	7.0	2.7	3.7	67.0	8.6	85 503
LM	34	1.05	43	4.3	68	33.6	18.2	6.4	2.3	3.4	68.2	7.7	86 502
SHELBY		CAROLINA QUEEN			100 PERCENT								
M	34	1.10	48	4.9	79	38.9	20.5	6.2	1.0	1.7	77.9	8.8	102 302
M	34	1.08	46	4.6	74	36.8	20.2	6.9	0.5	1.3	74.7	8.6	98 352
M	34	1.07	45	3.9	72	35.6	21.2	6.6	1.5	2.4	77.5	8.0	101 351
SHELBY		REX			100 PERCENT								
SM	33	1.07	46	4.4	73	36.3	19.1	7.1	0.4	1.5	78.5	9.0	104 252
M	33	1.03	45	4.1	74	36.9	18.9	7.2	0.5	1.2	73.3	8.9	96 403
M	33	1.03	44	3.6	74	36.7	20.5	7.2	0.8	1.6	75.1	8.4	99 352
SOUTH CAROLINA AIKEN		COKER 100			80 PERCENT								
M	34	1.08	45	4.0	74	36.4	21.3	6.6	1.0	1.7	76.0	9.0	100 302
M	34	1.07	44	4.2	70	34.6	19.5	6.9	0.5	1.9	77.1	9.0	102 302
SLM	33	1.03	43	3.8	72	35.7	18.8	7.0	1.6	2.3	71.0	8.6	92 453
LM	33	1.03	44	3.8	73	36.1	18.6	6.7	2.6	3.6	68.5	8.0	87 502
CAMDEN		CAROLINA QUEEN			75 PERCENT								
M	34	1.08	47	4.0	71	34.9	20.2	7.0	1.3	1.6	76.8	8.7	101 302
M	34	1.03	46	4.0	77	38.0	20.8	6.7	2.1	2.7	77.2	8.8	102 302
LM	34	1.05	44	4.5	76	37.5	19.0	6.2	2.1	3.2	68.1	8.0	86 502
LM	33	1.04	45	4.0	73	36.3	18.0	6.9	2.7	3.6	68.3	8.0	87 502
DENMARK		CAROLINA QUEEN			95 PERCENT								
SLM	34	1.06	44	4.0	72	35.6	19.4	6.9	1.8	2.6	73.8	9.2	98 353
SLM	34	1.06	44	4.0	69	34.3	20.0	7.2	1.1	2.5	74.0	8.8	98 402
LM	33	1.02	42	4.0	69	34.3	18.8	6.3	1.5	2.7	68.3	8.1	87 502
LM	33	1.03	43	4.1	70	34.6	19.0	6.3	1.9	3.1	69.0	7.8	88 502

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. potential	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn		
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflet-ance	Yellow-ness	Com-posite	Rflet-ance	Yellow-ness	Com-posite	Rflet-ance	Blue-ness	Com-posite
			Grade	Staple																
32d in.		Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHEAST AREA--CONTINUED																				
NORTH CAROLINA MONROE		COKER 100A 80 PERCENT																		
SLM	35	7.4	103	37	6.9	5.2	100	100	27	14	59	66.9	10.9	89	84.0	2.8	104	26.4	26.4	107
LM	34	9.4	109	40	7.0	5.8	100	100	52	32		70.2	10.9	96	83.3	2.9	102	26.0	26.4	103
SLM	34	7.8	117	41	7.3	5.8	110	100	34	23		70.6	10.6	96	83.2	3.2	100	27.5	26.0	103
MT. OLIVE		CAROLINA QUEEN 60 PERCENT																		
SLM	34	6.8	93	31	6.4	4.9	100	100	26	17	53	68.7	10.9	92	84.1	2.7	104	26.2	27.5	111
LM	33	7.9	87	30	6.0	5.0	100	90	30	20		64.6	10.4	84	82.4	2.6	101	27.8	25.7	101
LM	33	9.9	86	30	6.2	4.6	110	100	24	18		64.6	9.3	82	82.4	2.9	99	28.7	25.7	99
SALEMBURG		CAROLINA QUEEN 60 PERCENT																		
SLM	34	7.6	97	34	6.6	5.3	100	90	36	23	52	69.1	10.9	94	85.8	2.0	111	26.8	26.8	108
LM	34	9.5	88	28	6.1	4.4	100	90	34	20		63.4	10.2	81	83.5	2.9	102	28.7	25.4	98
LM	34	8.4	86	29	6.2	4.6	100	90	22	18		64.2	9.2	80	81.5	2.8	98	30.2	25.1	94
SHELBY		CAROLINA QUEEN 100 PERCENT																		
M	34	7.1	113	39	7.0	5.3	110	100	28	16	63	73.2	11.2	102	84.2	2.3	106	24.4	28.1	118
M	34	5.8	109	38	6.6	5.3	110	100	18	14		69.0	11.1	96	84.7	3.0	104	29.3	27.4	113
M	34	6.6	116	44	7.6	5.8	110	100	19	13		72.4	10.4	92	83.1	3.1	100	26.3	26.5	107
SHELBY		REX 100 PERCENT																		
SM	33	6.8	105	37	7.1	5.6	110	100	25	17	59	73.9	11.0	102	84.4	2.4	106	26.1	26.9	110
M	33	6.4	99	34	7.0	5.3	120	100	24	14		68.9	11.3	94	84.1	4.0	99	26.9	25.9	104
M	33	6.3	104	33	7.2	5.6	100	90	27	22		70.2	10.9	96	82.5	4.0	95	27.5	25.6	101
SOUTH CAROLINA AIKEN		COKER 100 80 PERCENT																		
M	34	6.9	108	38	6.9	5.4	110	100	29	22	61	71.6	11.4	100	84.9	2.5	107	25.8	27.2	111
M	34	6.9	98	33	6.6	4.9	100	90	31	19		72.0	11.0	99	84.5	2.4	106	25.9	27.4	112
SLM	33	7.8	94	31	6.6	4.9	100	100	44	31		67.0	11.0	89	84.0	2.9	103	27.2	26.8	107
LM	33	8.9	87	29	6.3	4.8	90	80	49	35	39	65.4	10.0	84	81.7	2.9	98	28.1	25.8	101
CAMDEN		CAROLINA QUEEN 75 PERCENT																		
M	34	6.4	111	39	7.2	5.5	110	100	27	16	68	72.0	11.2	100	85.6	2.4	109	26.2	27.9	113
M	34	7.9	105	36	6.2	4.6	100	90	36	24		72.2	11.1	100	85.1	2.4	108	26.6	26.8	108
LM	34	8.0	98	33	6.4	5.0	110	100	34	23		64.7	10.0	83	83.1	2.9	101	28.9	25.3	97
LM	33	8.9	94	32	6.1	4.8	100	100	33	23	51	64.2	10.0	82	82.4	2.7	100	29.1	25.5	98
DENMARK		CAROLINA QUEEN 95 PERCENT																		
SLM	34	7.0	100	35	7.0	5.3	100	90	32	25	58	68.5	11.2	93	85.4	2.6	108	26.7	27.3	110
SLM	34	6.8	100	35	6.3	4.9	90	90	40	29		68.6	11.2	94	85.2	2.7	107	26.9	26.5	106
LM	33	8.7	88	29	6.0	4.5	90	90	39	26		64.4	10.1	83	82.4	2.4	101	28.7	25.7	99
LM	33	8.8	86	28	5.9	4.5	100	90	40	31	43	65.5	9.9	84	82.9	2.7	101	29.1	25.2	99

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHEAST AREA--CONTINUED															
SOUTH CAROLINA HEATH SPRINGS		COKER 100				100 PERCENT									
SLM	34	1.06	45	3.9	70	34.8	19.9	6.9	1.4	2.3	73.0	8.4	95	402	
SLM	34	1.08	46	4.0	71	35.0	19.2	7.9	2.0	2.7	75.1	8.0	98	402	
LM	34	1.08	45	3.6	71	35.2	19.0	8.2	4.8	5.7	73.0	7.4	95	451	
RIDGE SPRINGS		COKER 100				100 PERCENT									
M	36	1.15	44	4.2	76	37.6	20.6	6.8	1.5	2.0	76.4	9.1	101	302	
M	35	1.13	45	4.0	73	36.2	19.5	7.8	1.3	1.9	77.3	9.1	102	252	
LM	34	1.07	46	4.0	72	35.4	19.5	7.3	3.8	5.2	68.9	7.8	88	502	
SALTERS		COKER 100				98 PERCENT									
SLM	34	1.05	45	4.0	70	34.7	18.2	7.0	0.6	1.6	72.7	8.6	95	402	
LM	34	1.06	44	4.1	68	33.8	17.3	7.0	2.8	3.8	69.2	8.3	89	503	
SLM LT GR	33	1.02	42	4.1	68	33.5	17.4	7.0	2.4	3.4	64.0	8.0	80	553	
ST. MATTHEWS		ALL-IN-ONE				100 PERCENT									
M	34	1.06	46	3.9	69	34.2	19.5	7.4	1.1	1.7	75.7	9.1	100	302	
SLM	34	1.03	45	3.8	73	36.2	18.2	7.2	2.5	3.3	74.3	9.0	98	353	
SLM	34	1.03	47	4.0	68	33.8	19.3	7.8	1.7	2.6	73.3	8.2	96	402	
YORK		CAROLINA QUEEN				100 PERCENT									
M	35	1.11	45	4.8	76	37.8	21.2	6.7	0.9	1.8	77.7	9.0	102	252	
M	34	1.07	46	4.6	79	39.2	19.5	7.0	1.0	1.6	77.7	8.9	102	252	
M	34	1.07	47	4.2	75	37.3	19.6	6.6	1.4	1.9	75.0	8.5	98	352	
VIRGINIA EMPORIA		COKER 100A				95 PERCENT									
SLM	34	1.07	44	4.0	77	37.9	21.7	6.6	2.6	3.7	71.0	8.4	92	452	
SOUTH CENTRAL AREA															
ARKANSAS ALTHEIMER		DPL SMOOTH LEAF				100 PERCENT									
SLM	35	1.10	47	4.8	80	39.6	23.6	7.7	1.9	2.8	75.6	8.3	99	452	
SLM	35	1.08	46	4.6	82	40.6	22.5	8.0	1.5	2.3	76.7	7.9	100	351	
SLM	35	1.08	44	3.2	83	41.1	23.4	7.6	1.8	3.3	77.1	7.7	101	351	
ALTHEIMER		MXD-MNLY COKER 100				30 PERCENT									
M	34	1.07	45	4.6	80	39.6	21.3	6.7	0.8	1.4	75.7	8.7	99	352	
SLM	34	1.08	46	4.5	80	39.6	21.8	6.4	1.4	2.2	74.4	8.2	98	402	
SLM	34	1.08	44	3.8	82	40.6	21.2	6.6	1.5	2.8	75.0	8.0	98	402	

45

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfecns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHEAST AREA--CONTINUED																					
SOUTH CAROLINA HEATH SPRINGS				COKER 100				100 PERCENT													
SLM	34	7.0	105	37	6.9	5.7	100	100	32	18	64	68.1	10.8	91	84.0	2.6	104	26.5	26.4	107	
SLM	34	7.8	106	39	7.2	5.8	100	110	30	17		70.8	10.6	96	84.5	2.6	106	27.0	26.3	105	
LM	34	9.8	107	39	7.5	6.0	100	90	54	33		69.5	9.9	91	82.7	3.2	99	27.7	25.8	102	
RIDGE SPRINGS				COKER 100				100 PERCENT													
M	36	6.8	113	41	7.4	5.6	100	100	18	14	71	71.0	11.6	100	85.8	2.6	109	25.0	27.9	116	
M	35	7.7	108	38	6.7	5.2	100	100	20	17		72.0	11.4	101	84.9	2.8	106	25.4	27.1	112	
LM	34	9.7	99	36	6.7	5.1	100	90	34	22		65.4	10.4	85	82.8	3.0	100	27.5	25.4	101	
SALTERS				COKER 100				98 PERCENT													
SLM	34	6.0	95	33	6.7	5.2	110	100	25	16	55	67.3	10.6	89	85.1	2.4	108	26.6	27.3	110	
LM	34	9.9	91	31	6.0	4.5	90	90	44	33		63.9	9.8	81	84.2	2.3	106	28.2	25.7	100	
SLM LT GR	33	10.5	75	23	5.4	3.9	100	90	38	33		59.6	9.5	74	82.6	2.7	101	29.5	25.3	96	
ST. MATTHEWS				ALL-IN-ONE				100 PERCENT													
M	34	6.3	105	36	7.0	5.3	100	90	32	25	61	70.5	11.5	99	85.2	3.1	105	26.1	27.9	113	
SLM	34	8.3	98	34	6.7	5.1	90	80	48	40		68.6	11.5	95	85.1	2.8	106	26.4	26.9	109	
SLM	34	6.8	96	34	6.9	5.3	100	100	25	24		68.2	11.0	92	83.6	2.7	103	27.1	26.1	104	
YORK				CAROLINA QUEEN				100 PERCENT													
M	35	5.9	113	40	6.7	5.6	110	100	19	14	63	73.0	11.0	101	85.1	2.4	108	25.0	28.2	117	
M	34	6.2	105	36	6.4	4.8	110	100	16	13		73.1	11.1	102	84.5	2.2	107	24.8	28.2	117	
M	34	6.7	105	38	6.7	5.3	110	100	20	12		70.2	10.8	96	83.0	2.7	102	25.8	26.8	110	
VIRGINIA EMPORIA				COKER 100A				95 PERCENT													
SLM	34	6.9	110	39	7.1	5.5	120	110	21	13	69	67.1	11.2	90	84.3	2.6	105	27.5	25.8	102	
SOUTH CENTRAL AREA																					
ARKANSAS ALTHEIMER				DPL SMOOTH LEAF				100 PERCENT													
SLM	35	8.0	113	40	6.3	5.2	120	100	30	22	60	71.7	10.5	97	83.2	2.3	104	26.9	27.6	111	
SLM	35	6.4	113	40	6.9	5.3	110	100	33	19		72.0	10.2	97	84.5	2.1	108	26.2	27.9	113	
SLM	35	8.2	116	40	7.1	5.6	100	90	70	55		72.7	10.5	99	84.3	2.8	104	26.5	26.4	107	
ALTHEIMER				MXD-MNLY COKER 100				30 PERCENT													
M	34	5.3	104	35	6.1	5.0	120	110	17	13	57	71.0	11.2	98	83.1	2.3	104	28.3	26.3	103	
SLM	34	7.4	107	36	6.0	4.7	120	100	24	20		69.6	11.0	95	84.0	2.8	104	27.1	26.7	107	
SLM	34	7.3	111	39	6.5	5.1	100	90	38	27		69.4	10.7	94	82.9	2.8	101	27.6	26.2	103	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results											
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock			
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite	
Grade	Staple												
32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rq	+b	Index	Code
SOUTH CENTRAL AREA--CONTINUED													
ARKANSAS													
CLARENDON		DPL-15	85 PERCENT										
SLM	33	1.04	46	5.3	82	40.6	22.2	6.4	1.3	2.2	74.0	8.5	97 402
SLM	34	1.04	48	4.6	83	41.1	22.6	6.0	1.8	2.8	74.2	7.8	97 402
SLM	33	1.04	46	4.4	83	41.1	20.2	5.8	1.7	3.1	72.4	7.8	94 452
DARDANELLE		DPL-15	80 PERCENT										
SLM	34	1.03	46	5.0	85	42.1	22.9	6.5	1.0	2.0	72.1	8.0	94 403
M	34	1.06	48	4.7	80	39.6	21.3	7.4	0.7	2.1	75.9	8.5	100 352
SLM	34	1.05	45	4.2	81	40.1	21.4	7.0	1.2	2.6	72.3	8.7	94 402
DEWITT		REX	70 PERCENT										
SM	33	0.98	48	5.0	84	41.6	20.6	5.6	0.7	2.2	78.8	8.8	104 252
SLM	33	1.04	47	4.7	82	40.6	20.4	6.3	1.0	2.0	73.2	8.6	96 402
SLM	34	1.04	47	4.4	80	39.6	20.6	6.3	1.6	2.5	74.8	8.0	98 402
DUMAS		STONEVILLE 213	100 PERCENT										
M	34	1.03	50	5.5	86	42.6	21.4	5.8	1.2	2.0	76.8	9.0	101 302
SLM	34	1.07	48	5.2	83	41.1	21.4	5.9	1.4	2.1	73.7	8.8	97 402
M	34	1.04	48	4.8	83	41.1	21.3	5.7	0.8	1.9	76.8	8.0	100 351
ENGLAND		DELFOS 9169	95 PERCENT										
SLM	34	1.08	44	4.4	80	39.6	21.1	6.8	1.3	1.8	74.0	8.3	97 402
SLM	35	1.12	45	4.2	78	38.6	21.4	6.9	1.7	2.8	74.8	8.0	98 402
SLM	34	1.08	42	3.2	79	39.1	20.6	7.1	1.5	2.4	74.5	7.9	97 402
HELENA		DPL SMOOTH LEAF	90 PERCENT										
SLM	34	1.05	45	5.0	85	42.1	21.6	5.5	1.6	2.5	74.0	8.5	97 402
SLM	33	1.04	47	4.7	83	41.1	22.7	6.6	1.3	2.2	73.0	8.2	95 402
SLM	34	1.07	45	4.0	83	41.1	20.9	6.3	1.7	3.0	74.0	7.8	96 402
HUGHES		STONEVILLE 213	100 PERCENT										
SM	34	1.01	49	5.2	91	45.0	23.4	5.3	0.6	1.4	79.2	9.0	105 202
M	34	1.08	47	5.2	84	41.6	22.1	6.0	0.9	1.5	77.0	8.8	101 302
SLM	34	1.06	49	4.7	81	40.1	23.3	6.1	1.5	2.6	75.3	8.2	99 352
LEACHVILLE		DELFOS 9169	100 PERCENT										
SLM	36	1.14	45	4.2	82	40.6	22.5	6.8	1.8	3.1	74.1	9.8	98 352
SLM	35	1.11	46	4.2	79	39.1	21.0	7.0	2.2	3.2	73.8	8.2	97 402
SLM	34	1.08	45	3.8	78	38.6	21.3	6.6	1.9	3.1	74.8	8.0	98 402

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn Imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTH CENTRAL AREA--CONTINUED																					
ARKANSAS																					
CLARENDON		DPL-15				85 PERCENT															
SLM	33	6.0	100	30	5.7	3.7	120	110	17	14	50	69.7	10.7	94	83.2	2.5	103	28.4	27.5	107	
SLM	34	6.7	109	37	6.2	4.7	120	100	23	13		70.8	10.6	94	83.4	2.6	103	27.5	26.7	106	
SLM	33	7.5	100	34	5.7	4.4	120	100	21	15		69.4	10.2	92	82.7	2.5	102	30.2	25.5	96	
DARDANELLE		DPL-15				80 PERCENT															
SLM	34	6.3	105	34	5.6	4.1	120	100	22	14	57	67.7	11.0	91	83.5	2.3	105	27.7	26.8	106	
M	34	6.0	105	35	5.8	4.6	110	100	23	16		70.8	10.9	97	83.4	2.5	103	26.9	27.1	108	
SLM	34	7.4	98	32	5.8	4.4	110	100	39	29		59.2	10.9	94	83.5	2.1	105	28.3	26.1	102	
DEWITT		REX				70 PERCENT															
SM	33	6.5	97	28	5.6	3.9	110	110	17	16	45	74.9	11.2	105	83.7	2.7	103	26.3	28.0	113	
SLM	33	6.4	101	33	5.9	4.4	120	110	18	15		69.8	10.8	92	84.1	2.6	105	27.7	27.4	108	
SLM	34	6.9	103	35	5.9	4.6	120	100	24	13		70.4	11.0	96	83.6	2.6	104	26.8	26.6	107	
DUMAS		STONEVILLE 213				100 PERCENT															
M	34	6.6	102	32	5.6	4.1	120	110	15	12	50	72.9	11.1	101	83.0	2.3	103	27.4	27.4	109	
SLM	34	6.0	105	35	5.9	4.4	120	100	16	13		70.0	11.0	96	83.3	2.5	103	27.9	27.2	107	
M	34	5.9	106	36	6.1	4.7	120	110	26	19		71.9	10.1	97	83.5	2.4	104	26.0	26.7	105	
ENGLAND		DELFO 9169				95 PERCENT															
SLM	34	6.3	100	34	5.8	4.3	120	110	24	19	57	69.8	11.0	95	83.4	2.4	104	28.9	26.1	101	
SLM	35	7.4	103	35	6.0	4.6	110	100	30	20		70.3	10.6	95	83.8	3.0	102	27.1	26.5	106	
SLM	34	8.0	109	38	6.7	4.9	100	90	51	38		69.0	10.1	91	83.4	3.1	101	27.4	25.6	101	
HELENA		DPL SMOOTH LEAF				90 PERCENT															
SLM	34	6.7	105	34	5.7	3.9	120	110	19	16	56	71.4	11.0	98	83.0	2.7	102	26.1	27.3	111	
SLM	33	7.1	102	34	5.6	4.4	120	110	18	13		69.6	10.6	94	83.0	2.8	101	27.7	26.9	106	
SLM	34	7.0	107	37	6.0	4.6	120	100	23	21		70.4	10.2	94	82.5	3.1	99	27.3	25.6	102	
HUGHES		STONEVILLE 213				100 PERCENT															
SM	34	6.1	107	33	5.6	3.7	120	110	20	12	53	74.2	11.0	103	82.8	2.5	102	26.4	27.7	112	
M	34	4.6	99	33	5.6	4.3	120	100	16	12		72.8	11.2	101	82.9	2.4	102	27.8	26.8	106	
SLM	34	6.6	104	35	5.9	4.7	110	100	30	22		70.8	10.8	97	83.0	2.6	102	27.2	26.7	106	
LEACHVILLE		DELFO 9169				100 PERCENT															
SLM	36	8.4	115	40	6.4	4.9	100	90	43	35	60	69.8	11.4	97	85.4	2.9	107	27.0	26.8	107	
SLM	35	7.1	110	38	6.6	5.1	110	100	29	22		69.5	10.7	94	83.4	2.7	103	27.8	27.3	108	
SLM	34	7.6	103	35	6.0	4.8	110	90	40	28		71.0	10.6	96	83.8	3.0	102	27.3	26.7	106	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTH CENTRAL AREA--CONTINUED															
ARKANSAS															
LEACHVILLE		STONEVILLE 7A				100 PERCENT									
SLM	35	1.08	47	5.0	84	41.6	21.6	5.7	2.0	3.0	73.1	8.6	96	402	
SLM	34	1.08	46	4.8	85	42.1	21.4	5.8	1.7	2.6	73.4	8.4	96	402	
SLM	34	1.06	46	4.0	83	41.1	21.7	6.1	1.4	2.4	74.8	7.9	98	402	
LITTLE ROCK		STONEVILLE 7A				78 PERCENT									
LM	34	1.07	48	4.9	84	41.6	23.0	6.6	3.5	4.2	75.0	7.7	98	401	
LM+	35	1.08	49	4.4	83	41.1	23.1	5.9	4.5	5.6	74.8	7.4	97	401	
LM	34	1.08	45	3.2	83	41.1	24.0	7.2	4.7	5.9	72.4	7.6	94	452	
MARION		REX				100 PERCENT									
SLM	35	1.10	48	4.2	81	40.1	20.7	6.4	2.6	3.8	76.9	8.6	101	302	
LM	34	1.06	46	4.4	83	41.1	19.8	5.6	4.2	5.4	70.2	8.3	90	452	
LM	34	1.08	45	3.7	81	40.1	20.9	5.7	4.4	5.9	71.8	8.1	93	452	
MARKED TREE		REX				88 PERCENT									
M	34	1.07	49	4.8	86	42.6	22.0	5.8	1.3	2.2	76.8	8.6	101	302	
SLM	34	1.08	46	4.9	85	42.1	21.0	6.5	1.5	2.0	75.0	8.3	98	352	
SLM	34	1.06	48	4.5	84	41.6	23.8	6.4	2.7	3.8	74.0	8.0	97	402	
MONTROSE		MXD-MNLY STONEVILLE 7A				40 PERCENT									
M	34	1.01	49	5.6	84	41.6	21.7	5.8	1.1	2.0	74.9	9.4	99	303	
M	33	1.04	47	5.2	83	41.1	20.7	7.0	0.8	1.6	75.2	8.8	99	352	
SLM	33	1.03	46	4.3	83	41.1	21.6	5.7	0.8	1.6	73.3	8.0	95	402	
OSCEOLA		STONEVILLE 7A				100 PERCENT									
SLM	34	1.07	45	4.4	85	42.1	21.1	5.5	2.5	3.6	73.8	8.2	96	402	
SLM	34	1.06	47	4.4	82	40.6	21.3	6.1	3.3	4.6	74.1	8.3	97	402	
SLM	34	1.04	47	4.1	82	40.6	22.4	5.6	3.0	4.3	74.8	8.2	98	402	
PINE BLUFF		DPL SMOOTH LEAF				95 PERCENT									
M	35	1.12	49	5.2	87	43.1	23.3	6.0	1.3	2.1	77.1	8.7	101	302	
SM	34	1.08	47	5.1	89	44.1	23.3	6.8	1.0	1.9	79.0	8.7	104	252	
M	34	1.08	47	5.0	82	40.6	22.3	7.2	1.2	2.1	75.8	8.6	100	352	
M	34	1.05	45	4.2	83	41.1	22.0	7.7	1.2	2.3	77.6	8.6	102	302	
PROCTOR		STONEVILLE 213				90 PERCENT									
M	34	1.08	49	4.6	86	42.6	22.0	5.8	1.0	2.0	78.2	8.8	103	252	
SLM	34	1.06	47	4.8	81	40.1	20.5	6.1	1.4	2.1	74.3	8.7	97	352	
SLM	34	1.06	46	4.0	80	39.6	22.3	6.5	1.6	2.7	74.9	8.1	98	402	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflet-	Yellow-	Com-	Rflet-	Yellow-	Com-	Rflet-	Blue-	Com-
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		ance	ness	posite	ance	ness	posite	ance	ness	posite
Grade	Staple											Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTH CENTRAL AREA--CONTINUED																				
ARKANSAS																				
LEACHVILLE		STONEVILLE 7A					100 PERCENT													
SLM	35	8.3	104	35	5.9	4.2	110	100	33	21	55	69.6	11.1	96	84.1	2.9	103	25.7	27.2	111
SLM	34	7.2	106	35	5.6	4.3	120	100	23	16		70.5	10.8	96	84.3	2.3	106	27.2	27.5	110
SLM	34	7.4	109	39	6.3	4.8	110	100	46	28		70.6	10.4	95	84.1	3.0	103	26.9	26.6	107
LITTLE ROCK		STONEVILLE 7A					78 PERCENT													
LM	34	8.2	111	38	6.2	4.3	110	100	33	21	58	71.8	10.3	97	82.8	2.6	102	26.6	27.7	112
LM+	35	9.6	110	39	6.4	5.1	120	100	38	28		71.8	10.4	97	83.3	2.9	102	27.3	27.0	107
LM	34	11.3	114	40	6.3	5.0	90	80	72	50		68.5	10.2	90	82.2	3.4	97	27.5	25.6	101
MARION		REX					100 PERCENT													
SLM	35	7.0	108	38	6.2	5.1	120	100	33	21	60	74.1	11.3	104	84.8	2.8	106	24.8	28.1	117
LM	34	7.8	101	33	5.9	4.6	120	110	31	20		67.8	11.1	91	83.1	2.3	104	27.4	26.7	106
LM	34	9.7	105	36	6.6	5.1	110	100	45	28		70.0	10.9	96	82.9	3.0	100	26.6	26.5	107
MARKED TRFE		REX					88 PERCENT													
M	34	7.5	103	34	5.8	4.1	110	100	34	24	57	72.6	10.9	100	84.6	2.4	107	25.8	27.6	113
SLM	34	5.6	104	35	5.8	4.4	120	110	23	16		71.9	11.1	100	83.6	2.5	104	26.7	27.3	110
SLM	34	7.8	109	38	6.3	4.9	120	100	34	22		70.6	10.6	96	83.6	2.8	103	27.3	27.0	107
MONTROSE		MXD-MNLY STONEVILLE 7A					40 PERCENT													
M	34	7.5	92	26	5.7	3.7	120	100	21	18	46	71.8	11.5	101	83.2	2.7	102	26.6	27.8	112
M	33	6.0	102	32	5.6	4.0	110	100	23	19		70.9	11.0	97	83.7	2.4	105	27.5	27.7	110
SLM	33	6.2	97	31	5.7	4.2	110	90	30	25		69.2	10.2	92	83.8	2.5	104	27.9	26.4	104
OSCEDALA		STONEVILLE 7A					100 PERCENT													
SLM	34	8.0	101	34	5.9	4.3	110	100	34	26	56	69.9	11.1	96	81.7	2.6	99	27.8	26.4	104
SLM	34	7.7	104	36	5.9	4.6	120	100	38	23		72.2	11.0	100	84.3	2.4	106	27.4	27.3	108
SLM	34	8.0	102	35	6.2	4.7	110	90	40	29		71.1	10.7	97	84.0	2.5	105	28.1	26.2	102
PINE BLUFF		DPL SMOOTH LEAF					95 PERCENT													
M	35	6.5	115	39	5.8	4.5	120	110	24	19	57	74.4	11.0	103	83.3	2.1	103	24.8	28.0	116
SM	34	6.2	114	37	6.3	4.7	120	100	21	14		74.9	11.0	104	84.0	2.3	106	24.9	28.3	118
M	34	5.8	112	37	6.6	5.0	120	110	22	14		72.0	10.9	99	83.1	2.5	103	26.9	28.1	113
M	34	6.4	118	40	7.5	5.6	120	110	18	14	58	73.4	11.3	103	84.4	2.6	105	26.6	27.4	110
PROCTOR		STONEVILLE 213					90 PERCENT													
M	34	7.0	112	38	6.0	5.0	120	100	20	17	55	74.0	11.4	104	85.0	2.7	106	25.2	28.1	116
SLM	34	5.6	98	34	5.8	4.6	120	110	19	14		69.4	11.2	95	82.4	2.4	101	27.8	26.2	103
SLM	34	7.7	112	38	6.7	5.1	110	100	32	28		71.0	10.8	97	82.5	2.6	101	27.2	26.6	106

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elongation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index	Code
SOUTH CENTRAL AREA--CONTINUED															
ARKANSAS															
TYRONZA		REX				75 PERCENT									
SLM	34	1.06	47	4.6	88	43.6	20.6	5.1	1.2	2.1	75.0	9.3	99	303	
SLM	34	1.06	46	4.8	84	41.6	20.3	5.8	1.5	2.2	73.1	8.7	96	402	
SLM	34	1.06	47	4.4	84	41.6	22.9	5.8	1.4	2.3	74.8	8.0	98	402	
WILMOT		DPL SMOOTH LEAF				100 PERCENT									
M	33	0.98	47	5.3	81	40.1	22.5	7.4	0.7	1.5	76.9	9.0	101	302	
M	33	1.03	47	5.4	81	40.1	21.5	7.5	0.7	1.4	75.0	9.1	99	352	
M	34	1.06	46	4.9	80	39.6	21.7	7.4	0.7	1.6	76.5	8.2	100	352	
WILSON		REX SMOOTH LEAF				100 PERCENT									
M LT SP	34	1.04	46	4.6	89	44.1	20.9	5.5	0.9	1.8	75.8	9.2	100	302	
M LT SP	34	1.08	45	4.6	80	39.6	20.2	6.1	1.2	2.1	74.5	9.0	98	352	
SLM	34	1.06	47	4.0	84	41.6	22.0	5.5	2.5	3.6	74.0	7.9	97	402	
WYNNE		DPL SMOOTH LEAF				100 PERCENT									
M LT SP	34	1.03	47	4.9	84	41.6	22.3	7.4	1.3	1.7	73.1	9.1	96	353	
M LT SP	33	1.03	48	5.0	83	41.1	23.0	7.2	0.9	1.7	74.1	8.4	97	402	
SLM	34	1.05	46	3.9	82	40.6	21.5	7.6	2.2	3.2	73.7	7.9	96	402	
LOUISIANA															
ALEXANDRIA		STONEVILLE 7A				70 PERCENT									
M LT SP	33	1.04	46	4.8	76	37.6	19.8	6.4	1.0	2.0	70.1	10.1	91	404	
SLM	33	1.04	44	4.6	81	40.1	21.3	6.0	1.6	2.8	72.3	8.9	95	403	
SLM	33	1.02	44	3.4	83	41.1	22.4	5.9	2.0	3.4	75.2	8.0	99	402	
ALEXANDRIA		MXD-MNLY STONEVILLE 7A				50 PERCENT									
M LT SP	33	1.03	46	4.8	81	40.1	20.9	5.6	0.9	2.2	72.0	9.9	95	353	
SLM	33	1.03	45	4.7	81	40.1	20.2	6.2	1.5	2.5	73.2	8.6	96	402	
SLM	33	1.03	46	4.1	83	41.1	21.7	5.5	1.2	2.6	73.8	8.1	96	402	
BONITA		DPL SMOOTH LEAF				90 PERCENT									
M	34	1.01	48	5.0	83	41.1	22.4	5.8	0.5	1.3	77.0	9.2	102	252	
SLM	34	1.05	47	5.0	79	39.1	22.8	7.0	0.9	1.7	74.1	8.7	97	352	
SLM	34	1.04	48	4.8	80	39.6	22.6	6.8	1.0	2.1	73.5	8.6	96	402	
LAKE PROVIDENCE		DPL SMOOTH LEAF				99 PERCENT									
M	34	1.04	46	4.8	81	40.1	23.2	7.1	0.5	1.7	78.2	8.4	103	301	
SLM	33	1.04	46	4.7	79	39.1	22.3	6.4	1.1	2.0	72.9	8.4	95	402	
SLM	34	1.08	48	4.3	81	40.1	21.7	6.2	1.6	2.9	74.0	7.8	96	402	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Reflet-	Yellow-	Com-	Reflet-	Yellow-	Com-	Reflet-	Blue-	Com-
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		Rq	+b	Index	Rq	+b	Index	Rq	-b	Index
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.								
SOUTH CENTRAL AREA--CONTINUED																				
ARKANSAS																				
TYRONZA		REX 75 PERCENT																		
SLM	34	7.5	99	32	5.6	3.9	120	90	34	29	51	70.2	11.6	98	84.2	2.9	104	25.5	27.7	113
SLM	34	5.2	102	33	5.6	4.4	120	110	26	16		69.8	11.2	96	83.0	2.5	102	28.0	25.8	101
SLM	34	6.8	107	37	6.2	4.7	120	100	28	19		70.0	10.5	94	83.6	2.5	104	26.4	27.1	110
WILMOT		DPL SMOOTH LEAF 100 PERCENT																		
M	33	6.8	99	29	6.1	4.1	120	100	23	15	48	73.4	11.2	103	84.2	2.5	105	26.9	27.4	110
M	33	6.7	96	28	5.7	4.2	120	100	20	16		70.9	11.0	97	82.6	2.4	102	26.9	27.5	110
M	34	6.1	108	37	7.2	5.4	120	100	19	18		72.2	10.8	100	84.0	2.6	104	26.4	27.1	110
WILSDN		REX SMOOTH LEAF 100 PERCENT																		
M LT SP	34	7.8	101	34	5.6	4.8	110	90	29	22	55	71.5	11.5	100	83.8	2.8	103	27.1	26.3	105
M LT SP	34	6.2	104	35	5.8	4.5	120	100	18	12		69.8	11.2	96	83.0	2.6	102	27.5	27.3	108
SLM	34	7.6	110	38	6.6	5.1	120	100	30	21		69.7	10.4	93	83.4	2.6	103	26.9	26.4	106
WYNNE		DPL SMOOTH LEAF 100 PERCENT																		
M LT SP	34	6.1	103	34	6.2	4.4	120	110	22	16	51	67.8	11.4	92	82.6	2.5	102	27.4	25.9	103
M LT SP	33	6.0	107	35	5.8	4.6	110	100	18	16		69.8	10.6	94	82.2	3.0	98	26.7	27.0	109
SLM	34	7.6	108	37	6.6	5.0	110	100	38	23		68.5	10.4	90	82.5	2.8	100	27.7	25.4	100
LOUISIANA																				
ALEXANDRIA		STONEVILLE 7A 70 PERCENT																		
M LT SP	33	8.3	87	26	5.7	3.9	110	90	50	32	50	67.1	12.0	93	83.8	2.0	102	26.9	27.0	108
SLM	33	7.9	94	28	5.6	4.0	110	90	35	29		69.1	11.2	95	82.5	2.8	100	26.8	27.5	110
SLM	33	8.3	97	31	5.9	4.2	90	70	64	51		69.9	10.6	94	83.8	2.6	101	26.6	26.3	106
ALEXANDRIA		MXD-MNLY STONEVILLE 7A 50 PERCENT																		
M LT SP	33	9.0	88	25	5.6	3.7	90	80	58	52	45	68.8	11.9	97	83.9	2.9	103	28.4	25.8	100
SLM	33	8.0	90	29	5.5	4.2	110	90	37	29		70.3	10.8	96	82.9	2.1	104	27.4	27.4	109
SLM	33	7.6	101	32	6.1	4.4	100	80	48	38		69.8	10.6	94	83.6	3.0	102	27.5	26.8	106
BONITA		DPL SMOOTH LEAF 90 PERCENT																		
M	34	6.5	102	31	5.7	4.1	120	100	24	15	52	73.2	11.2	102	83.4	2.5	103	26.1	28.0	114
SLM	34	6.0	108	37	6.5	5.1	120	110	23	14		68.7	11.3	94	83.1	2.4	103	26.5	27.3	110
SLM	34	6.4	107	36	5.9	4.9	120	100	25	20		69.0	10.8	93	83.4	2.8	102	26.8	26.9	108
LAKE PROVIDENCE		DPL SMOOTH LEAF 99 PERCENT																		
M	34	7.6	105	33	6.3	4.6	100	90	34	24	54	74.2	10.7	102	84.1	2.3	106	25.6	28.1	115
SLM	33	7.0	100	33	5.8	4.6	120	100	30	21		68.0	11.0	92	82.6	2.4	102	27.0	27.1	108
SLM	34	7.1	106	36	6.1	4.8	110	100	24	21		70.5	10.2	94	83.6	2.7	103	27.3	26.7	106

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elon- gation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index	Code
SOUTH CENTRAL AREA--CONTINUED															
LOUISIANA		MXD-MNLY STONEVILLE 7A													
NEWELLTON		50 PERCENT													
SLM	34	1.07	47			82	40.6	21.7	6.2	2.5	3.8	71.8	8.6	93	403
SLM	34	1.08	46	4.6		80	39.6	21.6	6.6	1.7	3.1	74.9	8.2	98	402
SGO	33	1.03	43	3.0		80	39.6	22.2	6.5	3.7	5.4	68.1	6.9	86	552
SHREVEPORT		DPL SMOOTH LEAF													
		100 PERCENT													
SM	34	1.06	48			86	42.6	23.3	6.2	0.6	1.7	76.6	9.1	101	302
M	33	1.03	46	5.4		87	43.1	22.4	6.6	0.6	1.3	76.3	8.7	101	302
M	33	1.04	45	5.0		81	40.1	22.3	6.7	0.9	2.0	76.2	8.1	100	352
SHREVEPORT		DPL-15													
		75 PERCENT													
SLM	33	1.02	48			84	41.6	21.7	6.2	1.0	2.0	73.1	9.4	96	353
M	34	1.07	46	5.2		79	39.1	21.8	6.9	0.8	1.9	76.5	8.2	100	352
M	34	1.08	47	4.5		79	39.1	23.2	7.1	0.7	1.7	76.3	8.2	100	352
SICILY ISLAND		STONEVILLE 213													
		75 PERCENT													
M	34	1.04	46	4.8		83	41.1	21.2	6.0	0.7	1.8	77.3	9.2	102	252
SLM	34	1.02	46	4.8		77	38.1	22.1	5.5	1.6	2.5	73.9	9.1	97	353
SLM	34	1.04	48	4.6		81	40.1	20.6	5.5	1.7	3.1	74.0	8.3	97	402
ST. JOSEPH		DPL SMOOTH LEAF													
		90 PERCENT													
M	34	1.07	47	4.8		77	38.1	22.0	7.2	0.7	1.8	76.9	8.8	101	302
SLM	34	1.07	47	4.6		81	40.1	22.4	7.2	1.3	2.3	73.5	8.6	96	402
SLM	34	1.06	47	4.2		80	39.6	22.4	6.9	1.1	2.4	75.9	7.7	99	401
VILLE PLATTE		DPL SMOOTH LEAF													
		100 PERCENT													
M	34	1.08	48	4.8		81	40.1	22.5	6.7	0.8	2.0	76.9	8.8	101	302
M	34	1.03	48	4.8		79	39.1	20.9	7.0	0.9	2.1	75.8	8.7	100	352
SLM	34	1.08	48	4.8		80	39.6	21.7	6.6	0.9	2.0	72.3	8.3	94	402
MISSISSIPPI		STONEVILLE 213													
BRUCE		70 PERCENT													
SM	34	1.03	46	4.8		78	38.4	21.5	6.9	0.9	1.5	78.5	9.3	104	202
SLM	34	1.07	43	4.0		80	39.6	20.7	6.6	1.3	2.4	72.0	9.2	94	403
SLM	33	1.05	42	4.1		79	39.1	20.7	6.2	2.4	3.6	73.0	8.4	96	402
CANTON		MXD-MNLY STONEVILLE 213													
		50 PERCENT													
SLM	34	1.04	44	4.8		78	38.5	21.2	7.1	2.6	3.4	74.0	8.8	98	352
CARROLLTON		DPL SMOOTH LEAF													
		98 PERCENT													
SM	34	1.06	47	4.8		82	40.6	21.8	7.0	0.7	1.6	78.2	9.0	103	252
M	34	1.07	44	4.5		76	37.4	20.8	6.2	0.7	1.6	78.5	8.7	103	252
SLM	33	1.04	45	4.4		75	37.3	21.2	7.3	1.2	1.9	71.8	8.7	93	403

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn impurities		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
Grade	Staple																				
	32d in. Pct.		Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index	
OUTH CENTRAL AREA--CONTINUED																					
LOUISIANA NEWELLTON		MXD-MNLY STONEVILLE 7A						50 PERCENT													
SLM	34	8.0	106	36	5.8	4.5	110	90	34	28	60	69.2	10.9	94	82.8	2.6	102	27.5	27.1	107	
SLM	34	8.0	107	38	6.6	5.2	100	90	35	27		72.1	10.8	99	84.0	2.6	104	27.2	27.0	108	
SGO	33	10.7	104	35	6.1	4.8	80	80	106	99		66.3	9.4	84	80.6	2.6	96	27.7	25.8	102	
SHREVEPORT		DPL SMOOTH LEAF						100 PERCENT													
SM	34	6.8	111	36	5.8	4.3	120	100	19	15	58	73.4	11.4	103	82.6	2.7	101	25.8	27.6	112	
M	33	5.4	105	32	5.6	3.8	120	110	14	11		72.2	10.7	99	82.1	2.2	102	27.0	27.3	109	
M	33	6.1	103	33	6.2	4.7	120	100	18	16		72.2	10.0	97	83.4	2.6	103	27.1	27.7	111	
SHREVEPORT		DPL-15						75 PERCENT													
SLM	33	7.4	105	34	5.7	4.1	120	100	27	19	52	69.4	11.7	97	83.0	2.9	101	27.0	27.3	109	
M	34	5.6	103	33	5.7	4.3	110	100	26	17		72.4	10.6	99	83.2	2.3	104	26.4	27.5	111	
M	34	5.6	108	36	6.5	5.1	110	100	29	22		71.4	10.3	96	83.6	2.4	104	26.9	26.5	106	
SICILY ISLAND		STONEVILLE 213						75 PERCENT													
M	34	7.2	101	31	6.0	4.3	120	100	24	18	52	72.9	11.6	103	84.2	2.2	106	26.0	27.9	114	
SLM	34	7.2	95	29	5.5	4.2	120	100	26	16		68.8	11.4	94	83.8	2.8	103	27.8	27.1	107	
SLM	34	7.1	99	33	5.4	4.3	110	100	27	22		70.0	10.7	95	83.6	2.7	103	27.1	26.8	107	
ST. JOSEPH		DPL SMOOTH LEAF						90 PERCENT													
M	34	7.1	107	37	6.6	5.1	110	100	32	26	55	72.4	10.9	100	84.6	2.5	106	26.0	27.4	112	
SLM	34	6.5	108	36	6.0	4.7	110	90	36	28		69.2	10.8	94	84.5	2.0	108	27.0	27.1	108	
SLM	34	7.4	112	38	6.4	5.4	100	90	39	29		72.0	10.1	97	83.4	2.4	104	27.1	26.8	107	
VILLE PLATTE		DPL SMOOTH LEAF						100 PERCENT													
M	34	7.1	104	35	5.9	4.4	120	110	16	13	56	72.4	11.0	100	84.2	2.5	105	25.8	27.5	112	
M	34	6.9	100	34	5.9	4.6	120	100	21	15		71.9	11.0	99	83.4	2.3	104	26.5	27.8	112	
SLM	34	6.7	108	37	6.0	4.4	120	100	17	15		67.6	10.8	90	82.7	2.8	101	26.9	25.8	103	
MISSISSIPPI BRUCE		STONEVILLE 213						70 PERCENT													
SM	34	6.1	106	36	6.5	5.1	110	100	16	10	53	73.3	10.8	101	84.8	1.8	110	26.0	28.3	115	
SLM	34	7.7	111	40	6.3	5.0	120	100	25	17		67.8	11.5	93	83.9	2.8	103	27.5	26.7	106	
SLM	33	8.1	105	36	6.4	4.8	110	90	25	19		69.7	11.2	96	83.4	2.6	103	28.5	26.1	101	
CANTON		MXD-MNLY STONEVILLE 213						50 PERCENT													
SLM	34	7.4	99	31	6.4	4.8	110	100	27	17	49	70.3	11.3	98	84.8	2.2	108	27.3	27.0	108	
CARROLLTON		DPL SMOOTH LEAF						98 PERCENT													
SM	34	5.6	109	36	6.2	4.9	110	100	24	14	54	73.8	10.8	102	84.4	2.3	107	25.3	28.2	116	
M	34	7.2	109	37	6.9	5.3	110	100	21	14		74.0	11.0	103	84.7	2.1	108	25.7	27.7	113	
SLM	33	6.1	104	36	6.6	5.2	110	100	21	16		68.2	10.7	91	83.7	2.8	103	28.2	26.2	102	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results											
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock		
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge			Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite
Grade	Staple												
	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index Code
SOUTH CENTRAL AREA--CONTINUED													
MISSISSIPPI CLARKSDALE		STONEVILLE 213			100 PERCENT								
SM	34	1.05	48	5.2	87	42.9	22.6	6.6	0.4	1.3	78.7	9.0	104 252
M	34	1.06	45	5.2	85	42.1	22.0	5.8	1.0	2.3	74.7	9.4	99 353
M	34	1.08	45	5.2	82	40.6	22.9	6.4	1.5	2.1	76.0	8.4	100 352
CLARKSDALE		DPL SMOOTH LEAF			100 PERCENT								
M	34	1.07	45	5.2	81	40.1	24.1	7.7	1.1	2.1	76.0	8.8	100 352
SLM	34	1.05	47	5.1	86	42.8	25.2	6.9	1.3	1.7	74.2	9.0	98 352
SLM	35	1.11	45	4.6	80	39.4	24.1	7.5	1.9	2.3	74.5	7.7	97 401
CLEVELAND		DPL SMOOTH LEAF			100 PERCENT								
M	35	1.12	47	5.0	86	42.3	24.1	7.2	1.5	2.3	79.5	8.4	104 251
COMO		STONEVILLE 7A			100 PERCENT								
SM	34	1.02	46	5.0	93	46.0	21.8	5.5	1.2	2.2	77.3	9.2	102 252
SLM	34	1.04	44	4.8	83	40.9	20.6	5.9	1.1	2.1	71.0	8.8	92 453
SLM	34	1.06	45	4.9	83	41.2	21.0	6.0	1.3	1.8	72.8	8.0	95 452
CORINTH		DIXIE KING			80 PERCENT								
SM	34	1.03	46	4.6	83	41.0	21.2	6.5	0.8	1.3	78.5	8.6	103 252
M	34	1.06	44	4.2	77	38.2	20.4	6.2	0.6	1.5	75.0	9.2	99 353
SLM	34	1.08	44	3.8	80	39.6	21.5	6.1	1.8	3.9	75.4	8.6	99 352
GREENVILLE		STONEVILLE 213			100 PERCENT								
M	34	1.08	46	4.9	85	42.1	22.4	6.7	2.4	2.7	77.8	8.5	102 302
SLM	34	1.10	46	4.7	81	39.9	21.7	6.7	2.4	3.2	75.8	8.6	100 352
SLM	35	1.10	45	4.2	80	39.7	21.2	6.4	2.0	3.0	74.3	7.6	97 401
GREENWOOD		STONEVILLE 213			100 PERCENT								
M	34	1.02	47	5.2	86	42.5	22.8	6.3	2.0	2.6	75.6	9.2	100 302
SLM	34	1.07	47	5.2	83	41.2	22.6	5.9	1.4	2.8	76.5	9.0	101 302
SLM	34	1.05	46	4.9	77	38.3	22.1	6.5	1.7	2.3	72.7	8.0	94 452
GREENWOOD		DPL SMOOTH LEAF			95 PERCENT								
SM	35	1.04	47	5.3	86	42.8	22.2	6.2	1.1	1.3	78.0	8.6	103 302
M	34	1.08	44	5.0	80	39.4	22.6	6.7	1.1	2.0	78.5	8.2	103 301
SLM	34	1.04	43	5.0	82	40.7	22.5	6.7	0.9	1.9	74.3	7.7	97 401
GREENWOOD		DPL 15			100 PERCENT								
SM	34	1.04	49	4.8	85	42.2	23.2	6.7	0.6	1.6	77.8	9.2	103 252
SLM	34	1.03	46	4.6	80	39.8	22.2	6.1	1.2	2.4	74.6	8.6	98 352
SLM	34	1.02	45	4.6	80	39.6	23.4	6.7	1.0	2.2	72.7	8.4	95 402

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn			
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite	
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTH CENTRAL AREA--CONTINUED																					
MISSISSIPPI		STONEVILLE 213										100 PERCENT									
CLARKSDALE																					
SM	34	5.8	108	35	6.2	4.7	110	100	14	9	57	73.8	10.6	101	84.9	1.6	110	25.3	29.1	120	
M	34	7.6	98	31	5.4	3.9	100	100	23	13		70.6	11.3	98	83.3	2.4	104	27.5	27.1	107	
M	34	6.2	110	36	6.1	4.6	110	100	14	11		72.0	10.9	99	84.3	2.3	106	27.3	27.2	108	
CLARKSDALE		DPL SMOOTH LEAF										100 PERCENT									
M	34	6.9	110	36	6.7	4.6	100	100	19	13	52	71.2	10.6	97	82.2	2.2	102	26.8	27.1	109	
SLM	34	6.5	113	38	5.8	4.4	110	100	18	10		69.4	11.1	95	83.0	2.6	102	26.0	27.3	111	
SLM	35	6.5	119	43	6.9	5.4	100	100	29	17		71.4	10.2	96	83.2	2.4	103	26.9	26.7	107	
CLEVELAND		DPL SMOOTH LEAF										100 PERCENT									
M	35	6.2	122	42	6.9	5.3	120	110	14	12	64	75.3	10.6	104	84.4	2.0	108	24.8	28.4	118	
COMO		STONEVILLE 74										100 PERCENT									
SM	34	6.3	98	29	5.3	3.8	120	100	12	10	49	72.9	11.3	102	84.4	2.4	106	28.0	27.0	106	
SLM	34	7.4	86	26	5.2	3.8	120	100	19	14		68.5	10.9	92	82.9	2.8	101	29.3	25.6	98	
SLM	34	6.7	95	30	5.4	4.0	120	110	19	12		70.1	10.8	96	81.9	2.2	101	29.8	24.6	93	
CORINTH		DIXIE KING										80 PERCENT									
SM	34	6.3	107	36	6.4	5.1	110	100	20	16	58	73.0	10.8	100	84.8	2.1	108	26.1	27.8	113	
M	34	6.8	111	39	6.2	5.0	100	90	23	17		70.0	11.4	97	84.5	2.9	104	27.1	26.7	107	
SLM	34	6.6	112	41	6.6	5.5	100	100	32	22		70.2	11.4	98	84.0	2.8	104	27.2	26.4	105	
GREENVILLE		STONEVILLE 213										100 PERCENT									
M	34	6.8	115	39	6.6	5.0	120	110	14	8	62	74.2	11.0	103	84.1	2.3	106	26.4	27.7	112	
SLM	34	8.6	112	39	6.1	4.9	110	100	23	15		73.0	10.8	101	83.4	2.3	104	27.0	27.3	109	
SLM	35	8.6	114	41	6.8	5.4	100	100	30	19		72.1	10.3	98	83.8	2.3	105	27.4	26.4	105	
GREENWOOD		STONEVILLE 213										100 PERCENT									
M	34	6.3	108	35	6.1	4.5	120	100	18	11	54	72.8	11.4	102	83.9	2.2	106	26.8	28.2	113	
SLM	34	7.3	107	36	6.1	4.8	110	100	21	12		72.6	11.3	101	83.0	2.2	104	26.1	27.5	112	
SLM	34	7.2	103	34	6.3	4.8	100	100	25	15		68.6	10.4	91	83.2	2.4	103	28.7	26.0	101	
GREENWOOD		DPL SMOOTH LEAF										95 PERCENT									
SM	35	6.3	105	34	5.9	4.6	110	100	16	10	50	73.8	10.8	102	84.4	2.2	107	25.8	28.8	118	
M	34	6.6	109	35	6.1	4.6	110	100	22	17		74.9	10.3	102	83.0	1.6	106	26.2	27.2	110	
SLM	34	6.8	107	35	6.2	4.8	110	100	20	13		71.3	10.3	96	83.2	2.3	104	28.3	26.3	103	
GREENWOOD		DPL 15										100 PERCENT									
SM	34	5.6	118	41	6.4	5.3	120	110	12	11	62	74.0	11.0	103	83.7	2.1	106	25.9	28.0	114	
SLM	34	8.2	109	35	6.4	4.7	110	100	23	18		72.0	10.8	99	83.7	2.2	105	28.1	26.6	104	
SLM	34	6.9	113	39	6.6	5.0	110	100	20	12		69.7	10.7	94	84.0	2.4	105	28.5	26.2	102	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results												
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite		
													Grade	Staple
	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index	Code
SOUTH CENTRAL AREA--CONTINUED														
MISSISSIPPI														
KOSCIUSKO														
		DPL SMOOTH LEAF				90 PERCENT								
SM	35	1.07	47	4.8	78	38.8	22.2	7.6	0.9	1.5	79.7	8.6	105	201
M	34	1.08	45	4.4	78	38.6	21.6	6.8	1.3	2.0	79.0	8.9	104	252
SLM	34	1.09	44	4.1	78	38.4	20.5	7.0	1.7	2.4	73.5	8.1	96	402
LELAND														
		FOX 4				100 PERCENT								
M	34	1.07	48	5.4	89	43.9	23.6	5.3	0.9	2.0	76.0	9.3	101	302
SLM	34	1.05	47	5.3	93	45.9	23.6	5.4	2.7	3.1	74.7	8.6	98	352
LELAND														
		STONEVILLE 213				100 PERCENT								
SM	36	1.13	47	5.2	82	40.5	23.7	6.4	1.0	1.5	79.1	8.7	104	252
SLM	35	1.12	46	5.2	85	42.1	22.3	6.1	2.2	3.3	76.2	8.8	101	302
SLM	35	1.09	43	4.3	82	40.4	22.8	6.2	1.8	2.7	73.0	8.2	95	402
MERIDIAN														
		MXD-MNLY COKER 100				60 PERCENT								
M	34	1.03	45	4.4	78	38.7	20.0	6.2	1.8	2.6	76.9	9.1	101	302
M LT SP	34	1.03	43	4.3	69	34.3	19.5	6.2	2.3	3.5	72.5	9.2	95	403
OXFORD														
		DPL SMOOTH LEAF				95 PERCENT								
SM	34	1.04	45	4.8	77	38.0	21.3	7.5	0.7	1.3	79.9	8.6	105	201
SLM	34	1.08	44	4.2	73	36.3	21.0	7.4	1.6	2.5	73.0	8.4	95	402
M LT SP	34	1.06	42	4.3	76	37.7	22.2	7.3	1.7	2.6	75.5	8.1	99	402
PRENTISS														
		DPL SMOOTH LEAF				95 PERCENT								
M	35	1.10	47	4.6	74	36.6	21.7	7.0	1.1	1.9	77.2	9.0	102	252
M	34	1.05	45	4.4	76	37.6	20.9	6.9	0.8	2.1	75.8	9.2	100	302
ROLLING FORK														
		DPL SMOOTH LEAF				95 PERCENT								
M	36	1.09	47	4.6	80	39.8	22.8	7.2	1.2	1.9	78.3	8.7	103	252
M	35	1.09	46	4.6	81	40.1	23.8	7.1	0.8	2.0	79.0	8.4	104	251
SLM	35	1.09	46	4.5	80	39.7	23.2	7.5	1.4	2.1	73.6	8.2	96	402
ROSEDALE														
		DPL SMOOTH LEAF				100 PERCENT								
M	35	1.10	45	5.2	83	41.2	22.3	7.0	1.4	2.3	76.1	9.1	101	302
M	35	1.11	45	5.2	79	39.0	23.9	7.3	1.0	1.7	77.4	8.8	102	302
M	35	1.12	45	4.4	82	40.4	23.1	7.9	0.7	1.8	76.5	8.4	100	352
RULEVILLE														
		DPL-15				100 PERCENT								
M	35	1.06	48	4.8	84	41.8	23.2	7.2	1.3	2.0	77.6	8.8	102	302
M	35	1.09	46	4.8	81	40.0	22.1	7.0	1.0	2.2	77.8	8.6	102	302
LM	35	1.09	47	4.8	77	38.2	22.7	6.8	2.5	3.1	72.8	8.0	94	452

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. potential	Color--22s grey yarn			Color--22s blechd. yarn			Color--22s dyed yarn		
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflet-ance	Yellow-ness	Com-posite	Rflet-ance	Yellow-ness	Com-posite	Rflet-ance	Blue-ness	Com-posite
Grade	Staple																			
	32d in. Pct.		Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index

SOUTH CENTRAL AREA--CONTINUED

MISSISSIPPI
KOSCIUSKO

DPL SMOOTH LEAF

90 PERCENT

SM	35	5.5	117	40	6.9	5.4	120	100	8	5	61	73.7	11.1	102	85.7	2.1	110	25.0	29.1	120
M	34	5.5	115	41	6.8	5.3	120	100	11	9		73.4	11.2	102	84.4	2.6	105	26.1	27.1	110
SLM	34	5.8	110	38	6.7	5.3	110	100	16	10		70.4	11.0	97	83.2	2.4	103	27.1	25.6	102

LELAND

FOX 4

100 PERCENT

M	34	6.6	113	37	5.6	4.1	110	100	29	16	55	72.3	11.2	101	82.5	2.5	101	26.1	27.7	113
SLM	34	8.6	107	34	5.5	4.0	100	100	30	22		71.5	10.9	98	83.2	2.4	103	27.2	27.0	108

LELAND

STONEVILLE 213

100 PERCENT

SM	36	5.8	116	40	6.4	4.9	110	100	17	11	61	74.6	10.8	103	83.9	2.4	105	25.3	28.7	118
SLM	35	7.0	110	38	5.9	4.6	110	100	22	14		72.4	11.2	101	82.7	2.5	102	25.1	28.0	116
SLM	35	7.3	110	40	6.5	5.2	100	90	32	22		69.2	10.8	94	83.0	2.8	101	27.7	26.2	103

MERIDIAN

MXD-MNLY COKER 100

60 PERCENT

M	34	7.3	108	37	7.0	5.2	120	100	17	10	61	71.8	11.2	100	85.1	2.5	107	26.1	27.9	114
M LT SP	34	7.4	103	36	6.2	5.2	120	100	24	15		69.4	11.4	96	84.8	2.9	105	27.3	26.6	106

OXFORD

DPL SMOOTH LEAF

95 PERCENT

SM	34	6.0	103	35	6.8	5.3	120	100	13	11	54	74.6	10.8	103	85.2	2.2	109	25.0	28.7	119
SLM	34	8.0	103	37	6.6	5.2	100	100	27	20		69.0	10.8	93	84.6	2.8	105	27.3	26.5	105
M LT SP	34	6.9	105	37	6.9	5.3	110	100	19	14		70.8	10.9	97	83.5	2.8	102	27.6	26.4	104

PRENTISS

DPL SMOOTH LEAF

95 PERCENT

M	35	5.9	113	38	6.7	5.2	110	110	12	7	64	73.0	11.5	103	84.1	2.3	106	24.9	28.0	116
M	34	6.6	102	34	6.2	4.6	120	100	15	13		71.1	11.2	99	84.0	2.3	106	27.6	26.1	103

ROLLING FORK

DPL SMOOTH LEAF

95 PERCENT

M	36	6.2	117	40	6.4	5.1	110	100	17	11	65	73.8	10.9	102	84.5	2.0	108	25.8	29.1	119
M	35	6.7	116	41	6.7	5.1	110	100	17	14		73.8	10.6	101	83.2	2.0	105	27.2	26.4	105
SLM	35	7.4	116	42	6.7	5.4	110	100	23	14		69.4	10.8	94	83.5	2.4	104	27.6	26.4	104

ROSEDALE

DPL SMOOTH LEAF

100 PERCENT

M	35	7.0	113	38	6.4	4.8	110	100	27	24	53	71.4	10.7	97	83.6	1.9	107	25.4	28.2	116
M	35	7.1	107	36	6.2	4.8	110	90	32	22		72.4	10.6	99	83.0	1.9	105	26.7	27.0	108
M	35	7.2	117	42	6.7	5.6	100	90	32	26		72.4	10.6	99	84.4	2.6	105	26.1	27.1	110

RULEVILLE

DPL-15

100 PERCENT

M	35	6.0	123	42	6.7	5.3	120	110	18	12	65	74.8	11.1	104	83.6	2.2	105	25.3	28.0	115
M	35	6.2	117	41	6.3	5.1	110	100	25	16		75.1	10.8	104	83.8	2.2	106	25.4	28.1	116
LM	35	8.0	113	39	6.7	5.2	120	100	27	17		69.5	10.7	94	83.4	2.5	104	27.6	26.8	106

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results												
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite		
Grade	Staple													
	30d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	R _a	+b	Index	Code
SOUTH CENTRAL AREA--CONTINUED														
MISSISSIPPI SENATOBIA		DPL SMOOTH LEAF			90 PERCENT									
M	35	1.08	48	4.9	78	38.7	21.3	7.3	1.4	1.9	78.8	8.5	104	251
M	34	1.08	46	4.7	76	37.9	21.0	6.7	1.3	1.9	75.7	8.9	100	352
SLM	34	1.08	44	4.4	72	35.5	22.1	7.1	2.0	3.0	74.8	8.0	98	402
SHELBY		DPL SMOOTH LEAF			100 PERCENT									
M	34	1.03	45	4.6	85	41.9	23.7	6.7	1.3	1.9	77.8	9.0	102	252
M	34	1.08	46	5.0	82	40.5	22.8	7.1	0.8	1.6	78.0	8.7	103	252
SLM	34	1.08	45	4.7	76	37.8	22.4	7.7	1.3	2.0	75.0	7.8	98	401
TCHULA		DPL SMOOTH LEAF			95 PERCENT									
M	34	1.06	45	4.4	82	40.8	22.2	7.3	0.6	1.5	76.7	8.8	101	302
M	35	1.09	47	5.0	80	39.6	22.0	7.8	0.9	1.8	77.2	8.8	102	302
M LT SP	35	1.10	43	4.4	76	37.6	21.1	7.2	0.8	1.9	73.7	8.4	97	402
TUPELO		MXD-MNLY REX			60 PERCENT									
SM	34	1.05	44	4.7	78	38.8	21.1	6.7	0.7	1.2	79.5	8.8	105	202
SLM	35	1.09	43	4.2	79	39.0	20.1	6.2	1.1	1.9	74.0	8.7	97	402
SLM	33	1.07	43	4.0	79	38.9	20.0	6.4	1.4	2.5	74.5	8.6	98	402
TYLERTOWN		DPL-15			90 PERCENT									
M	34	1.04	47	4.6	78	38.6	20.3	6.7	0.9	1.8	76.0	9.2	100	302
M LT SP	34	1.05	46	4.4	77	38.3	20.3	6.0	1.2	3.1	74.0	9.3	98	353
VANCE		STONEVILLE 7A			100 PERCENT									
SLM	36	1.10	49	5.4	89	43.9	22.9	5.4	2.7	3.5	77.5	8.7	102	302
SLM	36	1.13	47	5.0	89	43.9	22.4	5.4	3.1	4.1	75.9	8.2	100	352
LM	35	1.14	46	5.0	89	44.2	23.4	6.2	4.8	5.4	72.1	7.5	93	452
WATER VALLEY		DPL SMOOTH LEAF			90 PERCENT									
SM	34	1.02	48	4.8	76	37.8	21.2	8.5	0.9	1.5	80.0	8.4	105	251
M	34	1.08	45	4.6	77	38.3	21.8	7.4	1.2	1.9	76.5	9.0	101	302
SLM	34	1.06	43	3.8	78	38.4	22.7	7.8	1.9	2.7	75.8	7.9	99	401
WEST POINT		DPL SMOOTH LEAF			95 PERCENT									
SM	34	1.07	45	4.5	79	39.2	21.7	7.4	0.4	0.6	80.2	8.8	106	201
SLM	35	1.11	44	4.1	76	37.4	22.1	7.4	0.7	2.2	72.0	8.8	94	403
M	34	1.11	44	4.0	81	40.0	21.9	6.6	1.1	1.7	77.5	7.9	101	351
MISSOURI BUCODA		AUBURN M			100 PERCENT									
SLM	34	1.07	47	4.0	86	42.6	23.5	6.5	1.2	2.2	74.1	9.3	98	353
SLM	34	1.05	47	3.8	85	42.1	22.4	6.8	1.6	2.4	73.1	9.1	96	353
SLM	34	1.02	46	4.0	79	39.1	21.4	6.8	1.4	2.1	74.0	8.4	97	402
SLM	33	1.02	46	3.6	78	38.6	21.4	7.0	1.5	2.9	73.9	9.2	96	402

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn			
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd
Grade	Staple	32d in, Pct.		Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTH CENTRAL AREA--CONTINUED																					
MISSISSIPPI SENATOBIA			DPL SMOOTH LEAF				90 PERCENT														
M	35	6.0	115	40	6.6	5.3	120	110	21	15	65	73.7	11.0	102	84.5	2.1	108	26.0	28.7	117	
M	34	6.4	108	37	6.4	4.8	110	100	20	14		71.0	11.2	98	83.6	2.4	104	26.7	27.1	109	
SLM	34	7.3	108	37	6.8	5.2	120	100	22	16		71.4	10.6	97	82.9	2.2	103	27.2	25.8	103	
SHELBY			DPL SMOOTH LEAF				100 PERCENT														
M	34	6.2	114	37	6.3	4.8	120	100	18	15	59	73.0	11.2	102	84.2	2.4	106	27.2	27.5	110	
M	34	6.7	114	39	6.6	4.8	110	100	15	8		73.7	10.8	102	83.1	2.0	105	26.3	27.4	111	
SLM	34	5.9	112	39	6.7	5.4	110	100	20	15		70.8	10.7	97	83.3	2.4	104	28.2	26.7	104	
TCHULA			DPL SMOOTH LEAF				95 PERCENT														
M	34	6.1	111	38	6.7	4.9	110	90	21	16	58	72.7	11.1	101	84.3	2.2	107	26.9	27.3	109	
M	35	6.7	108	37	6.4	4.9	110	100	16	11		72.3	10.8	100	83.5	2.0	106	25.8	28.1	115	
M LT SP	35	6.7	110	39	6.8	5.2	100	90	26	16		69.2	10.7	93	82.8	2.8	101	27.5	26.6	105	
TUPELO			MXD-MNLY REX				60 PERCENT														
SM	34	5.3	108	36	6.5	5.1	110	100	11	11	56	73.4	10.8	101	85.1	2.0	109	25.9	28.5	116	
SLM	35	7.0	107	38	6.4	5.0	110	100	25	20		69.2	11.0	94	85.1	2.8	106	27.4	26.4	105	
SLM	33	7.0	101	34	6.4	4.6	100	90	28	23		70.8	11.2	98	83.7	2.4	105	27.0	25.9	104	
TYLERTOWN			DPL-15				90 PERCENT														
M	34	6.4	101	35	6.5	4.8	110	100	24	20	57	72.2	11.2	100	84.5	2.4	106	26.1	27.2	111	
M LT SP	34	8.4	98	32	5.9	4.4	100	100	26	21		70.4	11.4	98	84.0	2.6	104	27.0	26.9	108	
VANCE			STONEVILLE 7A				100 PERCENT														
SLM	36	7.0	118	39	5.9	4.5	120	110	9	6	64	74.7	10.9	104	83.3	2.2	104	26.5	27.5	111	
SLM	36	7.5	116	39	6.2	4.5	110	100	15	10		73.7	10.6	101	83.6	1.9	106	27.0	27.1	108	
LM	35	9.6	116	42	6.1	4.7	110	100	19	10		71.9	10.4	97	83.3	2.6	103	27.9	26.7	105	
WATER VALLEY			DPL SMOOTH LEAF				90 PERCENT														
SM	34	5.7	111	37	7.1	5.3	110	100	15	10	54	75.1	11.0	104	84.6	2.1	108	25.2	28.8	119	
M	34	6.6	113	40	6.7	5.3	100	100	19	17		71.0	11.0	98	84.8	2.2	108	25.4	27.9	115	
SLM	34	7.9	112	40	7.2	5.7	100	90	28	20		72.2	10.4	98	83.9	2.4	105	27.2	26.7	106	
WEST POINT			DPL SMOOTH LEAF				95 PERCENT														
SM	34	5.5	121	42	7.3	5.6	120	110	16	11	66	74.4	11.2	104	85.3	1.9	110	25.1	28.7	119	
SLM	35	6.6	119	43	7.2	5.7	110	110	22	16		68.5	11.2	93	84.3	3.0	104	26.1	27.0	110	
M	34	5.5	118	43	7.0	5.5	110	100	18	14		73.7	10.5	101	83.4	2.4	104	26.6	26.6	107	
MISSOURI BUCODA			AUBURN M				100 PERCENT														
SLM	34	8.0	115	39	6.4	5.5	110	90	33	24	61	69.4	11.8	97	84.4	2.9	104	25.0	27.9	116	
SLM	34	6.2	109	37	6.3	5.2	120	100	20	13		68.3	11.8	96	84.3	2.5	106	26.8	26.6	107	
SLM	34	7.1	102	34	6.2	4.6	120	100	26	15		69.8	10.9	95	83.9	2.2	106	27.2	27.1	108	
SLM	33	7.3	103	35	6.4	4.9	110	100	37	24	55	68.9	10.5	92	83.7	3.0	102	27.9	26.3	103	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>R₁</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTH CENTRAL AREA--CONTINUED															
MISSOURI															
DORENA		STONEVILLE 213				80 PERCENT									
SLM	34	1.02	47	4.1	85	42.1	22.7	5.4	1.4	2.1	75.8	9.2	100	302	
SLM	34	1.02	46	4.8	85	42.1	22.4	5.3	1.8	3.0	73.1	9.0	96	403	
SLM	33	0.99	46	5.0	80	39.6	22.4	6.2	1.5	2.4	72.8	8.4	95	402	
GIDEON		STONEVILLE 7A				70 PERCENT									
M	34	1.06	46	4.8	85	42.1	22.3	6.1	1.1	2.1	76.1	9.0	101	302	
SLM	34	1.06	46	4.8	83	41.1	21.4	6.2	1.6	2.4	73.2	8.4	96	402	
SLM	34	1.04	48	4.3	83	41.1	22.0	5.6	1.6	2.6	73.7	8.6	97	402	
MOREHOUSE		MIXED-MAINLY FOX				50 PERCENT									
SLM	34	1.01	48	4.6	88	43.6	21.9	4.6	2.4	3.4	74.2	8.4	98	402	
SLM	34	1.04	47	4.9	88	43.6	22.2	5.6	2.0	2.9	74.0	8.8	97	352	
SLM	34	1.03	47	4.8	84	41.6	22.7	6.1	1.8	2.9	73.3	8.2	96	402	
RISCO		STONEVILLE 213				90 PERCENT									
SLM	34	1.05	46	4.8	79	39.1	21.3	6.5	1.6	2.6	72.9	9.3	96	353	
SLM	33	1.04	47	4.9	82	40.6	22.0	6.1	1.6	2.5	75.1	8.4	99	352	
LM	33	1.06	46	4.2	81	40.1	22.9	6.2	4.0	5.3	70.4	8.3	91	452	
SENATH		MIXED REX SMOOTH LEAF				50 PERCENT									
SLM	34	1.04	46	4.4	85	42.1	21.9	6.0	1.4	2.3	74.0	9.4	98	353	
SLM	34	1.04	47	4.6	83	41.1	21.9	6.0	1.5	2.2	74.5	8.6	98	352	
SLM	34	1.08	45	3.9	84	41.6	22.7	6.6	1.9	3.1	73.4	8.1	96	402	
STEELE		DPL SMOOTH LEAF				90 PERCENT									
M	34	1.06	47	4.8	86	42.6	22.8	6.9	1.0	1.9	76.8	8.8	101	302	
SLM	34	1.06	46	5.0	82	40.6	22.9	6.6	1.3	2.0	75.8	8.2	99	352	
SLM	34	1.08	44	4.1	81	40.1	22.3	7.5	1.1	2.1	76.0	8.0	99	352	
WYATT		REX				98 PERCENT									
SLM	34	1.03	45	4.4	83	41.1	20.6	5.1	1.6	2.5	76.1	8.6	100	352	
SLM	34	1.08	46	4.2	84	41.6	19.9	5.8	2.0	2.7	73.0	8.7	95	402	
SLM	34	1.05	46	4.4	82	40.6	22.9	6.3	1.8	2.6	73.2	8.2	96	402	
TENNESSEE															
ALAMO		STONEVILLE 7A				70 PERCENT									
SM	34	1.02	47	5.0	87	43.0	21.9	5.8	0.4	1.0	78.5	8.9	104	252	
M	34	1.07	46	4.5	87	43.0	21.8	5.4	0.9	1.3	77.8	8.2	102	301	
M	34	1.07	47	4.4	82	40.8	21.2	6.2	1.3	2.0	77.6	8.2	102	301	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Blue- ness	Com- posite	
Grade	Staple	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTH CENTRAL AREA--CONTINUED																					
MISSOURI																					
DORENA																					
		STONEVILLE 213										80 PERCENT									
SLM	34	7.1	105	35		5.6	4.1	110	100	25	20	56	71.7	11.6	101	83.8	2.5	104	26.3	27.3	111
SLM	34	7.1	103	33		5.6	4.1	120	100	30	24		69.2	11.7	97	82.8	2.6	102	27.0	26.5	106
SLM	33	7.0	94	27		5.4	3.7	120	100	22	14		69.8	10.7	94	83.4	1.9	106	27.4	27.7	110
GIDEON																					
		STONEVILLE 7A										70 PERCENT									
M	34	6.6	111	37		6.0	4.8	110	100	24	17	59	70.8	10.8	97	84.6	2.5	106	26.0	27.3	111
SLM	34	6.2	103	35		5.8	4.4	120	110	22	15		69.8	11.4	97	83.5	2.2	105	26.5	27.9	113
SLM	34	7.0	103	36		6.2	5.0	120	100	24	17		68.4	11.0	92	84.4	2.6	105	27.0	26.9	108
MOREHOUSE																					
		MIXED-MAINLY FOX										50 PERCENT									
SLM	34	8.8	101	31		5.2	3.6	110	90	39	28	53	69.3	11.0	94	81.8	3.0	98	26.1	27.3	111
SLM	34	7.0	107	35		5.6	4.0	120	100	20	12		71.4	11.1	99	83.5	2.8	102	26.4	27.3	110
SLM	34	6.6	103	34		5.2	4.0	120	110	23	14		69.4	10.8	94	82.6	2.6	101	28.1	26.9	105
RISCO																					
		STONEVILLE 213										90 PERCENT									
SLM	34	7.9	97	33		5.8	4.3	110	100	30	25	55	68.6	11.6	95	84.0	2.6	104	26.0	27.2	111
SLM	33	6.0	104	36		5.7	4.4	120	120	17	11		71.6	10.8	98	82.8	2.5	102	27.3	27.4	109
LM	33	8.6	112	39		6.5	5.3	120	100	30	19		67.0	10.8	89	83.9	2.9	103	25.4	27.0	111
SENATH																					
		MIXED REX SMOOTH LEAF										50 PERCENT									
SLM	34	7.8	106	35		6.2	4.4	110	100	34	24	56	69.1	11.6	96	84.6	3.1	104	25.9	26.9	110
SLM	34	5.9	107	36		6.0	4.4	120	100	23	14		70.0	11.1	96	83.7	2.6	104	26.9	27.8	111
SLM	34	7.6	108	39		6.8	5.4	110	100	42	26		69.8	10.4	93	83.6	3.2	101	27.1	26.7	107
STEELE																					
		DPL SMOOTH LEAF										90 PERCENT									
M	34	7.5	114	39		6.2	5.0	110	100	28	21	62	72.3	11.0	100	83.2	2.7	102	25.6	27.9	114
SLM	34	6.0	108	37		6.3	4.6	120	110	24	15		71.2	10.8	98	83.5	2.2	105	26.5	27.7	112
SLM	34	6.8	113	40		7.2	5.7	110	100	32	22		70.0	10.6	94	83.5	2.9	102	26.0	27.4	112
WYATT																					
		REX										98 PERCENT									
SLM	34	7.0	101	32		5.6	4.2	110	90	28	19	51	72.9	11.0	101	84.2	2.9	104	25.9	27.2	111
SLM	34	6.0	100	34		6.0	4.5	120	100	20	13		68.7	11.6	95	82.8	2.8	101	26.6	26.8	108
SLM	34	6.7	109	38		5.9	4.7	120	100	22	15		69.2	10.5	92	82.1	2.8	99	26.1	27.7	113
TENNESSEE																					
ALAMO																					
		STONEVILLE 7A										70 PERCENT									
SM	34	5.2	113	39		6.2	5.0	110	100	20	16	58	73.1	10.8	101	84.4	1.9	108	24.8	29.0	120
M	34	6.9	115	40		6.3	5.0	110	100	21	15		72.2	11.0	100	83.2	2.3	104	26.8	27.0	108
M	34	6.4	114	41		6.1	4.8	110	100	25	17		73.2	11.0	101	83.3	2.6	103	26.7	27.0	109

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTH CENTRAL AREA--CONTINUED															
TENNESSEE															
BOLIVAR		DPL SMOOTH LEAF				75 PERCENT									
M	34	1.06	48	4.6	78	38.5	21.1	7.6	1.0	1.5	78.0	8.6	102	302	
M	34	1.05	45	4.1	78	38.4	20.6	6.7	0.5	1.5	75.8	9.0	100	302	
M	34	1.08	45	4.0	82	40.5	20.1	7.1	1.0	1.7	77.0	8.8	101	302	
BROWNSVILLE		DIXIE KING				75 PERCENT									
M	34	1.04	44	4.8	84	41.4	21.9	6.1	0.6	1.5	78.9	9.1	104	202	
M	34	1.04	43	4.5	78	38.9	19.9	6.4	0.6	1.2	75.5	8.8	100	352	
SLM	34	1.07	43	4.2	77	38.1	20.7	6.1	1.5	2.5	75.0	8.6	99	352	
COVINGTON		MIXED MAINLY FOX 4				50 PERCENT									
M	34	1.04	45	4.8	83	41.3	22.2	6.2	1.1	1.6	78.7	8.8	103	252	
M	34	1.07	46	4.4	81	39.9	22.3	5.9	0.9	1.1	76.0	8.4	100	352	
M	34	1.06	44	4.3	82	40.3	21.7	6.2	1.1	1.7	76.0	8.2	100	352	
FAYETTEVILLE		EMPIRE				75 PERCENT									
M	34	1.02	42	4.2	83	41.3	20.9	6.6	1.0	1.7	77.7	8.9	102	302	
SLM	34	1.04	43	3.6	74	36.8	19.7	6.5	1.2	2.0	74.0	9.2	98	353	
SLM	33	1.04	43	3.4	80	39.7	21.5	6.4	1.5	2.6	74.5	8.6	98	402	
HUNTINGDON		DIXIE KING				75 PERCENT									
SM	34	1.01	47	4.8	83	41.0	21.8	5.4	0.4	1.3	78.0	9.2	103	252	
M	34	1.04	47	4.6	83	41.0	21.5	5.8	0.7	1.0	75.8	9.1	100	302	
SLM	34	1.08	45	3.7	81	40.3	23.3	6.0	1.6	2.5	76.0	8.4	100	352	
JACKSON		DPL SMOOTH LEAF				80 PERCENT									
SM	34	1.06	45	4.8	82	40.5	21.2	6.9	0.3	0.9	79.2	9.0	105	202	
M	34	1.07	46	4.5	79	39.2	21.0	7.0	1.1	1.3	76.3	8.8	101	302	
SLM	34	1.06	43	4.2	78	38.6	21.7	6.3	1.7	2.7	75.0	8.6	98	352	
LAWRENCEBURG		DIXIE KING				75 PERCENT									
M	33	1.04	46	4.1	79	39.0	19.8	5.9	0.4	1.7	78.5	9.2	104	202	
M	34	1.04	46	3.8	76	37.6	21.3	6.1	1.1	1.8	75.4	8.9	99	352	
SLM	34	1.06	42	3.3	81	40.1	21.9	6.2	1.7	2.6	74.0	8.9	98	352	
LEXINGTON		DPL-15				90 PERCENT									
SM	34	1.04	45	4.4	79	39.0	21.2	6.6	0.7	1.0	78.5	9.1	104	252	
SLM	34	1.07	44	4.0	81	40.1	21.2	6.6	1.7	2.9	74.5	8.3	98	402	
SLM	34	1.07	46	3.8	79	39.1	20.9	7.3	2.0	2.7	76.3	8.0	100	351	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflect-	Yellow-	Com-	Rflect-	Yellow-	Com-	Rflect-	Blue-	Com-
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		ance	ness	posite	ance	ness	posite	ance	ness	posite
Grade	Staple																			
	32d in, Pct.		Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTH CENTRAL AREA--CONTINUED																				
TENNESSEE																				
BDLIVAR		DPL SMOOTH LEAF					75 PERCENT													
M	34	5.6	118	41	7.3	5.5	110	100	28	20	61	73.2	11.3	102	84.8	2.3	108	25.3	28.4	117
M	34	6.4	105	36	6.4	4.9	110	100	24	16		70.6	11.2	98	84.7	2.8	105	26.9	26.6	107
M	34	7.0	110	40	6.6	5.5	100	100	25	19		73.0	11.3	102	84.0	2.8	104	26.5	26.9	109
BROWNSVILLE		DIXIE KING					75 PERCENT													
M	34	6.1	106	35	5.7	4.6	110	100	14	15	53	73.0	11.2	102	84.7	1.9	109	26.0	28.3	115
M	34	6.8	102	35	6.1	4.5	120	100	18	14		71.4	10.9	98	84.5	2.6	106	27.2	26.6	106
SLM	34	6.7	103	36	6.2	4.7	100	90	26	19		71.0	11.2	98	82.9	2.3	103	27.5	25.8	102
COVINGTON		MIXED MAINLY FOX 4					50 PERCENT													
M	34	5.7	110	37	6.4	4.9	110	100	24	17	56	72.7	10.7	100	83.9	2.2	106	26.6	27.4	110
M	34	6.0	111	39	5.8	4.8	110	100	23	15		71.1	11.0	98	84.6	2.4	107	25.9	27.0	110
M	34	6.7	111	39	6.2	4.9	100	90	28	22		72.2	10.8	99	83.0	2.2	103	27.7	25.9	102
FAYETTEVILLE		EMPIRE					75 PERCENT													
M	34	6.8	103	35	6.5	4.8	110	90	36	26	55	72.7	11.3	102	85.0	2.6	107	26.8	27.2	109
SLM	34	6.9	105	37	6.6	4.8	100	90	38	26		68.2	11.3	93	84.8	3.2	104	27.5	26.1	103
SLM	33	7.4	106	37	6.4	5.0	90	90	32	24		70.3	11.4	98	83.4	2.9	102	27.9	25.3	99
HUNTINGDON		DIXIE KING					75 PERCENT													
SM	34	5.2	101	32	6.2	4.5	110	100	16	12	48	72.2	11.1	100	83.6	2.5	104	26.5	26.9	109
M	34	5.7	107	36	5.7	4.4	110	100	20	14		70.0	11.2	96	84.6	2.5	106	25.8	27.2	111
SLM	34	9.2	117	43	6.7	5.2	100	100	33	24		71.4	11.4	100	83.7	2.5	104	26.4	26.8	108
JACKSON		DPL SMOOTH LEAF					80 PERCENT													
SM	34	5.5	111	38	6.8	5.3	110	100	17	11	60	74.1	10.8	102	84.8	1.9	109	25.1	28.8	119
M	34	6.2	109	38	5.9	5.3	120	100	17	12		70.2	10.5	95	84.0	2.2	106	25.9	27.7	113
SLM	34	7.0	104	37	6.6	5.1	100	90	30	22		70.5	11.6	99	83.2	2.5	103	26.7	26.6	107
LAWRENCEBURG		DIXIE KING					75 PERCENT													
M	33	6.2	103	36	6.1	4.8	100	90	26	18	55	73.8	11.2	103	84.8	2.4	107	26.3	27.5	111
M	34	7.0	111	40	6.6	5.2	100	90	25	17		69.8	11.8	98	84.1	2.6	105	26.8	26.8	108
SLM	34	8.0	107	38	6.6	5.1	90	90	39	28		69.6	11.7	97	83.9	2.8	103	28.0	25.5	100
LEXINGTON		DPL-15					90 PERCENT													
SM	34	6.1	106	36	6.0	4.8	110	100	11	11	59	73.6	10.9	102	84.7	2.3	107	25.2	27.6	114
SLM	34	7.6	115	41	6.8	5.6	110	100	29	16		71.6	11.1	99	85.4	2.6	108	26.3	27.5	111
SLM	34	8.0	113	42	6.6	5.4	110	100	28	20		73.2	11.0	101	84.6	2.6	106	26.6	26.7	108

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTH CENTRAL AREA--CONTINUED															
TENNESSEE MEMPHIS		MIXED MAINLY REX				50 PERCENT									
SM	34	1.01	45	4.5	79	39.3	19.0	5.9	0.4	0.9	79.0	9.0	104	202	
SM	34	1.04	45	4.3	76	37.8	19.4	6.4	0.8	1.3	78.0	8.8	103	252	
M	34	1.08	45	4.0	76	37.5	19.5	6.9	0.6	1.3	78.0	8.2	102	301	
SOMERVILLE		STONEVILLE 213				72 PERCENT									
SM	34	1.07	47	4.6	79	38.9	20.8	6.3	0.6	1.6	78.2	9.1	104	252	
SLM	34	1.03	45	4.3	78	38.4	20.6	7.0	1.5	1.9	73.8	9.4	97	353	
SLM	34	1.05	44	4.0	79	39.2	21.6	6.5	2.3	3.3	74.0	8.4	97	402	
TIPTONVILLE		DPL SMOOTH LEAF				100 PERCENT									
SM	34	1.06	44	5.0	85	41.9	24.7	7.4	0.8	1.3	80.2	8.3	105	251	
M	34	1.08	45	4.8	83	40.9	23.1	7.4	0.8	2.0	77.0	8.1	101	351	
SLM	35	1.12	44	4.4	80	39.5	23.6	8.1	1.0	1.7	74.5	7.8	98	402	
TRENTON		EMPIRE				98 PERCENT									
SLM	34	1.02	48	4.7	89	44.2	21.2	5.4	1.6	2.7	75.3	9.3	100	303	
M	33	1.01	47	4.6	83	41.0	21.3	5.4	0.9	1.4	77.1	8.8	102	302	
SLM	34	1.08	45	4.0	81	39.9	21.3	5.8	1.8	2.6	74.3	8.2	98	402	
SOUTHWEST AREA															
SOUTH TEXAS CORPUS CHRISTI		DELFO 9169				90 PERCENT									
SLM	32	1.00	43	3.8	79	39.1	20.7	5.5	1.2	2.2	72.9	9.0	96	403	
SLM	31	0.94	43	3.6	88	43.6	20.4	5.3	1.5	2.5	74.6	8.6	98	352	
SLM	31	0.97	41	4.0	85	42.1	20.7	5.4	2.0	2.8	73.3	8.8	96	402	
ELSA		STONEVILLE 213				80 PERCENT									
SLM	33	1.04	48	4.4	82	40.6	22.2	5.9	1.0	1.6	72.1	9.7	95	353	
SLM	33	1.03	47	4.2	83	41.1	23.2	5.4	1.5	2.4	75.0	9.0	99	352	
SLM	33	1.02	45	3.8	77	38.1	20.8	5.9	1.6	2.5	73.9	9.0	98	353	
HARLINGEN		STONEVILLE 7A				94 PERCENT									
SLM	33	1.00	46	4.2	83	41.1	21.9	5.6	1.8	2.4	73.5	8.7	96	402	
SLM	33	0.99	46	4.0	86	42.6	21.1	4.9	1.4	2.5	74.9	8.8	98	352	
M	33	1.02	44	4.4	79	39.1	21.5	5.4	1.0	1.6	77.5	8.8	102	302	
PALACIOS		DPL SMOOTH LEAF				92 PERCENT									
SLM	34	1.04	47	4.6	86	42.6	24.0	6.3	1.6	2.4	74.8	8.9	98	352	
SLM	34	1.03	48	4.6	86	42.6	21.8	5.7	2.0	3.1	73.0	9.0	96	403	
LM	34	1.06	47	4.1	81	40.1	22.3	5.4	3.5	4.8	68.9	8.3	88	503	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn		
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite
			32d in, Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.		No.	No.	Rd	+b	Index	Rd	+b	Index	Rd
Grade	Staple																			
SOUTH CENTRAL AREA--CONTINUED																				
TENNESSEE		MIXED MAINLY REX										50 PERCENT								
MEMPHIS																				
SM	34	6.1	104	35	6.6	5.0	120	110	13	10	55	73.8	10.9	102	85.1	2.0	110	25.3	28.5	118
SM	34	5.9	103	35	5.8	4.4	110	100	16	10		72.6	10.8	100	84.4	2.1	107	26.9	27.4	110
M	34	6.6	108	38	6.7	5.3	120	100	17	11		73.5	10.9	102	84.2	2.4	106	26.3	27.1	110
SOMERVILLE		STONEVILLE 213										72 PERCENT								
SM	34	6.8	111	38	6.7	5.3	110	100	17	12	60	72.8	11.3	102	83.7	2.3	105	25.2	28.2	116
SLM	34	7.3	106	37	6.3	4.9	110	100	24	20		69.3	11.6	96	83.9	3.0	103	27.7	26.5	105
SLM	34	8.0	106	37	6.6	5.0	100	100	31	21		69.6	11.2	96	83.8	2.6	104	27.2	26.0	104
TIPTONVILLE		DPL SMOOTH LEAF										100 PERCENT								
SM	34	5.6	115	40	6.8	5.2	110	100	12	12	64	74.5	10.5	102	84.5	1.7	109	24.6	28.7	120
M	34	5.7	111	37	6.4	4.7	100	100	23	16		72.9	10.5	99	84.1	2.2	106	25.9	27.2	111
SLM	35	8.0	113	41	7.1	5.3	110	100	25	21		70.6	10.4	95	82.6	2.3	102	24.9	27.4	114
TRENTON		EMPIRE										98 PERCENT								
SLM	34	6.6	110	37	5.8	4.4	110	100	21	14	55	70.8	11.3	98	83.9	2.6	104	26.1	27.7	113
M	33	6.2	100	30	5.3	3.8	110	100	14	10		72.2	10.8	99	84.5	2.6	106	26.2	27.2	110
SLM	34	7.2	112	40	6.4	5.0	110	100	21	14		69.5	11.0	95	82.6	3.0	100	26.9	26.0	104
SOUTHWEST AREA																				
SOUTH TEXAS		DELFO 9169										90 PERCENT								
CORPUS CHRISTI																				
SLM	32	8.2	85	27	5.5	3.7	110	90	34	30	43	67.2	11.5	92	83.2	3.4	99	28.5	26.2	102
SLM	31	7.6	83	25	4.7	3.1	110	90	28	22		69.6	11.1	95	84.2	2.8	104	29.3	25.9	99
SLM	31	7.9	91	26	5.0	3.2	120	100	29	25		68.7	11.3	94	84.1	2.8	104	29.6	25.5	97
ELSA		STONEVILLE 213										80 PERCENT								
SLM	33	7.8	102	37	5.9	4.7	110	100	33	24	57	67.4	11.6	92	83.8	3.0	102	26.5	26.7	108
SLM	33	6.4	105	38	5.6	4.5	120	100	28	18		71.2	11.4	100	84.5	2.4	106	27.2	26.8	107
SLM	33	7.6	97	31	6.2	4.2	100	100	32	25		70.9	12.0	101	84.5	2.9	104	28.0	25.9	102
HARLINGEN		STONEVILLE 7A										94 PERCENT								
SLM	33	7.4	101	35	6.1	4.7	110	100	27	22	56	69.3	11.1	95	83.1	3.1	100	27.3	26.4	105
SLM	33	7.4	94	32	4.9	3.6	110	90	39	28		69.4	11.2	96	82.8	2.8	101	28.3	26.0	101
M	33	5.7	105	35	6.0	4.4	110	100	24	15		73.1	11.6	103	84.5	2.5	106	28.2	26.4	103
PALACIOS		DPL SMOOTH LEAF										92 PERCENT								
SLM	34	6.9	106	38	5.9	4.5	120	100	30	17	59	70.6	11.1	98	83.7	2.2	105	25.2	27.9	115
SLM	34	7.8	106	34	6.1	4.0	120	100	32	25		69.0	11.4	95	83.7	2.7	103	26.5	27.2	110
LM	34	10.2	102	34	5.7	3.9	100	90	56	49		66.1	11.0	88	82.9	2.5	102	27.9	26.5	104

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHWEST AREA--CONTINUED															
SOUTH TEXAS PORT LAVACA		DPL SMOOTH LEAF				85 PERCENT									
M	34	1.02	47	4.4	85	42.1	23.3	6.5	1.0	1.6	76.4	8.9	101	302	
SLM	34	1.06	46	4.6	85	42.1	21.8	5.8	1.9	2.2	73.6	8.8	97	402	
M LT SP	33	1.04	48	4.6	86	42.6	22.8	6.2	1.5	2.6	74.0	9.2	98	353	
ROBSTOWN		STONEVILLE 7A				90 PERCENT									
SLM LT SP	31	0.96	46	3.9	86	42.6	19.3	4.3	1.6	2.6	70.2	9.9	92	404	
M LT SP	30	0.91	45	3.9	85	42.1	19.4	4.9	1.1	2.3	72.7	9.9	96	353	
M LT SP	31	0.96	44	4.5	86	42.6	19.8	5.0	1.3	2.2	73.1	9.6	96	353	
SANTA ROSA		DPL-15				90 PERCENT									
SLM	33	1.04	47	4.4	85	42.1	24.0	6.0	1.6	2.5	74.8	9.0	99	352	
SLM	33	1.04	46	4.2	83	41.1	23.1	6.0	1.7	2.6	74.9	9.4	99	303	
SLM	33	1.03	43	3.3	84	41.6	22.3	6.2	1.7	2.6	74.9	9.0	99	352	
SEBASTIAN		STONEVILLE 7A				80 PERCENT									
SLM LT SP	33	1.02	47	4.6	83	41.1	22.2	5.7	2.4	3.5	69.4	10.1	90	404	
SLM	33	1.02	45	4.4	84	41.6	23.1	5.4	1.5	2.8	73.3	9.4	97	353	
M	33	1.04	47	4.8	81	40.1	22.0	5.8	0.9	1.6	76.2	9.3	101	302	
CENTRAL TEXAS BATESVILLE		DPL SMOOTH LEAF				95 PERCENT									
M	34	1.06	46	4.3	81	40.1	23.2	6.6	1.0	1.9	76.9	8.8	101	302	
M	34	1.06	46	4.4	77	38.1	21.4	7.4	1.0	2.1	76.9	9.0	101	302	
SLM	34	1.08	46	4.6	79	39.1	22.4	7.4	1.0	1.8	72.9	8.1	95	402	
BRYAN		DPL SMOOTH LEAF				75 PERCENT									
M	33	1.03	47	4.6	89	44.1	22.9	5.4	1.3	2.1	75.7	9.5	100	303	
M	34	1.03	47	4.6	80	39.6	22.0	5.8	1.0	1.6	76.5	9.0	101	302	
SLM	33	1.06	46	4.7	84	41.6	22.9	5.8	1.6	2.4	70.3	7.9	90	452	
NAVASOTA		MXD-MNLY DPL SMOOTH LEAF				50 PERCENT									
SLM	35	1.10	48	4.7	81	40.1	20.8	5.1	2.0	2.6	75.2	8.8	99	352	
SLM	35	1.05	46	4.2	83	41.1	22.0	6.7	1.7	2.7	75.2	7.5	98	401	
SLM	34	1.08	46	4.4	81	40.1	23.6	6.9	1.4	2.4	76.0	7.5	99	401	
QUEEN CITY		DPL SMOOTH LEAF				99 PERCENT									
M	32	0.97	49	5.2	85	42.1	20.9	6.6	0.8	2.0	76.2	9.1	101	302	
M	33	1.03	47	5.0	81	40.1	22.0	7.6	0.8	1.8	76.4	8.6	100	302	
SLM	34	1.06	44	4.4	83	41.1	21.2	7.6	1.1	2.3	76.2	8.4	100	352	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
Grade	Staple																			
	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
OUTWEST AREA--CONTINUED																				
SOUTH TEXAS		DPL SMOOTH LEAF																		
PORT LAVACA		85 PERCENT																		
M	34	6.8	112	39	6.6	5.1	120	110	20	16	61	72.2	11.6	102	83.6	2.3	105	26.3	27.4	111
SLM	34	7.0	110	38	5.9	4.4	120	110	25	15		70.2	11.7	99	83.2	2.8	102	26.9	27.2	109
M LT SP	33	7.6	105	35	5.9	4.4	120	110	17	14		70.0	11.5	98	83.5	2.5	104	26.6	27.5	111
ROBSTOWN		STONEVILLE 7A																		
		90 PERCENT																		
SLM LT SP	31	7.6	93	30	5.5	3.7	120	100	24	18	47	66.0	12.1	91	83.0	3.4	99	27.7	25.8	102
M LT SP	30	7.0	85	25	5.0	3.3	120	100	31	22		67.5	12.5	96	84.2	2.7	105	28.3	26.2	102
M LT SP	31	6.6	86	25	4.8	3.3	120	120	19	14		69.6	12.0	98	83.1	2.5	103	29.1	25.8	99
SANTA ROSA		DPL-15																		
		90 PERCENT																		
SLM	33	8.2	106	37	5.9	4.4	110	100	35	22	59	69.3	11.6	97	82.9	2.5	102	27.0	26.9	108
SLM	33	6.4	107	38	5.8	4.8	120	100	26	19		70.1	12.0	100	83.8	2.5	104	26.3	26.8	109
SLM	33	7.8	107	35	6.3	4.6	100	90	36	28		70.8	11.8	100	84.4	3.0	104	28.1	25.8	101
SEBASTIAN		STONEVILLE 7A																		
		80 PERCENT																		
SLM LT SP	33	9.0	102	37	5.6	4.4	120	100	32	23	56	64.7	12.0	87	82.2	3.3	97	26.5	26.8	108
SLM	33	8.2	100	34	5.6	4.5	110	100	29	21		68.6	12.0	96	82.9	3.4	98	28.1	26.3	103
M	33	6.2	105	36	6.2	4.3	120	110	19	12		70.8	11.7	100	83.5	2.3	104	27.3	26.6	106
CENTRAL TEXAS		DPL SMOOTH LEAF																		
BATESVILLE		95 PERCENT																		
M	34	6.8	111	38	6.8	5.4	110	90	41	32	55	73.3	11.2	102	84.9	2.3	108	25.9	27.6	113
M	34	7.4	109	37	6.7	5.2	110	100	36	25		73.0	11.2	102	85.1	2.5	107	27.2	26.8	107
SLM	34	6.4	107	36	6.0	4.8	120	100	25	22		70.0	10.5	94	83.5	2.6	103	27.0	26.6	106
BRYAN		DPL SMOOTH LEAF																		
		75 PERCENT																		
M	33	6.3	109	37	5.8	4.3	120	110	22	15	57	70.9	12.0	101	84.7	2.6	106	27.2	27.1	108
M	34	6.2	112	38	6.5	5.1	120	100	21	15		72.6	11.3	101	83.3	2.1	105	26.9	27.0	108
SLM	33	7.1	104	34	5.3	4.0	120	100	21	17		67.2	10.4	88	81.4	3.3	96	29.0	26.1	101
NAVASOTA		MXD-MNLY DPL SMOOTH LEAF																		
		50 PERCENT																		
SLM	35	7.1	111	38	6.2	4.5	110	100	34	24	61	73.0	11.2	102	83.6	2.3	105	27.3	27.0	107
SLM	35	6.4	112	38	6.3	5.2	110	100	23	19		72.2	9.9	97	83.1	2.1	104	28.3	26.7	104
SLM	34	7.5	111	38	6.2	4.7	110	90	30	19		71.9	10.3	97	83.8	2.5	104	26.3	27.5	111
QUEEN CITY		DPL SMOOTH LEAF																		
		99 PERCENT																		
M	32	7.4	92	25	5.5	3.3	120	100	34	24	42	71.9	11.1	100	83.9	2.6	104	27.2	27.0	108
M	33	6.3	101	32	5.8	4.4	120	100	31	24		73.0	10.8	100	83.5	2.4	104	26.1	27.8	113
SLM	34	7.0	104	34	6.2	4.7	110	90	41	33		71.0	10.7	97	82.8	2.8	101	26.9	26.6	106

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results											
		Digital Fibrograph		Micro- naire	Fiber strength			Elon- gation 1/8"	Shirley Analyzer		Color of raw stock		
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge			Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite
Grade	Staple												
	3rd in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index Code
SOUTHWEST AREA--CONTINUED													
CENTRAL TEXAS SUGARLAND		STONEVILLE 7A			100 PERCENT								
M LT SP	33	1.04	47	5.0	84	41.6	21.8	5.6	1.3	2.2	72.8	9.9	96 353
M LT SP	33	1.04	49	5.2	86	42.6	21.9	5.6	1.5	2.5	73.9	9.6	98 353
SLM LT SP	34	1.09	48	5.1	88	43.6	21.8	4.7	2.3	3.4	70.2	9.3	91 403
TEXARKANA		DPL SMOOTH LEAF			99 PERCENT								
M	33	1.00	47	4.7	87	43.1	20.2	5.2	1.0	2.6	74.3	9.3	98 353
SLM	33	1.02	46	5.0	88	43.6	21.9	6.6	1.0	2.1	71.9	9.0	93 403
SLM	33	1.07	45	4.6	79	39.1	21.2	7.7	0.8	1.9	75.1	8.6	99 352
OKLAHOMA BOKCHITO		STONEVILLE			90 PERCENT								
SLM LT SP	29	0.89	45	4.7	86	42.6	19.3	4.6	1.4	2.6	68.2	9.1	88 453
SLM LT SP	29	0.88	47	4.7	86	42.6	18.5	4.7	1.4	2.4	70.6	9.2	91 403
SLM LT SP	29	0.90	47	4.8	84	41.6	19.4	5.0	1.4	2.5	70.1	9.3	91 403
WEBBERS FALLS		DPL SMOOTH LEAF			95 PERCENT								
SLM	35	1.10	48	5.1	81	40.1	24.0	6.7	2.1	3.0	73.1	8.0	95 402
SLM	35	1.12	47	4.2	79	39.1	23.4	8.0	2.0	3.1	75.0	7.9	98 402
LM	34	1.10	44	4.8	84	41.6	23.3	7.1	3.1	4.6	68.8	8.0	87 502
WESTERN AREA													
ARIZONA CASA GRANDE		DPL SMOOTH LEAF			100 PERCENT								
M	34	1.08	44	5.0	81	40.1	22.5	7.0	1.1	1.8	77.8	8.6	102 302
M	33	1.03	47	4.7	78	38.6	21.0	7.0	1.0	2.3	77.5	8.2	101 301
SM LT SP	34	1.06	43	3.9	78	38.6	20.7	7.6	1.1	2.3	77.5	9.4	103 252
ELOY		DPL SMOOTH LEAF			100 PERCENT								
SLM	33	1.04	46	4.5	80	39.6	22.4	7.8	1.3	2.4	74.0	8.8	98 352
SLM	34	1.06	46	4.8	78	38.6	20.8	6.9	1.9	3.4	74.1	7.9	97 402
M SP	34	1.08	44	4.4	76	37.6	21.8	8.2	1.6	3.0	73.2	8.8	96 402
MARANA		STONEVILLE 7A			75 PERCENT								
M LT SP	34	1.06	47	5.2	82	40.6	23.1	7.0	1.3	2.2	74.5	9.4	98 353
SLM LT SP	35	1.10	43	3.4	77	38.1	19.8	5.9	2.5	3.7	76.0	8.4	100 352
LM	34	1.08	42	3.2	79	39.1	18.8	5.4	2.6	4.3	70.8	6.8	90 501
MARICOPA		DPL SMOOTH LEAF			100 PERCENT								
M LT SP	34	1.08	45	5.0	82	40.6	23.2	6.9	1.4	2.1	74.9	9.3	99 303
M LT SP	34	1.08	43	4.1	84	41.6	23.1	6.8	1.4	2.7	75.3	9.3	100 303
SLM TG	32	1.10	45	3.6	83	41.1	22.1	7.0	2.0	3.2	63.0	11.6	80 456

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at
 biweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
Grade	Staple																			
		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.								
SOUTHWEST AREA--CONTINUED																				
CENTRAL TEXAS																				
SUGARLAND		STONEVILLE 7A 100 PERCENT																		
M LT SP	33	6.7	106	34	5.9	4.1	120	110	25	18	54	69.5	12.0	98	83.5	2.4	104	26.8	27.0	108
M LT SP	33	6.9	106	35	5.6	4.1	120	110	17	12		69.8	11.8	98	83.6	2.6	104	26.5	27.4	111
SLM LT SP	34	7.6	101	33	5.4	3.9	120	100	24	15		67.2	12.0	94	82.5	3.1	99	27.1	26.8	107
TEXARKANA		DPL SMOOTH LEAF 99 PERCENT																		
M	33	8.5	96	27	5.4	3.4	110	90	38	29	48	70.3	11.4	98	83.0	2.8	101	29.6	25.6	97
SLM	33	6.8	92	26	5.0	3.3	120	110	29	21		68.4	11.1	93	82.0	2.4	100	30.2	25.8	97
SLM	33	6.2	99	33	5.9	4.3	110	100	27	17		69.3	11.2	95	83.3	2.9	102	27.3	26.5	105
OKLAHOMA		STONEVILLE 90 PERCENT																		
BOKCHITO																				
SLM LT SP	29	8.4	69	17	4.1	3.6	120	110	27	19	25	64.7	11.6	86	81.7	3.0	97	28.8	26.2	101
SLM LT SP	29	8.2	68	17	3.7	3.2	120	110	26	23		66.5	11.6	90	82.7	2.8	101	31.2	25.2	92
SLM LT SP	29	7.5	75	20	4.4	3.7	120	110	26	23		66.9	11.2	90	82.7	3.1	99	29.9	25.8	97
WEBBERS FALLS		DPL SMOOTH LEAF 95 PERCENT																		
SLM	35	7.2	108	38	6.3	4.8	120	100	27	19	62	71.7	10.6	98	83.9	2.3	105	25.5	27.3	112
SLM	35	6.6	117	41	6.6	5.6	110	100	35	20		70.9	10.7	97	83.4	2.6	103	25.8	27.1	111
LM	34	8.6	103	34	5.9	4.3	110	100	36	24		67.1	10.3	88	82.3	3.0	98	28.2	26.4	103
WESTERN AREA																				
ARIZONA																				
CASA GRANDE		DPL SMOOTH LEAF 100 PERCENT																		
M	34	6.4	105	34	5.9	4.8	120	100	22	15	57	74.7	10.5	102	84.1	2.1	107	26.2	28.1	114
M	33	6.4	104	34	6.3	4.8	120	100	23	14		74.6	10.6	102	83.1	2.4	103	26.7	27.6	110
SM LT SP	34	6.1	104	35	6.4	5.2	110	90	26	18		71.2	11.7	100	83.7	2.4	104	26.9	27.5	110
ELOY		DPL SMOOTH LEAF 100 PERCENT																		
SLM	33	6.3	98	31	5.9	4.4	120	100	32	22	53	72.4	11.5	102	83.2	2.3	104	26.4	27.1	110
SLM	34	7.0	103	35	6.3	4.8	110	100	26	18		71.6	10.4	97	82.3	2.8	100	27.8	26.8	106
M SP	34	7.6	104	36	7.0	5.3	120	100	36	25		70.5	11.5	98	84.7	2.3	107	28.0	26.7	105
MARANA		STONEVILLE 7A 75 PERCENT																		
M LT SP	34	5.8	109	37	5.9	4.7	120	120	19	14	60	70.6	11.8	100	82.7	2.4	102	25.7	27.9	114
SLM LT SP	35	8.1	101	35	6.3	5.0	100	80	59	35		71.4	10.9	98	84.7	3.2	104	27.7	26.3	103
LM	34	9.3	86	27	5.6	4.0	90	60	105	77		66.8	9.3	85	81.0	3.0	96	31.2	23.9	87
MARICOPA		DPL SMOOTH LEAF 100 PERCENT																		
M LT SP	34	6.2	108	36	5.8	4.7	120	100	23	16	59	70.7	11.7	99	84.1	2.8	104	26.3	27.3	111
M LT SP	34	7.4	109	37	6.5	5.1	110	90	45	28		70.2	11.8	99	83.7	2.9	103	27.0	26.7	107
SLM TG	32	7.7	106	36	6.5	4.9	110	90	73	40		55.9	13.7	76	83.4	3.7	99	27.5	25.3	100

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elong- ation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	R _a	+b	Index	Code
WESTERN AREA--CONTINUED															
ARIZONA															
PALO VERDE		DPL SMOOTH LEAF				100 PERCENT									
M	34	1.06	48	5.3	84	41.6	22.7	6.6	1.1	2.1	77.8	8.2	102	301	
SLM	34	1.06	48	5.2	84	41.6	22.4	6.8	1.6	2.8	75.1	8.3	98	352	
SM SP	34	1.08	48	4.8	80	39.6	22.0	7.1	1.9	2.9	73.8	9.6	98	353	
PEORIA		DPL SMOOTH LEAF				100 PERCENT									
M LT SP	34	1.04	47	4.9	81	40.1	22.7	6.6	1.3	2.1	74.2	9.5	98	303	
M LT SP	33	1.04	47	4.4	82	40.6	21.6	7.0	1.6	3.6	74.3	9.2	98	353	
SLM SP	34	1.04	43	3.9	80	39.6	21.8	7.0	2.6	4.1	67.5	10.2	86	454	
QUEEN CREEK		DPL SMOOTH LEAF				100 PERCENT									
M LT SP	34	1.04	46	4.2	79	39.1	22.1	7.2	1.6	2.7	75.5	9.2	100	302	
SLM	34	1.08	47	4.7	79	39.1	21.5	6.6	2.4	3.3	76.8	8.4	101	352	
M LT SP	34	1.06	44	4.6	81	40.1	23.4	7.5	2.0	3.3	76.0	8.8	100	302	
SM	34	1.04	46	5.0	85	42.1	24.1	6.3	0.6	1.4	78.7	8.6	103	252	
SLM	34	1.07	46	4.9	86	42.6	23.5	6.4	1.0	2.0	74.6	8.9	98	352	
M LT SP	33	1.03	48	4.8	82	40.6	21.5	6.1	0.8	1.9	73.8	8.6	97	402	
SLM	34	1.08	46	4.6	85	42.1	23.8	6.4	1.4	2.5	74.8	8.0	98	402	
CALIFORNIA															
BAKERSFIELD		ACALA 4-42				100 PERCENT									
M	35	1.08	49	4.7	99	49.0	26.6	6.0	1.2	1.6	76.8	8.7	101	302	
SLM	35	1.10	48	4.1	90	44.6	23.7	6.0	1.7	2.6	75.0	7.8	98	401	
SLM	35	1.05	47	3.9	95	47.0	25.5	5.4	1.6	2.6	73.4	7.7	95	452	
BLYTHE		DPL SMOOTH LEAF				100 PERCENT									
M LT SP	34	1.08	44	4.8	84	41.6	23.8	6.3	1.5	2.4	74.7	9.0	99	352	
M LT SP	34	1.08	46	4.8	83	41.1	23.5	7.0	1.3	2.2	73.7	9.5	97	353	
SLM	33	1.03	47	4.8	81	40.1	22.7	7.0	1.5	2.6	75.2	8.4	99	352	
SLM	34	1.08	47	5.0	85	42.1	23.7	6.5	1.8	2.7	77.1	7.8	101	351	
BRAWLEY		DPL SMOOTH LEAF				100 PERCENT									
M	34	1.06	46	4.8	90	44.6	22.9	6.0	1.3	2.3	77.6	8.2	102	301	
SLM	33	1.04	41	4.2	87	43.1	24.1	6.0	1.2	2.5	75.6	8.3	99	352	
M LT SP	32	1.06	46	3.6	85	42.1	22.1	6.5	1.4	2.2	74.2	9.0	98	352	
BUTTONWILLOW		ACALA 4-42				100 PERCENT									
M	35	1.09	47	4.2	98	48.5	27.8	5.8	1.5	2.5	77.1	8.1	101	351	
M	35	1.08	47	4.2	91	45.0	25.0	6.0	1.0	1.8	78.1	8.5	103	302	
SLM	35	1.08	48	4.4	92	45.5	25.5	5.8	1.6	2.5	75.9	7.3	99	401	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn		
			22s or 50s or 26.8 tex11.8 tex	22s or 50s or 26.8 tex11.8 tex	22s or 50s or 26.8 tex11.8 tex	22s or 50s or 26.8 tex11.8 tex	22s or 50s or 26.8 tex11.8 tex	22s or 50s or 26.8 tex11.8 tex	Rflet- ance	Yellow- ness		Com- posite	Rflet- ance	Yellow- ness	Com- posite	Rflet- ance	Blue- ness	Com- posite		
			Grade	Staple																
		32d in. Pet.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index

WESTERN AREA--CONTINUED

ARIZONA		DPL SMOOTH LEAF					100 PERCENT													
PALO VERDE																				
M	34	7.8	110	37	6.2	4.9	120	100	26	22	60	75.0	10.8	104	84.0	2.6	104	27.3	27.5	109
SLM	34	6.9	108	36	6.0	4.5	120	100	30	19		71.8	10.8	99	82.3	2.6	101	26.9	27.4	110
SM SP	34	6.9	114	39	6.5	5.0	120	110	29	21		68.7	12.4	98	84.7	2.7	106	25.9	28.7	117
PEORIA		DPL SMOOTH LEAF					100 PERCENT													
M LT SP	34	6.8	107	35	5.9	4.6	120	110	24	20	56	70.8	11.9	100	83.7	2.9	102	26.7	27.2	109
M LT SP	33	7.5	102	34	5.9	4.5	120	100	29	24		70.5	11.8	99	83.7	3.0	102	27.1	26.8	107
SLM SP	34	8.4	102	35	5.8	4.3	100	90	57	39		62.7	12.8	86	81.5	3.2	96	27.9	25.6	101
QUEEN CREEK		DPL SMOOTH LEAF					100 PERCENT													
M LT SP	34	6.4	107	37	6.6	4.9	110	90	37	26	62	71.1	11.6	100	83.7	2.8	103	27.0	27.0	108
SLM	34	7.9	103	35	6.5	4.8	120	100	26	19		73.3	11.0	102	84.1	2.5	105	28.4	26.6	103
M LT SP	34	8.0	107	39	6.5	5.5	120	90	35	27		71.8	11.4	100	84.4	2.7	105	27.8	26.6	105
SM	34	6.5	104	33	5.6	4.1	100	100	29	24	52	76.5	10.8	106	83.7	2.5	104	25.2	28.3	117
SLM	34	6.7	103	33	5.4	4.1	120	100	27	20		72.2	11.0	100	83.8	2.6	104	27.7	27.3	108
M LT SP	33	7.4	101	33	5.7	4.3	120	100	30	22		71.4	11.0	98	83.4	2.4	104	27.2	27.2	108
SLM	34	6.6	104	33	5.6	4.0	110	90	38	24	53	72.5	11.2	101	84.0	1.8	108	27.0	27.3	109
CALIFORNIA		ACALA 4-42					100 PERCENT													
BAKERSFIELD																				
M	35	5.1	140	51	6.2	5.0	120	110	19	13	69	70.8	11.2	98	82.5	2.6	101	25.3	27.1	112
SLM	35	7.4	136	50	6.3	5.3	120	100	27	17		69.9	10.4	93	82.3	2.8	100	27.2	25.8	103
SLM	35	6.9	126	45	5.8	4.7	100	90	36	28		68.2	9.8	89	81.7	3.0	98	27.8	25.9	102
BLYTHE		DPL SMOOTH LEAF					100 PERCENT													
M LT SP	34	7.5	108	37	5.9	4.4	110	100	34	24	58	71.6	11.4	100	83.8	2.6	104	26.1	28.0	114
M LT SP	34	7.0	108	36	5.6	4.4	120	100	28	19		70.8	11.3	98	83.5	2.1	105	25.6	28.3	116
SLM	33	7.7	105	34	6.1	4.5	120	90	30	17		71.5	10.9	98	83.3	2.4	104	26.5	27.5	111
SLM	34	6.0	111	38	5.8	4.4	110	100	25	21	61	74.2	10.4	101	84.3	2.1	107	25.9	28.1	115
BRAWLEY		DPL SMOOTH LEAF					100 PERCENT													
M	34	6.5	104	32	5.4	3.9	120	100	29	26	53	73.2	10.0	98	82.4	2.8	100	27.0	27.3	109
SLM	33	7.2	107	36	5.8	4.5	110	90	39	25		71.8	10.9	99	83.1	3.0	101	27.7	26.4	104
M LT SP	32	6.3	106	36	5.8	4.5	110	90	52	36		69.5	11.6	97	81.9	3.2	97	26.2	26.5	108
BUTTONWILLOW		ACALA 4-42					100 PERCENT													
M	35	6.5	139	51	5.9	4.8	110	90	52	37	72	73.0	10.4	99	82.3	2.9	99	25.2	28.0	116
M	35	6.4	132	49	6.6	5.3	120	100	21	16		72.7	11.7	103	83.2	2.6	102	26.6	26.9	108
SLM	35	6.6	134	49	5.9	5.1	110	100	26	18		72.2	9.7	96	83.3	2.9	102	27.5	26.7	107

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength			Elon- gation 1/8"	Shirley Analyzer		Color of raw stock				
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge	Visible waste		Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index	Code
WESTERN AREA--CONTINUED															
CALIFORNIA CHOWCHILLA		ACALA 4-42				100 PERCENT									
M	35	1.06	48	4.3	95	47.0	27.2	6.2	1.7	2.4	77.1	8.4	101	302	
M	35	1.06	49	4.0	92	45.5	24.2	6.2	1.5	2.6	76.1	8.2	100	352	
SLM	35	1.06	48	3.6	95	47.0	26.4	6.3	1.6	2.8	74.8	7.5	97	401	
DOS PALOS		ACALA 4-42				100 PERCENT									
M	35	1.10	47	4.0	97	48.0	27.1	5.8	1.7	2.9	77.1	8.2	101	302	
SLM	35	1.06	50	3.8	92	45.5	25.6	5.8	1.8	2.8	74.8	7.6	97	401	
SLM	35	1.10	49	4.0	93	46.0	26.7	5.9	2.1	2.7	74.2	7.1	96	451	
EL CENTRO		DPL SMOOTH LEAF				100 PERCENT									
SLM	33	1.02	47	5.0	89	44.1	22.4	5.5	1.2	2.6	75.3	8.2	99	352	
SLM	34	1.04	44	4.5	90	44.6	23.1	5.6	1.4	2.2	75.1	8.0	98	402	
SLM	33	1.04	45	4.6	88	43.6	23.1	6.1	2.6	3.5	76.0	7.9	99	351	
SLM	33	1.04	46	4.1	84	41.6	21.9	6.6	1.7	2.8	75.9	7.7	99	401	
FIVE POINTS		ACALA 4-42				100 PERCENT									
M	35	1.08	48	4.4	94	46.5	26.7	6.7	1.8	2.8	76.3	8.2	100	352	
M	35	1.06	49	4.0	92	45.5	25.4	6.2	1.7	2.8	76.9	8.0	101	351	
SLM	35	1.06	50	4.2	92	45.5	27.7	6.5	2.2	2.8	75.0	7.5	98	401	
HANFORD		ACALA 4-42				100 PERCENT									
M	35	1.08	48	4.4	101	50.0	27.9	5.8	1.4	2.4	77.2	8.3	101	302	
M	35	1.10	48	4.4	90	44.6	25.0	5.4	1.3	2.4	76.9	8.2	101	352	
SLM	36	1.13	50	4.0	90	44.6	25.0	5.4	1.5	2.2	72.8	7.9	94	452	
HURON		ACALA 4-42				100 PERCENT									
SM	34	1.04	47	4.0	96	47.5	27.5	6.3	1.2	1.9	78.9	8.4	103	251	
M	35	1.05	48	4.0	92	45.5	25.7	6.2	1.5	2.6	75.9	8.9	100	302	
LM	34	1.02	45	2.6	90	44.6	25.3	6.4	2.4	3.6	68.9	7.8	88	502	
KERMAN		ACALA 4-42				100 PERCENT									
M	35	1.08	49	4.4	95	47.0	28.1	6.1	1.7	2.4	77.9	8.2	102	301	
SLM	35	1.08	49	4.1	92	45.5	25.4	6.3	1.8	3.0	74.9	7.7	97	401	
SLM	35	1.08	50	4.0	94	46.5	26.1	6.0	1.9	2.8	75.9	7.4	99	401	
MENDOTA		ACALA 4-42				100 PERCENT									
M	35	1.06	49	4.2	94	46.5	26.6	6.2	1.8	3.0	77.9	8.2	102	301	
M	35	1.08	50	4.2	92	45.5	26.4	6.8	1.9	3.0	78.8	7.9	103	301	
SLM	35	1.06	49	4.0	95	47.0	27.0	6.2	1.7	2.1	74.9	8.0	98	402	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Blue- ness	Com- posite	
			Grade	Staple																	
		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
WESTERN AREA--CONTINUED																					
CALIFORNIA CHOWCHILLA		ACALA 4-42										100 PERCENT									
M	35	7.2	139	51	6.3	5.2	100	100	57	39	72	71.2	11.2	99	83.0	2.9	101	25.7	26.9	110	
M	35	6.4	130	48	6.3	5.0	100	90	32	25		70.3	10.6	95	82.6	2.9	100	27.4	26.4	105	
SLM	35	7.5	135	51	6.7	5.2	110	90	44	33		69.3	9.9	91	82.0	3.1	98	28.4	25.4	99	
DOS PALOS		ACALA 4-42										100 PERCENT									
M	35	7.0	139	51	6.2	5.0	120	100	38	26	78	73.6	10.7	101	82.7	2.6	101	25.2	27.5	114	
SLM	35	7.1	136	51	6.4	5.0	120	100	26	16		70.0	10.3	94	83.1	2.8	101	28.1	26.0	102	
SLM	35	7.2	139	53	6.0	5.1	110	100	31	20		71.6	10.3	97	83.4	2.2	105	26.8	26.7	107	
EL CENTRO		DPL SMOOTH LEAF										100 PERCENT									
SLM	33	7.3	107	35	5.3	4.0	120	90	34	24	51	71.5	10.3	97	82.6	2.6	101	26.9	27.2	109	
SLM	34	7.5	103	31	5.2	3.7	110	90	48	31		71.3	9.6	94	81.8	2.9	98	27.1	26.8	107	
SLM	33	7.3	108	36	6.2	4.6	110	100	33	25		72.4	10.4	98	82.3	2.6	100	26.9	26.9	108	
SLM	33	7.0	104	33	5.7	4.2	110	100	37	27	54	71.2	10.1	95	81.0	2.8	97	27.4	26.5	105	
FIVE POINTS		ACALA 4-42										100 PERCENT									
M	35	7.4	134	50	5.9	5.0	120	100	33	20	71	71.6	10.8	98	82.1	2.8	99	24.6	27.7	116	
M	35	7.6	136	50	6.6	4.9	110	90	33	21		71.4	10.7	98	83.5	2.6	103	26.4	26.4	106	
SLM	35	7.1	140	51	6.4	5.3	120	100	25	18		72.0	10.2	97	83.5	2.1	105	26.7	26.8	108	
HANFORD		ACALA 4-42										100 PERCENT									
M	35	6.8	141	52	6.2	4.9	110	100	36	26	72	73.1	10.8	101	82.7	2.5	102	25.5	27.7	114	
M	35	6.7	138	53	6.7	5.6	120	100	35	25		72.1	11.0	100	82.7	3.0	100	27.3	26.9	107	
SLM	36	6.9	135	50	6.4	4.9	110	100	32	23		68.5	10.0	89	82.5	3.0	99	27.8	26.2	103	
HURON		ACALA 4-42										100 PERCENT									
SM	34	7.0	134	49	5.9	4.9	110	90	31	23	68	72.9	11.0	101	82.8	3.0	100	23.3	27.7	118	
M	35	6.8	132	48	6.4	5.1	110	100	26	16		70.6	11.2	98	83.1	3.0	101	27.7	25.9	102	
LM	34	8.1	121	44	5.9	4.8	70	60	134	106		64.9	9.9	83	80.7	4.5	89	27.1	24.6	98	
KERMAN		ACALA 4-42										100 PERCENT									
M	35	6.4	142	53	6.3	5.3	120	100	21	18	67	72.7	10.7	100	83.4	2.5	103	25.5	28.0	115	
SLM	35	7.5	139	51	6.4	5.0	120	110	31	22		69.8	10.6	94	82.9	2.6	102	27.6	26.1	103	
SLM	35	6.4	140	52	6.6	5.2	120	100	22	16		71.3	9.8	95	82.8	3.2	99	27.6	25.9	102	
MENDOTA		ACALA 4-42										100 PERCENT									
M	35	6.9	141	52	6.6	5.2	110	100	30	22	66	72.2	10.9	100	83.2	2.6	103	23.9	27.7	117	
M	35	7.7	136	50	6.7	5.3	120	100	37	25		72.0	10.7	98	83.1	2.8	101	26.3	26.7	108	
SLM	35	5.2	134	49	6.3	5.1	120	100	26	18		71.5	10.2	96	82.6	3.0	100	26.9	26.9	108	

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rq</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
WESTERN AREA--CONTINUED															
CALIFORNIA ROSEDALE		ACALA 4-42				100 PERCENT									
M	35	1.06	49	4.2	90	44.6	25.7	5.8	1.6	2.4	77.2	8.1	101	301	
SLM	35	1.10	49	4.2	90	44.6	24.7	5.9	1.5	2.6	73.0	7.8	94	452	
LM	34	1.08	47	4.0	92	45.5	24.5	5.6	2.2	3.3	71.4	7.1	91	501	
STRATFORD		ACALA 4-42				100 PERCENT									
M	35	1.07	48	4.2	90	44.6	26.4	6.2	1.6	2.5	77.8	8.1	102	301	
M	35	1.07	49	4.0	85	42.1	25.5	6.2	1.4	2.7	77.4	8.2	101	301	
SLM	35	1.08	47	3.8	90	44.6	25.3	6.3	1.5	2.4	74.5	7.6	97	401	
TULARE		ACALA 4-42				100 PERCENT									
M	35	1.06	48	4.2	95	47.0	26.6	5.9	1.8	2.6	77.2	8.1	101	351	
M	35	1.11	47	4.1	94	46.5	26.2	5.8	1.6	2.6	77.3	8.4	102	302	
SLM	35	1.10	47	3.8	91	45.0	24.7	6.0	1.5	2.2	74.1	7.3	96	451	
VISALIA		ACALA 4-42				100 PERCENT									
M	34	1.04	49	4.2	94	46.5	27.4	6.2	1.7	2.8	77.0	8.4	101	302	
SLM	35	1.05	48	4.2	97	48.0	25.4	6.0	1.9	3.1	72.9	8.1	95	402	
SLM	34	1.04	46	4.0	96	47.5	25.6	5.7	1.6	2.4	73.7	7.4	95	451	
WASCO		ACALA 4-42				100 PERCENT									
M	35	1.10	48	4.0	95	47.0	27.7	7.0	1.4	2.0	79.1	8.1	103	301	
M	35	1.08	47	4.4	93	46.0	25.7	6.5	1.7	2.6	77.9	8.1	102	301	
SLM	35	1.08	47	4.0	88	43.6	24.4	6.2	1.6	2.5	75.6	7.5	98	401	
WHEELER RIDGE		ACALA 4-42				100 PERCENT									
M	35	1.10	46	4.2	92	45.5	27.6	6.1	1.4	2.4	78.5	8.4	103	301	
M	35	1.10	46	4.4	97	48.0	28.0	5.6	1.3	2.5	77.1	8.1	101	351	
SLM LT SP	34	1.05	47	4.0	94	46.5	26.0	5.6	2.1	3.0	68.1	9.2	87	453	
WOODVILLE		ACALA 4-42				100 PERCENT									
M	35	1.11	46	4.2	94	46.5	26.0	6.0	1.2	2.0	77.3	8.6	102	302	
M	35	1.08	47	4.1	94	46.5	25.9	5.8	1.2	2.2	77.9	8.2	102	301	
SLM	35	1.07	48	4.2	92	45.5	25.6	5.7	1.0	2.2	74.2	7.9	97	402	
WEST TEXAS PRESIDIO		DPL SMOOTH LEAF				75 PERCENT									
SM	35	1.10	45	4.8	80	39.6	22.9	7.0	0.7	1.5	78.2	8.6	103	252	
SM	34	1.07	44	4.8	78	38.6	21.8	7.4	0.6	1.3	79.1	8.4	104	251	
SM	35	1.10	44	3.7	77	38.1	21.3	7.4	0.7	1.7	80.9	8.1	105	201	

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfecns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn		
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Yellow- ness	Com- posite	Reflet- ance	Blue- ness	Com- posite
			Grade	Staple																
32d in.		Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
WESTERN AREA--CONTINUED																				
CALIFORNIA ROSEDALE		ACALA 4-42						100 PERCENT												
M	35	6.4	140	51	6.1	5.0	120	100	32	22	72	72.0	10.8	99	83.0	3.0	100	25.5	26.9	111
SLM	35	5.8	137	50	6.2	5.1	120	100	26	20		69.1	10.2	92	82.6	2.5	101	27.4	25.9	103
LM	34	7.8	133	50	6.4	5.2	120	100	34	18		69.7	9.8	91	81.1	2.1	100	27.6	26.2	104
STRATFORD		ACALA 4-42						100 PERCENT												
M	35	7.1	135	50	6.6	5.2	120	100	29	21	69	72.0	10.5	98	82.3	3.1	98	24.5	27.1	113
M	35	6.7	133	49	6.5	5.0	120	100	26	18		71.6	10.6	98	82.9	2.7	101	27.0	26.3	105
SLM	35	6.6	129	49	6.2	5.1	120	100	29	21		71.1	9.6	94	83.2	2.8	102	27.3	27.0	108
TULARE		ACALA 4-42						100 PERCENT												
M	35	6.5	136	49	6.2	5.1	110	100	37	28	68	72.6	11.1	101	82.9	2.6	102	26.5	27.0	109
M	35	6.9	136	51	6.3	5.6	120	100	23	17		72.1	10.9	100	82.6	2.8	100	26.8	26.3	105
SLM	35	6.9	136	49	6.3	5.0	120	100	34	23		70.5	9.6	92	82.6	3.0	100	27.5	26.3	104
VISALIA		ACALA 4-42						100 PERCENT												
M	34	7.3	131	46	5.9	4.7	110	100	45	28	64	73.4	11.2	102	82.8	2.4	102	26.5	27.4	111
SLM	35	7.2	130	46	5.9	4.7	120	90	48	35		68.0	10.8	90	81.9	2.7	99	28.1	26.1	102
SLM	34	7.2	127	45	6.0	4.9	110	90	36	28		71.4	10.0	95	82.7	3.0	100	28.3	25.5	99
WASCO		ACALA 4-42						100 PERCENT												
M	35	6.9	138	51	6.5	5.4	120	100	35	26	78	74.9	10.8	104	83.0	2.3	103	25.1	27.7	115
M	35	7.3	137	51	7.2	5.6	110	100	23	18		73.0	10.8	100	83.4	3.0	101	26.8	26.8	108
SLM	35	7.3	128	45	6.3	4.9	110	90	37	28		71.9	9.7	95	83.0	2.7	101	28.1	26.1	102
WHEELER RIDGE		ACALA 4-42						100 PERCENT												
M	35	6.5	132	49	6.3	4.9	110	90	30	24	66	74.2	11.2	104	83.8	2.6	104	25.0	27.1	112
M	35	6.5	134	50	6.0	5.0	110	100	26	20		71.7	10.8	98	82.7	2.5	102	26.0	26.7	108
SLM LT SP	34	7.3	124	45	6.3	4.9	110	90	45	34		63.5	10.7	83	82.1	3.1	98	28.5	25.8	100
WOODVILLE		ACALA 4-42						100 PERCENT												
M	35	6.0	134	49	6.3	5.1	110	100	28	18	66	72.4	10.9	100	83.6	2.8	103	26.1	28.1	114
M	35	7.2	133	48	6.5	5.3	120	100	24	18		72.3	10.8	100	83.0	2.8	101	27.5	25.8	102
SLM	35	6.2	130	48	5.9	5.0	110	100	27	20		71.2	9.9	95	83.3	2.7	102	27.9	26.5	104
WEST TEXAS PRESIDIO		DPL SMOOTH LEAF						75 PERCENT												
SM	35	5.7	109	37	6.3	4.9	120	100	17	14	58	74.3	11.0	103	84.4	2.6	105	25.1	27.1	112
SM	34	5.9	106	36	6.6	5.2	120	100	18	14		75.2	10.9	104	84.6	2.6	106	25.8	27.6	113
SM	35	6.0	113	39	7.0	5.4	110	90	30	23		75.2	10.2	102	85.9	2.3	110	25.3	27.3	112

Table 6.--Cotton: Fiber test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results											
		Digital Fibrograph		Micro- naire	Fiber strength			Elongation 1/8"	Shirley Analyzer		Color of raw stock		
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge			Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite
Grade	Staple												
	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index Code

WESTERN AREA--CONTINUED

WEST TEXAS
SARAGOSA

STONEVILLE 7A

70 PERCENT

M	34	1.07	48	5.0	82	40.6	21.9	6.0	1.1	1.9	75.2	8.8	99 352
SLM	34	1.07	46	4.8	80	39.6	21.3	6.1	1.0	1.9	74.8	8.7	98 352
SLM	34	1.08	46	3.0	76	37.6	20.1	6.9	2.0	3.1	76.0	6.9	99 401

Table 6a.--Cotton: Carded yarn processing test results for medium staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn		
			22s or	50s or	22s or	50s or	22s or	50s or	22s or	50s or		Rflet-	Yellow-	Com-	Rflet-	Yellow-	Com-	Rflet-	Blue-	Com-
			26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex	26.8 tex	11.8 tex		ance	ness	posite	ance	ness	posite	ance	ness	posite
Grade	Staple																			
	32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index

WESTERN AREA--CONTINUED

WEST TEXAS
SARAGOSA

STONEVILLE 7A

70 PERCENT

M	34	5.9	105	36	5.7	4.3	120	100	22	13	58	70.8	11.1	98	81.8	2.8	98	27.1	25.4	101
SLM	34	6.2	103	34	5.7	4.4	120	110	21	16		70.3	10.9	96	83.1	3.0	101	29.1	25.2	96
SLM	34	7.1	104	36	6.8	5.5	90	80	79	61		70.5	9.5	92	81.1	2.6	98	29.4	24.8	94

Table 7.--Cotton: Fiber test results for long staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
SOUTHWEST AREA															
NORTHWEST TEXAS															
STANTON															
		MXD-MNLY ACALA 1517BR2				40 PERCENT									
M	36	1.13	44	4.0	103	50.9	26.4	5.9	0.9	1.8	76.0	9.5	101	303	
SLM LT SP	36	1.14	43	4.4	94	46.6	26.2	5.3	1.3	2.1	69.5	10.2	90	404	
M	36	1.15	43	4.3	98	48.6	27.4	5.7	1.2	1.8	75.3	8.4	99	352	
SLM	35	1.10	43	3.8	89	44.0	24.1	5.8	1.3	2.1	75.8	7.9	99	431	
WESTERN AREA															
ARIZONA															
DUNCAN															
		ACALA 1517D				100 PERCENT									
SLM+	37	1.21	47	4.2	86	42.6	26.5	7.2	1.4	2.5	76.0	8.3	100	352	
M	37	1.20	45	3.7	84	41.6	25.1	7.3	1.8	2.8	78.1	8.0	102	301	
SLM	37	1.18	44	3.2	83	41.3	23.3	7.1	2.9	3.9	78.0	7.6	102	351	
SAHUARITA															
		ACALA 1517C				89 PERCENT									
SLM	36	1.15	44	3.7	85	42.1	26.8	6.7	1.1	2.3	76.0	8.7	100	352	
M	36	1.16	42	3.6	86	42.7	24.4	6.2	1.7	2.7	75.8	8.3	101	352	
SLM	36	1.13	42	3.3	85	42.1	23.0	6.2	2.1	3.8	77.2	8.2	101	351	
SAN SIMON															
		ACALA 1517C				90 PERCENT									
M	37	1.19	45	3.8	82	40.3	25.1	6.9	1.5	1.9	77.7	8.2	102	301	
M	37	1.22	47	3.7	81	39.9	23.6	7.5	0.8	1.4	79.3	7.9	104	301	
SLM	36	1.19	43	3.0	84	41.4	24.3	6.7	2.6	4.1	78.0	7.3	101	351	
NEVADA															
PAHRUMP															
		ACALA 1517C				97 PERCENT									
M	37	1.20	43	3.2	88	43.3	26.8	6.3	1.9	2.9	78.7	8.0	103	301	
SM	37	1.15	43	3.2	90	44.7	23.6	6.6	1.6	2.9	80.5	8.1	105	251	
SM	37	1.16	43	3.1	90	44.6	24.9	6.1	1.6	2.6	80.7	8.2	106	201	
NEW MEXICO															
ANIMAS															
		MXD-MNLY ACALA 1517C				50 PERCENT									
M	37	1.20	42	3.6	82	40.5	24.3	6.6	0.8	2.2	78.0	8.2	102	301	
M	37	1.21	46	3.7	87	43.0	25.2	7.1	1.2	1.9	79.6	7.9	104	301	
M	36	1.18	44	3.2	83	41.1	22.6	7.0	1.6	3.4	80.6	7.8	105	251	
HATCH															
		ACALA 1517D				93 PERCENT									
M	37	1.20	45	4.2	92	45.4	28.0	7.1	1.1	2.3	77.5	8.5	102	302	
M	37	1.20	45	3.7	88	43.4	26.1	7.3	2.2	3.0	77.5	8.0	101	351	
SLM	36	1.19	43	3.0	81	40.1	23.6	7.2	3.9	5.0	78.2	7.7	102	351	
HOBBS															
		MXD-MNLY ACALA 1517BR-2				68 PERCENT									
M	37	1.17	44	4.3	96	47.4	26.1	6.2	0.6	1.9	74.2	8.4	97	402	
M	37	1.20	45	4.2	96	47.3	26.1	6.2	1.0	1.7	76.2	8.4	100	352	

Table 7a.--Cotton: Carded yarn processing test results for long staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																			
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprfctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blchd.yarn			Color-22s dyed yarn			
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	
Grade	Staple																				
		32d in.	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
SOUTHWEST AREA																					
NORTHWEST TEXAS																					
STANTON		MXD-MNLY ACALA 1517RR2										40 PERCENT									
M	36	6.8	136	50	6.0	5.0	100	90	36	28	74	69.6	11.5	97	84.1	2.8	104	25.2	27.4	113	
SLM LT SP	36	7.3	128	45	5.6	4.4	120	100	24	12		63.6	12.6	87	83.3	3.2	100	27.9	25.4	100	
M	36	6.5	134	49	5.8	4.8	120	110	19	15		68.8	10.4	91	82.5	3.1	99	27.7	25.7	101	
SLM	35	7.4	115	39	5.7	4.0	100	90	33	24	60	70.2	9.8	92	81.3	2.5	98	27.4	25.7	102	
WESTERN AREA																					
ARIZONA																					
DUNCAN		ACALA 1517D										100 PERCENT									
SLM+	37	7.2	144	54	7.0	5.8	110	100	38	26		71.8	11.0	99	84.6	2.6	106	26.9	26.5	106	
M	37	7.4	140	52	7.3	6.0	100	90	47	30		73.6	11.1	102	85.2	2.6	107	26.9	26.8	108	
SLM	37	9.5	132	52	7.0	6.0	90	80	61	35		72.4	10.6	99	84.2	3.0	103	26.8	25.9	104	
SAHUARITA		ACALA 1517C										89 PERCENT									
SLM	36	6.4	129	49	6.6	5.4	100	90	44	31	77	71.6	11.4	100	84.5	2.7	105	28.2	25.8	101	
M	36	7.2	124	46	6.5	5.1	100	100	39	31		72.4	10.4	98	84.2	2.6	105	29.2	25.4	97	
SLM	36	8.1	115	41	6.6	5.1	80	60	99	73		72.7	10.8	100	83.9	2.6	104	30.1	24.7	93	
SAN SIMON		ACALA 1517C										90 PERCENT									
M	37	5.6	135	51	6.6	5.7	100	100	21	13	77	73.0	10.7	100	85.3	2.4	108	26.4	26.7	108	
M	37	6.6	135	52	7.4	6.2	100	90	23	18		74.0	10.8	102	85.1	2.3	108	26.5	27.0	109	
SLM	36	8.6	136	53	6.8	5.9	90	70	54	34		72.4	10.2	98	83.5	2.9	102	26.1	26.7	108	
NEVADA																					
PAHRUMP		ACALA 1517C										97 PERCENT									
M	37	9.2	133	50	7.1	5.9	90	80	0	0	82	73.5	11.0	102	84.7	2.5	107	26.0	25.8	105	
SM	37	7.4	131	49	7.1	5.6	100	100	32	23		75.0	10.7	103	85.0	2.8	106	26.9	26.6	107	
SM	37	7.3	132	49	7.1	5.8	90	70	53	37		75.6	11.0	105	84.5	2.6	106	27.8	25.7	101	
NEW MEXICO																					
ANIMAS		MXD-MNLY ACALA 1517C										50 PERCENT									
M	37	7.0	131	49	6.8	5.8	90	90	33	27	75	73.2	10.9	101	84.7	2.6	106	26.9	26.3	105	
M	37	7.4	139	53	7.3	5.8	100	90	37	22		73.4	10.8	101	85.2	2.4	108	26.8	26.8	108	
M	36	7.6	135	52	7.1	5.9	100	90	35	23		74.3	10.3	101	85.2	2.9	106	27.3	26.3	105	
HATCH		ACALA 1517D										93 PERCENT									
M	37	6.8	144	54	6.5	5.5	100	100	28	20	81	73.4	10.8	101	84.1	2.5	105	26.2	26.3	107	
M	37	8.1	139	52	6.9	5.7	90	90	59	42		72.8	10.8	100	84.1	2.0	107	25.5	27.2	112	
SLM	36	9.8	138	52	7.4	6.1	90	80	59	34		72.9	10.9	101	84.1	2.9	104	26.3	26.3	106	
HOBBBS		MXD-MNLY ACALA 1517BR-2										68 PERCENT									
M	37	6.7	132	50	5.8	4.9	100	90	44	32	75	70.0	10.5	94	82.5	2.5	101	26.2	26.5	108	
M	37	7.0	139	52	6.3	5.2	100	90	45	33		70.4	10.8	96	82.4	2.1	103	26.6	27.0	109	

Table 7.--Cotton: Fiber test results for long staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling and Classification		Predominant variety, percentage of variety at gin, and fiber test results													
		Digital Fibrograph		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock					
		2.5% span length	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite			
Grade	Staple	<u>32d in.</u>	<u>In.</u>	<u>Pct.</u>	<u>Rdg.</u>	<u>Mpsi</u>	<u>G/tex</u>	<u>G/tex</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Rd</u>	<u>+b</u>	<u>Index</u>	<u>Code</u>
WESTERN AREA--CONTINUED															
NEW MEXICO															
MALAGA		ACALA 1517C				80 PERCENT									
M	37	1.18	44	4.0	86	42.4	25.6	6.7	0.5	1.7	76.2	8.0	100	351	
M LT SP	37	1.19	47	4.1	90	44.5	26.7	6.8	1.4	1.9	75.6	9.0	100	352	
M	36	1.15	43	3.3	84	41.7	22.8	7.0	1.8	2.6	77.0	7.2	100	401	
ROSWELL		MXD-MNLY ACALA 1517D				40 PERCENT									
M	37	1.19	45	4.1	92	45.4	27.0	6.4	1.0	2.4	76.0	8.3	100	352	
SLM	36	1.22	45	3.8	89	44.0	25.5	6.9	2.1	2.9	76.5	8.4	100	352	
SLM	35	1.17	44	3.4	88	43.6	25.0	6.2	2.0	3.5	76.0	8.4	100	352	
TULAROSA		ACALA 1517C				100 PERCENT									
M	37	1.18	44	4.0	86	42.5	25.4	7.2	2.6	3.6	76.1	8.0	100	351	
SLM	37	1.19	45	3.5	84	41.7	23.5	7.0	3.8	5.1	75.8	7.9	99	401	
SLM	36	1.16	42	3.1	82	40.6	25.2	6.6	4.3	5.7	76.4	7.7	100	401	
WEST TEXAS															
CANUTILLO		ACALA 1517D				70 PERCENT									
M	37	1.21	45	3.9	88	43.3	25.8	6.6	1.1	2.2	77.0	8.5	101	302	
M	37	1.18	45	3.8	91	45.0	25.1	7.1	1.5	2.1	76.9	8.3	101	352	
M	36	1.16	41	3.0	87	42.9	22.6	6.9	1.6	2.9	79.3	7.3	103	351	
FABENS		ACALA 1517C				90 PERCENT									
M	37	1.18	44	4.1	88	43.6	25.8	6.5	1.2	1.7	76.5	8.7	101	302	
M	36	1.16	43	3.8	89	44.0	24.1	6.8	1.4	3.0	76.2	8.6	100	352	
SLM	37	1.19	42	3.2	87	42.9	24.3	6.7	2.9	4.2	77.0	7.4	100	401	
FT. STOCKTON		ACALA 1517C				85 PERCENT									
M	37	1.14	45	4.1	90	44.4	26.4	5.9	1.1	2.1	75.5	8.7	100	352	
M	36	1.15	44	3.8	86	42.6	23.9	6.2	1.2	2.1	76.8	7.8	100	351	

Table 7a.--Cotton: Carded yarn processing test results for long staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological sampling, and Classification		Predominant variety, percentage of variety at gin, and carded yarn processing results																		
		Picker & card waste	Yarn strength		Yarn elongation		Yarn appearance		Yarn imprctns.		Spin. poten- tial	Color-22s grey yarn			Color-22s blechd. yarn			Color-22s dyed yarn		
			22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex		Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite
			Grade	Staple																
		32d in. Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index

32d in. Pct.

Lbs.

Lbs.

Pct.

Pct.

Index

Index

No.

No.

No.

Rd

+b

Index

Rd

+b

Index

Rd

-b

Index

WESTERN AREA--CONTINUED

NEW MEXICO

MALAGA

ACALA 1517C

80 PERCENT

M	37	6.6	131	49	6.6	5.4	110	90	35	24	77	70.8	10.6	96	83.6	2.9	102	27.1	26.2	105
M LT SP	37	7.0	136	51	6.6	5.3	110	100	26	17		70.0	11.5	98	82.3	2.4	101	25.7	27.0	111
M	36	6.9	124	46	6.6	5.6	100	90	39	28		71.5	9.6	94	81.3	2.9	97	26.9	26.1	105

ROSWELL

MXD-MNLY ACALA 1517D

40 PERCENT

M	37	6.5	141	54	6.5	5.4	100	100	20	13	79	71.2	11.0	98	83.7	3.0	102	26.4	26.1	106
SLM	36	8.0	139	53	6.6	5.5	100	90	37	21		70.4	11.3	98	83.0	2.6	102	26.1	26.6	108
SLM	35	7.6	128	49	6.6	5.3	90	90	45	31		71.3	10.7	98	82.8	3.1	100	26.6	26.3	106

TULAROSA

ACALA 1517C

100 PERCENT

M	37	8.2	134	50	7.0	5.8	100	100	0	0	75	72.8	11.0	101	84.2	2.3	106	24.9	27.1	113
SLM	37	8.2	131	50	6.8	5.8	100	90	36	26		72.8	10.4	99	84.0	2.8	103	26.4	26.6	108
SLM	36	10.8	134	48	7.2	5.5	100	90	56	40		73.2	10.0	98	84.4	2.5	106	26.5	26.3	106

WEST TEXAS

CANUTILLO

ACALA 1517D

70 PERCENT

M	37	6.6	140	52	6.5	5.4	100	90	34	20	88	72.1	10.8	99	84.5	2.7	105	26.7	25.9	104
M	37	7.5	140	53	6.9	5.6	100	90	42	31		70.4	10.9	96	83.8	2.2	106	26.9	26.7	107
M	36	7.5	131	50	6.8	5.7	90	80	43	28		73.8	9.6	98	84.1	2.5	105	26.8	26.1	105

FABENS

ACALA 1517C

90 PERCENT

M	37	6.6	136	51	6.4	5.3	100	100	28	22	74	71.2	10.7	97	83.7	2.5	104	26.8	26.0	104
M	36	7.5	131	49	6.3	5.4	100	90	32	22		70.6	10.7	96	82.7	2.5	102	26.4	26.8	108
SLM	37	9.3	139	52	7.0	5.7	90	80	38	30		72.6	10.3	98	83.5	2.9	102	26.7	26.3	106

FT. STOCKTON

ACALA 1517C

85 PERCENT

M	37	6.7	131	49	6.3	5.3	100	90	26	21	74	69.8	10.9	95	83.7	2.5	104	26.9	26.0	104
M	36	6.2	130	50	6.7	5.4	100	90	37	23		73.2	10.1	99	82.6	3.1	99	27.2	26.3	105

Table 7b.--Cotton: Combed yarn processing test results for long staple varieties, by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964

State, Production Area, Chronological Sampling and Classification		Comber waste	Yarn skein strength				Yarn elongation		Yarn appearance			Yarn imperfections		Luster of 50s or 11.8 tex yarn	
Grade	Staple		22s or 26.8 tex	50s or 11.8 tex	Average brk.fctr.	50s Merc.	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	Average	22s or 26.8 tex	50s or 11.8 tex	Grey	Merc.
Abbr.	32d in.	Pct.	Lbs.	Lbs.	No.	Lbs.	Pct.	Pct.	Index	Index	Index	No.	No.	Pct.	Pct.
WESTERN AREA															
ARIZONA															
Duncan		Acala 1517D		100 Percent											
SLM plus	37	11.9	157	58	3177	60	7.1	6.1	110	100	105	18	15	35.9	46.2
M	37	14.0	154	58	3144	59	7.3	6.1	100	100	100	32	20	33.7	43.8
SLM	36	16.8	150	58	3100	60	7.4	6.3	90	90	90	37	22	34.9	43.3
Sahuarita		Acala 1517C		89 Percent											
SLM	36	17.0	147	56	3017	60	6.9	5.4	100	90	95	23	15	35.7	42.6
M	36	16.5	137	52	2807	55	6.8	5.5	100	100	100	29	23	33.5	42.9
SLM	36	19.9	137	50	2757	52	7.0	5.4	90	80	85	67	46	35.1	42.5
San Simon		Acala 1517C		90 Percent											
M	37	13.2	149	56	3039	59	7.2	5.9	110	100	105	10	10	35.8	44.4
M	37	13.0	152	57	3097	57	7.6	6.4	120	100	110	11	10	33.9	43.5
SLM	36	17.4	158	59	3213	62	7.6	6.1	90	80	85	34	25	35.0	45.2
NEVADA															
Pahrump		Acala 1517C		97 Percent											
M	37	18.0	151	57	3086	59	7.5	6.2	90	90	90	31	12	32.5	42.8
SM	37	18.9	152	59	3147	61	7.2	6.0	100	100	100	27	18	33.0	43.0
SM	37	19.3	156	59	3191	60	7.6	6.6	100	100	100	24	18	33.3	43.7
NEW MEXICO															
Animas		Mixed, mainly Acala 1517C (50 Percent)													
M	37	15.9	148	55	3003	57	7.2	5.9	100	100	100	22	16	34.2	44.2
M	37	14.3	156	58	3166	60	7.5	6.2	110	100	105	16	15	34.0	44.0
M	36	16.7	150	56	3050	59	7.2	6.2	100	90	95	20	16	33.9	46.7
Hatch		Acala 1517D		93 Percent											
M	37	14.7	163	59	3268	62	7.0	5.6	120	100	110	13	10	34.8	45.3
M	37	16.1	156	58	3166	60	7.3	6.0	100	100	100	30	22	33.2	44.4
SLM	36	17.1	151	58	3111	61	7.6	6.3	90	80	85	36	25	35.0	45.1
Hobbs		Mixed, mainly Acala 1517BR2 (68 Percent)													
M	37	15.3	150	57	3075	62	6.4	5.2	100	100	100	28	22	37.8	47.6
M	37	15.7	157	60	3227	63	6.8	5.5	110	100	105	20	13	35.0	44.8

Table 7b.--Cotton: Combed yarn processing test results for long staple varieties, by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964--Continued

State, Production Area, Chronological Sampling and Classification		Comber waste	Yarn skein strength				Yarn elongation		Yarn appearance			Yarn imperfections		Luster of 50s or 11.8 tex yarn	
			22s or 26.8 tex	50s or 11.8 tex	Average brk.fctr.	50s Merc.	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	Average	22s or 26.8 tex	50s or 11.8 tex	Grey	Merc.
Grade	Staple														
Abbr.	32d in.	Pct.	Lbs.	Lbs.	No.	Lbs.	Pct.	Pct.	Index	Index	Index	No.	No.	Pct.	Pct.
WESTERN AREA (Cont'd)															
NEW MEXICO (Cont'd)															
<u>Malaga</u>	<u>Acala 1517C</u>	<u>80 Percent</u>													
M	37	16.6	149	56	3039	59	6.9	5.7	110	100	105	12	11	34.9	45.0
MITsp	37	14.9	159	59	3224	63	6.7	5.6	110	110	110	15	8	35.4	47.0
M	36	19.5	144	55	2959	58	7.3	5.9	100	90	95	22	14	36.2	45.0
<u>Roswell</u>	<u>Mixed, mainly Acala 1517D</u>	<u>(40 Percent)</u>													
M	37	14.0	157	60	3227	63	7.0	5.8	110	100	105	11	8	36.8	46.0
SIM	36	15.3	156	59	3191	63	6.9	5.6	110	100	105	15	14	34.1	45.3
SIM	35	18.7	147	56	3017	58	7.1	5.8	100	100	100	25	17	33.3	43.9
<u>Tularosa</u>	<u>Acala 1517C</u>	<u>100 Percent</u>													
M	37	14.4	149	55	3014	58	7.1	6.0	110	100	105	15	20	33.2	42.2
SIM	37	17.2	150	56	3050	59	7.6	6.1	100	100	100	16	10	33.0	43.2
SIM	36	17.7	150	57	3075	60	7.4	5.9	100	100	100	36	25	33.4	42.4
TEXAS															
<u>Stanton</u>	<u>Mixed, mainly Acala 1517BR2</u>	<u>(40 Percent)</u>													
M	36	17.7	158	57	3163	63	6.5	5.3	110	100	105	18	13	35.7	47.4
SIMltsp	36	16.7	146	55	2981	61	5.7	4.9	120	100	110	17	17	38.8	47.7
M	36	16.7	152	57	3097	60	6.2	5.1	120	100	110	17	11	36.5	43.4
SIM	35	20.9	141	52	2851	55	6.2	5.1	100	100	100	20	16	35.5	46.1
<u>Canutillo</u>	<u>Acala 1517D</u>	<u>70 Percent</u>													
M	37	15.3	155	58	3155	62	6.8	5.5	110	100	105	19	14	35.1	45.3
M	37	16.2	157	60	3227	62	7.2	5.8	110	100	105	23	19	35.1	44.8
M	36	19.0	150	57	3075	59	7.2	5.9	100	90	95	25	18	35.6	44.8
<u>Fabens</u>	<u>Acala 1517C</u>	<u>90 Percent</u>													
M	37	15.4	152	56	3072	62	6.6	5.5	110	100	105	17	14	35.2	45.6
M	36	18.5	148	57	3053	61	6.9	5.8	100	100	100	13	10	36.5	46.3
SIM	37	17.7	156	59	3191	62	7.5	6.0	90	90	90	31	22	35.9	44.1
<u>Ft. Stockton</u>	<u>Acala 1517C</u>	<u>85 Percent</u>													
M	37	16.7	147	57	3042	59	6.6	5.5	110	100	105	12	9	36.3	44.8
M	36	17.7	151	56	3061	58	6.6	5.5	100	100	100	23	14	35.9	45.8

Table 8.--Cotton: Fiber and combed yarn processing test results for extra long staple varieties by state and market area for samples of modal quality, collected at triweekly intervals, crop of 1964

State, Production Area, Chronological sampling and Classification	Array length		Micro- naire	Fiber strength		Elon- gation 1/8"	Shirley Analyzer		Color of raw stock			Picker & card waste	Comber waste		
	Upper quart.	Coef. var.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Composite				
Grade:Staple	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	G/tex	Pct.	Pct.	Pct.	Rq	+b	Index Code	Pct.	Pct.
WESTERN AREA															
ARIZONA															
Peoria		Pima S-2		100 Percent											
3	44	1.38	28	4.0	99	49.0	33.8	6.8	2.0	2.9	69.8	10.2	91 404	7.8	17.6
3	44	1.42	26	4.0	96	47.6	34.6	7.4	1.4	2.5	71.0	9.8	93 403	8.0	15.2
3	44	1.41	29	4.0	104	51.6	34.3	6.6	2.8	4.4	72.0	9.8	95 353	9.0	17.6
Safford		Pima S-2		100 Percent											
2	44	1.39	27	4.0	94	46.6	32.7	7.5	1.1	1.8	70.0	10.4	91 404	8.0	16.1
2	44	1.41	27	3.9	95	46.8	31.3	7.8	1.3	2.1	70.0	10.5	92 354	6.8	15.4
3	44	1.42	28	3.6	98	48.3	33.3	7.0	1.3	2.2	72.0	10.3	95 354	7.4	16.7
Stanfield		Pima S-2		100 Percent											
2	44	1.40	26	4.0	101	49.8	34.8	7.0	1.2	1.8	72.5	10.2	96 354	6.9	16.0
3	44	1.47	26	4.1	96	47.7	33.3	7.8	1.5	2.4	72.7	9.7	96 353	8.1	15.6
3	44	1.45	29	3.6	101	49.8	35.9	7.0	2.9	4.2	70.5	10.9	93 355	9.5	16.5
CALIFORNIA															
Ripley		Pima S-2		100 Percent											
3	44	1.38	28	4.0	100	49.6	35.2	7.0	2.5	3.6	70.9	10.2	93 354	8.2	16.5
3	44	1.37	28	3.9	93	46.0	31.9	6.7	1.3	2.5	71.5	9.7	94 403	8.3	17.1
4	44	1.43	29	4.0	98	48.4	34.2	6.8	2.7	4.3	70.2	9.0	91 453	10.4	16.7
NEW MEXICO															
Las Cruces		Pima S-2		70 Percent											
3	44	1.40	25	4.1	98	48.6	33.9	7.8	1.5	2.1	68.8	10.4	90 404	8.8	15.6
2	44	1.40	27	3.7	95	46.9	32.1	7.9	1.2	2.2	69.7	10.4	91 404	7.0	15.4
3	44	1.39	29	3.4	97	48.1	32.9	7.0	1.2	2.5	71.2	10.2	93 354	9.0	17.8
TEXAS															
Canutillo		Pima S-2		85 Percent											
3	44	1.43	26	3.9	100	49.3	33.7	7.8	1.9	2.7	68.6	10.3	89 404	8.8	14.0
2	44	1.40	25	3.9	95	47.1	32.9	8.0	1.8	2.5	71.5	10.2	94 354	7.2	14.9
3	44	1.41	28	3.6	93	46.1	32.2	7.4	2.0	3.0	70.8	10.0	92 404	9.6	15.5
El Paso		Mixed, mainly Pima S-1 (50 Percent)													
3	44	1.38	27	4.2	98	48.7	34.5	7.9	2.7	3.6	67.8	10.7	88 405	9.7	17.0
3	44	1.36	29	3.9	101	49.8	34.1	7.5	2.4	3.7	68.2	10.5	88 405	8.8	16.6
4	44	1.37	32	3.3	98	48.8	33.1	6.9	3.1	4.5	69.5	10.3	90 404	10.6	18.5

- 87 -

State, Production Area, Chronological sampling and classification			Yarn skein strength			Yarn elngtn		Yarn appear.		Yarn imprfctns			Color 50s grey yarn			Color 50s blechd yarn			Color 50s dyed yarn			Luster of 50s or 11.8 tex yarn	
			50s or 11.8tex	80s or 7.4tex	50s Merc.	50s or 11.8tex	80s or 7.4tex	50s or 11.8tex	80s or 7.4tex	50s or 11.8tex	80s or 7.4tex	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Yellow- ness	Com- posite	Rflect- ance	Blue- ness	Com- posite	Grey	Merc.	
			Grade:Staple																				
			32d in.	Lbs.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index	Pct.	Pct.
WESTERN AREA																							
ARIZONA																							
<u>Peoria</u>			Pima S-2			100 Percent																	
2	44	77	39	74	5.6	4.9	120	100	4	5	67.6	13.0	98	83.3	3.4	100	29.3	25.2	96	39.5	50.5		
3	44	75	41	82	5.8	5.2	120	110	3	2	68.9	12.6	99	83.1	3.1	100	28.2	25.9	101	38.1	50.6		
3	44	74	40	78	5.7	5.0	120	110	3	2	69.4	12.7	101	83.1	3.3	100	30.4	24.7	92	39.4	50.6		
<u>Safford</u>			Pima S-2			95 Percent																	
2	44	69	37	74	5.9	5.2	120	100	4	3	66.1	13.6	98	83.9	3.6	100	27.5	26.4	104	39.3	49.1		
2	44	69	38	73	6.2	5.3	120	110	2	2	66.5	13.1	96	83.9	4.0	99	27.3	26.9	107	39.0	50.2		
3	44	71	39	76	6.7	5.6	110	100	5	4	68.2	13.2	100	83.8	3.3	101	27.7	26.4	104	37.5	53.6		
<u>Stanfield</u>			Pima S-2			100 Percent																	
2	44	71	39	77	5.5	4.8	130	120	3	1	68.5	13.3	101	83.0	3.4	99	29.3	25.4	97	40.0	49.5		
3	44	73	40	77	6.0	5.3	120	110	2	2	69.2	12.8	101	83.6	2.9	102	28.2	26.1	102	37.3	49.4		
3	44	75	41	81	6.0	4.9	120	100	6	6	65.9	13.6	97	82.7	4.4	94	27.5	25.5	101	39.6	53.1		
CALIFORNIA																							
<u>Ripley</u>			Pima S-2			100 Percent																	
3	44	73	40	78	5.7	4.8	130	110	3	4	68.0	13.2	100	83.2	3.4	99	28.7	25.6	99	38.7	47.5		
3	44	71	38	79	5.7	5.0	120	110	2	3	70.6	12.2	101	84.2	3.1	103	29.4	25.5	97	37.2	47.3		
4	44	74	40	78	5.7	4.9	120	110	4.	3	69.2	12.3	99	81.9	3.8	95	29.1	25.1	96	38.9	49.1		
NEW MEXICO																							
<u>Las Cruces</u>			Pima S-2			70 Percent																	
3	44	66	36	70	5.7	5.0	120	100	3	2	65.4	13.3	94	82.1	3.5	96	26.7	26.9	108	40.2	50.9		
2	44	68	37	73	6.0	5.2	120	110	3	2	65.4	12.7	92	82.8	3.9	97	26.1	27.1	110	38.6	50.4		
3	44	71	39	77	6.7	5.3	110	100	7	6	65.4	13.3	95	82.8	3.5	98	25.8	26.6	109	39.0	50.6		
TEXAS																							
<u>Canutillo</u>			Pima S-2			85 Percent																	
3	44	70	38	74	5.9	5.0	120	100	3	2	65.1	13.5	94	82.5	3.6	97	26.2	27.6	112	40.4	49.5		
2	44	70	39	75	6.1	5.3	120	110	3	2	67.2	12.8	97	83.0	3.8	97	27.4	26.7	106	40.2	50.2		
3	44	73	40	77	6.7	6.0	110	100	6	4	66.3	13.4	98	82.7	3.7	97	26.8	26.7	107	38.0	50.7		
<u>El Paso</u>			Mixed, mainly Pima S-1 (50%)																				
3	44	67	36	72	5.6	4.8	120	100	5	3	65.2	13.4	94	81.7	3.6	95	27.3	26.6	106	40.3	50.6		
3	44	69	38	75	6.0	4.8	120	110	3	2	65.6	12.8	93	82.7	3.8	97	27.2	26.3	105	39.4	48.9		
4	44	74	41	79	6.7	5.4	100	100	9	7	64.6	12.1	92	82.2	3.9	95	26.4	26.5	107	40.3	52.6		

Table 9.--Cotton: Results of simple correlation analyses for the fiber and processing tests performed on 162 short staple samples collected at triweekly intervals from selected gin points, crop of 1964

Item	Grade	Staple	Fiber length		Micro- naire	Fiber strength		Elongation 1/8"	Shirley Analyzer		Color of raw stock			Picker & card waste
			2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Com- posite	
	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Pct.	R _a	+b	Index	Pct.
Sample Distribution:														
Mean.....	93.0	29.9	.92	46.5	4.16	80.2	20.6	6.54	1.87	3.14	72.1	9.2	94.1	7.62
Standard deviation (+)....	4.9	1.0	.04	1.2	.45	5.1	1.6	1.00	.66	.81	3.0	.7	4.9	.86
Correlation Coef. for:														
Classification:														
Grade.....index		+ .3355	+ .2233	+ .2117	-.0156	+ .0067	-.0289	-.0827	-.6321	-.6854	+ .8150	-.2645	+ .8342	-.6659
Staple.....32d inches	+ .3355		+ .8463	+ .2401	-.2053	-.2191	+ .3211	+ .3618	-.0171	-.0617	+ .4455	-.5690	+ .3998	-.4299
Fiber length:														
2.5% span.....inches	+ .2233	+ .8463		+ .1327	+ .0040	-.2660	+ .2379	+ .3848	+ .0049	-.0305	+ .2690	-.4310	+ .2265	-.3670
50/2.5 unif.....percent	+ .2117	+ .2401	+ .1327		-.0231	+ .0441	+ .3782	+ .1297	+ .1051	+ .0209	+ .2921	-.4324	+ .2489	-.2113
Micronaire.....reading														
-.0156	-.2053	+ .0040	-.0231			+ .0350	-.3340	-.2209	-.2665	-.2522	-.3261	+ .3079	-.3173	-.0660
Fiber strength:														
Zero gauge.....1,000 psi	+ .0067	-.2191	-.2660	+ .0441	+ .0350		+ .4936	-.7004	+ .0650	-.0218	+ .0226	+ .1324	+ .0548	-.0145
1/8" gauge.....grams/tex	-.0289	+ .3211	+ .2379	+ .3782	-.3340	+ .4936		+ .0719	+ .3274	+ .2408	+ .2247	-.4692	+ .1863	-.1400
Elongation (1/8")....pct	-.0827	+ .3618	+ .3848	+ .1297	-.2209	-.7004	+ .0719		-.1715	+ .1790	-.0618	-.4348	+ .0053	-.0488
Shirley Analyzer:														
Visible waste....percent	-.6321	-.0171	+ .0049	+ .1051	-.2665	+ .0650	-.3274	+ .1715		+ .9408	-.3185	-.1483	-.3511	+ .5964
Total waste.....percent	-.6854	-.0617	-.0305	+ .0209	-.2522	-.0218	+ .2408	+ .1790	+ .9408		-.4254	-.0961	-.4609	+ .6584
Color of raw stock:														
Reflectance.....R _a	+ .8150	+ .4455	+ .2690	+ .2921	-.3261	+ .0226	+ .2247	+ .0618	-.3185	-.4254		-.5333	+ .9905	-.5795
Yellowness.....+b	-.2645	-.5690	-.4310	-.4324	+ .3079	+ .1324	-.4692	-.4348	-.1483	-.0961	-.5333		-.4433	+ .3516
Composite.....index	+ .8342	+ .3998	+ .2265	+ .2489	-.3173	+ .0548	+ .1863	+ .0053	-.3511	-.4609	+ .9905	-.4433		-.5669
Picker & card waste....pct	-.6659	-.4299	-.3670	-.2113	-.0660	-.0145	-.1400	-.0488	+ .5964	+ .6584	-.5795	-.3516	-.5669	
Yarn skein strength:														
8s (73.8 tex)....pounds	+ .1588	+ .5773	+ .4549	+ .5008	-.4507	+ .2410	+ .8261	+ .2637	+ .2843	+ .1633	+ .4546	-.6746	+ .4024	-.3294
22s (26.8 tex)....pounds	+ .1749	+ .6094	+ .4958	+ .4952	-.4232	+ .2588	+ .8132	+ .2264	+ .2650	+ .1477	+ .4590	-.6587	+ .4087	-.3579
Yarn elongation:														
8s (73.8 tex)....percent	+ .1464	+ .5588	+ .5087	+ .2866	-.4032	-.4252	+ .3363	+ .7337	+ .2041	+ .1617	+ .3763	-.5952	+ .3251	-.2254
22s (26.8 tex)....percent	+ .2353	+ .6081	+ .5159	+ .3632	-.4626	-.3629	+ .3862	+ .6889	+ .1366	+ .0726	+ .4782	-.6462	+ .4247	-.2958
Yarn appearance:														
8s (73.8 tex)....index	-.0112	-.1534	-.0277	+ .1868	+ .3682	+ .2465	+ .0364	-.2852	-.1134	-.1546	-.0710	+ .0611	-.0774	-.1111
22s (26.8 tex)....index	+ .0959	-.1515	-.0749	+ .1293	+ .4738	+ .2912	-.0136	-.3672	-.1856	-.2311	-.0416	+ .1472	-.0358	-.2721
Yarn imperfections:														
8s (73.8 tex)....number	-.3568	-.0252	-.0479	-.2084	-.5229	-.2645	-.0041	+ .3553	+ .3872	+ .4464	-.2088	-.0195	-.2025	+ .4103
22s (26.8 tex)....number	-.3332	+ .0208	-.0363	-.2049	-.6051	-.2285	-.0055	+ .3520	+ .3990	+ .4376	-.1351	-.0605	-.1331	+ .3894
Color-22s grey yarn:														
Reflectance.....R _a	+ .7044	+ .4330	+ .2456	+ .2890	-.3045	-.0084	+ .2432	+ .0831	-.1934	-.2861	+ .9326	-.6015	+ .9087	-.4490
Yellowness.....+b	-.2339	-.4935	-.4293	-.3571	+ .1782	+ .2404	-.2867	-.4807	-.0241	-.0121	-.3916	+ .8931	-.3052	+ .4083
Composite.....index	+ .6447	+ .1865	+ .0150	+ .1075	-.2385	+ .1279	+ .1013	-.1844	-.2333	-.3270	+ .7978	-.1507	+ .8220	-.2540
Color-22s bleached yarn:														
Reflectance.....R _a	+ .3142	-.0644	-.1028	-.0721	-.0451	+ .0405	-.0997	-.2389	-.2106	-.2592	+ .3627	+ .1875	+ .3942	+ .0077
Yellowness.....+b	-.4584	-.1594	-.0938	-.1222	+ .0162	-.0786	-.0895	+ .1369	-.2969	-.3254	+ .5196	+ .2782	-.5516	+ .3090
Composite.....index	+ .4263	+ .0394	-.0170	+ .0134	-.0332	+ .0595	-.0212	-.2124	-.2829	-.3251	+ .4997	-.0197	+ .5207	-.1500
Color-22s dyed yarn:														
Reflectance.....R _a	-.5461	-.5164	-.4695	-.3669	+ .2174	-.0248	-.4000	-.2075	+ .1603	+ .2824	-.6371	+ .3956	-.6181	+ .4937
Blueness.....+b	+ .6363	+ .2822	+ .2333	+ .2020	+ .0346	+ .0442	+ .1282	-.0170	-.3862	+ .4938	+ .6500	-.2403	+ .6532	-.4216
Composite.....index	+ .6413	+ .4033	+ .3447	+ .2801	-.0754	+ .0467	+ .2556	+ .0721	-.3136	-.4416	+ .6946	-.3224	+ .6835	-.4836

Table 9--Continued

Item	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color-22s gray yarn			Color-22s bleached yarn			Color-22s dyed yarn		
	8s or 73.8tex	22s or 26.8tex	8s or 73.8tex	22s or 26.8tex	8s or 73.8tex	22s or 26.8tex	8s or 73.8tex	22s or 26.8tex	Reflectance	Yellowness	Composite	Reflectance	Yellowness	Composite	Reflectance	Blue-ness	Composite
	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	R _d	+b	Index	R _d	+b	Index	R _d	+b	Index
Sample distribution:																	
Mean.....	291.1	90.8	6.77	5.99	117.9	107.9	67.4	41.9	67.6	11.7	93.2	82.1	3.5	96.2	27.4	26.0	103.1
Standard deviation (+)...	28.3	10.4	.79	.73	4.2	8.4	16.7	11.3	2.5	.8	4.8	1.4	.6	5.2	1.0	.8	4.6
Correlation coef. for:																	
Classification:																	
Grade.....index	+1588	+1749	+1464	+2353	-.0112	+.0959	-.3568	-.3332	+.7044	-.2339	+.6447	+.3142	-.4584	+.4263	-.5461	+.6363	+.6413
Staple 32d.....inches	+.5773	+.6094	+.5588	+.6081	-.1534	-.1515	-.0252	-.0208	+.4330	-.4935	+.1865	-.0644	-.1594	+.0394	-.5164	+.2822	+.4033
Fiber length:																	
2.5% span.....inches	+.4549	+.4958	+.5087	+.5159	-.0277	-.0749	-.0479	-.0363	+.2456	-.4293	+.0150	-.1028	-.0938	-.0170	-.4695	+.2333	+.3447
50/2.5 unif.....percent	+.5008	+.4952	+.2866	+.3632	+.1868	+.1293	-.2084	-.2049	+.2890	-.3571	+.1075	-.0721	-.1222	+.0134	-.3669	+.2020	+.2801
Micronaire reading.....	-.4507	-.4232	-.4032	-.4626	+.3682	+.4738	-.5229	-.6051	-.3045	+.1782	-.2385	-.0451	+.0162	-.0332	+.2174	+.0346	-.0754
Fiber strength:																	
Zero gauge...1,000 psi	+.2410	+.2588	-.4252	-.3629	+.2465	+.2912	-.2645	-.2285	-.0084	+.2404	+.1279	+.0405	-.0786	+.0595	-.0248	+.0442	+.0467
1/8" gauge...grams/tex	+.8261	+.8132	+.3363	+.3862	+.0364	-.0136	-.0041	-.0055	+.2432	-.2867	+.1013	-.0997	-.0895	-.0212	-.4000	+.1282	+.2656
Elongation (1/8")...pct	+.2637	+.2264	+.7337	+.6889	-.2852	-.3672	+.3553	+.3520	+.0831	-.4807	-.1844	-.2389	+.1369	-.2124	-.2075	-.0170	+.0721
Shirley Analyzer:																	
Visible waste...percent	+.2843	+.2650	+.2041	+.1366	-.1134	-.1856	+.3872	+.3990	-.1934	-.0241	-.2333	-.2106	+.2969	-.2829	+.1603	-.3862	-.3186
Total waste...percent	+.1633	+.1477	+.1617	+.0726	-.1546	-.2311	+.4464	+.4376	-.2861	-.0121	-.3270	-.2592	+.3254	-.3251	+.2824	+.4998	-.4416
Color of raw stock:																	
Reflectance.....R _d	+.4546	+.4590	+.3763	+.4782	-.0710	-.0416	-.2088	-.1351	+.9326	-.3916	+.7978	+.3627	-.5496	+.4997	-.6371	+.6508	+.6946
Yellowness.....+b	-.6746	-.6587	-.5952	-.6462	+.0611	+.1472	-.0195	-.0605	-.6015	+.8931	-.1507	+.1875	+.2782	-.0197	+.3956	-.2403	-.3224
Composite.....index	+.4024	+.4087	+.3251	+.4247	-.0774	-.0358	-.2025	-.1331	+.9087	-.3052	+.8220	+.3942	-.5516	+.5207	-.6181	+.6532	+.6885
Picker & card waste...pct	-.3294	-.3579	-.2254	-.2958	-.1111	-.2721	+.4103	+.3894	-.4490	+.4083	-.2540	+.0077	+.3090	-.1500	+.4937	-.4216	-.4836
Yarn skein strength:																	
8s (73.8 tex)...pounds		+.9810	+.6350	+.6904	-.0461	-.0889	-.0086	+.0887	+.4521	-.5126	+.1981	-.1822	-.0868	-.0719	-.5717	+.2027	+.3807
22s (26.8 tex)...pounds	+.9810		+.6150	+.6901	-.0276	-.0533	-.0476	+.0382	+.4473	-.5009	+.1993	-.1864	-.0920	-.0729	-.5810	+.2095	+.3899
Yarn elongation:																	
8s (73.8 tex)...percent	+.6350	+.6150		+.9305	-.2512	-.2497	+.1835	+.2332	+.3889	-.5083	+.1309	-.1885	+.0188	-.1251	-.4296	+.1268	+.2686
22s (26.8 tex)...percent	+.6904	+.6901	+.9305		-.2273	-.2629	+.1661	+.2089	+.4767	-.5461	+.2095	-.1299	-.0535	-.0515	-.5219	+.2159	+.3639
Yarn appearance:																	
8s (73.8 tex)...index	-.0461	-.0276	-.2512	-.2273		+.5187	-.5206	-.5477	-.0600	+.0528	-.0408	-.0519	-.0078	-.0342	+.0397	+.0337	+.0063
22s (26.8 tex)...index	-.0889	-.0533	-.2497	-.2629	+.5187		-.6359	-.9450	-.0484	+.1282	+.0057	-.0091	-.0717	+.0255	-.0310	+.1742	+.1320
Yarn imperfections:																	
8s (73.8 tex)...number	-.0086	-.0476	+.1835	+.1661	-.5206	-.6359		+.9307	-.1922	+.0043	-.1951	-.1024	+.1619	-.1453	+.1438	-.3069	-.2634
22s (26.8 tex)...number	-.0887	+.0382	+.2332	+.2089	-.5477	+.9450	+.9307		-.1155	-.0159	-.1229	-.0515	+.1386	-.1023	+.1255	-.2697	-.2282
Color-22s gray yarn:																	
Reflectance.....R _d	+.4521	+.4473	+.3889	+.4767	-.0600	-.0484	-.1922	-.1155		-.4249	+.8518	+.3802	-.5414	+.5055	-.5524	+.6282	+.6447
Yellowness.....+b	-.5126	-.5009	-.5083	-.5461	+.0528	+.1282	+.0043	-.0159	+.4249	+.1049		+.3962	+.1444	+.1778	+.3013	-.1041	-.1850
Composite.....index	+.1981	+.1993	+.1309	+.2095	-.0408	+.0057	-.1951	-.1229	+.8518	+.1049		+.6369	-.5099	+.6510	-.4277	+.6264	+.5973
Color-22s bleached yarn:																	
Reflectance.....R _d	-.1822	-.1864	-.1885	-.1299	-.0519	-.0091	-.1024	-.0515	+.3802	+.3962	+.6369		-.5717	+.9126	-.1047	+.5453	+.4075
Yellowness.....+b	-.0868	-.0920	+.0188	-.0535	-.0078	-.0717	+.1619	+.1386	-.5414	+.1444	-.5099	-.5717		-.8550	+.2116	-.5061	-.4799
Composite.....index	-.0719	-.0729	-.1251	-.0515	-.0342	+.0255	-.1453	-.1023	+.5055	+.1778	+.5099	+.9126	-.8550		-.1666	+.6298	+.4893
Color-22s dyed yarn:																	
Reflectance.....R _d	-.5717	-.5810	-.4296	-.5219	+.0397	-.0310	+.1438	+.1255	+.5524	+.3013	+.4277	-.1047	+.2116	-.1666		-.6811	-.8732
Blue-ness.....+b	+.2027	+.2095	+.1268	+.2159	+.0337	+.1742	+.3069	-.2697	+.6282	-.1041	+.6264	+.5453	-.5881	+.6298	-.6811		+.9473
Composite.....index	+.3807	+.3899	+.2686	+.3639	+.0063	+.1320	-.2634	-.2282	+.6447	-.1850	+.5973	+.4075	-.4799	+.4893	-.8732	+.9473	

Table 10.--Cotton: Results of simple correlation analyses for the fiber and processing tests performed on 520 medium staple samples, collected at triweekly intervals from selected gin points, crop of 1964

Item	Grade	Staple	Fiber length		Micro- naire	Fiber strength		Elongation 1/8"	Shirley Analyzer		Color of raw stock			Picker & card waste
			2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Com- posite	
	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Pct.	R _a	+b	Index	Pct.
Sample distribution:														
Mean.....	95.8	33.9	1.06	45.7	4.38	80.7	21.7	6.47	1.50	2.44	74.7	8.6	97.8	7.10
Standard deviation (+)....	5.1	.8	.03	1.8	.47	6.4	2.0	.67	.76	.87	2.9	.6	4.5	1.03
Correlation coef. for:														
Classification:														
Grade.....index		+2249	+0777	+2870	+3636	+2030	+2417	+0718	-.7381	-.7596	+8667	+2677	+8813	-.7371
Staple.....32d inches	+2249		+7732	+2938	+0817	+2402	+4593	+1775	+.0420	-.0317	+3597	-.3248	+3205	+1890
Fiber length:														
2.5% span.....inches	+0777	+7732		+1036	+0261	+0497	+2917	+3062	+.1138	+.0687	+.2160	-.2910	+1820	-.1022
50/2.5 unif.....percent	+2870	+2938	+1036		+.4011	+5561	+5381	-.2074	-.0729	-.0982	+3258	-.1049	+3155	-.2881
Fiber strength:														
Micronaire.....reading	+3636	+0817	+0261	+.4011		+2275	+1786	-.0577	-.2986	-.3313	+.2735	+.2284	+.2901	-.3872
Fiber strength:														
Zero gauge.....1,000 psi	+2030	+2402	+0497	+5561	+2275		+8240	-.4775	-.0474	-.0451	+.2974	-.1896	+.2790	-.2272
1/8" gauge.....grams/tex	+2417	+4593	+2917	+5381	+1786	+8240		-.1398	-.0420	-.0560	+3673	-.2982	+3333	-.2530
Elongation (1/6").....pct	+0718	+1775	+3062	-.2074	-.0577	-.4775	-.1398		-.0396	-.0598	+0857	-.0956	+0641	-.0632
Shirley Analyzer:														
Visible waste....percent	-.7381	+.0420	+.1138	-.0729	-.2986	-.0474	-.0420	-.0396		+.9416	-.5413	-.3684	-.5703	+.7119
Total waste.....percent	-.7596	-.0117	+.0687	-.0982	-.3313	-.0451	-.0560	-.0698	+.9416		-.5710	-.3441	-.5954	+.7636
Color of raw stock:														
Reflectance.....R _a	+.8667	+.3597	+.2160	+.3258	+.2735	+.2974	+.3673	+.0857	-.5413	-.5710		+.0288	+.9895	-.6578
Yellowness.....+b	+.2677	-.3248	-.2910	-.1049	+.2284	-.1896	-.2982	-.0956	-.3441	-.3441	+.0288		+.1254	-.1632
Composite.....index	+.8813	+.3205	+.1820	+.3155	+.2901	+.2790	+.3333	+.0641	-.5703	-.5954	+.9895	+.1254		-.6684
Picker & card waste....pct	-.7371	+.1890	-.1022	-.2881	-.3872	-.2272	-.2530	-.0632	+.7119	+.7636	-.6578	-.1632	-.6684	
Yarn skein strength:														
22s (26.8 tex)....pounds	+.3294	+.6679	+.5290	+.4956	-.0427	+.6217	+.8105	+.0206	-.0462	-.0948	+.4802	-.3426	+.4360	-.3168
50s (11.8 tex)....pounds	+.2457	+.6710	+.5705	+.4072	-.1870	+.4893	+.7138	+.0771	+.0200	-.0351	+.3977	-.3699	+.3517	-.2399
Yarn elongation:														
22s (26.8 tex)....percent	+.1699	+.4105	+.4757	-.1445	-.3329	-.3769	-.0607	+.5912	+.0081	-.0436	+.2647	-.1418	+.2356	-.0809
50s (11.8 tex)....percent	+.1648	+.4579	+.5175	-.0573	-.3670	-.2528	+.0703	+.5373	+.0153	-.0442	+.2742	-.2183	+.2359	-.1270
Yarn appearance:														
22s (26.8 tex)....index	+.2873	+.0426	-.0170	+.4944	+.5316	+.4287	+.3417	-.1688	-.1923	-.2300	+.2587	+.0523	+.2621	-.4308
50s (11.8 tex)....index	+.2815	+.0650	+.0410	+.3928	+.5398	+.2082	+.1629	-.0334	-.1885	-.2606	+.2359	+.1038	+.2421	-.4408
Yarn imperfections:														
22s (26.8 tex)....number	-.5143	-.0830	-.0365	-.2011	-.5702	-.0130	-.0004	-.0338	+.4367	+.5107	-.4138	-.2153	-.4305	+.5748
50s (11.8 tex)....number	-.4621	-.1050	-.0783	-.2040	-.5404	+.0013	-.0025	-.0547	+.3713	+.4527	-.3816	-.2075	-.3987	+.5460
Color-22s grey yarn:														
Reflectance.....R _a	+.7833	+.3671	+.2419	+.3561	+.3561	+.3333	+.3939	+.0585	-.4356	-.4617	+.9436	-.0633	+.9294	-.5906
Yellowness.....+b	+.2691	-.2486	-.1980	-.0004	+.1358	-.0254	-.1208	-.1390	-.2623	-.2536	+.1219	+.8347	+.2179	-.1820
Composite.....index	+.8069	+.2721	+.1684	+.3307	+.3680	+.3044	+.3324	+.0038	-.4824	-.5029	+.9147	+.1932	+.9309	-.6023
Color-22s bleached yarn:														
Reflectance.....R _a	+.4166	+.0532	+.0533	-.1776	-.0010	-.3910	-.3175	+.2230	-.3203	-.3481	+.3770	+.4290	+.4206	-.2377
Yellowness.....+b	-.4075	-.2133	-.1522	-.1712	-.4932	-.0209	-.0982	+.1637	+.2666	+.3199	-.0043	-.4482	+.4482	+.3638
Composite.....index	+.4966	+.1453	+.1154	-.0526	+.2299	-.2782	-.1916	+.2467	-.3592	-.4075	+.5069	+.3122	+.5260	-.3593
Color-22s dyed yarn:														
Reflectance.....R _a	-.5788	-.3999	-.3613	-.3200	-.2575	-.1386	-.2920	-.1900	+.3086	+.3767	-.6264	-.1996	-.6257	+.4217
Blueness.....-b	+.6173	+.2687	+.1920	+.3434	+.5353	+.1369	+.2155	+.1458	-.3689	-.4321	+.6490	+.2608	+.6569	-.4873
Composite.....index	+.6299	+.3359	+.2704	+.3516	+.4433	+.1441	+.2566	+.1737	-.3588	-.4285	+.6700	+.2475	+.6746	-.4831

Table 10.--Continued

Item	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color-22s gray yarn			Color-22s bleached yarn			Color-22s dyed yarn		
	22s or 26.8tex	50s or 11.8tex	22s or 26.8tex	50s or 11.8tex	22s or 26.8tex	50s or 11.8tex	22s or 26.8tex	50s or 11.8tex	Reflectance	Yellowness	Composite	Reflectance	Yellowness	Composite	Reflectance	Blue-ness	Composite
	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Rd	+b	Index	Rd	+b	Index	Rd	-b	Index
Sample distribution:																	
Mean.....	107.0	36.6	6.24	4.80	110.2	97.9	28.7	20.6	70.5	10.9	96.4	83.7	2.6	103.6	26.9	26.9	107.6
Standard deviation (+)...	11.7	5.6	.51	.51	8.7	7.3	12.0	9.3	2.7	.5	5.4	1.0	.4	3.0	1.2	.9	5.6
Correlation coef. for:																	
Classification:																	
Grade.....index	+3294	+2457	+1699	+1648	+2873	+2815	-5143	-4621	+7833	+2691	+8069	+4166	-4075	+4966	-5788	+6173	+6299
Staple.....32d inches	+6679	+6710	+4105	+4579	+0426	+0650	-0830	-1050	+3671	-2486	+2721	+0532	-2133	+1453	-3999	+2687	+3359
Fiber length:																	
2.5% span.....inches	+5290	+5705	+4757	+5175	-0170	+0410	-0365	-0783	+2419	-1980	+1684	+0533	-1522	+1154	-3613	+1920	+2704
50/2.5 unif.....percent	+4956	+4072	-1445	-0573	+4944	+3928	-2011	-2040	+3561	-0004	+3307	-1776	-1712	-0526	-3200	+3434	+3516
Micronaire.....reading	-0427	-1870	-3329	-3670	+5316	+5398	-5702	-5404	+3561	+1358	+3680	-0010	-4932	+2299	-2575	+5353	+4433
Fiber strength:																	
Zero gauge....1,000 psi	+6217	+4893	-3769	-2528	+4287	+2082	-0130	+0013	+3333	-0254	+3044	-3910	-0209	-2782	-1386	+1369	+1441
1/8" gauge....grams/tex	+8105	+7138	-0607	+0703	+3417	+1629	-0004	-0025	+3939	-1208	+3324	-3175	-0982	-1916	-2920	+2155	+2566
Elongation (1/8")...pct	+0206	+0771	+5912	+5373	-1688	-0334	-0338	-0547	+0585	-1390	+0038	+2230	-1637	+2467	-1900	+1458	+1737
Shirley Analyzer:																	
Visible waste.....pct	-0462	+0200	+0081	+0153	-1923	-1885	+4367	+3713	-4356	-2623	-4824	-3203	+2666	-3592	+3086	-3689	-3588
Total waste.....pct	-0948	-0351	-0436	-0442	-2300	-2606	+5107	+4527	-4617	-2536	-5029	-3481	+3199	-4075	+3767	-4321	-4285
Color of raw stock:																	
Reflectance.....Rd	+4802	+3977	+2647	+2742	+2587	+2359	-4138	-3816	+0436	+1219	+9147	+3770	-4643	+5069	-6264	+6490	+6700
Yellowness.....+b	-3426	-3699	-1418	-2183	+0523	+1038	-2153	-2075	-0633	+8347	+1932	+4290	-0043	+3122	-1996	+2608	+2475
Composite.....index	+4360	+3517	+2356	+2359	+2621	+2421	-4305	-3987	+9294	+2179	+9309	+4206	-4482	+5260	-6257	+6569	+6746
Picker & card waste...pct	-3168	-2399	-0809	-1270	-4308	-4408	+5748	+5460	-5906	-1820	-6023	-2377	+3688	-3593	+4217	-4873	-4831
Yarn skein strength:																	
22s (26.8 tex)...pounds		+9670	+3539	+4843	+2314	+1565	-0722	-0951	+4588	+1576	+3815	-1053	-0898	-0296	-4213	+2392	+3275
50s (11.8 tex)...pounds	+9670		+4610	+6109	+1308	+0908	-0237	-0588	+3615	-1797	+2856	-0714	-0171	-0384	-3837	+1515	+2576
Yarn elongation:																	
22s (26.8 tex)...percent	+3539	+4610		+8913	-2444	-0868	-0320	-0744	+1987	-0827	+1571	+3873	-0692	+3236	-3303	+1441	+2317
50s (11.8 tex)...percent	+4843	+6109	+8913		-1832	-0532	-0315	-0756	+2088	-1304	+1522	+3060	-0400	+2522	-3462	+1334	+2318
Yarn appearance:																	
22s (26.8 tex)...index	+2314	+1308	-2444	-1832		+6702	-5407	-5414	+3054	+1325	+3172	-0826	-2300	+0508	-1459	+3096	+2582
50s (11.8 tex)...index	+1565	+0908	-0868	-0532	+6702		-6719	-6672	+2676	+1459	+2884	+0274	-3133	+1767	-1821	+3372	+2988
Yarn imperfections:																	
22s (26.8 tex)...number	-0722	-0237	-0320	-0315	-5407	-6719		+9603	-4065	-1739	-4285	-2811	+4189	-4130	+2642	-4321	-3835
50s (11.8 tex)...number	-0951	-0588	-0744	-0756	-5414	-6672	+9603		-3767	-1850	-4033	-2779	+4029	-4052	+2650	-4168	-3752
Color-22s gray yarn:																	
Reflectance.....Rd	+4588	+3615	+1987	+2088	+3054	+2676	-4065	-3767		+0585	+9494	+3095	-5093	+4772	-5738	+6431	+6447
Yellowness.....+b	-1576	-1797	-0827	-1304	+1325	+1459	-1739	-1850	+0585		+3607	+3760	+0336	+2589	-2336	+2322	+2454
Composite.....index	+3815	+2856	+1571	+1522	+3172	+2884	-4285	-4033	+9494	+3607		+4069	-4635	+5202	-5976	+6594	+6652
Color-22s bleached yarn:																	
Reflectance.....Rd	-1053	-0714	+3873	+3060	-0826	+0274	-2811	-2779	+3095	+3760	+4069		-2898	+9017	-3967	+4582	+4578
Yellowness.....+b	-0898	-0171	-0692	-0400	-2300	-3133	+4189	+4029	-5093	+0336		-4635	-2898	-6796	+3275	-5491	-4836
Composite.....index	-0296	-0384	+3236	+2522	+0508	+1767	-4130	-4052	+4772	+2589	+5202	+9017		-6796	-4420	+6041	+5668
Color-22s dyed yarn:																	
Reflectance.....Rd	-4213	-3837	-3303	-3462	-1459	-1821	+2642	+2650	-5738	-2336	-5976	-3967	+3275	-4420		-8044	-9250
Blue-ness.....-b	+2392	+1515	+1441	+1334	+3096	+3372	-4321	-4168	+6431	+2322	+6594	+4582		-5491	-8044		+9674
Composite.....index	+3275	+2576	+2317	+2318	+2582	+2988	-3835	-3752	+6447	+2454	+6652	+4578		+5668	-9250		

Table 11.--Cotton: Results of simple correlation analyses for the fiber and processing tests performed on 41 long staple samples, collected at triweekly intervals from selected gin points, crop of 1964

Item	Grade	Staple	Fiber length		Micro- naire	Fiber strength		Elong- ation 1/8"	Shirley Analyzer		Color of raw stock			Picker & card waste
			2.5% span	50/2.5 unif.		Zero gauge	1/8" gauge		Visible waste	Total waste	Reflect- ance	Yellow- ness	Com- posite	
	Index	32d in.	In.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Pct.	Rd	+b	Index	Pct.
Sample distribution:														
Mean.....	98.2	36.5	1.18	44.0	3.68	87.8	25.1	6.63	1.70	2.75	77.0	8.2	100.8	7.48
Standard deviation (+).....	3.3	.6	.03	1.4	.41	4.8	1.4	.50	.87	1.01	1.9	.6	2.5	1.06
Correlation coef. for:														
Classification:														
Grade.....index		+.4640	+.1316	+.1350	+.1160	+.1942	+.0848	+.1348	-.4961	-.4817	+.5036	-.1036	+.5843	-.4711
Staple.....32d inches	+.4640		+.5884	+.4583	+.2351	-.0149	+.2863	+.3835	-.1517	-.2151	+.2120	-.0028	+.2471	-.1234
Fiber length:														
2.5% span.....inches	+.1316	+.5884		+.5336	+.0278	-.2956	+.1675	+.6623	+.0714	+.0203	+.3009	-.2012	+.2863	+.0896
50/2.5 unif.....percent	+.1350	+.4583	+.5336		+.5166	+.0620	+.3991	+.3910	-.2808	-.3926	-.0275	+.2402	+.0480	+.3669
Micronaire.....reading	+.1160	+.2351	+.0278	+.5166		+.5808	+.7031	-.2754	-.6151	-.6778	-.6492	+.6834	-.5432	-.6305
Fiber strength:														
Zero gauge.....1,000 psi	+.1942	-.0149	-.2956	+.0620	+.5808		+.5819	-.5957	-.4602	-.4705	-.4182	+.6166	-.3372	-.3366
1/8" gauge.....grams/tex	+.0848	+.2863	+.1675	+.3991	+.7031	+.5819		-.2657	-.3648	-.4246	-.4381	+.5973	-.3183	-.2905
Elongation (1/8").....pct	+.1348	+.3835	+.6623	+.3910	-.2754	-.5957	-.2657		+.2912	+.2532	+.5173	-.5170	+.4758	+.2098
Shirley Analyzer:														
Visible waste.....percent	-.4961	-.1517	+.0714	-.2808	-.6151	-.4602	-.3648	+.2912		+.9441	+.1094	-.4438	+.0296	+.8591
Total waste.....percent	-.4817	-.2151	+.0203	-.3926	-.6778	-.4705	-.4246	+.2532	+.9441		+.1498	-.4655	+.0606	+.8540
Color of raw stock:														
Reflectance.....Rd	+.5036	+.2120	+.3009	-.0275	-.6492	-.4182	-.4381	+.5173	+.1094	+.1498		-.6297	+.9687	+.1552
Yellowness.....+b	-.1036	-.0028	-.2012	+.2402	-.6492	+.6166	+.5973	+.5170	-.4438	-.6297	-.6297		+.9687	+.1552
Composite.....index	+.5843	+.2471	+.2863	+.0480	-.5432	-.3372	-.3183	+.4758	+.0296	+.0606	+.9687	-.5125	+.5125	+.4075
Picker & card waste.....pct	-.4711	-.1234	+.0896	-.3669	-.6305	-.3366	-.2905	+.2098	+.8591	+.8540	+.1552	-.4075	+.0672	
Yarn skein strength:														
22s (26.8 tex).....pounds	+.2373	+.5666	+.7560	+.5376	+.2266	+.1252	+.4538	+.4731	+.0011	-.0621	+.1716	+.0373	+.1917	+.0164
50s (11.8 tex).....pounds	+.2569	+.5537	+.7997	+.5369	+.0828	-.0147	+.2828	+.5704	+.0128	-.0217	+.3006	-.1130	+.3113	+.0017
Yarn elongation:														
22s (26.8 tex).....percent	+.1564	+.3376	+.5405	+.1312	-.6290	-.6811	-.3739	+.7384	+.4582	+.4448	+.7358	-.5942	+.6883	+.4582
50s (11.8 tex).....percent	+.2372	+.4643	+.6745	+.2032	-.5178	-.6092	-.2979	+.7933	+.3572	+.3555	+.6897	-.5486	+.6457	+.3132
Yarn appearance:														
22s (26.8 tex).....index	+.0084	+.0368	-.0714	+.3573	+.7050	+.3831	+.4649	-.2326	-.3611	-.4522	-.5560	+.5099	-.5084	-.4325
50s (11.8 tex).....index	+.2171	+.1327	+.0775	+.3704	+.6740	+.2931	+.4833	-.0418	-.3241	-.4205	-.3866	+.4121	-.2940	-.4627
Yarn imperfections:														
22s (26.8 tex).....number	-.3089	-.2430	-.1676	-.2488	-.4327	-.2146	-.4054	+.0708	+.3318	+.4043	+.1603	-.2409	+.1052	+.3356
50s (11.8 tex).....number	-.2299	-.2195	-.2315	-.2859	-.3871	-.1551	-.3719	+.0091	+.2657	+.3501	+.1435	-.2131	+.1139	+.2749
Color-22s grey yarn:														
Reflectance.....Rd	+.4300	+.2517	+.3190	-.0658	-.6457	-.5638	-.4217	+.5604	+.2694	+.3272	+.8946	-.6881	+.8720	+.2201
Yellowness.....+b	-.1847	+.2390	+.1593	+.3676	+.4560	+.3278	+.5322	-.1682	-.2263	+.2708	+.3935	+.8077	-.3265	-.1496
Composite.....index	+.3742	+.3794	+.4641	+.1465	-.4939	-.4721	-.1993	+.5736	+.2011	+.2449	+.8057	-.3870	+.8252	+.1763
Color-22s bleached yarn:														
Reflectance.....Rd	+.2356	+.4443	+.4133	+.1284	-.2730	-.3805	-.0477	+.4180	+.1051	+.1390	+.5157	-.0690	+.5387	+.1139
Yellowness.....+b	-.3548	-.4045	-.2936	-.3148	-.1523	+.0106	-.1592	-.3586	+.1095	+.2088	+.2095	+.0258	-.2711	+.0353
Composite.....index	+.3624	+.5237	+.4729	+.2156	-.1966	-.3125	+.0304	+.4941	+.0585	+.0471	+.5438	-.0763	+.5915	+.1097
Color-22s dyed yarn:														
Reflectance.....Rd	-.1553	-.2998	-.4352	-.3730	-.1210	-.1405	-.2564	-.3748	-.1318	-.0507	-.0633	+.0507	-.0572	-.1425
Blueness.....+b	+.2734	+.3114	+.4556	+.5182	+.1513	+.0946	+.1068	+.5087	+.0064	-.0711	+.1714	-.0457	+.1815	-.0363
Composite.....index	+.2368	+.3385	+.4644	+.4898	+.1535	+.1220	+.1768	+.4818	+.0558	-.0236	+.1265	-.0556	+.1252	+.0323

Table 11.--Continued

Item	Yarn strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color-22s grey yarn			Color-22s bleached yarn			Color-22s dyed yarn		
	22s or 26.8tex	50s or 11.8tex	22s or 26.8tex	50s or 11.8tex	22s or 26.8tex	50s or 11.8tex	22s or 26.8tex	50s or 11.8tex	Reflectance	Yellowness	Composite	Reflectance	Yellowness	Composite	Reflectance	Blueness	Composite
	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	R _q	+b	Index	R _q	+b	Index	R _q	-b	Index
Sample distribution:																	
Mean.....	133.5	50.0	6.68	5.49	98.8	90.0	37.5	25.9	71.9	10.7	98.2	83.8	2.6	103.8	26.8	26.3	105.7
Standard deviation (+)..	6.4	3.1	.45	.44	7.8	9.5	16.7	11.8	2.1	.5	3.4	1.0	.3	2.8	.9	.6	3.9
Correlation coef. for:																	
Classification:																	
Grade.....index	+2373	+2569	+1564	+2372	+0084	+2171	-3089	-2299	+4300	-1847	+3742	+2356	-3548	+3624	-1553	+2734	+2368
Staple.....32d inches	+5666	+5537	+3376	+4643	+0368	+1327	-2430	-2195	+2517	+2390	+3794	+4443	-4045	+5237	-2998	+3114	+3385
Fiber length:																	
2.5% span.....inches	+7560	+7997	+5405	+6745	-0714	+0775	-1676	-2315	+3190	+1593	+4641	+4133	-2936	+4729	-4352	+4556	+4644
50/2.5 unif....percent	+5376	+5369	+1312	+2032	+3573	+3704	-2488	-2859	-0658	+3676	+1465	+1284	-3148	+2156	-3730	+5182	+4898
Micronaire.....reading	+2266	+0828	-6290	-5178	+7050	+6740	-4327	-3871	-6457	+4560	-4939	-2730	-1523	-1966	-1210	+1513	+1535
Fiber strength:																	
Zero gauge...1,000 psi	+1252	-0147	-6811	-6092	+3831	+2931	-2146	-1551	-5638	+3278	-4721	-3805	+0106	-3125	-1405	+0946	+1220
1/8" gauge...grams/tex	+4538	+2888	-3739	-2979	+4649	+4833	-4054	-3719	-4217	+5322	-1993	-0477	-1592	+0304	-2564	+1068	+1768
Elongation (1/8")...pct	+4731	+5704	+7384	+7933	-2326	-0418	+0708	+0091	+5604	-1682	+5736	+4180	-3586	+4941	-3748	+5087	+4818
Shirley Analyzer:																	
Visible waste...percent	+0011	+0128	+4582	+3572	-3611	-3241	+3318	+2657	+2694	-2263	+2011	+1051	+1095	+0585	-1318	+0064	+0558
Total waste...percent	-0621	-0217	+4448	+3555	-4522	-4205	+4043	+3501	+3272	-2708	+2449	+1390	+2088	+0471	-0507	-0711	-0236
Color of raw stock:																	
Reflectance.....R _q	+1716	+3006	+7358	+6897	-5560	-3866	+1603	+1435	+8946	-3935	+8057	+5157	-2095	+5438	-0633	+1714	+1265
Yellowness.....+b	+0373	-1130	-5942	-5486	+5099	+4121	-2409	-2131	-6881	+8077	-3870	-0690	+0258	-0763	-0507	-0457	-0556
Composite.....index	+1917	+3113	+6883	+6457	-5084	-2940	+1052	+1139	+8720	-3265	+8252	+5387	-2711	+5915	-0572	+1815	+1252
Picker & card waste...pct	+0164	+0017	+4582	+3132	-4325	-4627	+3356	+2749	+2201	-1496	+1763	+1139	+0353	+1097	-1425	-0363	+0323
Yarn skein strength:																	
22s (26.8 tex)...pounds		+9356	+3451	+4937	+1678	+2778	-2475	-3068	+1238	+2627	+2847	+3645	-2019	+4087	-5882	+5874	+6066
50s (11.8 tex)...pounds	+9356		+4474	+6493	+0216	+1677	-2017	-2775	+2510	+1552	+3938	+3880	-1282	+3963	-5712	+5901	+6023
Yarn elongation:																	
22s (26.8 tex)...percent	+3451	+4474		+8983	-4477	-3206	+1639	+1094	+7876	-1412	+8132	+6378	-1791	+6349	-1492	+2600	+2242
50s (11.8 tex)...percent	+4937	+6493	+8983		-4192	-2755	+0508	-0119	+7147	-1043	+7648	+6193	-1424	+6007	-3152	+3738	+3606
Yarn appearance:																	
22s (26.8 tex)...index	+1678	+0216	-4477	-4192		+7762	+5186	-5253	-6081	+3070	-5646	-2164	+1739	-2734	-0273	+0858	+0701
50s (11.8 tex)...index	+2778	+1677	-3206	-2755	+7762		+9533	-6271	-3508	+1964	-3110	-0753	-0093	-0743	-2249	+2492	+2568
Yarn imperfections:																	
22s (26.8 tex)...number	-2475	-2017	+1639	+0508	-5186	+9533		+9711	+1816	-1793	+1268	-0102	+0280	-0148	+4390	-2436	-3477
50s (11.8 tex)...number	-3068	-2775	+1094	-0119	-5253	-6271	+9711		+1866	-2162	+1121	-0314	-0497	-0003	+4487	-2549	-3744
Color-22s grey yarn:																	
Reflectance.....R _q	+1238	+2510	+7876	+7147	-6081	-3508	+1816	+1866		-4544	+8956	+5576	-2208	+5737	-0373	+1261	+0955
Yellowness.....+b	+2627	+1552	-1412	-1043	+3070	+1964	-1793	-2162	-4544		-0315	+2332	-0092	+1987	-0645	+0766	+0747
Composite.....index	+2847	+3938	+8132	+7648	-5646	-3110	+1268	+1121	+8956	-0315		+6956	-2605	+7087	-1258	+2248	+1928
Color-22s bleached yarn:																	
Reflectance.....R _q	+3645	+3880	+6378	+6193	-2164	-0753	-0102	-0314	+5576	+2332	+6956		-1671	+9111	+0072	+1030	+0551
Yellowness.....+b	-2019	-1282	-1791	-1424	+1739	-0093	+0280	-0497	-2208	-0092	-2506		-1671	+9111	+2535	-4074	-3555
Composite.....index	+4087	+3963	+6349	+6007	-2734	-0743	-0148	-0003	+5737	+1987	+7087	+9111	-5481		-1033	+2559	+1925
Color-22s dyed yarn:																	
Reflectance.....R _q	-5882	-5712	-1492	-3152	-0273	-2249	+4390	+4827	-0373	-0645	-1258	+0072	+2535	-1033		-8105	-9334
Blueness.....-b	+5874	+5901	+2600	+3738	+0858	+2492	-2436	-2549	+1261	+0766	+2248	+1030	-4074	+2559	-8105		+9616
Composite.....index	+6066	+6023	+2242	+3606	+0701	+2568	-3477	-3744	+0955	+0747	+1928	+0551	-3555	+1925	-9334		

Table 12.--Cotton: Results of multiple correlation analyses for the relationship of classification and supplemental fiber test measurements with processing tests performed on 520 medium staple samples, collected at triweekly intervals from selected gin points, crop of 1964

Statistical Items	Dependent Variables											
	Picker & card waste	Yarn skein strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color of 22s yarn		
		22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	Grey yarn	Bleached Yarn	Dyed Yarn
	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Index	Index	Index
Mean Values for:												
Dependent variable.....	7.1	107	37	6.2	4.8	110	98	29	21	96	104	108
Grade index.....	96	96	96	96	96	96	96	96	96	96	96	96
Staple length.....	33.9	33.9	33.9	33.9	33.9	33.9	33.9	33.9	33.9	33.9	33.9	33.9
Micronaire.....	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Fiber strength (0 gauge)...	81	81	81	81	81	81	81	81	81	81	81	81
Uniformity ratio.....	46	46	46	46	46	46	46	46	46	46	46	46
Standard Deviations (+) for:												
Dependent variable.....	1.0	11.7	5.6	.5	.5	8	7	12	9	5.4	3.0	5.6
Grade index.....	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Staple length.....	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
Micronaire.....	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
Fiber strength (0 gauge)...	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Uniformity ratio.....	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Simple correlation Coef. for:												
Grade index.....	-.74	+.33	+.25	+.17	+.16	+.29	+.29	-.51	-.46	+.81	+.50	+.63
Staple length.....	+.19	+.67	+.67	+.41	+.46	+.04	+.06	-.08	-.10	+.27	+.15	+.34
Micronaire.....	-.39	-.04	-.19	-.33	-.37	+.53	+.54	-.57	-.54	+.39	+.23	+.44
Fiber strength (0 gauge)...	-.23	+.62	+.49	-.38	-.25	+.43	+.21	-.01	.00	+.30	-.28	+.14
Uniformity ratio.....	-.29	+.50	+.41	-.14	-.06	+.49	+.39	-.20	-.20	+.33	-.05	+.35
Multiple Cor. Data for:												
DEPENDENT VARIABLE with												
GRADE INDEX, STAPLE LENGTH												
Multiple Cor. Coef.....	.74	.69	.68	.42	.46	.29	.28	.52	.46	.81	.50	.66
Partial Cor. Coef. for:												
Grade index.....	+.73	+.25	+.13	+.09	+.07	+.29	+.27	+.51	+.45	+.80	+.48	+.60
Staple length.....	+.04	+.65	+.65	+.39	+.44	+.02	.00	+.04	.00	+.16	+.04	+.26
Beta Coefficients for:												
Grade index.....	-.73	+.19	+.10	+.08*	+.07*	+.29	+.28	-.52	+.46	+.79	+.49	+.58
Staple length.....	-.02*	+.63	+.65	+.39	+.44	-.02*	.00	+.03*	.00	+.10	+.04*	+.20
Regression Equation:												
Constant (a).....	+22.22	-226.04	-118.31	-2.52	-4.84	+70.81	+59.16	+129.83	+101.37	-3.84	+71.41	+1.25
Regression Coef. for:												
Grade index.....	-.15	+.43	+.11	+.01	+.01	+.50	+.40	-1.23	-.84	+.83	+.29	+.64
Staple length.....	-.03	+8.61	+4.26	+.24	+.27	-.24	+.02	+.49	-.01	+.61	+.13	+1.34
Standard Error (+).....	.70	8.42	4.10	.46	.45	8.30	6.97	10.33	8.25	3.16	2.64	4.18
DEPENDENT VARIABLE with												
GRADE INDEX, STAPLE LENGTH, MICRONAIRE												
Multiple Cor. Coef.....	.75	.71	.74	.60	.65	.54	.55	.66	.61	.82	.50	.70
Partial Cor. Coef. for:												
Grade index.....	+.68	+.32	+.28	+.27	+.29	+.12	+.11	+.40	+.33	+.77	+.44	+.53
Staple length.....	+.04	+.66	+.68	+.43	+.49	+.03	.00	+.04	.00	+.16	+.04	+.27
Micronaire.....	+.19	+.24	+.40	+.47	+.52	+.48	+.49	+.48	+.45	+.14	+.06	+.31
Beta Coefficients for:												
Grade index.....	-.68	+.26	+.22	+.25	+.24	+.11*	+.10*	-.36	-.31	+.75	+.07	+.49
Staple length.....	-.02*	+.63	+.65	+.39	+.44	-.02*	.00	+.03*	.00	+.10	+.04*	+.20
Micronaire.....	-.14	-.19	-.32	-.45	-.49	+.49	+.50	-.44	-.43	+.09	+.06*	+.25
Regression Equation:												
Constant (a).....	+22.59	-220.35	-113.69	-1.92	-4.19	+59.72	+49.64	+143.66	+111.74	-5.06	+70.96	-2.33
Regression Coef. for:												
Grade index.....	-.14	+.59	+.23	+.02	+.02	+.19	+.14	-.85	-.56	+.80	+.28	+.54
Staple length.....	-.03	+8.61	+4.26	+.24	+.27	-.24	+.02	+.49	-.01	+.61	+.13	+1.34
Micronaire.....	-.03	-4.69	-3.81	-.50	-.54	+9.15	+7.86	-11.41	-8.56	+1.00	+.37	+2.95
Standard Error (+).....	.68	8.17	3.75	.41	.39	7.29	6.08	9.06	7.36	3.13	2.64	3.98

* Statistically insignificant.

Table 12.--Continued

Statistical Items	Dependent Variable											
	Picker & card waste	Yarn skein strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color of 22s yarn		
		22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	Grey yarn	Bleached yarn	Dyed yarn
	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Index	Index	Index
DEPENDENT VARIABLE with GRADE INDEX, STAPLE LENGTH, MICRONAIRE, FIBER STRENGTH (0 GAUGE)												
Multiple Cor. Coef.....	.75	.87	.83	.74	.72	.63	.55	.68	.63	.82	.65	.70
Partial Cor. coef. for:												
Grade index.....	+.68	+.09	+.05	+.32	+.32	+.10	+.09	+.43	+.37	+.76	+.56	+.54
Staple length.....	+.02	+.70	+.70	+.57	+.58	+.11	+.02	.00	+.05	+.12	+.16	+.28
Micronaire.....	+.17	+.56	+.54	+.45	+.50	+.45	+.47	+.51	+.48	+.10	+.16	+.32
Fiber str. (0 gauge).....	+.08	+.70	+.57	+.55	+.41	+.38	+.09	+.21	+.22	+.20	+.48	+.09
Beta Coefficients for:												
Grade index.....	-.67	+.05*	+.03*	+.25	+.25	+.09*	+.09*	-.39	-.34	+.74	+.57	+.50
Staple length.....	-.01*	+.52	+.57	+.49	+.51	-.09*	-.02*	.00	-.04*	+.07	+.13	+.22
Micronaire.....	-.13	-.28	-.39	-.37	-.43	+.43	+.49	-.47	-.46	+.06*	+.14	+.26
Fiber str. (0 gauge).....	-.06*	+.52	+.41	-.47	-.33	+.34	+.08*	+.17	+.18	+.12	-.44	-.07*
Regression Equation:												
Constant (a).....	+22.59	-192.64	-100.80	-1.25	-3.82	+56.00	+49.67	+143.66	+112.66	-5.02	+68.87	-2.36
Regression Coef. for:												
Grade index.....	-.14	+.12	+.04	+.02	+.03	+.15	+.12	-.91	-.61	+.78	+.34	+.55
Staple length.....	-.02	+7.15	+3.72	+.29	+.31	-.94	-.13	-.01	-.42	+.45	+.45	+1.44
Micronaire.....	-.28	-6.99	-4.67	-.41	-.47	+8.05	+7.63	-12.19	-9.20	+.75	+.88	+3.10
Fiber str. (0 gauge).....	-.01	+.94	+.35	-.04	-.03	+.45	+.09	+.32	+.26	+.10	-.21	-.06
Standard Error (+).....	.68	5.85	3.08	.34	.35	6.75	6.06	8.85	7.19	3.07	2.31	3.96
DEPENDENT VARIABLE with GRADE INDEX, STAPLE LENGTH, MICRONAIRE, FIBER STRENGTH (0 GAUGE), UNIFORMITY RATIO												
Multiple Cor. Coef.....	.75	.88	.85	.74	.73	.65	.58	.68	.63	.82	.65	.71
Partial Cor. Coef. for:												
Grade index.....	+.68	+.12	+.08	+.31	+.31	+.08	+.08	+.43	+.36	+.76	+.56	+.54
Staple length.....	+.02	+.69	+.69	+.56	+.56	+.16	+.06	.00	+.04	+.11	+.17	+.26
Micronaire.....	+.16	+.51	+.59	+.45	+.51	+.39	+.42	+.49	+.46	+.10	+.18	+.27
Fiber str. (0 gauge).....	+.07	+.60	+.44	+.52	+.42	+.24	+.02	+.19	+.20	+.17	+.41	+.15
Uniformity ratio.....	+.01	+.28	+.29	+.08	+.14	+.23	+.20	.00	+.03	+.01	+.08	+.14
Beta Coefficients for:												
Grade index.....	-.67	+.07*	+.05*	+.24	+.24	+.07*	+.08*	-.39	-.34	+.74	+.57	+.50
Staple length.....	-.01*	+.49	+.53	+.49	+.49	-.13	-.05*	.00	-.03*	+.07*	+.14	+.20
Micronaire.....	-.12	-.33	-.44	-.38	-.47	+.37	-.43	-.47	-.45	+.06*	+.15	+.22
Fiber str. (0 gauge).....	-.05*	+.44	+.31	-.50	-.39	+.23	-.02*	+.17	+.19	+.12	-.41	-.13
Uniformity ratio.....	-.01*	+.18	+.21	-.07*	+.12	+.24	+.22	.00	-.03*	.00	-.08*	+.13
Regression Equation:												
Constant (a).....	+22.71	-218.21	-115.17	-1.54	-4.39	+36.96	+33.69	+143.35	+115.22	-5.30	+71.29	-9.77
Regression Coef. for:												
Grade index.....	-.14	+.15	+.06	+.02	+.02	+.12	+.11	-.91	-.61	+.78	+.34	+.54
Staple length.....	-.01	+6.77	+3.51	+.29	+.30	-1.30	-.41	-.02	-.37	+.44	+.49	+1.30
Micronaire.....	-.27	-8.20	-5.32	-.43	-.51	+6.89	+6.72	-12.21	-9.06	+.73	+1.01	+2.68
Fiber str. (0 gauge).....	-.01	+.79	+.27	-.04	-.03	+.31	-.02	+.32	+.28	+.10	-.19	-.11
Uniformity ratio.....	-.01	+1.16	+.63	+.02	+.03	+1.11	+.87	+.02	-.14	+.02	-.12	+.40
Standard Error (+).....	.68	5.61	2.95	.34	.35	6.56	5.93	8.85	7.19	3.07	2.30	3.92

* Statistically insignificant.

Table 13.--Cotton: Results of multiple correlation analyses for the relationship of selected fiber test measurements with processing tests performed on 520 medium staple samples, collected at triweekly intervals from selected gin points, crop of 1964

Statistical Items	Picker & card waste	Dependent Variables										
		Yarn skein strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color of 22s yarn		
		22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	Grey yarn	Bleached yarn	Dyed yarn
	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Index	Index	Index
Mean values for:												
Dependent variable.....	7.1	107	37	6.2	4.8	110	98	29	21	96	104	108
Color index.....	98	98	98	98	98	98	98	98	98	98	98	98
Nonlint content (S.A.)....	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
2.5% span length.....	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Micronaire.....	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Fiber str. (1/8" gauge)...	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Standard Deviations (+) for:												
Dependent variable.....	1.0	11.7	5.6	.5	.5	9	7	12	9	5.4	3.0	5.6
Color index.....	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Nonlint content (S.A.)....	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9
2.5% span length.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
Micronaire.....	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
Fiber str. (1/8" gauge)...	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simple Correlation Coef. for:												
Color index.....	-.67	+.44	+.35	+.24	+.24	+.26	+.24	-.43	-.40	+.93	+.53	+.67
Nonlint content (S.A.)....	+.76	-.09	-.04	-.04	-.04	-.23	-.26	+.51	+.45	-.50	-.41	-.43
2.5% span length.....	-.10	+.53	+.57	+.46	+.46	-.02	+.04	-.04	-.08	+.17	+.12	+.27
Micronaire.....	-.39	-.04	-.19	-.33	-.37	+.53	+.54	-.57	-.54	+.37	+.23	+.44
Fiber str. (1/8" gauge)...	-.25	+.81	+.71	-.06	+.07	+.34	+.16	.00	.00	+.33	-.19	+.26
Multiple Cor. Data for:												
DEPENDENT VARIABLE with												
COLOR INDEX, NONLINT												
Multiple Cor. Coef.....	.81	.48	.41	.26	.26	.28	.28	.53	.48	.93	.54	.68
Partial Cor. Coef. for:												
Color index.....	+.41	+.47	+.41	+.26	+.26	+.16	+.11	+.18	+.18	+.91	+.39	+.58
Nonlint.....	+.61	+.23	+.23	+.12	+.12	+.10	+.15	+.35	+.29	+.18	+.14	+.05
Beta Coefficients for:												
Color index.....	-.33	+.59	+.51	+.32	+.32	+.19	+.13*	-.20	-.20	+.98	+.44	+.65
Nonlint.....	+.57	+.26	+.27	+.15	+.15	-.11*	-.18	+.39	+.33	+.08	-.15	-.04*
Regression Equation:												
Constant (a).....	+12.87	-50.41	-29.68	+2.43	+1.0	+76.53	+80.34	+66.58	+52.24	-19.80	+75.80	+29.70
Regression Coef. for:												
Color index.....	-.08	+1.52	+.63	+.04	+.04	+.37	+.22	-.52	-.41	+.17	+.30	+.80
Nonlint.....	+.67	+3.44	+1.74	+.09	+.09	-1.14	-1.51	+5.47	+3.58	+.50	-.51	-.27
Standard Error (+).....	.61	10.24	5.08	.49	.49	8.33	6.97	10.18	8.16	1.95	2.57	4.11
DEPENDENT VARIABLE with												
COLOR INDEX, NONLINT,												
2.5% SPAN LENGTH												
Multiple Cor. Coef.....	.81	.64	.63	.50	.54	.28	.28	.54	.49	.93	.54	.69
Partial Cor. Coef. for:												
Color index.....	+.37	+.40	+.32	+.15	+.14	+.17	+.10	+.17	+.15	+.90	+.36	+.54
Nonlint.....	+.62	+.14	+.13	+.03	+.01	+.08	+.15	+.35	+.30	+.18	+.15	+.10
2.5% span length.....	+.14	+.48	+.53	+.44	+.49	+.05	+.03	+.03	+.08	+.04	+.06	+.22
Beta Coefficients for:												
Color index.....	-.30	+.44	+.34	+.17	+.16	+.21	+.12	-.19	-.18	+.98	+.42	+.59
Nonlint.....	+.59	+.13	+.13	+.03*	+.02*	-.10*	-.19	+.40	+.35	+.08	-.16	-.09*
2.5% span length.....	-.09	+.44	+.50	+.44	+.49	-.05*	+.03*	-.03*	-.07*	-.02*	+.05*	+.17
Regression Equation:												
Constant (a).....	+15.08	-175.94	-97.66	-3.07	-5.07	+86.76	+74.76	+75.52	+68.25	-17.62	+72.11	+6.76
Regression Coef. for:												
Color index.....	-.07	+1.13	+.42	+.02	+.02	+.40	+.20	-.50	-.36	+.18	+.28	+.73
Nonlint.....	+.70	+1.81	+.86	+.02	+.01	-1.01	-1.58	+5.59	+3.78	+.53	-.56	-.56
2.5% span length.....	-2.81	+159.15	+86.19	+6.97	+7.69	-12.97	+7.07	-11.33	-20.30	-2.76	+4.68	+29.09
Standard Error (+).....	.60	8.97	4.32	.44	.43	8.32	6.97	10.18	8.13	1.94	2.56	4.01

* Statistically insignificant.

Table 13.--Continued

Statistical Items	Dependent Variables											
	Picker & card waste	Yarn skein strength		Yarn elongation		Yarn appearance		Yarn imperfections		Color or 22s yarn		
		22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	22s or 26.8 tex	50s or 11.8 tex	Grey yarn	Bleached yarn	Dyed yarn
	Pct.	Lbs.	Lbs.	Pct.	Pct.	Index	Index	No.	No.	Index	Index	Index
DEPENDENT VARIABLE with COLOR INDEX, NONLINT, 2.5% SPAN LENGTH, MICRONAIRE												
Multiple Cor. Coef.....	.82	.66	.69	.65	.70	.55	.55	.67	.63	.94	.54	.74
Partial Cor. Coef. for:												
Color index.....	+.36	+.42	+.38	+.26	+.28	+.12	+.05	+.13	+.12	+.91	+.35	+.54
Nonlint.....	+.60	+.10	+.06	+.08	+.11	+.02	+.06	+.29	+.24	+.25	+.13	+.02
2.5% span length.....	+.14	+.49	+.55	+.49	+.55	+.07	+.03	+.03	+.08	+.05	+.06	+.23
Micronaire.....	+.19	+.19	+.35	+.47	+.53	+.49	+.49	+.48	+.45	+.33	+.07	+.35
Beta Coefficients for:												
Color index.....	-.29	+.46	+.39	+.28	+.28	+.13*	+.05*	-.12	-.12	+.96	+.41	+.56
Nonlint.....	+.56	+.10	+.06*	-.08*	-.10*	+.02*	-.06*	+.29	+.25	+.12	-.14	-.02*
2.5% span length.....	-.09	+.44	+.50	+.45	+.50	-.06*	+.02*	-.02*	-.06*	-.02*	+.05*	+.16
Micronaire.....	-.11	-.16	-.29	-.44	-.48	+.50	+.50	-.44	-.42	+.13	+.06*	+.27
Regression Equation:												
Constant (a).....	+15.88	-164.44	-88.10	-2.09	-4.09	+61.27	+51.13	+109.62	+94.78	-21.64	+70.94	-3.74
Regression Coef. for:												
Color index.....	-.07	+1.19	+.48	+.03	+.03	+.24	+.09	-.33	-.25	+.16	+.28	+.69
Nonlint.....	+.67	+1.29	+.39	-.05	-.06	+.24	-.53	+.07	+.26	+.72	-.51	-.13
2.5% span length.....	-2.74	+160.18	+87.11	+7.10	+7.83	-15.43	+5.00	-8.35	-18.07	-3.15	+4.58	+28.23
Micronaire.....	-.26	-3.89	-3.47	-.48	-.52	+9.29	+7.83	-11.27	-8.44	+.14	+.40	+3.25
Standard error (+).....	.59	8.81	4.05	.39	.36	7.26	6.07	8.91	7.25	1.84	2.56	3.75
DEPENDENT VARIABLE with COLOR INDEX, NONLINT, 2.5% SPAN LENGTH, MICRONAIRE, FIBER STRENGTH (1/8" GAUGE)												
Multiple Cor. Coef.....	.83	.91	.88	.68	.70	.60	.55	.69	.65	.94	.68	.74
Partial Cor. Coef. for:												
Color index.....	+.30	+.33	+.24	+.34	+.30	+.02	+.03	+.19	+.18	+.90	+.50	+.53
Nonlint.....	+.61	+.07	+.10	+.04	+.09	+.03	+.07	+.26	+.21	+.25	+.06	+.02
2.5% span length.....	+.11	+.55	+.60	+.54	+.56	+.13	+.01	+.08	+.12	+.05	+.18	+.23
Micronaire.....	+.17	+.46	+.59	+.46	+.52	+.47	+.48	+.51	+.48	+.33	+.15	+.36
Fiber str.(1/8" gauge)..	+.16	+.83	+.76	+.29	+.11	+.30	+.06	+.21	+.21	.00	+.48	+.04
Beta Coefficients for:												
Color index.....	-.25	+.20	+.16	+.36	+.31	+.02*	+.03*	-.19	-.19	+.96	+.58	+.57
Nonlint.....	+.58	-.04*	-.06*	-.03*	-.09*	-.03*	-.07*	+.26	+.21	+.12	-.06*	-.01*
2.5% span length.....	-.07	+.30	+.38	+.50	+.51	-.12	+.01*	-.06*	-.10	-.02*	+.14	+.17
Micronaire.....	-.10	-.25	-.37	-.40	-.47	+.46	+.50	-.46	-.44	+.13	+.12	+.28
Fiber str.(1/8" gauge)..	-.10	+.70	+.62	-.24	-.09*	+.28	+.06*	+.18	+.18	.00	-.45	-.03*
Regression Equation:												
Constant (a).....	+15.26	-116.03	-67.94	-2.79	-4.34	+75.39	+53.54	+122.29	+104.77	-21.66	+62.81	-4.80
Regression Coef. for:												
Color index.....	-.06	+.51	+.20	+.04	+.03	+.05	+.05	-.51	-.39	+.16	+.39	+.71
Nonlint.....	+.69	-.56	-.39	-.02	-.05	-.30	-.62	+3.59	+2.27	+.72	-.20	-.09
2.5% span length.....	-2.06	+107.90	+65.11	+7.90	+8.11	-30.85	+2.40	-22.01	-28.77	-3.13	+13.67	+29.37
Micronaire.....	-.23	-6.16	-4.43	-.45	-.51	+8.62	+7.72	-11.86	-8.90	+1.47	+.78	+3.30
Fiber str.(1/8" gauge)	-.05	+4.04	+1.70	-.06	-.02	+1.19	+.20	+1.05	+.83	.00	-.70	-.09
Standard Error (+).....	.58	4.89	2.62	.37	.36	6.93	6.06	8.70	7.10	1.84	2.24	3.75

* Statistically insignificant.

BASIS FOR INTERPRETATION

The following explanation of the data published in tables 1 through 8 of this report may be helpful in the interpretation of test results;

Classification

Classification was made in accordance with the Official Cotton Standards for grade and staple length. These results are presented under the usual terms for the individual lots but the grade values were converted to an index for averaging in the summary tables.

Grade index, as reported in the summary tables is designed to reflect differences in market value and provides a method for averaging the grade for a number of individual lots. Middling grade is used as the basis of 100 and higher or lower index numbers reflect higher or lower average market values, respectively. Index values for white, spotted, tinged and gray grades of upland cotton are shown below:

Grade Name	Grade index for					
	White	Light Spotted	Spotted	Tinged	Light Gray	Gray
Good Middling	105	103	101	94	99	93
Strict Middling	104	102	99	91	98	91
Middling plus	102					
Middling	100	97	93	82	92	84
Strict Low Middling plus	97					
Strict Low Middling	94	89	83	75	85	75
Low Middling plus	90					
Low Middling	85	80	75	68		
Strict Good Ordinary plus	81					
Strict Good Ordinary	76					
Good Ordinary plus	73					
Good Ordinary	70					
Below Grade	60					

The grade of cotton, as the term is generally understood, is obtained by evaluating in relation to the official standards, the three factors of grade - color, leaf, and preparation in the sample. Grade usually provides an indication of waste content of a sample of cotton. Although, for individual samples, the quantity of waste removed is not always larger for the lower grades. Past experience has shown the average relationship between picker and card waste and various grades of upland cotton to be approximately as given in the tabulation shown in the subsequent section on manufacturing waste. In comparing these average grade figures with the picker

and card waste data, it should be understood that variations from the averages for individual samples are attributable to the nature of the extraneous material present in the cotton, the characteristics of the fiber, and whether the grade designation was low because of poor color.

Staple length is the length of a typical portion of the fibers in the samples as determined by the classer. Uniformity of fiber length, as well as other fiber properties, influence to some extent the classer's selection of the typical portion of the fibers on which the staple length designation is based. In general, there is a fairly close relationship between the staple length as designated by the classer and the fineness and strength of the yarn that can be manufactured from the cotton. These relationships, however, are influenced by other fiber properties, the measurements of which will be discussed in the paragraphs which follow:

Fiber Tests

Fiber length data were obtained by the Digital Fibrograph method for the short, medium, and long staple American upland samples and by the array method for the extra long American Egyptian samples. Briefly, the Digital Fibrograph method consists of placing representative specimens of cotton weighing approximately 30 centigrams at random on a pair of combs, parallelizing the beards of cotton extending from one side of the combs, and scanning these beards photoelectrically on the instrument at 3 length intervals beginning at 0.15 inch from the teeth of the combs and ending near the outer fringe. The 2.5 percent span length and the 50/2.5 uniformity ratio values reported for each lot are based on two specimens tested by each of two technicians.

The Digital Fibrograph 2.5 percent span length values reported indicate the length which will be spanned by 2.5 percent of the fibers when they are parallel and randomly distributed. It is also the length where the amount of fibers on the Fibrograph curve is 2.5 percent of the amount of fibers reading at the starting point of 0.15 inch. These values are highly correlated with and are essentially equal to the Servo Fibrograph upper half mean length values reported in previous years. Both the Digital 2.5 percent span length and the Servo upper half mean length values are usually closely related to staple length designations. These relationships may vary, however, because they measure different fiber length characteristics.

The Digital Fibrograph 50/2.5 uniformity ratio values reported indicate the relative uniformity of fiber length in the samples. They represent the ratios between the 50 percent span length and the 2.5 percent span length expressed as percentages. These values are closely correlated with the Servo Fibrograph uniformity ratios reported in previous years but the results are much more reproducible and they are on a lower level. Digital 50/2.5 uniformity ratios of 40 to 45 are equivalent to Servo uniformity ratios of approximately 75 to 80. Larger values in both cases indicate more uniform fiber length distribution. Unusually low fiber length uniformity tends to

increase manufacturing waste, to make processing more difficult, and to lower the quality of the product. The following adjective descriptions will serve to classify cottons from the standpoint of fiber length uniformity.

Digital Fibrograph 50/2.5 uniformity ratio

Below 42.....	Very low uniformity
42 to 43.....	Low uniformity
44 to 45.....	Average uniformity
46 to 47.....	High uniformity
Above 47.....	Very high uniformity

Data source - 2897 American upland lots tested from crops of 1960-62 for 50/2.5.

Array tests for the extra long staple American Egyptian samples were performed on the Suter-Webb fiber sorter. Briefly, this method consists of parallelizing the fibers in a representative 75-milligram specimen of cotton through a series of combs, separating the fibers into length groups at 1/8-inch intervals, and weighing the fibers in each length group. The upper quartile length and coefficient of variation values reported are based on specimens tested by each of two technicians.

The array upper quartile length values reported indicate the length which is exceeded by 25 percent of the weight of the fibers in the samples. They are usually closely related to and longer than the classer's staple designations. This relationship may vary, however, because the two methods measure different fiber length characteristics.

The array coefficient of length variation values reported indicate the relative variability of fiber length in the samples. They represent the standard deviation of the weight-length frequencies expressed as a percentage of the mean length. Smaller values indicate more uniform fiber length distributions. Excessive fiber length variation tends to increase manufacturing waste, to make processing more difficult, and to lower the quality of the product. It is, therefore, considered desirable for a cotton to have a low coefficient of variation. The following adjective descriptions will serve to classify cottons from the standpoint of fiber length variation:

Array coefficient of fiber length variation

Below 26.....	Very low variation
26 to 29.....	Low variation
30 to 33.....	Average variation
34 to 37.....	High variation
Above 37.....	Very high variation

Data source - 830 American upland lots tested from crops of 1958-60.

Fiber fineness and maturity were determined in combination by the micronaire method. The micronaire readings which indicate the resistance to the passage of air through a 50-grain specimen compressed to a given volume were made for each lot of cotton. A linear scale for the Micronaire instrument was initially adopted to indicate a direct reading in micrograms-per-inch of fiber. Further studies, however, indicated a curvilinear relationship between micronaire readings and actual weight-per-inch determinations on American upland cottons. As a result of these studies, a curvilinear scale for upland cotton was adopted in September 1950.

Micronaire readings for both American upland and American Egyptian cottons may differ from the actual weight-per-inch for specific samples depending upon the fiber characteristics of the samples. Because of these discrepancies, micronaire results are reported in terms of "micronaire reading" instead of micrograms-per-inch. These micronaire readings are based on the American upland scale for all cottons instead of using a different scale for the American Egyptian cottons. This scale is now used internationally.

Fiber fineness contributes to yarn strength, particularly when fine numbers are spun, but it also tends to increase neppiness and to require a reduced rate of processing.

Fiber maturity is also an important factor affecting the appearance of yarns and fabrics, and is a desirable characteristic from the standpoint of low picker and card waste. Immature fibers are susceptible to the formation of neps, and contribute to lower yarn appearance grades. The desirability of micronaire reading, therefore, depends on the specific end product or use of the cotton. The following descriptive terms may be applied to the micronaire data shown in the tables:

Micronaire readings

Below 3.5.....	Very low
3.5 to 3.9.....	Low
4.0 to 4.4.....	Average
4.5 to 5.0.....	High
Above 5.0.....	Very high

Data source - 2897 American upland lots tested from crops of 1960-62.

Fiber strength is an important factor in determining yarn strength. Cottons with good fiber strength usually give less trouble in the manufacturing processes than the weak fibered cottons. Tests for fiber strength were made without any space between the clamp jaws (0 gauge) using the Pressley flat bundle tester, and with a 1/8-inch spacer between the clamp jaws (1/8-inch gauge) using the Stelometer. Strength results from the Stelometer were controlled at the same level obtained on the Pressley instrument. This provided strength results similar to those reported

previously and also furnishes a measure of fiber elongation. Comparative tests have shown that the results of the 1/8-inch gauge tests are more highly correlated with yarn strength than the results of zero gauge tests. Results for both methods are reported, however, because the zero gauge tests are still widely used by the cotton industry.

The results for the zero gauge test are reported in the usual terms of thousand pounds per square inch and also in terms of grams per tex. The results reported may be converted to the other methods of expressing fiber strength by applying the following formulae:

$$(1) \quad S_2 = \frac{(S_1 + 0.12)}{10.81}$$

$$(2) \quad S_2 = \frac{S_3}{5.36}$$

$$(3) \quad S_3 = (S_1 + 0.12) \times 0.496$$

When S_1 = Thousand pounds per square inch (Pressley 0 gauge)
 S_2 = Strength-weight ratio (Pressley 0 gauge)
 S_3 = Grams per tex (Pressley 0 gauge)

The following adjective ratings will assist in the interpretation of the zero gauge fiber strength results reported and will facilitate comparisons between cottons:

Fiber Strength (0 Gauge)

<u>Thousand psi</u>	<u>Designation</u>	<u>Grams per tex</u>
Below 70	Very low strength	Below 34
70 to 76	Low strength	34 to 37
77 to 83	Average strength	38 to 41
84 to 90	High strength	42 to 45
Above 90	Very high strength	Above 45

Data source - 2897 American upland lots tested from crops of 1960-1962.

The results of the 1/8-inch gauge tests are reported in terms of grams per tex. A tex unit is equal to the weight in grams of 1,000 meters of the material. The decision to report strength measurements in terms of grams per tex was made in accordance with the recommendations of the American Society for Testing and Materials (ASTM) and the International Standards Organization (ISO), and after consultation with various interested groups and individuals in the textile industry. Since there is a high degree of correlation between the 1/8-inch gauge strength test results and fiber length,

cottons with short staple lengths would tend to have lower average strength values than would the long staple groups. Previous tests have shown the average relationship between staple length and fiber strength to be approximately as follows:

Fiber Strength (1/8-inch Gauge)

<u>Group Numbers and Staple Length</u>	<u>Average Strength</u> <u>grams per tex</u>
American upland:	
Group 1.--Short staple	20
Group 2.--Medium staple	22
Group 3.--Long staple	24
American Egyptian:	
Group 4.--Extra long staple	33

Data source - 2897 American upland lots tested from crops 1960-62 and 158 American Egyptian lots tested from crops of 1956-60.

The fiber strength results as reported for 1/8-inch gauge tests may be converted to other methods of expressing fiber strength by applying the following formulae:

$$(1) \quad S_5 = \frac{S_4}{6.80}$$

$$(2) \quad S_6 = \frac{S_4}{0.217}$$

Where: S_4 = Grams per tex (1/8-inch gauge)

S_5 = Strength weight ratio (1/8-inch gauge)

S_6 = Fiber strength index (1/8-inch gauge)

Fiber elongation results were obtained in connection with the 1/8-inch gauge fiber strength tests by using the Stelometer instrument and are reported both in the periodic and summary reports. These results will be used in analyses to evaluate the relationship of elongation with spinning test results. The following adjective ratings based on these recent tests will assist in the interpretation of the fiber elongation results reported and will facilitate the comparison between cottons:

Fiber elongation (1/8-inch gauge)

<u>Designation</u>	<u>Percent</u>
Very low	4.8 and below
Low	4.9 to 5.7
Average	5.8 to 6.6
High	6.7 to 7.5
Very high	7.6 and above

Data source - 1991 American upland lots tested from the crops of 1961-62.

Nonlint content for the various lots was determined by the use of the Shirley Analyzer which separates the lint from the foreign matter. The total nonlint values reported include both visible and invisible loss. These results are distinguished from total picker and card waste in that practically no fiber is included; whereas textile mill wastes include appreciable amounts of fiber. Tests performed in previous years show the following average relationship of Shirley Analyzer nonlint to grade:

Average nonlint content for white grades of upland cotton

<u>Grade of cotton</u>	<u>Nonlint content</u> <u>Percent</u>
Good Middling	1.5
Strict Middling	1.6
Middling	2.2
Strict Low Middling	3.1
Low Middling	4.5
Strict Good Ordinary	5.8

Data source - 2897 American upland lots tested from crops of 1960-62.

The following scale has been developed to represent the average nonlint content for grades of American Egyptian cotton:

Nonlint content for grades of American Egyptian cotton

<u>Grade of cotton</u>	<u>Nonlint content</u> <u>Percent</u>
1	1.1
2	1.9
3	2.7
4	3.6
5	4.4
6	5.3

Data source - 158 American Egyptian lots tested from the crops of 1956-60.

Differences between results obtained for individual lots and the percentages shown for the grades may be caused by two things: (1) There are intentional allowances for variations in trash content among bales in each standard grade (to offset differences in color and to provide a range for the grade) that may result in an overlap; (2) these data are based on weight and do not take into consideration the nature of trash, which may be as important as weight in determining the grade designation.

Color measurements were made on samples of raw stock from each lot by using the Nickerson-Hunter Colorimeter. The basic color values reported are percentage reflectance in terms of R_d and yellowness in terms of $+b$. Increasing R_d values indicate increasing brightness of the cotton and increasing $+b$ values indicate increasing degrees of yellowness.

The color of raw cotton is also reported as both a single index number and as a single code number. The index number is related to market value and is equivalent to the grade index described in the earlier section on classification. It also provides a method for averaging the composite color for a number of individual lots. The code number provides an identification of the color measurements for an individual lot with the color of the grade standards, but it cannot be used to average the composite color of a number of individual lots (figure 2). The first digit of this 3-digit code relates to grade as indicated by numbers 1 for Good Middling through 7 for Good Ordinary. The second digit of the code relates to placement within the grade as indicated by 0 for the upper half and by 5 for the lower half. The third digit in the code relates to yellowness as indicated by numbers 1 for the whitest side of the grade through 9 for the color of the yellow stained grades. The color values for the American upland samples may also be plotted on the diagram shown as figure 2, or those for American Egyptian samples may be plotted on the diagram shown as figure 3, for comparison with the color of the cotton in official grade standards.

Yarn Processing Tests

The results of yarn processing tests reported in this summary were obtained by procedure adopted in 1962 which include heavier weights for laps, slivers and rovings than those used in previous years. These new procedures also include spinning from single roving instead of double roving for the two standard yarn numbers and the spinning of a third yarn number on selected samples to provide a small-scale measure of spinning end-breakage or spinning performance. These changes reflect similar changes that have taken place in the cotton textile industry including increased emphasis on running quality since the mid-1940's when long-draft systems were adopted for both the roving and spinning processes in the routine laboratory spinning test procedures. These changes were designed to bring the laboratory processing procedures more in line with current textile mill practices and thus make the processing evaluations more applicable to present day mill operations. The processing results previously reported for 1960 and earlier crop years may be compared

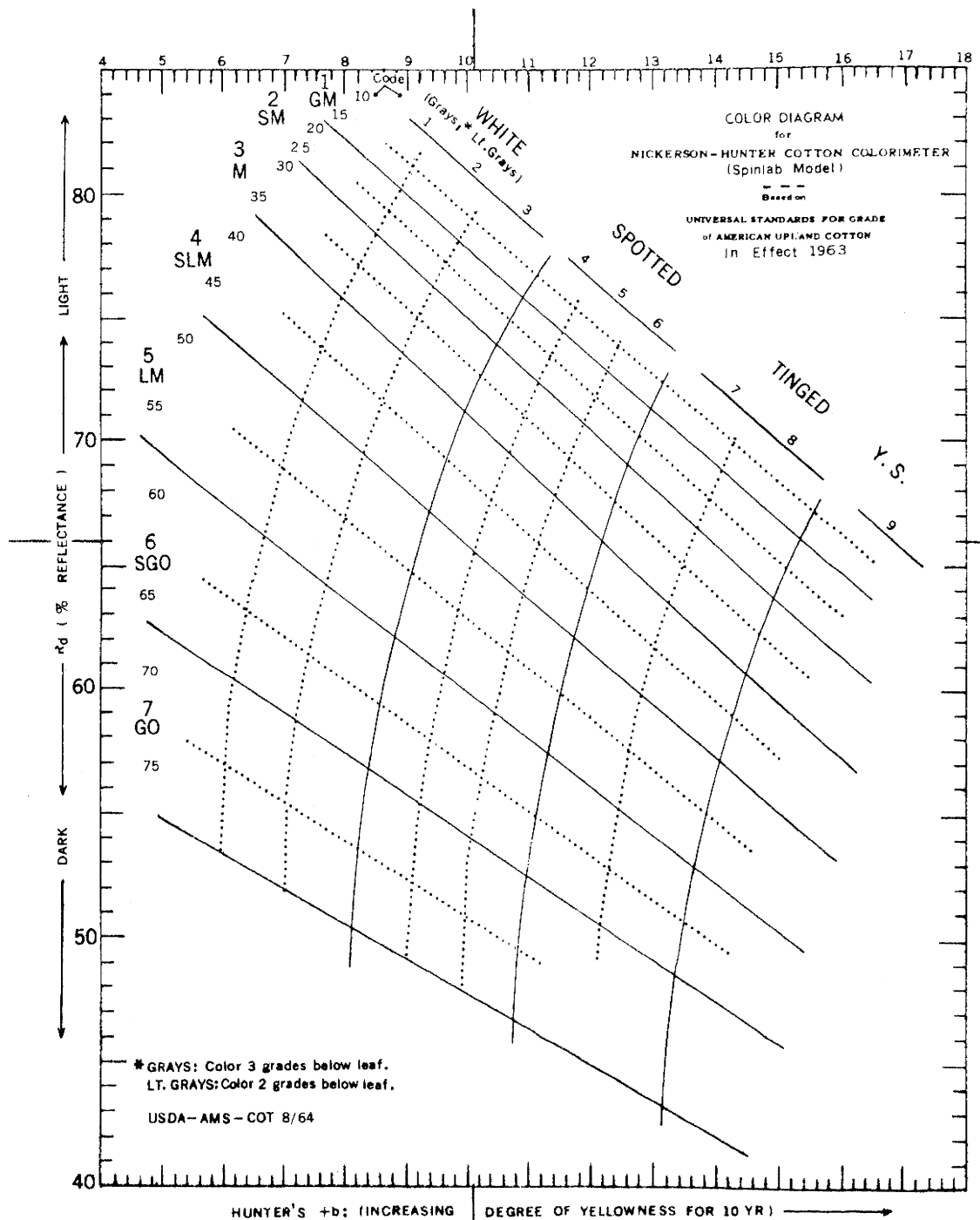


Fig. 2.--Code for relating color measurements of raw cotton to the color of American upland grade standards.

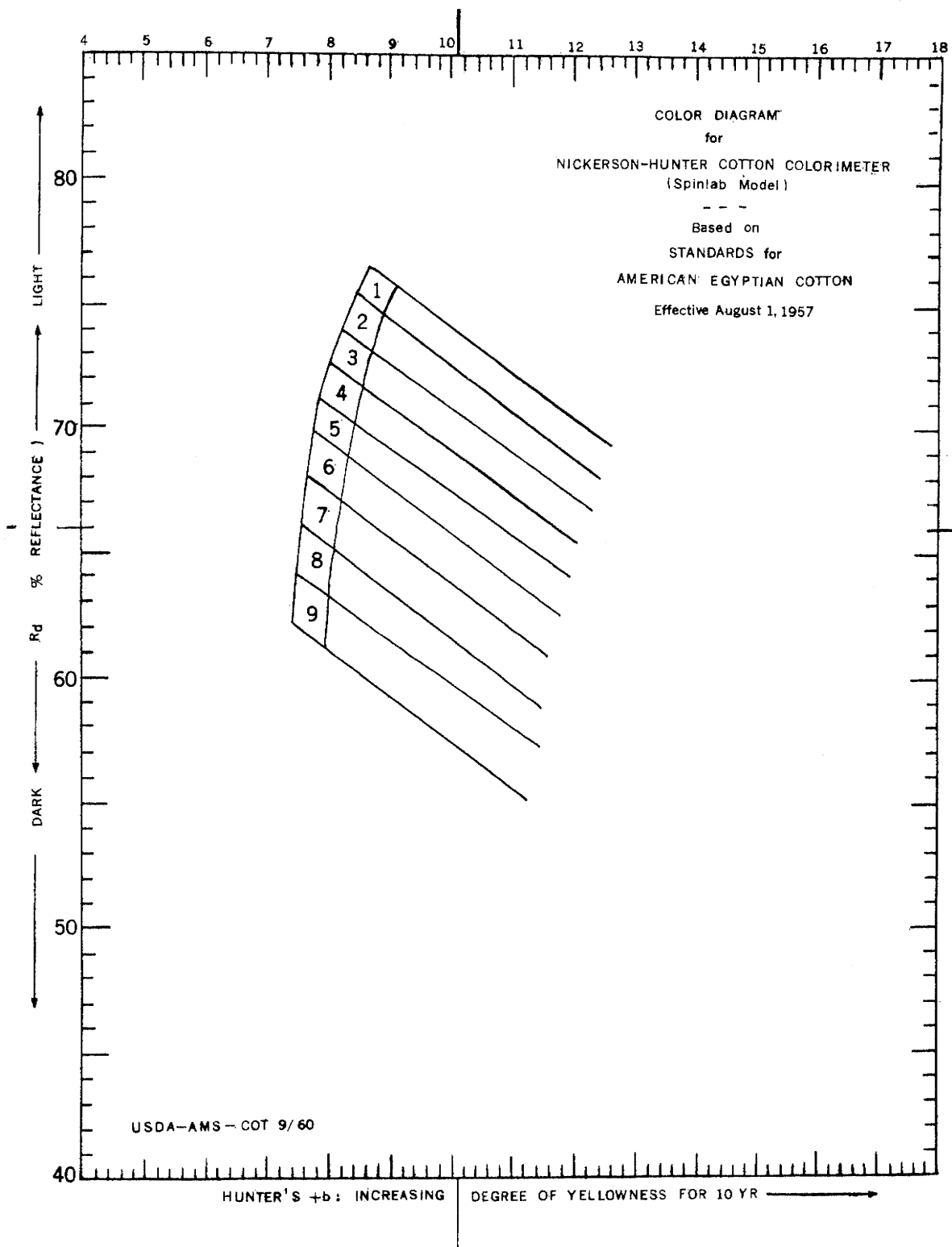


Fig. 3.--Diagram for relating color measurements of raw cotton to the color of American Egyptian grade standards.

Table 14.--Cotton: Spinning test procedures for specified staple length groupings

Process	Staple length groups			
	Short	Medium	Long	Extra long
1. PICKER				
Standard atmospheric conditions:				
Temperature.....degrees F.:	75	75	75	75
Relative humidity.....percent:	60	60	60	60
Each test lot is processed through a finisher type picker twice to produce the specified weight of lap.....ounces per yard:	14	14	14	11
Type of beater.....	Kirschner	Kirschner	Kirschner	2-blade
Beater speed.....r.p.m.:	1,000	1,000	1,000	1,000
Settings:				
Feed roll to beater.....inches:	3/16	3/16	3/16	3/8
Girds to beater, top.....inches:	5/16	5/16	5/16	9/16
Girds to beater, bottom.....inches:	11/16	11/16	11/16	11/16
2. CARD				
Standard atmospheric conditions:				
Temperature.....degrees F.:	75	75	75	75
Relative humidity.....percent:	60	60	60	60
Picker lap fed.....ounces per yard:	14	14	14	11
Sliver delivered.....grains per yard:	50	50	50	40
Production rate.....pounds per hour:	12-1/2	9-1/2	6-1/2	4-1/2
Doffer speed.....r.p.m.:	11	8	6	4
Cylinder speed.....r.p.m.:	165	165	165	165
Flat speed.....inches per minute:	2-7/8	2-7/8	2-7/8	2-7/8
Licker-in-speed.....r.p.m.:	435	435	435	435
Cylinder wire.....number:	100	100	120	120
Doffer and flat wire.....number:	110	110	130	130
Settings:				
Feed plate to licker-in.....inches:	0.010	0.010	0.010	0.017
Mote knife to licker-in top.....inches:	.012	.012	.012	.012
Mote knife to licker-in, bottom.....inches:	.010	.010	.010	.010
Licker-in screen, front.....inches:	.029	.029	.029	.029
Licker-in screen, back.....inches:	.017	.017	.017	.017
Licker-in to cylinder.....inches:	.007	.007	.007	.007
Flats to cylinder, back, center, and front.....inches:	.009	.009	.009	.009
Back plate to cylinder, top.....inches:	.029	.029	.029	.029
Back plate to cylinder, bottom.....inches:	.034	.034	.034	.034
Front plate to cylinder, top.....inches:	.029	.029	.029	.029
Front plate to cylinder, bottom.....inches:	.034	.034	.034	.034
Doffer to cylinder.....inches:	.007	.007	.007	.007
Cylinder screen, back.....inches:	.029	.029	.029	.029
Cylinder screen, center.....inches:	.034	.034	.034	.034
Cylinder screen, front.....inches:	3/16	3/16	3/16	3/16
Doffer comb to doffer.....inches:	.022	.022	.022	.022
3. SLIVER LAPPER (combed only)				
Standard atmospheric conditions:				
Temperature.....degrees F.:	-	-	75	75
Relative humidity.....percent:	-	-	60	60
Sliver fed, 20 each.....grains per yard:	-	-	50	40
Lap delivered.....grains per yard:	-	-	595	525
Speed.....yards per minute:	-	-	46	46
Roll settings (center to center):				
First to second.....inches plus fiber length $\frac{1}{16}$:	-	-	5/16	5/16
Second to third.....inches plus fiber length $\frac{1}{16}$:	-	-	9/16	9/16
4. RIBBON LAPPER (combed only)				
Standard atmospheric conditions:				
Temperature.....degrees F.:	-	-	75	75
Relative humidity.....percent:	-	-	60	60
Laps fed, 4.....grains per yard:	-	-	595	525
Lap delivered.....grains per yard:	-	-	610	610
Speed.....yards per minute:	-	-	47	47
Roll settings (center to center):				
First to second.....inches plus fiber length $\frac{1}{16}$:	-	-	4/16	4/16
Second to third.....inches plus fiber length $\frac{1}{16}$:	-	-	7/16	7/16
Third to fourth.....inches plus fiber length $\frac{1}{16}$:	-	-	10/16	10/16

For footnotes see next page.

Table 14.--Cotton: Spinning test procedures for specified staple length groupings--Continued

Process	Staple length groups			
	Short	Medium	Long	Extra long
5. COMBER (Model D-4)				
Standard atmospheric conditions:				
Temperature.....degrees F.:	-	-	75	75
Relative humidity.....percent:	-	-	60	60
Laps fed, 8 each.....grains per yard:	-	-	610	610
Sliver delivered.....grains per yard:	-	-	50	40
Production per hour.....pounds:	-	-	16	13
Setting of cushion plate to detaching roll.....inches:	-	-	.48	.54
Nominal waste.....percent:	-	-	16 to 17	16 to 17
6. DRAWING FRAME (synthetic top rolls)				
Standard atmospheric conditions:				
Temperature.....degrees F.:	75	75	75	75
Relative humidity.....percent:	60	60	60	60
First process:				
Sliver fed, 6 each.....grains per yard:	50	50	50	40
Sliver delivered.....grains per yard:	60	53	53	42
Second process:				
Sliver fed, 6 each.....grains per yard:	60	53	53	42
Sliver delivered.....grains per yard:	70	55	55	44
Speed.....yards per minute:	36	36	36	36
Roll settings (center to center):				
First to second.....inches plus fiber length $\frac{1}{16}$:	$\frac{4}{16}$	$\frac{4}{16}$	$\frac{4}{16}$	$\frac{4}{16}$
Second to third.....inches plus fiber length $\frac{1}{16}$:	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{7}{16}$
Third to fourth.....inches plus fiber length $\frac{1}{16}$:	$\frac{10}{16}$	$\frac{10}{16}$	$\frac{10}{16}$	$\frac{10}{16}$
7. LONG DRAFT ROVING (8 x 4, 2 apron type)				
Standard atmospheric conditions:				
Temperature.....degrees F.:	75	75	75	75
Relative humidity.....percent:	60	60	60	60
Sliver fed.....grains per yard:	70	55	55	44
Roving delivered.....hank:	1.10	1.80	1.80	4.25
Spindle speed.....r.p.m.:	1235	1235	1235	1235
Roll settings (center to center)				
First to second, standard.....inches:	$2\frac{-1}{4}$	$2\frac{-1}{4}$	$2\frac{-1}{4}$	$2\frac{-1}{4}$
Third to fourth.....inches plus fiber length $\frac{1}{16}$:	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
8. LONG DRAFT SPINNING (two apron type)				
Standard atmospheric conditions:				
Temperature.....degrees F.:	75	75	75	75
Relative humidity.....percent:	65	65	65	65
Roving fed single.....hank:	1.10	1.80	1.80	4.25
Twist multiplier.....number:	4.4	4.0	3.8	3.6
Carded yarns.....number 2/:	8s & 22s	22s & 50s	22s & 50s	-
Combed yarns.....number:	-	-	22s & 50s	50s & 80s
Spindle speed.....r.p.m. $\frac{3}{4}$:	9000	9000	9000	9000
Roll settings (center to center):				
First to second, standard.....inches:	$2\frac{-1}{16}$	$2\frac{-1}{16}$	$2\frac{-1}{16}$	$2\frac{-1}{16}$
Second to third, standard.....inches:	$1\frac{-3}{4}$	$1\frac{-3}{4}$	$1\frac{-3}{4}$	$1\frac{-3}{4}$

1/ Allowances listed are in addition to fiber lengths in terms of "pulls" made on card sliver. These pulls are estimated from Fibrograph length tests except for extra long staple cottons.

2/ Additional yarn is spun for selected lots on a 96 spindle wide gauge frame at 9,000 r.p.m. spindle speed to determine the spinning potential yarn number or the finest yarn number that can be spun without end-breakage.

3/ All standard yarn numbers are spun on narrow gauge frames with spindle speeds of 9,000 r.p.m. except for 8s which are spun on a wide gauge frame with spindle speed of 5,500 r.p.m.

with those reported this year after proper adjustments to make them comparable. The level of the results obtained by the newly adopted procedures as compared to those published before 1961 are as follows:

1. Results on essentially the same level:

- a. Picker and card waste
- b. Neps in card web
- c. Strength of combed 22s, 50s, and 80's yarns
- d. Appearance of carded and combed yarns
- e. Imperfections in carded and combed yarns

2. Results on significantly different levels:

- a. Strength of carded 8s yarns approximately 10 percent lower by the new procedure
- b. Strength of carded 22s and 50s yarns approximately 5 percent lower by the new procedure

The card production rate employed and the yarn numbers spun for each cotton were selected on the basis of the staple length expected in the specified area of growth as described in the earlier section on test procedures. Four different length groupings were used to cover the range of cottons grown in this country and to approach commercial practices in processing these cottons. The spinning twist multipliers were selected to provide maximum yarn strength on the basis of staple length. Details of the spinning test procedures are shown at the end of this section of the report (table 14). Results of previous tests show that decreasing the card production rate results in fewer neps, improved yarn appearance grades, and removal of more waste at the card. Results of tests on the various lots should therefore be compared directly for only those lots in the same length group which were processed in a comparable manner.

Manufacturing waste reported for a sample of cotton is important because excessive waste increases the cost of cotton products. The percentage of waste extracted by the picking and carding processes in performing a spinning test provides a measure of manufacturing waste. There is an average relationship between this waste and grade as discussed in the previous section on the grade of cotton. The rate at which the cotton is carded, however, affects the picker and card waste values because the more thorough carding action obtained when the carding rate is decreased extracts a larger quantity of waste. The longer staple cottons are generally carded at a lower rate than the shorter cottons in order to obtain acceptable yarn quality. Tests performed in recent years show the following average relationship of picker and card waste to grade:

<u>American upland grade</u>	<u>Average picker and card waste (percent)</u>	<u>American Egyptian grade</u>	<u>Average picker and card waste (percent)</u>
Good Middling	6.3	1	7.0
Strict Middling	6.4	2	8.5
Middling	7.1	3	10.0
Strict Low Middling	8.2	4	11.4
Low Middling	9.7	5	12.9
Strict Good Ordinary	11.2	6	14.4

Data source - 2897 lots tested from crops of 1960-62 for American upland and 158 lots tested from crops of 1956-60 for American Egyptian.

The percentage of waste removed by the comber is reported in addition to the picker and card waste for cottons processed into combed yarn. The short staple cottons are processed through the comber with a closer setting than for the longer staple cottons because smaller comber waste percentages are usually extracted from this cotton in commercial practice.

Yarn strength is perhaps the most important and reliable test of yarn quality. Yarn strength not only determines the range of usefulness of a given cotton, but is also an indication of spinning and weaving performance. Yarn strength is reported in terms of skein strength since studies have shown that such strength values are more closely related to fabric strength as well as to fiber properties than single strand yarn strength. Skein strength data for each yarn number and the average "break factor" for gray or natural yarn (number x strength) for the two numbers spun, are reported for each lot. There is an average relationship between yarn strength and staple length but it varies for the individual cottons because of differences in the characteristics of the fiber. Tests performed in recent years have shown approximately the following relationship of yarn strength to staple length:

<u>Type of cotton, kind of yarn and staple length group</u>	<u>Average yarn skein strength</u>		
	<u>Coarse (pounds)</u>	<u>Fine (pounds)</u>	<u>Average (lb. x No.)</u>
American upland:			
Carded yarns:			
Short staple	294 (8s)	93 (22s)	2199
Medium staple	108 (22s)	38 (50s)	2138
Long staple	130 (22s)	48 (50s)	2630
Combed yarns:			
Long staple	143 (22s)	53 (50s)	2898
American Egyptian:			
Combed yarns:			
Extra long staple	71 (50s)	40 (80s)	3375

Data source - 2897 American upland lots tested from crops of 1960-62 and 158 American Egyptian lots tested from the crops of 1956-60.

Skein strength of mercerized 50s combed yarn, when compared with strength of gray yarn, provides an indication of the relative response of different cottons from the standpoint of increase in yarn strength resulting from the mercerization process.

Yarn elongation results were obtained in connection with skein strength tests. These data are to be used in analyses to investigate their relationship to other test measures.

Yarn appearance refers to the relative evenness, smoothness and freedom from foreign material of the yarn as evaluated by a visual comparison of the yarn with the standards adopted by the American Society for Testing and Materials. Since appearance is very important in many types of cotton products, high yarn appearance grades are desirable. Index values shown in the tables represent the average of the appearance indices for both yarn numbers spun. Tests performed in recent years have shown approximately the following relationship of yarn appearance to staple length:

Type of cotton, kind of yarn and <u>staple length group</u>	Course (<u>index</u>)	<u>Average yarn appearance</u>	
		Fine (<u>index</u>)	Average (<u>index</u>)
American upland:			
Carded yarns:			
Short staple	111 (8s)	100 (22s)	106
Medium staple	107 (22s)	95 (50s)	101
Long staple	102 (22s)	91 (50s)	96
Combed yarns:			
Long staple	108 (22s)	99 (50s)	104
American Egyptian:			
Combed yarns:			
Extra long staple	117 (50s)	108 (80s)	112

Where: A grade = 130 index, B+ = 120, B = 110, C+ = 100, C = 90, D+ = 80, D = 70, and BG = 60.

Data source - 2897 American upland lots tested from crops of 1960-62 and 158 American Egyptian lots tested from crops of 1956-60.

Yarn imperfections are reported for the two yarn numbers spun for each lot of cotton. These results were obtained on "Neptel" instruments which electronically count the abrupt changes in the silhouette of the yarn while passing it through a beam of light. They are expressed as the number of imperfections per 50 yards of yarn and are based on the average of 10 determinations. This value is an instrument measure of product quality which is

associated with the characteristics of the cotton. It is more highly correlated with fiber properties than either neps in card web or yarn appearance grade:

Type of cotton, kind of yarn and staple length group	Average yarn imperfections		
	Course (number)	Fine (number)	Average (number)
American upland:			
Carded yarns:			
Short staple	62 (8s)	41 (22s)	52
Medium staple	27 (22s)	19 (50s)	23
Long staple	27 (22s)	21 (50s)	24
Combed yarns:			
Long staple	19 (22s)	16 (50s)	18

Data source - 2897 lots tested from the crops of 1960-62

Spinning potential yarn number indicates the finest yarn number that can be spun from a cotton sample without any end-breakage when using specific processing procedures. In performing these tests, the yarn number to spin is selected from a list of desired yarn numbers calculated to represent the middle of the range of yarn numbers spun with each traveler number and twist gear. New travelers, draft gears, and twist gears are installed for the selected yarn number and it is spun for a 15-minute trial period. The yarn number selected is considered acceptable if there is an end-breakage involving 5 to 15 of the 96 spindles employed during the trial run. If end-breakages occur on less than 5 or more than 15 of the 96 spindles during the trial period, a different yarn number is selected to be spun for another 15-minute trial period until the acceptable end-breakage rate is obtained. The acceptable trial period is also used for a warm-up period which is followed by a 1-hour test period. The spinning potential yarn number is calculated from the deviation of the actual yarn number spun from the desired yarn number and the number of spindles with end-breakages during the 1-hour test run. The following tabulation of the average relationship between spinning potential yarn number and staple length based on cottons used in the grade and staple standards will be helpful in evaluating the results for different cottons with respect to spinning performance.

Tests performed in recent years on samples of cotton from surveys of the crop have shown approximately the following relationship between spinning potential yarn number and staple length:

<u>Type of cotton and staple length group</u>	<u>Average spinning potential Yarn number</u>
American upland:	
Short staple	41.3
Medium staple	58.8
Long staple	73.9

Data source - 1097 American upland lots tested from crops of 1961-62.

Chemical Finishing Tests

Information with respect to the bleaching and dyeing properties of different varieties and growths of cotton is of particular significance to textile manufacturers from the standpoint of providing a basis for avoiding problems that may result from blending different varieties and growths having different dyeing properties. Data with respect to the chemical finishing properties of the principal varieties and growths of cotton as herein reported may thus be used as a basis for selecting cottons of similar finishing properties. Details of the chemical finishing tests are described in Agricultural Information Bulletin No. 167 - Bleaching, Dyeing, and Mercerizing Test Results on Some Varieties of Cotton Grown by Selected Cotton Improvement Groups, Crop of 1955.

Color measurements of cotton yarn samples were made on a Gardner Automatic Color Difference Meter. These values are reported in terms of R_d and b , two of the three scales on the instrument. The R_d scale measures percentages of diffuse reflectance from 0 to 100. The b scale provides a measure of yellowness in the direction of $+b$ and of blueness in the direction of $-b$. The degree of either yellowness or blueness increases as the scale numbers increase. These data when plotted with R_d on the vertical ordinate and with b on the horizontal ordinate are similar to the color values for raw cotton when plotted in relation to the official grade standards as described in the earlier section on color of raw stock.

While the color factors R_d and b are not independent of each other and should be considered together in any overall interpretation, for many purposes it would be convenient in evaluating results to have them in terms of a single number. For raw cotton the grade index provides one way to do this in a straight forward manner. A similar method has been followed in developing conversion formulae and diagrams for each form of cotton measured for color as a part of the chemical finishing studies of the Cotton Division. In each, the index for Middling is held at 100 and that for Good Ordinary is held close to 70. By use of such indices the color measurements of raw stock, gray yarns, bleached yarns, and bleached and dyed yarns may be converted to

a single number specification. For details see "Grade and Color Indexes Developed for Evaluating Results of USDA Cotton Finishing Tests", (AMS-245, June 1958).

Luster measurements of cotton yarn samples were made by means of Hunter-lab Cotton Lustermeter. Luster is measured as contrast gloss expressed as a ratio of the specular reflectance to the diffuse reflectance of a sample. The results are expressed on a percentage scale, with high luster at 100 percent and zero luster (matte surface) at 0 percent. The scale of this instrument reads directly in terms of $1-(D/S)$ which, when multiplied by 100, provides a scale in which 100 percent equals high gloss and 0 equals zero gloss. On this scale gray yarns measure approximately 30 to 40 percent and mercerized yarns generally range from 40 to 50 percent luster. Luster is reported only for those yarns that were mercerized (50s combed). A comparison of the before and after luster data indicates the relative degree of improvement caused by mercerization.

The following adjective descriptions of luster values will serve as an aid in the interpretation of the luster results reported:

Relative percentage of luster of 50s combed yarn

<u>Gray</u>	<u>Mercerized</u>	<u>Adjective description</u>
Below 33	Below 40	Low
33-34	40-44	Average
Above 34	Above 44	High