## UNIVERSITY OF MISSOURI-COLUMBIA COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATION ELMER R. KIEHL, DIRECTOR

## Estimates of Performance of Cotton Varieties in Southeast Missouri 1971-75

W. P. SAPPENFIELD, L. E. TREECE, J. N. WARD, R. D. HORROCKS



(Publication authorized September, 1976

COLUMBIA, MISSOURI

#### CONTENTS

Introduction
Materials and Methods
Agronomic Characteristics
Disease Reactions
Boll and Ginning Properties
Fiber and Spinning Quality Determinations
Statistical Interpretation of Data for Significance
Methods, Cultural Practices and Test Conditions
Results and Discussion
Performance Data: Six Locations in Southeast Missouri16-49

#### ACKNOWLEDGEMENT

Fiber and Spinning quality measurements were obtained in cooperation with the USDA, ARS, Southern Region Cotton Quality Laboratory, directed by H. H. Ramey and associates. Computer analyses of data were possible utilizing special program construction by Jack Naylor, formerly senior computer programmer, University of Missouri Computer Services Center. Grateful acknowledgement is extended to Doris Adams, senior secretary, Thelma Harmon, laboratory assistant and Wayne Brooks, greenhouse attendant. This bulletin is a partial report on the University of Missouri-Columbia and Missouri Agricultural Experiment Station, Department of Agronomy Project 3730, "Cotton Improvement." The testing and evaluation of cotton varieties were supported, in part, by the Missouri Seed Improvement Association.

## Estimates of Performance of Cotton Varieties

### in

# Southeast Missouri

1971-75

W. P. Sappenfield, L. E. Treece, J. N. Ward and R. D. Horrocks<sup>1</sup>

#### INTRODUCTION

Estimates of the comparative varietal performance can be gained from reliable varietal trials. Estimates are most valid when derived from trials conducted during several seasons at locations representing production environmental variables within the region. Limited tests for only one year may yield unreliable information and exceptions may be experienced even with long-term trials since it is not possible to test under all conditions.

During 1971-75, climatic variables, within and among seasons, were extreme, often modifying or exaggerating varietal response to the already diversified soil and disease conditions at the test sites. However, the Fusarium Wilt-root knot disease severity at the sandy soil locations usually was light. Varietal responses, therefore, may not reflect the true inherent resistant potentials to this disease that exist among the varieties tested.

Variety test results serve as guides to cotton growers for the selection of varieties best adapted to their particular farms. Test results also assist breeders in evaluating performance of new varieties and determinating successful breeding methods, materials and characteristics needed to extend varietal adaptation to meet the constant pressures of nature, producers, textile manufacturers, and the consuming public.

Performance and lint quality results reported herein are for general commercial varieties grown on (1) sandy loam, wilt-free, usually non-irrigated soil, (2) a sandy loam, wilt-free, non-irrigated soil, planted May 20 to secure varietal responses following late plantings, (3) sandy loam, *Verticillium* Spp. infested, usually non-irrigated soil, (4) clay soil, wilt-free, and usually non-irrigated, and (5) sandy, non-irrigated soil lightly infested with *Fusarium* Spp. Root-knot nematodes. The several conditions represented tests conducted at Portageville, Clarkton, Malden, and Sikeston.

<sup>&</sup>lt;sup>1</sup>Professor, Research Technician, Research Technician and Associate Professor, respectively, Department of Agronomy University of Missouri-Columbia.

#### MATERIALS AND METHODS

Seven varieties were common to all general variety trials at all locations 1971-75. Additional varieties and new strains were included but varied from year to year.

- 1. Stoneville 213
- 2. Stoneville 7A
- 3. Coker 310
- 4. Deltapine 16
- 5. Brycot 4
- 6. Auburn M
- 7. Delcot 277

Performance estimates are given for seven varieties at most locations and tests over the 3-year period, 1973-75. No trials were harvested on clay soil during 1973-74; therefore, data for 1971-72 and 1975 were averaged.

Agronomic characteristics, boll, ginning, fiber and spinning properties and statistical interpretation of data are defined. Methods, cultural practices and conditions at the various sites during testing are given in Tables 1-4.

#### Agronomic Characteristics

- 1. Seed Cotton Yield is reported in pounds per acre.
- 2. Total Lint Yield is expressed in pounds per acre.
- 3. Lint Yield, First Pick is reported in pounds per acre of lint produced by time of first picking, a good measure of early maturity.
- 4. Stand is the average number of hills per plot for each variety for all replications after uniform thinning to three plants per hill, when possible. Hill spacings were on 10-12 centers for all tests.
- 5. Days to First Flower is the average number of days from planting to first flower.
- 6. Seedling Vigor Index is an average visual rating of vigorousness from seedling to first flower.
  - 4 = excellent
  - 3 = good
  - 2 = fair
  - l = poor
- 7. Height Index is an average visual rating of height made just prior to harvest.
  - 3 = approximately 60 inches
  - 2 = approximately 40 inches
  - 1 = approximately 20 inches

- 8. Lodging Index is an average visual rating made prior to harvest.
  - 4 = plants upright and rigid
  - 3 = plants showing slight arch
  - 2 = plants showing moderate arch
  - 1 = plants showing moderate arch and some root lodging
  - 0 = plants showing severe root lodging and semi-prostrate position.
- 9. Storm Resistance Index is an average visual estimate of the degree of bur retention of locks.
  - 4 = excessive storm resistance, tight bolls or tight locks
  - 3 = bolls fluffed, little stringing-out of locks
  - 2 = bolls fluffed, moderate stringing-out of locks
  - 1 = "pan-cake" or flat open-bolls, with excessive stringing-out and some ground loss
- 10. 75% Maturity is a visual estimate, reported in days, from planting to 75% open bolls.

#### Disease Reactions

- 11. Verticillium Wilt, relative incidence was rated as follows:
  - 1 = zero-trace leaf symptoms
  - 2 = mild leaf symptoms
  - 3 = moderate leaf symptoms
  - 4 = severe leaf symptoms
  - 5 = very severe leaf symptoms
- 12. Fusarium Wilt is expressed as the average percent of plants dead or showing wilt symptoms by September 1 in all replications of only the Fusarium Wilt-Root Knot trials on sandy soils.
- 13. Bacterial Blight Relative Incidence is an average visual estimate of the incidence of leaf, stem and boll infection.
  - 1 = no infection
  - 2 = mild infection
  - 3 = moderate infection
  - 4 = severe infection
  - 5 = very severe infection

## **Boll and Ginning**

- 14. Seed Index is a measure of seed size, expressed as the gram weight of 100 seeds.
- 15. Seed Grade is an estimate of the amount and length of linters and ease of ginning. Standard grades ranged from 0 = naked seeds to 9 = seeds having dense, long tufted seed fuzz, and exhibiting slow ginning characteristics.

16. Lint Percent =

### Gram weight of ginned lint

Gram weight of seed cotton sample

17. Lint Index is the gram weight of the lint on 100 seed, calculated from means of:

## Percent Lint x Seed Index

#### Percent Seed

18. Boll Weight is the gram weight per boll of seed cotton.

## Fiber and Spinning Quality Determinations

- 19. 2.5% Span Length is the average length of fiber, in inches, of two determinations on the raw fiber sample using the Fibro-sample and Digital Fibrograph. Two and five-tenths percent of the fibers caught in the sample holder will extend this length or further, thereby approximating the Servo-Fibrograph Upper-Half-Mean (UHM) and the Classer's Staple.
- 20. 50% Span Length is the average length of fiber, in inches, of two determinations on the raw fiber sample using the Fibro-sample and Digital Fibrograph. Fifty percent of the fibers caught in the sample holder will extend this length or further.
- 21. Length Uniformity Index is determined by:

## 50% Span Length x 100

## 2.5% Span Length

Values obtained usually range between 33 and 48 for cotton. High values indicate high uniformity of fiber length.

- 22. Micronaire is a measure of fiber fineness or coarseness.
  - 4.9 and above = coarse
  - 3.5 to 4.8 = premium range
  - 3.4 and below = fine and often immature
- 23. Colorimeter Rd Values as measured by the colorimeter indicate the degree of brightness and are expressed in percent reflectance. Increasing values of Rd indicate increasing brightness of sample. Colorimeter values may be useful as indicators of weathering and fiber deterioration.
- 24. Colorimeter b Values as measured by the colorimeter indicate the degree of yellowness and increasing values of b indicate increasing yellowness of fiber.
- 25. Trash as estimated on a scale: (1) low trash through (5) high trash content.
- 26. Yarn Tenacity is the strength of 27 tex yarn expressed as grams force per tex. The greater the value, the stronger the yarn.

# Statistical Interpretation of Data for Significance

All data were analyzed statistically at the University of Missouri-Columbia Computer Research Center via the Delta Center terminal. All observations were analyzed using the randomized block analysis of variance method.

The Duncan's Multiple Range Test of Significance for .05 probability for variety mean values is given. Means or values followed by the same letter are not significantly different. Means or values not followed by the same letter are significantly different.

MiLSR (.05) = Minimum least significant range for Duncan's Multiple Range Test (.05) probability.

MaLSR (.05) = Maximum least significant range for Duncan's Multiple Range Test (.05) probability.

C. V. % = Coefficient of variation.

Table 1. Methods, Cultural Practices and Conditions of Cotton Variety Trials in Southeast Missouri, 1975.

			Location a	nd Most	*************	
I management of the second of	Sandy Loam Wilt-free	Sandy Loam Verticillium Wilt	Clay Wilt-free	Fine Sand Fusarium Wilt- Root-Knot	Sandy Loam Wilt-free Late Planted	Sandy Loam Wilt-free
Conditions	Portageville		Portageville	Malden	Portageville	Sikeston
Soil Texture	Sandy loam	Sandy loam	Clay	Sand	Sandy loam	Sandy loam
Fusarium Wilt- Root-Knot	None	None	None	Light	None	None
Verticillium Wilt	None	Severe	None	None	None	None
Bacterial Blight	Mod-severe	Mod-severe	Light-med	Light	Light	Light
Cercospora-Alternaria Leaf Spot	Light	Light	Light	Moderate	Light	Light
/Plot Design	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS
Replications Yield, Stand, Disease	5	5	5	5	5	5
Replications-Others	2	2	2	2	2	2
/Plot Size	2 rows x 50'	4 rows x 50'	4 rows x 50'	4 rows x 50'	2 rows x 50'	4 rows x 50
/Date Planted	5/8	5/9	5/16	5/5	5/20	5/10
/Fertilizer	50+26+84	50+26+84	100+26+84	50+50+50	50+26+84	45+60+108
/Weed Control	Tref	lan + Cotoran	+ Wide Sweeps	(Middles) + (MS	MA + Karmex) L	ау-Ву
Irrigations	0	0	0	0	0	0
Insecticide Applied			Recommend	ed		
Defoliant Applied	9/29	9/29	10/20	9/11 & 30	10/13	9/11 & 30
/Seed Cotton Samples	Machine	Machine	Machine	Machine	Machine	Machine
Harvesting Date 1st Pick Date 2nd Pick	10/21 11/12	10/20 11/22	11/17	10/15 10/30	11/15	10/31

#### Table 1 continued

- 1/ BLS = Balanced lattice square.
- 2/ Middle two rows were harvested from 4-row plots.
- 3/ Acid-delinted, fungicide treated seed of all varieties obtained directly for respective originating breeders, were hill-dropped (12-14" centers) using a 4-row V-belt planter. In-furrow treatment with Terraclor Super X granules (12 lbs/acre) was applied at planting.
- 4/50+26+84, 50+50+50 or 45+60+108 applied broadcast preplant; additional fertilizers, especially nitrogen, was sometimes applied as a sidedress prior to July 1.
- 5/ Machine picked samples were collected as random "grab" samples taken from the total plot yield in two replications for each variety at first picking. Hand picked 25-boll samples were collected from two replications of the sandy loam wilt-free trials for seed and boll characteristics.
- 6/ Botton defoliation, 1st date; full defoliation, 2nd date.
- 7/ All tests except: Portageville clay: Cotoran + cultivation Sikeston: Treflan + Cotoran + mechanical cultivation.

Table 2. Methods, Cultural Practices and Conditions of Cotton Variety Trials in Southeast Missouri, 1974.

			Location and Tes		
	Sandy Loam Wilt-free	Sandy Loam Verticillium Wilt	Fine Sand Fusarium Wilt- Root-Knot	Sandy Loam Wilt-free Late Planted	Sandy Loam Wilt-free
Condition	Portageville	Portageville	Malden	Portageville	Sikeston1/
Soil Texture	Sandy loam	Sandy loam	Sand	Sandy loam	Sandy loam
Fusarium Wilt- Root-Knot	None	None	Mod-severe	None	None
Vertıcillium Wilt	Trace	Severe	None	Trace	None
Bacterial Blight	Trace	Trace	Trace	Trace	Trace
Cercospora-Alternaria Leaf Spot	Trace	Trace	Light-mod	Trace	Trace
Plot Design	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS
Replications Yield, Stand, Disease	5	5	5	5	5
Replications-Others	2	2	2	2	2
Plot Size	2 rows x 50'	4 rows x 50'	4 rows x 50'	2 rows x 50'	4 rows x 50'
Date Planted	5/8	5/7	5/9	5/30	5/13
Fertilizer	50+26+84	50+26+84	50+26+84	50+26+84	24+72+144
Weed Control		-Treflan + Cotor	an + MSMA-Karmex-		
Irrigations	None	7/9 & 8/8	None	None	7/10 & 7/17
Insecticide Applied			Recommended		
Defoliant Applied	Bottom 10/1	Bottom 10/2	None (frost)	None (Frost)	Bottom 9/12 Overall 10/14
Seed Cotton Samples	Machine	Machine	Machine	Machine	Machine
Harvesting lst Pick 2nd Pick	Machine 10/18 11/8	Machine 10/18 11/8	Machine 10/28 One only	Machine 11/26 One only	Machine 10/25 11/26

 $<sup>\</sup>frac{1}{2}$  2-4D injury 7/5 (moderate to severe leaf abnormalities with middle crop injury).

Table 3. Methods, Cultural Practices and Conditions of Cotton Variety Trials in Southeast Missouri, 1973.

	*	Test of	Location		·····
Conditions	Sandy Loam Wilt-free Portageville	Sandy Loam Verticillium Wilt Portageville	Fine Sand Fusarium Wilt- Root-Knot Malden	Sandy Loam Wilt-free Late Planted Portageville	Sandy Loam Wilt-free Sikeston
Soil Texture	Sandy loam	Sandy loam	Sand	Sandy loam	Sandy loam
Fusarium Wilt-Root Knot	None	None	Moderate	None	None
Verticillium Wilt	Trace	Severe	None	Trace	None
Bacterial Blight	Severe	Severe	Mod-early	Severe	Mod-early
Cercospora-Alternaria Leaf Spot	Light	Light	Mod-severe	Light	Moderate
Plot Design	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS	4x4 BLS
Replications (yield-stand-disease)	5	5	5	5	5
Replications (others)	2	2	2	2	2
Plot Size	2 rows x 50'	4 rows x 50'	4 rows x 50'	2 rows x 50'	4 rows x 50'
Date Planted	5/14	5/15	5/8	5/29	5/10
Fertilizer	50+50+75	50+50+75	80+50+100	50+50+75	18+54+108
Weed Control	Treflan+wide	sweep cultivati	on of middles+MS	SMA at Portage	ville only
Irrigations	0	0	0	0	1
Insecticide Applied			Recommended		
Defoliant Applied	10/1;10/18	10/10	9/25	10/18	9/25
Seed Cotton Samples	Machine	Machine	Machine	Machine	Machine
Harvesting	Machine	Machine	Machine	Machine	Machine
Date 1st Pick	10/25	10/25	10/2	10/25	10/1
Date 2nd Pick	12/3	12/6	11/7	12/3	11/7

Table 4. Methods, Cultural Practices and Conditions of Cotton Variety Trials Grown on Clay Soil in Southeast Missouri, 1971 and 1972.

	Test or Location			
Condition	1971 Clay Wilt-free Portageville	1972 Clay Wilt-free Portageville		
Soil Texture	Clay (gumbo)	Clay (gumbo)		
Fusarium Wilt-Roct Knot	None	None		
Verticillium Wilt	Trace	None		
Bacterial Blight	Moderate	Moderate		
Cercospora-Alternaria Leaf Spot	Light	Light		
Plot Design	4x4 BLS	4x4 BLS		
Replications (yield-stand-disease)	5	5		
Replications (others)	2	2		
Plot Size	4 rows x 50'	4 rows x 50'		
Date Planted	4/30	5/6		
Fertilizer	80+50+50	100+50+100		
Weed Control	Cotoran+MSMA-Karmex	Cotoran+MSMA-Karme:		
Irrigations	None	1 (6/8)		
Insecticide Applied	Recommended	Recommended		
Defoliant Applied	9/29	10/9		
Seed Cotton Samples	Machine	Machine		
Harvesting	Machine	Machine		
Date 1st Pick	10/12	10/13		
Date 2nd Pick	11/5			

#### RESULTS AND DISCUSSION

Tests of performance of cotton varieties under varied conditions help producers to choose varieties best suited to their fields and conditions. Following are brief characterizations for each of the varieties evaluated for the period 1971-75. Most descriptions were based upon performance during the 3-year period. For more detailed information pertaining to a specific response or trait refer to data in Tables 5-18.

Early maturing varieties generally were among the top producers during this test period. Adversities during the very short seasons of 1974-75, usually ending with cool rainy weather and early frosts generally were not favorable to full-season varieties. In many respects, the results obtained at the various sites during this test period were not greatly different from those reported for these varieties, 1970-73.<sup>2</sup>

**Delcot** 277 is an early to medium-early maturing variety and has produced good lint yields under a rather wide range of conditions. It has been one of the highest yielding and earliest maturing varieties during 1971-75, at six tests sites representing diverse soil and disease conditions.

Combining lint yields for the six tests, Delcot 277 produced the highest total and first-pick lint yields of the seven varieties. Leading the test on sandy loam wilt-free soil, its lint yield were slightly greater than those for Stoneville 213 and it matured earlier as indicated by its superior first-pick lint yield. In plantings made after May 20, Delcot 277 was statistically equal to the top producers, Deltapine 16, Auburn M and Coker 310.

On Verticillium wilt infested soil Delcot 277, although producing the highest and earliest lint yields, was statistically equalled by Stoneville 7A. On clay soils, all varieties were statistically equal for the test period, 1971-1972, and 1975. Similar results were noted at Malden on sandy soil where droughty soil conditions frequently prevailed and the light incidence of Fusarium wilt and root-knot nematode disease did not clearly differentiate the inherent varietal resistance potentials to this disease. Delcot 277, however, was one of the highest producers. At Sikeston, the northern-most test site, Delcot 277 and Auburn M were the highest yielding and earliest maturing varieties grown.

Delcot 277's habit of growth varies from determinate to indeterminate with time of planting and cultural management. Storm resistance is adequate and high "off-ground" fruiting permits efficient spindle-type machine harvesting. Some lodging of plants may occur with a heavy crop of bolls but plants usually become erect as bolls mature. The variety appears best adapted to sandy loam, loam and silt loam soils. In some seasons in the extreme North Delta it may mature later than usual on heavy clay soils. Delcot 277 bolls often are larger than those for other varieties. It possesses excellent tolerance to Verticillium and Fusarium wilts. It is susceptible to bacterial blight and root-knot nematodes. However, the

<sup>&</sup>lt;sup>2</sup>Sappenfield, W. P., L. E. Treece, J. N. Ward and R. D. Horrocks, 1975. Estimates of Performance of Cotton Varieties in Southeast Missouri, 1970-73. Univ. of Mo.-Col., Dept. of Agron. and Agr. Exp. Sta. Res. Bull. 1011:1-62.

variety has produced good yields on sandy soils where root-knot nematode infestation was moderate.

Delcot 277 sometimes is sensitive to Cercospora-Alternaria leaf spot, associated with potash deficient and moisture-stressed soils. Substantial potash in the recommended fertilizer application will aid to offset disease damage and insure more complete fiber maturity and acceptable micronaire quality. Delcot 277 staple is usually longer than most varieties and fiber yarn strength is above average although raw fiber strength is about equal to the stronger mid-south varieties. Fiber fineness usually falls in the premium range but often the fiber is finer than most commercially-grown varieties. Delcot 277 represents an unusual combination of earliness, wilt resistance, productivity, and fiber quality.

Stoneville 213 produced superior yields at Portageville on sandy loam, wilt-free, non-irrigated soil. This likely accounts for the variety's popularity since most cotton in Southeast Missouri is grown on these better soils without irrigation. It appears to tolerate low soil moisture during fruiting and is slow to "cut out" under these conditions, which may account for its ability to produce acceptable lint yields during most years. Very short seasons during 1974-75, climaxed by early October frosts or cool weather during September, reduced its productivity. It produced well on clay soils and at Malden on sandy soils where the Fusarium wilt and root knot complex was light. (The variety is normally considered susceptible to this disease and to bacterial blight but slightly tolerant to Verticillium wilt.) In the late planted tests at Portageville and the test at Sikeston, Stoneville 213 produced comparatively low lint yields. The variety demonstrated acceptable lint properties.

Stoneville 7A produced its best comparative lint yields on sandy loam soil infested with Verticillium wilt. It was statistically equal to all varieties on clay soil and on sandy at Malden where wilt-nematode disease problems were very light. At other locations the variety was average to below average in productivity.

Lint percent was good and fiber length, micronaire, and yarn strength were acceptable. The variety generally is late maturing compared to Delcot 277 and Auburn M although exceptions have been observed during some seasons. It is very susceptible to the Fusarium wilt root-knot disease but seems to carry some field tolerance to bacterial blight.

Auburn M was among the top producers and earliest maturing of the seven varieties evaluated, combining yields from the six tests. The very short seasons of 1974-75 favored the quick fruiting determinate plant type of Auburn M. It produced good yields in late plantings, yields statistically equal to all varieties on the clay soil, although it usually performs below average and often prematurely "cuts out" on heavy soils. It gave top yields at Malden on sandy soil and at Sikeston. It performed poorly, comparatively, at Portageville on sandy loam soil when planted in early May.

Auburn M is an early, determinate variety and high yields are most often obtained when it is planted 5 to 10 days later than for full-season varieties. It has

been an excellent "re-plant" variety following loss of earlier plantings or where supplemental irrigation is practiced. Extra-early plantings grown without supplemental irrigation, if needed, may result in early "cut out" and plants may show weak stalked tendencies. Auburn M is very resistant to the Fusarium wilt-root knot disease found on sandy soils. It has not performed well where Verticillium wilt and bacterial blight are severe. Fiber and spinning qualities are acceptable and micronaire values for fiber fineness usually fall in the premium range.

Brycot 4 During this test period, 1971-74, Brycot 4 produced average lint yields at Portageville on sandy loam, non-wilt, non-irrigated soil in normal plantings. In late plantings it was inferior. It produced poorly on soils infested with Verticillium wilt. Its yields were statistically comparable to those for all varieties on clay and sandy soils and below average lint yields at Sikeston. Its over-all performance, combining the six tests, ranked among the lowest producing and latest maturing varieties. The variety usually expressed potential susceptibility to the Fusarium wilt-root knot disease but showed some field tolerance to bacterial blight. This variety does not appear generally adapted to the Southeast Missouri cotton area. Lint percent and fiber quality characteristics are acceptable.

Deltapine 16 was among the highest producers in the late-planted, wilt-free, non-irrigated sandy loam test but produced only average yields at the same site where the test was planted in early May. Total lint yields for all varieties grown in the early planted test, however, average 263 pounds per acre more than those for the late-planted tests. The variety produced average yields on sandy loam soil infested with Verticillium wilt. Its performance was equivalent to all varieties on clay soil, but was below average on sand at Malden and Sikeston. Its overall performance, combining the data obtained for the six tests, was only average among the varieties evaluated. The fiber length, micronaire and yarn strength character combination of Deltapine 16 suggested a desirable fiber for wide range and usage. The variety possesses semi-smooth leaves and, therefore, the ginned lint is more free of trash.

Coker 310 was one of the highest yielding varieties grown during 1971-75, combining the six locations. Although indeterminate, the variety matures rapidly most years, but during 1973-75 its performance was more typical of mid-south varieties while during 1970-73 it demonstrated earlier maturity than most mid-south varieties. It exhibited the highest percent lint and had longer than average fiber in the premium micronaire range and yarn strength second only to Delcot 277. Good to average yields were obtained on most soil types but its visible susceptibility to Verticillium wilt was reflected in the reduced yields. It is very susceptible to bacterial blight. It was slightly below average in performance on sandy loam, wilt-free soil at Portageville, a slight reversal of its performance during 1970-73. Its "field tolerance" to the Fusarium wilt-root knot disease proved adequate for producing acceptable yields on sandy soils only moderately to lightly infested with the disease complex.

Table 5 Summary of Performance of Seven Cotton Varieties Grown in Southeast Missouri Combining Six Locations, 1971-75.

Variety or Strain	Lint Yield Total Lbs/Acre	lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length 2.5% SL	Micronaire	Yarn Tenacity (27 Tex)
Delcot 277 Auburn M Coker 310 Deltapine 16 Stoneville 7A Stoneville 213 Brycot 4	696.22 a 664.43 b 645.26 bc 633.39 cd 623.54 cd 617.74 cd 603.26 d	621.21 610.38 549.03 535.89 527.59 522.13 506.22	89 92 85 85 85 85	37.70 35.27 38.21 37.06 36.69 36.67 36.08	1.20 1.11 1.21 1.16 1.14 1.13	3.84 4.02 4.17 4.21 4.19 4.28 4.22	11.74 10.11 11.19 10.84 10.32 10.54 10.60
Mean	640.55	553.21	86	36.81	1.16	4.13	10.77
MiLSR (.05) MaLSR (.05)	29•25 33•69	27.42 31.57		•37 •42	.009 .01	.06 .07	.16 .18
C. V. %	15.64	16.97		2.15	1.69	3.39	3.19

FOOTNOTE: Heavy Clay Soil, Portageville, 1971, 1972, 1975. Remaining locations, 1973-75.

Table 6 Performance and Characteristics of Seven Cotton Varieties Grown in Southeast Missouri Combining Six Locations, 1971-75.

Variety	Seed Cotton-Lbs/Acre
Auburn M	1876.47 a
Delcot 277	1837.34 a
Deltapine 16	1697.49 b
Coker 310	1674.87 b
Stoneville 213	1671.81 b
Stoneville 7A	1671.66 b
Brycot 4	1650.72 b

Variety	Total Lint-Lbs/Acre
Delcot 277	696.22 a
Auburn M	664.43 b
Coker 310	645.26 bc
Deltapine 16	633.39 cd
Stoneville 7A	623.54 cd
Stoneville 213	617.74 cd
Brycot 4	603.26 d

Variety	Lint-Lbs/Acre lst Pick
Delcot 277	621.21 a
Auburn M	610.38 a
Coker 310	549.03 b
Deltapine 16	535.89 bc
Stoneville 7A	527.59 bc
Stoneville 213	522.13 bc
Brycot 4	506.22 c

Variety	Stand-hills/Plot
Stoneville 7A	106.22 a
Brycot 4	106.00 a
Deltapine 16	105.88 ab
Stoneville 213	105.83 ab
Coker 310	104.68 bc
Auburn M	104.49 c
Delcot 277	103.56 c

Variety	lst Flower-days
Stoneville 7A	66.63 a
Stoneville 213	66.29 ab
Delcot 277	66.27 ab
Brycot 4	65.96 b
Deltapine 16	65.28 c
Coker 310	63.31 d
Auburn M	63.13 d

Variety	Verticillium Wilt Rating
Auburn M	3.18 a
Coker 310	2.79 b
Brycot 4	2.29 c
Stoneville 213	2.18 c
Stoneville 7A	2.14 c
Deltapine 16	2.07 c
Delcot 277	1.60 d

<sup>1/</sup>F or Verticillium Wilt Test only.

Table 6 continued

Variety	Fusarium Wilt % 1/
Stoneville 213	25.60 a
Stoneville 7A	23.40 a
Coker 310	20.60 ab
Brycot 4	16.40 ab
Delcot 277	11.90 ab
Deltapine 16	11.70 ab
Auburn M	6.00 b

Variety	Seedling Vigor Index
Stoneville 7A	3.76 a
Brycot 4	3.67 ab
Stoneville 213	3.67 ab
Deltapine 16	3.60 bc
Coker 310	3.59 bc
Delcot 277	3.50 c
Auburn M	3.49 c

Variety	Lodging Index
Coker 310 Stoneville 213	3.26 a 3.18 ab
Deltapine 16	3.12 bc
Stoneville 7A	3.06 c
Brycot 4	3.03 c
Delcot 277	2.87 d
Auburn M	2.70 e

 $<sup>\</sup>frac{1}{F}$  or Sandy Soil Tests only, 1973-74.

Variety	Bacterial Blight Incidence
Auburn M	2.42 a
Coker 310	2.02 b
Delcot 277	1.87 c
Deltapine 16	1.61 d
Stoneville 213	1.56 d
Brycot 4	1.51 d
Stoneville 7A	1.47 d

Variety	Height	Index
Coker 310	2.56	а
Brycot 4	2.47	
Stoneville 213	2.44	
Deltapine 16	2.38	bc
Stoneville 7A	2.37	bc
Delcot 277	2.29	С
Auburn M	1.93	d

Variety	Storm Resistance Index
Delcot 277	3.09 a
Coker 310	3.07 ab
Deltapine 16	3.06 ab
Stoneville 213	3.01 ab
Stoneville 7A	2.95 b
Brycot 4	2.81 c
Auburn M	2.78 c

<sup>2/</sup> Bacterial blight data excluded for sandy soil location, 1975.

Table 6 continued

Variety	75% Maturity
Coker 310	155.50 a
Deltapine 16	154.08 ab
Brycot 4	153.65 bc
Stoneville 7A	153.23 bc
Stoneville 213	152.15 cd
Delcot 277	151.92 cd
Auburn M	150.63 d

Variety	Seed Index	
Auburn M	13.23 a	
Delcot 277	12.97 a	
Stoneville 7A	11.97 b	
Stoneville 213	11.90 b	
Brycot 4	11.73 b	
Deltapine 16	11.63 b	
Coker 310	11.63 b	

Variety	Seed Grade	
Coker 310	7.67 a	
Stoneville 7A	7.67 a	
Stoneville 213	7.67 a	
Delcot 277	7.67 a	
Brycot 4	7.33 ab	
Auburn M	7.33 ab	
Deltapine 16	7.00 b	

Variety	Lint Percent
Coker 310	38.21 a
Delcot 277	37.70 b
Deltapine 16	37.06 c
Stoneville 7A	36.69 d
Stoneville 213	36.67 d
Brycot 4	36.08 e
Auburn M	35.27 f

Variety	Boll Weight	
Delcot 277 Auburn M Deltapine 16	7.35 a 7.18 a 6.45 b	
Brycot 4 Coker 310 Stoneville 7A	6.45 b 6.43 b 6.27 b	
Stoneville 213	6.25 b	

Variety	50% Span Length	
Delcot 277	0.52 a	
Coker 310	0.51 b	
Deltapine 16	0.50 c	
Brycot 4	0.49 d	
Stoneville 7A	0.49 d	
Stoneville 213	0.49 d	
Auburn M	0.48 e	

Table 6 continued

Variety	2.5% Span Length
Coker 310	1.21 a
Delcot 277	1.20 b
Deltapine 16	1.16 c
Brycot 4	1.14 d
Stoneville 7A	1.14 d
Stoneville 213	1.13 e
Auburn M	1.11 f

Variety	Micronaire		
Stoneville 213 Brycot 4 Deltapine 16 Stoneville 7A Coker 310 Auburn M Delcot 277	4.28 a 4.22 ab 4.21 b 4.19 b 4.17 b 4.02 c 3.84 d		

Variety	Colorimeter b	
Delcot 277	8.20 a	
Coker 310	7.97 b	
Stoneville 213	7.94 b	
Brycot 4	7.81 bc	
Auburn M	7.77 c	
Deltapine 16	7.74 c	
Stoneville 7A	7.69 c	

Variety	Yarn Tenacity (27 Tex)
Delcot 277	11.74 a
Coker 310	11.19 b
Deltapine 16	10.84 c
Brycot 4	10.60 d
Stoneville 213	10.54 d
Stoneville 7A	10.32 e
Auburn M	10.11 f

Variety	Length Uniformity Index
Stoneville 213	43.28 a
Delcot 277	43.14 a
Deltapine 16	42.86 ab
Brycot 4	42.81 ab
Auburn M	42.50 bc
Stoneville 7A	42.39 bc
Coker 310	42.19 c

Variety	Colorimeter Rd
Deltapine 16	71.36 a
Auburn M	70.67 b
Stoneville 213	69.81 c
Stoneville 7A	69.81 c
Brycot 4	69 <b>.</b> 56 c
Coker 310	69.17 c
Delcot 277	69.11 c

Variety	Trash Index
Stoneville 213	3.56 a
Coker 310	3.50 a
Delcot 277	3.50 a
Brycot 4	3.47 a
Stoneville 7A	3.44 a
Auburn M	3.31 ab
Deltapine 16	3.14 b

Table 7 Summary of Performance of Seven Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1973-75, Portageville.

Variety or Strain	Lint Yield Total Lbs/Acre	lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length		Yarn Tenacity
	225/11010	HUS/ ACTE	OTOP	rercent	2.5% SL	Micronaire	(27 Tex)
Delcot 277 Stoneville 213 Brycot 4 Stoneville 7A Deltapine 16 Coker 310 Auburn M	930.64 a 890.75 ab 871.49 b 864.70 bc 860.58 bc 850.30 bc 823.89 c	786.48 708.53 696.70 662.86 685.14 632.59 737.50	85 80 80 77 80 74 90	38.12 36.92 36.73 36.35 37.53 38.67 35.65	1.20 1.13 1.13 1.15 1.17 1.19	3.87 4.33 4.33 4.27 4.30 4.32 4.12	11.83 10.32 10.47 10.23 10.68 11.10 9.85
Mean	870.34	701.40	81	37.14	1.15	4.22	10.64
MiLSR (.05) MaLSR (.05)	40.29 46.07	43.82 50.10		.90 1.02	•03 •03	.15 .17	.42 .47
C. V. %	6.32	8.52		2.00	1.98	2.98	3.22

Table 8 Performance and Characteristics of Seven Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1973-75, Portageville.

Variety	Seed Cotton-Lbs/Acre
Delcot 277	2436.65 a
Stoneville 213	2413.72 ab
Stoneville 7A	2379.79 abc
Brycot 4	2373.37 abc
Auburn M	2300.92 bcd
Deltapine 16	2290.83 cd
Coker 310	2189.95 d

Variety	Total Lint-Lbs/Acre
Delcot 277 Stoneville 213	930.64 a 890.75 ab
Brycot 4	871.49 b
Stoneville 7A	864.70 bc
Deltapine 16	860.58 bc
Coker 310	850.30 bc
Auburn M	823.89 c

Variety	Lint-Lbs/Acre 1st Pick
Delcot 277	786.48 a
Auburn M	737.50 b
Stoneville 213	708.53 bc
Brycot 4	696.70 bc
Deltapine 16	685 <b>.</b> 14 c
Stoneville 7A	662.86 cd
Coker 310	632.59 d

Variety	Stand-hills/Plot	
Deltapine 16	111.73 a	
Brycot 4	111.20 a	
Stoneville 213	111.00 a	
Coker 310	110.53 a	
Stoneville 7A	109.73 a	
Auburn M	108.73 ab	
Delcot 277	106.20 b	

Variety	lst Flower-days
Delcot 277	66.93 a
Stoneville 7A	66.73 a
Brycot 4	66.27 ab
Stoneville 213	66.27 ab
Deltapine 16	65.40 b
Coker 310	64.00 c
Auburn M	63.87 c

Variety	Bacterial Blight Incidence
Auburn M	2.87 a
Coker 310	2.27 b
Delcot 277	2.20 b
Stoneville 7A	1.80 c
Stoneville 213	1.80 c
Deltapine 16	1.60 c
Brycot 4	1.47 c

Table 8 continued

Variety	Seedling Vigor Index
Stoneville 7A	4.00 a
Stoneville 213	4.00 a
Brycot 4	3.93 a
Coker 310	3.73 ab
Deltapine 16	3.73 ab
Auburn M	3.73 ab
Delcot 277	3.53 b

Variety	Height	Index	_
Coker 310	3.07	a	
Deltapine 16	2.83	Ъ	
Stoneville 213	2.80	Ъ	
Stoneville 7A	2.73	Ъ	
Brycot 4	2.67	bc	
Delcot 277	2.47	С	
Auburn M	2.20	đ	

Variety	Lodging Index
Coker 310	3.07 a
Deltapine 16	3.00 a
Stoneville 213	2.93 ab
Brycot 4	2.67 bc
Stoneville 7A	2.67 bc
Delcot 277	2.40 c
Auburn M	2.40 c

Variety	Storm Resistance Index	
Stanguille 74	2.07.	
Stoneville 7A	3.27 a	
Coker 310	3.20 a	
Stoneville 213	3.20 a	
Deltapine 16	3.20 a	
Brycot 4	3.13 ab	
Delcot 277	3.13 ab	
Auburn M	2.87 b	

Variety	75% Maturity
Coker 310	161.33 a
Deltapine 16	158.80 ab
Delcot 277	158.00 b
Brycot 4	157.67 b
Stoneville 7A	157.67 b
Auburn M	157.20 b
Stoneville 213	156.40 b

Variety	Seed Index	
Auburn M	13.23 a	
Delcot 277	12.97 a	
Stoneville 7A	11.97 b	
Stoneville 213	11.90 b	
Brycot 4	11.73 b	
Deltapine 16	11.63 b	
Coker 310	11.63 b	

Table 8 continued

Variety	Seed Grade	
Coker 310	7.67 a	
Stoneville 7A	7.67 a	
Stoneville 213	7.67 a	
Delcot 277	7.67 a	
Brycot 4	7.33 ab	
Auburn M	7.33 ab	
Deltapine 16	7.00 b	

Variety	Lint Percent	
Coker 310 Delcot 277 Deltapine 16 Stoneville 213 Brycot 4 Stoneville 7A Auburn M	38.67 a 38.12 ab 37.53 bc 36.92 cd 36.73 cd 36.35 de 35.65 e	

Variety	Boll Weight	
Delcot 277	7.35 a	
Auburn M	7.18 a	
Deltapine 16	6.45 b	
Brycot 4	6.45 b	
Coker 310	6.43 b	
Stoneville 7A	6.27 b	
Stoneville 213	6.25 b	

Variety	50% Span Length	
Delcot 277	0.52 a	
Coker 310	0.50 ab	
Deltapine 16	0.50 ab	
Stoneville 213	0.50 ab	
Brycot 4	0.49 bc	
Stoneville 7A	0.49 bc	
Auburn M	0.47 c	

Variety	2.5% Span Length	
Delcot 277 Coker 310 Deltapine 16 Stoneville 7A Brycot 4	1.20 a 1.19 ab 1.17 bc 1.15 cd 1.13 d	

Variety	Length Uniformity	Index
Delcot 277	43.33 a	
Stoneville 21		
Brycot 4	42.67 a	
Deltapine 16	42.33 a	
Auburn M	42.00 a	
Stoneville 7A	41.83 a	
Coker 310	41.83 a	

Table 8 continued

Variety	Micronaire	Variety	Colorimeter Rd
Brycot 4 Stoneville 213 Coker 310 Deltapine 16 Stoneville 7A Auburn M Delcot 277	4.33 a 4.33 a 4.32 a 4.30 a 4.27 ab 4.12 b 3.87 c	Deltapine 16 Auburn M Stoneville 213 Brycot 4 Stoneville 7A Delcot 277 Coker 310	72.67 a 72.17 ab 71.33 bc 71.17 c 70.83 c 70.83 c 69.67 d

Variety	Colorimeter b	Variety	Trash Index
Delcot 277 Coker 310 Stoneville 7A Auburn M Stoneville 213 Brycot 4 Deltapine 16	8.15 a 7.80 b 7.73 bc 7.70 bc 7.68 bc 7.62 bc 7.52 c	Brycot 4 Stoneville 213 Coker 310 Delcot 277 Stoneville 7A Auburn M Deltapine 16	3.33 a 3.33 a 3.33 a 3.33 a 3.17 a 3.00 a 2.67 a

Variety	Yarn Tenacity (Tex)	
Delcot 277 Coker 310 Deltapine 16 Brycot 4 Stoneville 213 Stoneville 7A Auburn M	11.83 a 11.10 b 10.68 c 10.47 cd 10.32 cd 10.23 de 9.85 e	

Table 9 Summary of Performance of Seven Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1973-75, Portageville (Planted May 20 or later).

Variety or Strain	Lint Yield Total Lbs/Acre	lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length 2.5% SL	Micronaire	Yarn Tenacity (27 Tex)
Deltapine 16 Auburn M Coker 310 Delcot 277 Stoneville 213 Brycot 4 Stoneville 7A	659.65 a 648.18 a 635.07 ab 630.94 ab 589.03 bc 544.46 c 544.37 c	616.54 629.02 583.35 611.96 554.00 487.60 499.25	93 97 92 97 94 90 92	36.75 34.75 37.73 36.80 35.30 34.88 35.45	1.16 1.10 1.21 1.17 1.12 1.12	3.90 3.70 3.78 3.43 3.82 3.68 3.72	10.67 10.08 11.27 11.27 10.38 10.25 10.00
Mean	607.39	568.82	94	35.95	1.14	3.72	10.56
MiLSR (.05) MaLSR (.05)	46.22 52.84	47.91 54.78		.83 .94	.02 .02	.15 .17	.41 .47
C. V. %	10.38	11.49		1.91	1.16	3.34	3.23

Table 10 Performance and Characteristics of Seven Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1973-75, Portageville, (Planted May 20 or later)

Variety	Seed Cotton-Lbs/Acre	Variety	Total Lint-Lbs/Acre
Auburn M Deltapine 16 Delcot 277 Coker 310 Stoneville 213 Brycot 4 Stoneville 7A	1857.06 a 1764.44 ab 1682.82 b 1660.81 b 1625.96 bc 1497.57 cd 1452.63 d	Deltapine 16 Auburn M Coker 310 Delcot 277 Stoneville 213 Brycot 4 Stoneville 7A	659.65 a 648.18 a 635.07 ab 630.94 ab 589.03 bc 544.46 c 544.37 c

Variety	Lint-Lbs/Acre lst Pick
Auburn M	629.02 a
Deltapine 16	616.54 a
Delcot 277	611.96 a
Coker 310	583.35 ab
Stoneville 213	554.00 b
Stoneville 7A	499.25 c
Brycot 4	487.60 c

Stand-hills/Plot
98.00 a
96.67 ab
96.07 ab
95.67 abc
95.53 bc
94.73 bc
93.60 c

Variety	lst Flower-days
Stoneville 7A	60.93 a
Stoneville 213	60.73 a
Brycot 4	60.13 ab
Delcot 277	60.00 ab
Deltapine 16	59.00 b
Auburn M	57.40 c
Coker 310	57.27 c

Variety	Bacterial Blight Incidence
Auburn M	2.33 ن
Coker 310	2.27 ab
Delcot 277	1.87 bc
Brycot 4	1.73 c
Deltapine 16	1.67 c
Stoneville 213	1.53 c
Stoneville 7A	1.47 c

Table 10 continued

Variety	Seedling Vigor Index
Deltapine 16	3.93 a
Stoneville 213	3.93 a
Coker 310	3.87 a
Auburn M	3.87 a
Stoneville 7A	3.87 a
Brycot 4	3.80 a
Delcot 277	3.73 a

Variety	Lodging Index
220	3.00
Coker 310	3.20 a
Stoneville 213	3.20 a
Deltapine 16	3.07 a
Delcot 277	3.00 a
Stoneville 7A	2.93 a
Brycot 4	2.87 a
Auburn M	2.53 b

	1./
Variety	75% Maturity≐
Coker 310	156.30 a
Brycot 4	153.80 a
Stoneville 7A	153.70 a
Deltapine 16	152.20 ab
Stoneville 213	148.00 bc
Auburn M	147.20 c
Delcot 277	145.00 c

 $<sup>\</sup>frac{1}{1973-74}$  only.

Variety	Height Index
Brycot 4	2.90 a
Coker 310	2.90 a
Deltapine 16	2.73 a
Stoneville 7A	2.70 a
Stoneville 213	2.67 ab
Delcot 277	2.47 bc
Auburn M	2.33 c

Variety	Storm Resistance Index
Delcot 277	3.20 a
Stoneville 7A	3.10 ab
Brycot 4	3.00 ab
Coker 310	3.00 ab
Deltapine 16	3.00 ab
Stoneville 213	3.00 ab
Auburn M	2.90 b

Variety	Lint Percent
Coker 310 Delcot 277 Deltapine 16 Stoneville 7A Stoneville 213 Brycot 4 Auburn M	37.73 a 36.80 b 36.75 b 35.45 c 35.30 c 34.88 c

Table 10 continued

Variety	50% Span Length
Coker 310	0.50 a
Deltapine 16	0.49 a
Delcot 277	0.49 a
Brycot 4	0.47 b
Stoneville 7A	0.47 b
Stoneville 213	0.47 b
Auburn M	0.47 b

Variety	2.5% Span Length
Coker 310	1.21 a
Delcot 277	1.17 b
Deltapine 16	1.16 b
Brycot 4	1.12 c
Stoneville 7A	1.12 c
Stoneville 213	1.12 c
Auburn M	1.10 d

Variety	Length Uniformity Index
Auburn M	42.17 a
Deltapine 16	42.17 a
Stoneville 213	42.00 a
Delcot 277	42.00 a
Brycot 4	41.67 a
Stoneville 7A	41.33 a
Coker 310	41.33 a

Variety	Micronaire
Deltapine 16	3.90 a
Stoneville 213	3.82 ab
Coker 310	3.78 ab
Stoneville 7A	3.72 b
Auburn M	3.70 b
Brycot 4	3.68 b
Delcot 277	3.43 c

Variety	Colorimeter Rd
Auburn M	70.17 a
Deltapine 16	70.00 a
Stoneville 213	69.33 ab
Coker 310	68.83 abc
Stoneville 7A	68.00 bc
Brycot 4	67.67 bc
Delcot 277	67.17 c

Variety	Colorimeter b
Delcot 277 Stoneville 213 Deltapine 16 Auburn M Coker 310 Brycot 4 Stoneville 7A	8.33 a 7.85 b 7.83 b 7.75 be 7.58 be 7.50 be 7.42 c

Table 10 continued

Variety	Trash Index	
Delcot 277	3.83 a	
Brycot 4	3.67 a	
Stoneville 7A	3.67 a	
Auburn M	3.67 a	
Deltapine 16	3.50 a	
Stoneville 213	3.50 a	
Coker 310	3.50 a	

Variety	Yarn Tenacity (27 Tex)
Coker 310	11.27 a
Delcot 277	11.27 a
Deltapine 16	10.67 b
Stoneville 213	10.38 bc
Brycot 4	10.25 bc
Auburn M	10.08 c
Stoneville 7A	10.00 c

Table 11 Summary of Performance of Seven Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Non-irrigated Soil Infested with Verticillium Wilt Disease, 1973-75, Portageville.

Variety or Strain	Lint Yield Total Lbs/Acre	lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length 2.5% SL	Micronaire	Yarn Tenacity (27 Tex)
Delcot 277 Stoneville 7A Deltapine 16 Stoneville 213 Auburn M Coker 310 Brycot 4	860.21 a 803.72 ab 756.49 bc 750.16 bc 729.71 c 707.06 c 690.92 c	745.67 703.39 627.82 633.23 652.68 592.52 583.99	87 88 83 84 89 84	38.02 37.60 36.88 36.90 34.78 37.75 35.90	1.20 1.13 1.17 1.14 1.11 1.20 1.14	4.07 4.32 4.33 4.42 4.18 4.27 4.17	11.57 10.15 10.95 10.68 9.82 11.02 10.38
Mean	756.89	648.47	86	36.83	1.16	4.25	10.65
MiLSR (.05) MaLSR (.05)	66.86 76.44	70.03 80.07		.95 1.07	.02 .02	.15 .17	.42 .48
C. V. %	12.05	14.73		2.13	1.36	2.90	3.26

Table 12 Performance and Characteristics of Seven Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Non-irrigated Soil Infested with Verticillium Wilt Disease, 1973-75, Portageville.

Variety	Seed Cotton-Lbs/Acre	Variety	Total Lint-Lbs/Acre
Delcot 277 Stoneville 7A Auburn M Deltapine 16 Stoneville 213 Rrycot 4 Coker 310	2257.82 a 2133.10 ab 2095.50 abc 2041.39 bcd 2026.72 bcd 1916.67 cd 1868.06 d	Delcot 277 Stoneville 7A Deltapine 16 Stoneville 213 Auburn M Coker 310 Brycot 4	860.21 a 803.72 ab 756.49 bc 750.16 bc 729.71 c 707.06 c 690.92 c

Variety	Lint-Lbs/Acre lst Pick	Variety	Stand-hills/Plot
Delcot 277 Stoneville 7A Auburn M Stoneville 213 Deltapine 16 Coker 310 Brycot 4	745.67 a 703.39 ab 652.68 bc 633.23 bc 627.82 bc 592.52 c 583.99 c	Stoneville 7A Coker 310 Stoneville 213 Brycot 4 Deltapine 16 Auburn M Delcot 277	110.20 a 109.80 a 109.40 a 109.33 a 109.33 a 108.13 a 107.53 a

Variety	lst Flower-days	Variety	Verticillium Wilt-Rating
Stoneville 213 Delcot 277 Stoneville 7A Brycot 4 Deltapine 16 Coker 310 Auburn M	65.13 a 65.00 ab 64.93 ab 64.00 bc 63.00 cd 62.13 de 61.73 e	Auburn M Coker 310 Brycot 4 Stoneville 213 Stoneville 7A Deltapine 16 Delcot 277	3.18 a 2.79 b 2.29 c 2.18 c 2.14 c 2.07 c 1.60 d

Table 12 continued

Variety	Bacterial Blight Incidence	Variety	Seedling Vigor Index
Coker 310	2.47 a	Stoneville 7A	4.07 a
Auburn M	2.47 a	Brycot 4	3.93 ab
Stoneville 213	1.93 b	Stoneville 213	3.87 abc
Delcot 277	1.93 b	Delcot 277	3.80 abc
Brycot 4	1.87 b	Deltapine 16	3.73 bc
Deltapine 16	1.80 b	Coker 310	3.67 bc
Stoneville 7A	1.60 b	Auburn M	3.60 c

Variety	Height Index
Coker 310	2.47 a
Stoneville 213	2.37 ab
Brycot 4	2.37 ab
Deltapine 16	2.27 bc
Stoneville 7A	2.20 bc
Delcot 277	2.13 c
Auburn M	1.80 d

Variety	Lodging Index
Coker 310	3.00 a
Stoneville 213	2.93 ab
Stoneville 7A	2.73 ab
Brycot 4	2.67 b
Deltapine 16	2.67 b
Delcot 277	2.27 c
Auburn M	2.07 c

Variety	Storm Resistance Index
Delcot 277	3.07 a
Coker 310	3.00 a
Deltapine 16	3.00 a
Auburn M	3.00 a
Stoneville 7A	2.87 a
Stoneville 213	2.87 a
Brycot 4	2.87 a

Variety	75% Maturity
Coker 310	160.47 a
Deltapine 16	159.73 ab
Delcot 277	156.80 bc
Brycot 4	156.40 c
Stoneville 213	154.87 cd
Stoneville 7A	154.60 cd
Auburn M	152.93 d

Table 12 continued

Variety	Lint Percent	
Delcot 277	38.02 a	
Coker 310	37.75 ab	
Stoneville 7A	37.60 ab	
Stoneville 213	36.90 b	
Deltapine 16	36.88 b	
Brycot 4	35.90 c	
Auburn M	34.78 d	

Variety	50% Span Length
Deltapine 16	0.52 a
Delcot 277	0.52 a
Coker 310	0.51 ab
Stoneville 213	0.50 abc
Stoneville 7A	0.49 bc
Brycot 4	0.48 c
Auburn M	0.48 c

Variety	2.5% Span Length				
Coker 310	1.20 a				
Delcot 277	1.20 a				
Deltapine 16	1.17 b				
Brycot 4	1.14 c				
Stoneville 213	1.14 c				
Stoneville 7A	1.13 c				
Auburn M	1.11 d				

Variety	Length Uniformity Index
Deltapine 16 Delcot 277 Stoneville 213	43.83 a 43.67 a 43.50 a
Stoneville 7A	43.00 a 42.83 a
Auburn M Brycot 4	42.33 a
Coker 310	41.83 a

Variety	Micronaire				
Stoneville 213	4.42 a				
Deltapine 16	4.33 ab				
Stoneville 7A	4.32 ab				
Coker 310	4.27 ab				
Auburn M	4.18 bc				
Brycot 4	4.17 bc				
Delcot 277	4.07 c				

Variety	Colorimeter Rd				
Deltapine 16	72.83 a				
Stoneville 7A	72.17 ab				
Stoneville 213	71.50 bc				
Auburn M	71.17 bc				
Brycot 4	70.83 c				
Coker 310	70.50 cd				
Delcot 277	69.67 d				

Table 12 continued

Variety	Colorimeter b	Variety	Trash Index		
Delcot 277 Brycot 4 Coker 310 Stoneville 7A Deltapine 16 Auburn M Stoneville 213	7.85 a 7.63 a 7.60 a 7.53 a 7.53 a 7.53 a 7.52 a	Brycot 4 Stoneville 213 Auburn M Stoneville 7A Delcot 277 Coker 310 Deltapine 16	3.67 a 3.50 a 3.50 a 3.33 a 3.33 a 3.17 a 3.00 a		

Variety	Yarn Tenacity (27 Tex)				
Delcot 277	11.57 a				
Coker 310	11.02 b				
Deltapine 16	10.95 b				
Stoneville 213	10.68 bc				
Brycot 4	10.38 cd				
Stoneville 7A	10.15 de				
Auburn M	9.82 e				

Table 13 Summary of Performance of Seven Cotton Varieties Grown in Southeast Missouri on Heavy Clay, Wilt-free, Non-irrigated Soil, 1971-1972-1975, Portageville.

Variety or Strain	Lint Yie Total Lbs/Acre	ld lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length 2.5% SL	Micronaire	Yarn Tenacity (27 Tex)
Coker 310 Delcot 277 Deltapine 16 Brycot 4 Stoneville 213 Auburn M Stoneville 7A	540.98 a 537.31 a 522.82 a 496.32 a 490.08 a 484.12 a 483.29 a	505.67 500.26 470.73 431.66 427.63 459.54 412.13	93 93 90 87 87 95 85	38.50 38.07 37.53 36.63 37.80 35.30 37.83	1.22 1.19 1.16 1.14 1.13 1.12	4.28 3.98 4.28 4.40 4.48 4.08 4.53	11.47 12.20 10.93 11.02 10.73 10.97
Mean	507.84	458.23	90	37.38	1.16	4.29	11.12
MiLSR (.05) MaLSR (.05)	53.07 60.68	49.07 56.11		.89 1.00	.02 .02	.12 .14	•31 •36
c. v. %	14.26	14.61		1.95	1.47	2.36	2.33

Table 14 Performance and Characteristics of Seven Cotton Varieties Grown in Southeast Missouri on Heavy Clay, Wilt-free, Non-irrigated Soil, 1971-1972-1975, Portageville.

Variety	Seed Cotton-Lbs/Acre	Variety	Total Lint-Lbs/Acre
Coker 310	1406.78 a	Coker 310	540 <b>.</b> 98 a
Delcot 277	1405.86 a	Delcot 277	537.31 a
Deltapine 16	1393.94 a	Deltapine 16	522.82 a
Auburn M	1371.93 a	Brycot 4	496.32 a
Brycot 4	1345.34 a	Stoneville 213	490.08 a
Stoneville 213	1289.40 a	Auburn M	484.12 a
Stoneville 7A	1268.30 a	Stoneville 7A	483.29 a

Variety	Lint-Lbs/Acre 1st Pick
g .)	505 (5
Coker 310	505.67 a
Delcot 277	500.26 a
Deltapine 16	470.73 ab
Auburn M	459.54 abc
Brycot 4	431.66 bc
Stoneville 213	427.63 bc
Stoneville 7A	412.13 c

Variety	Stand-hills/Plot
Stoneville 7A	106.20 a
Brycot 4	105.13 a
Auburn M	104.80 a
Deltapine 16	104.80 a
Stoneville 213	104.27 a
Coker 310	102.93 a
Delcot 277	102.67 a

Variety	lst Flower-days
Delcot 277	71.07 a
Stoneville 7A	70.93 a
Brycot 4	70.53 ab
Deltapine 16	70.07 ab
Stoneville 213	69.47 b
Coker 310	66.40 c
Auburn M	66.13 c

Variety	Bacterial Blight Incidence
Auburn M	2.93 a
Delcot 277	2.13 b
Coker 310	1.87 bc
Deltapine 16	1.60 cd
Stoneville 213	1.60 cd
Brycot 4	1.47 cd
Stoneville 7A	1.33 d

Table 14 continued

Variety	Seedling Vigor Index
Stoneville 7A	3.47 a
Brycot 4	3.40 a
Stoneville 213	3.27 a
Coker 310	3.27 a
Delcot 277	3.20 a
Deltapine 16	3.13 a
Auburn M	3.13 a

Variety	Lodging Index
Brycot 4	3.00 a
Stoneville 7A	3.00 a
Coker 310	3.00 a
Stoneville 213	2.93 a
Deltapine 16	2.93 a
Delcot 277	2.67 b
Auburn M	2.27 c

Variety	75% Maturity <sup>1</sup>
Stoneville 7A	164 <b>.</b> 19 a
Brycot 4	163.41 a
Stoneville 213	162.21 a
Delcot 277	161.79 a
Deltapine 16	161.40 ab
Auburn M	158.61 bc
Coker 310	157.80 c

7/		
<u> -</u> /	1975	only.

Variety	Height Index
Stoneville 7A	2.27 a
Brycot 4	2.23 a
Coker 310	2.20 a
Stoneville 213	2.17 a
Deltapine 16	2.10 a
Delcot 277	2.07 a
Auburn M	1.63 b

Variety	Storm Resistance Index
Coker 310	3.07 a
Delcot 277	3.00 a
Stoneville 213	2.93 a
Deltapine 16	2.80 a
Stoneville 7A	2.67 ab
Brycot 4	2.33 b
Auburn M	2.33 b

Variety	Lint Percent
Coker 310	38.50 a
Delcot 277	38.07 a
Stoneville 7A	37.83 a
Stoneville 213	37.80 a
Deltapine 16	37.53 a
Brycot 4	36.63 b
Auburn M	35.30 c

Table 14 continued

Variety	50% Span Length	Variety	2.5% Span Length
Coker 310 Delcot 277 Brycot 4 Stoneville 7A Deltapine 16 Stoneville 213 Auburn M	0.53 a 0.52 ab 0.51 bc 0.50 c 0.50 c 0.50 c 0.48 d	Coker 310 Delcot 277 Deltapine 16 Brycot 4 Stoneville 7A Stoneville 213 Auburn M	1.22 a 1.19 b 1.16 c 1.14 cd 1.14 cd 1.13 d 1.12 d

Variety	Length Uniformity Index
Brycot 4	44.00 a
Stoneville 213	44.00 a
Delcot 277	43.83 ab
Stoneville 7A	43.33 ab
Deltapine 16	43.00 ab
Coker 310	42.83 ab
Auburn M	42.67 b

Variety	Micronaire
Stoneville 7A	4.53 a
Stoneville 213	4.48 ab
Brycot 4	4.40 bc
Coker 310	4.28 c
Deltapine 16	4.28 c
Auburn M	4.08 d
Delcot 277	3.98 d

Variety	Colorimeter Rd
Deltapine 16 Auburn M	70.83 a 69.83 ab 69.50 b
Stoneville 213 Brycot 4 Stoneville 7A	69.17 b 69.00 b
Coker 310 Delcot 277	69.00 b 68.83 b

Variety	Colorimeter b
Delcot 277	8.37 a
Coker 310	8.18 a
Stoneville 213	8.10 a
Brycot 4	8.02 a
Auburn M	7.95 a
Stoneville 7A	7.72 a
Deltapine 16	7.70 a

Variety.	Trash Index
Stoneville 213	3.67 a
Brycot 4	3.33 ab
Coker 310	3.33 ab
Stoneville 7A	3.17 abc
Delcot 277	3.17 abc
Auburn M	3.00 bc
Deltapine 16	2.67 c

Variety	Yarn Tenacity (27 Tex)
Delcot 277	12.20 a
Coker 310	11.47 b
Brycot 4	11.02 c
Auburn M	10.97 c
Deltapine 16	10.93 c
Stoneville 213	10.73 cd
Stoneville 7A	10.55 d

Table 15 Summary of Performance of Seven Cotton Varieties Grown in Southeast Missouri on Sandy, Non-irrigated Soil, 1973-75, Malden.

Variety or Strain	Lint Yield Total Lbs/Acre	lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length 2.5% SL	Micronaire	Yarn Tenacity (27 Tex)
Auburn M Delcot 277 Stoneville 213 Brycot 4 Coker 310 Stoneville 7A Deltapine 16	429.74 a 411.30 ab 384.89 ab 381.87 ab 368.39 ab 363.80 ab 349.13 b	383.52 361.69 326.84 331.24 320.97 312.63 297.40	89 88 86 86 87 86 85	35.73 38.62 37.12 36.90 39.07 37.12 37.47	1.09 1.17 1.12 1.12 1.19 1.12 1.15	3.92 3.83 4.30 4.38 4.12 4.13	9.90 11.63 10.43 10.62 11.38 10.30
Mean	384.16	333.47	87	37.43	1.14	4.12	10.73
MiLSR (.05) MaLSR (.05)	69.22 79.14	67.41 77.07		1.05 1.18	.03 .03	•21 •23	•37 •41
C. V. %	24.58	27.58		2.30	1.86	4.13	2.83

Table 16 Performance and Characteristics of Seven Cotton Varieties Grown in Southeast Missouri on Sandy, Non-irrigated Soil, 1973-75, Malden

Variety	Seed Cotton-Lbs/Acre
Auburn M	1190.35 a
Delcot 277	1061.05 ab
Stoneville 213	1046.37 ab
Brycot 4	1045.46 ab
Stoneville 7A	975.76 b
Coker 310	936.32 b
Deltapine 16	920.73 b

Variety	Total Lint-Lbs/Acre
Auburn M	429.74 a
Delcot 277	411.30 ab
Stoneville 213	384.89 ab
Brycot 4	381.87 ab
Coker 310	368.39 ab
Stoneville 7A	363.80 ab
Deltapine 16	349.13 b

Variety	Lint-Lbs/Acre lst Pick
Auburn M	383.52 a
Delcot 277	361.69 ab
Brycot 4	331.24 ab
Stoneville 213	326.84 ab
Coker 310	320.97 ab
Stoneville 7A	312.63 ab
Deltapine 16	297.40 Ъ

Variety	Stand-hills/Plot
Stoneville 7A	106.40 a 105.47 ab
Brycot 4 Stoneville 213	105.20 ab
Deltapine 16 Auburn M	103.87 abc 102.47 bc
Delcot 277 Coker 310	102.20 bc 101.00 c

Variety	lst Flower-days	
Stoneville 213	70.67 a	
Stoneville 7A	70.60 a	
Brycot 4	70.20 a	
Delcot 277	69.60 a	
Deltapine 16	69 <b>.</b> 20 a	
Auburn M	66.87 ъ	
Coker 310	66.60 Ъ	

Variety	Fusarium Wilt 🚈
Stoneville 213	25.60 a
Stoneville 7A	23.40 a
Coker 310	20.60 ab
Brycot 4	16.40 ab
Delcot 277	11.90 ab
Deltapine 16	11.70 ab
Auburn M	6.00 b

 $<sup>\</sup>frac{1}{1973-74}$  only.

Table 16 continued

Variety	Bacterial Blight Incidence	Variety	Seedling Vigor Index
Coker 310	1.50 a	Stoneville 7A	3.27 a
Deltapine 16	1.50 a	Deltapine 16	3.27 a
Auburn M	1.40 a	Stoneville 213	3.20 ab
Stoneville 7A	1.40 a	Brycot 4	3.13 ab
Stoneville 213	1.30 a	Coker 310	3.13 ab
Delcot 277	1.30 a	Delcot 277	3.07 ab
Brycot 4	1.30 a	Auburn M	2.87 b

Variety	Height Index	Variety	Lodging Index
Coker 310	1.90 a	Coker 310	3.67 a
Stoneville 213 Delcot 277	1.87 a 1.83 a	Deltapine 16 Stoneville 213	3.67 a 3.60 ab
Brycot 4	1.77 a	Auburn M	3.60 ab
Deltapine 16	1.67 a	Stoneville 7A Brycot 4	3.53 ab 3.53 ab
Stoneville 7A Auburn M	1.63 ab 1.37 b	Delcot 277	3.47 b

Variety	Storm Resistance Index	Variety	75% Maturity 1/
Deltapine 16	3.20 a	Stoneville 7A	146.70 a
Delcot 277	3.20 a	Brycot 4	144.90 a
Coker 310	3.13 a	Stoneville 213	144.50 a
Stoneville 213	3.00 a	Delcot 277	144.30 a
Stoneville 7A	2.80 ab	Coker 310	143.70 a
Auburn M	2.60 b	Auburn M	141.50 a
Brycot 4	2.47 b	Deltapine 16	141.30 a

<sup>1/&</sup>lt;sub>1973-74</sub> only.

Table 16 continued

Variety	Lint Percent	
Coker 310	39.07 a	
Delcot 277	38.62 a	
Deltapine 16	37.47 b	
Stoneville 7A	37.12 b	
Stoneville 213	37.12 b	
Brycot 4	36.90 b	
Auburn M	35.73 c	

Variety	2.5% Span Length	
Coker 310	1.19 a	
Delcot 277	1.17 ab	
Deltapine 16	1.15 b	
Brycot 4	1.12 c	
Stoneville 7A	1.12 c	
Stoneville 213	1.12 c	
Auburn M	1.09 d	

Variety	Micronaire
Brycot 4	4.38 a
Stoneville 213	4.30 ab
Stoneville 7A	4.13 bc
Deltapine 16	4.13 be
Coker 310	4.12 bc
Auburn M	3.92 cd
Delcot 277	3.83 d

Variety	50% Span Length	
Coker 310	0.52 a	
Delcot 277	0.51 ab	
Deltapine 16	0.49 bc	
Brycot 4	0.49 bc	
Stoneville 213	0.49 bc	
Stoneville 7A	0.48 c	
Auburn M	0.47 c	

Variety	Length Uniformity Index
Coker 310	43.17 a
Stoneville 213	43.00 a
Brycot 4	43.00 a
Delcot 277	42.83 a
Auburn M	42.50 a
Deltapine 16	42.33 a
Stoneville 7A	42.17 a

Variety	Colorimeter Rd
Deltapine 16	71.00 a
Auburn M	70.67 a
Stoneville 7A	70.33 ab
Brycot 4	70.00 ab
Delcot 277	69.83 ab
Coker 310	68.83 b
Stoneville 213	68.67 b

Table 16 continued

Variety	Colorimeter b	Variety	Trash Index
Coker 310	8.35 a	Coker 310	3.33 a
Delcot 277	8.27 a	Deltapine 16	3.17 a
Stoneville 213	8.05 ab	Stoneville 213	3.17 a
Stoneville 7A	7.88 bc	Brycot 4	3.17 a
Auburn M	7.88 bc	Delcot 277	3.17 a
Brycot 4	7.87 bc	Stoneville 7A	3.00 a
Deltapine 16	7.68 c	Auburn M	3.00 a

Variety	Yarn Tenacity (27 Tex)
Delcot 277	11.63 a
Coker 310	11.38 a
Deltapine 16	10.87 b
Brycot 4	10.62 bc
Stoneville 213	10.43 c
Stoneville 7A	10.30 c
Auburn M	9.90 d

Table 17 Summary of Performance of Seven Cotton Varieties Grown on Sandy Loam, Wilt-free, Non-irrigated Soil, Sikeston, Missouri, 1973-75.

Variety or Strain	Lint Yield Total Lbs/Acre	lst Pick Lbs/Acre	Percent of Crop	Lint Percent	Length 2.5% SL	Micronaire	Yarn Tenacity (27 Tex)
Auburn M Delcot 277 Coker 310 Stoneville 7A Deltapine 16 Brycot 4 Stoneville 213	870.94 a 806.93 ab 769.79 b 681.38 c 651.67 cd 634.52 cd 601.50 d	800.05 721.18 659.10 575.28 517.68 506.13 482.56	92 89 86 84 79 80 80	35.43 36.57 37.57 35.82 36.17 35.45 36.00	1.14 1.24 1.23 1.16 1.18 1.17	4.12 3.83 4.23 4.15 4.32 4.33 4.33	10.05 11.92 10.93 10.72 10.97 10.87 10.72
Mean	716.67	608.85	84	36.14	1.18	4.19	10.88
MiLSR (.05) MaLSR (.05)	70.37 80.46	63.72 72.85		.86 .97	.03 .03	.18 .20	• 39 • 44
C. V. %	13.39	14.28		1.97	1.75	3.51	2.94

Table 18 Performance and Characteristics of Seven Cotton Varieties Grown on Sandy Loam, Wiltfree, Non-irrigated Soil, Sikeston, Missouri, 1973-75.

Variety	Seed Cotton-Lbs/Acre
Auburn M Delcot 277 Coker 310 Stoneville 7A Deltapine 16 Brycot 4 Stoneville 213	2443.07 a 2179.87 b 1987.28 c 1820.38 cd 1773.61 d 1725.92 d

Variety	Total Lint-Lbs/Acre
Auburn M	870.94 a
Delcot 277	806.93 ab
Coker 310	769.79 b
Stoneville 7A	681.38 c
Deltapine 16	651.67 cd
Brycot 4	634.52 cd
Stoneville 213	601.50 d

Variety	Lint-Lbs/Acre lst Pick
1	900 05 -
Auburn M	800.05 a
Delcot 277	721.18 b
Coker 310	659 <b>.</b> 10 b
Stoneville 7A	575.28 c
Deltapine 16	517.68 cd
Brycot 4	506.13 d
Stoneville 213	482.56 d

Variety	Stand-hills/Plot	-
Auburn M Stoneville 7A	109.20 a 109.13 a	
Stoneville 213	109.07 a	
Coker 310 Brycot 4	108.27 a 108.20 a	
Delcot 277 Deltapine 16	108.00 a 107.53 a	

Variety	lst Flower-days
Stoneville 7A	65.67 a
Stoneville 213	65.47 ab
Deltapine 16	65.00 ab
Delcot 277	65.00 ab
Brycot 4	64.60 b
Coker 310	63.47 c
Auburn M	62.80 c

Variety	Bacterial Blight Incidence
Auburn M	2.20 a
Delcot 277	1.60 b
Coker 310	1.60 b
Deltapine 16	1.47 b
Stoneville 7A	1.13 c
Stoneville 213	1.07 c
Brycot 4	1.07 c

Table 18 continued

Variety	Seedling Vigor Index
Coker 310	3.87 a
Stoneville 7A	3.87 a
Brycot 4	3.80 a
Deltapine 16	3.80 a
Stoneville 213	3.73 a
Auburn M	3.73 a
Delcot 277	3.67 a

Variety	Lodging Index
27.0	2 60 -
Coker 310	3.60 a
Stoneville 7A	3.47 ab
Stoneville 213	3.47 ab
Brycot 4	3.47 ab
Deltapine 16	3.40 ab
Delcot 277	3.40 ab
Auburn M	3.33 b

	1/
Variety	75% Maturity =
Deltapine 16	144.99 a
Stoneville 213	144.81 a
Coker 310	142.80 a
Auburn M	141.20 a
Brycot 4	140.79 a
Delcot 277	138.21 a
Stoneville 7A	137.01 a

<sup>1/1973</sup> only.

Variety	Height Index
Brycot 4	2.87 a
Coker 310	2.80 a
Stoneville 213	2.77 a
Delcot 277	2.77 a
Deltapine 16	2.70 a
Stoneville 7A	2.67 a
Auburn M	2.27 b

Variety	Storm Resistance Index
Brycot 4	3.13 a
Deltapine 16	3.13 a
Stoneville 213	3.07 a
Stoneville 7A	3.07 a
Coker 310	3.00 a
Delcot 277	3.00 a
Auburn M	3.00 a

Variety	Lint Percent	
Coker 310 Delcot 277 Deltapine 16 Stoneville 213 Stoneville 7A Brycot 4 Auburn M	37.57 a 36.57 b 36.17 bc 36.00 bc 35.82 bc 35.45 c	

Table 18 continued

Variety	50% Span Length	Variety
Delcot 277	0.54 a	Delcot 277
Coker 310	0.52 ab	Coker 310
Deltapine 16	0.51 bc	Deltapine 16
Brycot 4	0.51 bc	Brycot 4
Stoneville 213	0.51 bc	Stoneville 7A
Stoneville 7A	0.50 bc	Stoneville 213
Auburn M	0.49 c	Auburn M

Variety	Length Uniformity Index	
Stoneville 213	44.00 a	
Deltapine 16	43.50 a	
Brycot 4	43.17 a	
Delcot 277	43.17 a	
Auburn M	42.83 a	
Stoneville 7A	42.67 a	
Coker 310	42.17 a	

Variety	Colorimeter Rd	
Deltapine 16 Auburn M Stoneville 213 Brycot 4 Stoneville 7A Delcot 277 Coker 310	70.83 a 70.00 a 68.50 b 68.50 b 68.50 b 68.17 b	

Variety	2.5% Span Length	
Delcot 277	1.24 a	
Coker 310	1.23 a	
Deltapine 16	1.18 b	
Brycot 4	1.17 bc	
Stoneville 7A	1.16 bcd	
Stoneville 213	1.15 cd	
Auburn M	1.14 d	

Variety	Micronaire
Brycot 4	4.33 a
Stoneville 213	4.33 a
Deltapine 16	4.32 a
Coker 310	4.23 ab
Stoneville 7A	4.15 ab
Auburn M	4.12 b
Delcot 277	3.83 c

Variety	Colorimeter b	
Stoneville 213 Coker 310 Delcot 277 Brycot 4 Deltapine 16 Auburn M Stoneville 7A	8.45 a 8.30 a 8.23 ab 8.22 ab 8.18 ab 7.83 b 7.82 b	

Table 18 continued

Variety	Trash Index	Variety	Yarn Tenacity (27 Tex)
Coker 310	4.33 a	Delcot 277	11.92 a
Stoneville 7A	4.33 a	Deltapine 16	10.97 b
Stoneville 213	4.17 ab	Coker 310	10.93 b
Delcot 277	4.17 ab	Brycot 4	10.87 b
Deltapine 16	3.83 ab	Stoneville 7A	10.72 b
Brycot 4	3.67 b	Stoneville 213	10.72 b
Auburn M	3.67 b	Auburn M	10.05 c