

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

# Estimates of Performance of Cotton Varieties in Southeast Missouri 1969-71

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



(Publication authorized August 14, 1972)

COLUMBIA, MISSOURI

## CONTENTS

|   |   |
|---|---|
| ACKNOWLEDGMENT .....                                    | 2 |
| INTRODUCTION .....                                      | 3 |
| DEFINITION OF OBSERVATIONS .....                        | 4 |
| Agronomic Properties .....                              | 4 |
| Disease Reactions .....                                 | 5 |
| Boll and Ginning .....                                  | 5 |
| Fiber and Spinning Quality Determinations .....         | 5 |
| STATISTICAL INTERPRETATION OF DATA FOR SIGNIFICANCE ... | 6 |
| TEST RESULTS .....                                      | 7 |

## ACKNOWLEDGMENT

Fiber and Spinning quality measurements were obtained in cooperation with the Fiber and Spinning Laboratories of the Cotton and Cordage Fibers Research Branch, ARS, CRD, USDA, currently directed by H. H. Ramey, formerly Thomas Kerr (retired) and associates C. F. Lewis, Smith Worley, Jr., and P. R. Ewald. Computer analyses of data were possible by utilizing special program construction by Jack Naylor, senior computer programmer, University of Missouri Computer Services Center. Grateful acknowledgement is extended to Doris Adams, secretary, Thelma Harmon, laboratory assistant and Wayne Brooks, farm worker. This bulletin reports on the Department of Agronomy Project 3730, "Cotton Improvement."

# Estimates of Performance of Cotton Varieties in Southeast Missouri 1969-71

W. P. SAPPENFIELD, L. E. TREECE, J. N. WARD AND D. R. GUETHLE\*

## INTRODUCTION

Estimates of comparative varietal performance can be gained from reliable variety trials. Estimates are most valid when derived from trials conducted during several seasons at locations representing production environmental variables within the region. During 1969-71 climatic variables in southeast Missouri, within and among seasons, were diverse and extreme often modifying or exaggerating varietal response to the already diversified soil and disease conditions existing at the test sites. However, 1971 produced one of the most productive cotton crops in the history of southeast Missouri cotton.

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

Reported herein are results of general variety tests, 1969-71, that included approved commercial varieties, new varieties and experimental strains grown on (1) sandy loam, wilt-free, usually non-irrigated soils, (2) sandy loam, *Verticillium* infested, irrigated soils, (3) clay soils, free of wilt, and irrigated, (4) sandy, irrigated soil infested with *Fusarium* and Root-Knot nematodes. Performance estimates are given for nine varieties grown at the four locations over the 3-year period, 1969-71. Estimates for 16 varieties grown only in 1971 are presented. Also reported are 1971 results of varieties and strains grown in the Missouri Regional Variety and High Quality Strains Test.

\*Professor, Technician and Research Specialist, respectively, Department of Agronomy, University of Missouri-Columbia, Delta Center, Portageville, Missouri 63873.

## DEFINITION OF OBSERVATIONS

**Agronomic Properties**

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.
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. Spacing between hills was 12-14" but in heavy clay and late-planted trials, hills were spaced 10-12" apart.
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

1 = 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 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

### Disease Reactions

10. *Verticillium Wilt* reactions were rated as follows:

- 5 = resistant
- 4 = very tolerant
- 3 = tolerant
- 2 = susceptible
- 1 = very susceptible

11. *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.

12. *Bacterial Blight Incidence* is an average visual estimate of the incidence of leaf, stem and boll infection.

- 5 = no infection
- 4 = mild infection
- 3 = moderate infection
- 2 = severe infection
- 1 = very severe infection

### Boll and Ginning

13. *Seed Index* is a measure of seed size, expressed as the gram weight of 100 seeds.

14. *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.

15. *Lint Percent* = 
$$\frac{\text{Gram weight of ginned lint}}{\text{Gram weight of seed cotton sample}}$$

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

$$\frac{\text{Percent Lint} \times \text{Seed Index}}{\text{Percent Seed}}$$

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

### Fiber and Spinning Quality Determinations

18. *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.

19. *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.

20. *Length Uniformity Index* is determined by:

$$\frac{50\% \text{ Span Length} \times 100}{2.5\% \text{ Span Length}}$$

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

21. *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

22. *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.

23. *Colorimeter b values* as measured by the colorimeter indicate the degree of yellowness and increasing values of b indicate increasing yellowness of fiber.

24. *Trash* as estimated on a scale: (1) low trash through (5) high trash.

25. *Yarn Strength* is the average breaking strength in pounds of 20 determinations corrected to a yarn number of 27.0 tex and is in terms of the standard skein. The greater the value, the stronger the yarn. Yarn strength of 130 and above is considered superior and 110, inferior.

26. *Yarn Tenacity* is the strength of 27 tex yarn expressed as grams force per tex.

## STATISTICAL INTERPRETATION OF DATA FOR SIGNIFICANCE

All data were analyzed statistically at the University of Missouri-Columbia Computer Research Center. All observations were analyzed using the randomized block analysis of variance method, except 1971 total lint yield and yield of lint at first picking for which the balanced lattice square analysis of variance method was used.

*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

**TEST RESULTS**

Table 1. Methods, Cultural Practices and Conditions of Cotton Variety Trials in Southeast Missouri, 1971

|                                   | Location and Test               |              |                    |                    |                  |                 |              |
|-----------------------------------|---------------------------------|--------------|--------------------|--------------------|------------------|-----------------|--------------|
|                                   | Sandy Loam                      | Sandy Loam   | Clay               | Fine Sand          | Sandy Loam       | Sandy Loam      | Regional     |
|                                   | Wilt-free                       | Verticillium | Wilt-free          | Fusarium Wilt-     | Wilt-free        | Wilt-free       | Variety &    |
|                                   |                                 | Wilt         |                    | Root Knot          | Late Planted     |                 | Hi-Quality   |
|                                   | (7111)                          | (7122)       | (7133)             | (7144)             | (7151)           | (71156)         | (71101)      |
| Condition                         | Portageville                    | Portageville | Portageville       | Portageville       | Portageville     | Sikeston        | Portageville |
| Soil Texture                      | Sandy Loam                      | Sandy Loam   | Clay(gumbo)        | Fine Sand          | Sandy Loam       | Sandy Loam      | Sandy Loam   |
|                                   |                                 |              |                    | Fine Sandy Loam    |                  |                 |              |
| Fusarium Wilt-Root Knot           | None                            | None         | None               | Very Light         | None             | None            | None         |
| Verticillium Wilt                 | Trace                           | Severe       | Trace              | None               | None             | None            | None         |
| Bacterial Blight                  | Severe-Moderate                 | Moderate     | Moderate           | Trace              | Moderate         | Moderate-Severe | Moderate     |
| Cercospora-Alternaria             | Light                           | Moderate     | Light              | Light              | Light            | Light           | Light        |
| Leaf Spot                         |                                 |              |                    |                    |                  |                 |              |
| Plot Design <sup>1/</sup>         | 4 x 4 BLS                       | 4 x 4 BLS    | 4 x 4 BLS          | 4 x 4 BLS          | 4 x 4 BLS        | 4 x 4 BLS       | 5 x 5 BLS    |
| Replications - Yield              | 5                               | 5            | 5                  | 5                  | 5                | 5               | 6            |
| Stand - Disease                   |                                 |              |                    |                    |                  |                 |              |
| Replications (Others)             | 2                               | 2            | 2                  | 2                  | 2                | 2               | 3            |
| Plot Size <sup>2/</sup>           | 2 rows x 50'                    | 4 rows x 50' | 4 rows x 50'       | 4 rows x 50'       | 2 rows x 50'     | 4 rows x 50'    | 2 rows x 38' |
| Hill Spacing <sup>3/</sup>        | 10-12"                          | 10-12"       | 10-12"             | 12-14"             | 12-14"           | 10-12"          | 10-12"       |
| Date Planted <sup>4/</sup>        | May 3                           | May 4        | April 30           | May 18             | May 19           | May 4           | May 10       |
| Fertilizer <sup>4/</sup>          | 80+50+50                        | 80+50+50     | 80+50+50           | 80+50+50           | 80+50+50         | 45+36+72        | 80+50+50     |
| Weed Control                      | Treflan Preplant+Post Emergence | MSA (3 app)  | Treflan+MSA+Sweeps | Treflan+MSA+Sweeps | Treflan, Cotoran | Treflan+MSA     | Treflan+MSA  |
|                                   | +Wide Sweep Middle Cult.        |              | Wide               |                    | Cotoran Plus     | +Sweeps         |              |
| Irrigations                       | None                            | None         | None               | None               | None             | None            | None         |
| Insecticide App.                  | Recommended                     | Recommended  | Recommended        | Recommended        | Recommended      | Recommended     | Recommended  |
| Defoliant Applied <sup>6/</sup>   | 9/9; 9/30                       | 9/30         | 9/29               | 9/10; 10/6         | 9/29; 10/19      | 9/9; 10/5       | 9/9; 10/5    |
| Seed Cotton Samples <sup>5/</sup> | Machine                         | Machine      | Machine            | Machine            | Machine          | Machine         | Machine      |
| Harvesting                        | Machine                         | Machine      | Machine            | Machine            | Machine          | Machine         | Machine      |
| Date 1st Pick                     | Oct. 12                         | Oct. 13      | Oct. 12            | Oct. 22            | Oct. 29          | Oct. 29         | Oct. 13      |
| Date 2nd Pick                     | Nov. 8                          | Nov. 8       | Nov. 5             | Nov. 9             |                  |                 | Nov. 8       |

<sup>1/</sup>BLS = Balanced lattice square. RB = Randomized block.

<sup>2/</sup>Middle two rows were harvested from 4-row plots.

<sup>3/</sup>Acid-delinted, fungicide treated seed of all varieties obtained directly for respective originating breeders, were hill-dropped using a 4-row V-belt planter. Where possible hills were uniformly thinned to 3 plants.

<sup>4/</sup>50+50+50 applied broadcast preplant; additional fertilizers applied were sidedressed mid-June to July 1

<sup>5/</sup>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 in 1971 for seed and boll characteristics (7111).

<sup>6/</sup>Bottom defoliation, 1st date; full defoliation, 2nd date.



Table 2. Methods, Cultural Practices and Conditions of Cotton Variety Trials in Southeast Missouri, 1970.

| Conditions                       | Test or Location     |                              |                |                               |  | Variety & Regional Hi-Quality |
|----------------------------------|----------------------|------------------------------|----------------|-------------------------------|--|-------------------------------|
|                                  | Sandy Loam Wilt-free | Sandy Loam Verticillium Wilt | Clay Wilt-free | Sandy Fusarium Wilt-Root-Knot |  |                               |
| Soil Texture                     | Sandy loam           | Sandy loam                   | Clay (Gumbo)   | Sand                          |  | Sandy loam                    |
| Fusarium Wilt-Root Knot          | None                 | None                         | None           | Light-Moderate                |  | None                          |
| Verticillium Wilt                | Traces               | Severe                       | None           | None                          |  | Traces                        |
| Bacterial Blight                 | Severe               | Severe                       | Severe         | Very Severe                   |  | Very Severe                   |
| Cercospora-Alternaria Leaf Spot  | Moderate             | Moderate                     | Moderate       | Moderate                      |  | Moderate                      |
| Plot Design                      | RB                   | RB                           | RB             | RB                            |  | RB                            |
| Replications yield-stand-disease | 5                    | 5                            | 5              | 5                             |  | 6                             |
| Replications other observations  | 2                    | 2                            | 2              | 2                             |  | 3                             |
| Plot Size                        | 2 rows x 50'         | 4 rows x 50'                 | 4 rows x 50'   | 4 rows x 33'                  |  | 2 rows x 38'                  |
| Hill Spacing                     | 12-14"               | 12-14"                       | 10-12"         | 12-14"                        |  | 12-14"                        |
| Date Planted                     | May 6 & 20           | May 7                        | May 6          | May 4                         |  | May 6                         |
| Fertilizer                       | 75+50+50             | 75+50+50                     | 75+50+50       | 75+75+75                      |  | 75+50+50                      |
| Weed Control                     |                      | Treflan + Wide Sweep         | Cultivation    | of Middles                    |  |                               |
| Irrigations                      | None                 | 2                            | 1              | 2                             |  | 2                             |
| Insecticide Applied              | Recommended          | Recommended                  | Recommended    | Recommended                   |  | Recommended                   |
| Defoliant Applied                | Sept. 14             | Sept. 14                     | Oct. 23        | Sept. 29                      |  | Sept. 14                      |
| Seed Cotton Sample               | Machine              | Machine                      | Machine        | Machine                       |  | Machine                       |
| Harvesting                       | Machine              | Machine                      | Machine        | Machine                       |  | Machine                       |
| Date 1st Pick                    | Sept. 28             | Oct. 6                       | Nov. 8         | Oct. 9                        |  | Sept. 28                      |
| Date 2nd Pick                    | Nov. 3               | Nov. 4                       | -----          | Nov. 5                        |  | Nov. 3                        |

Table 3. Methods, Cultural Practices and Conditions of Cotton Variety Trials in Southeast Missouri, 1969.

| Conditions                          | Test or Location        |                                    |                   |                                      |                        |
|-------------------------------------|-------------------------|------------------------------------|-------------------|--------------------------------------|------------------------|
|                                     | Sandy Loam<br>Wilt-free | Sandy Loam<br>Verticillium<br>Wilt | Clay<br>Wilt-free | Sandy<br>Fusarium Wilt-<br>Root Knot | Regional<br>Hi-Quality |
| Soil Texture                        | Sandy loam              | Sandy loam                         | Clay (gumbo)      | Sand                                 | Sandy loam             |
| Fusarium Wilt-<br>Root Knot         | None                    | None                               | None              | Moderate                             | None                   |
| Verticillium Wilt                   | None                    | Moderate-Severe                    | None              | None                                 | None                   |
| Bacterial Blight                    | Light                   | Light                              | Light             | Light                                | Light-Moderate         |
| Cercospora-Alternaria<br>Leaf Spot  | Light                   | Light                              | Light             | Light                                | Light                  |
| Plot Design                         | RB                      | RB                                 | RB                | RB                                   | RB                     |
| Replications<br>yield-stand-disease | 5                       | 5                                  | 5                 | 5                                    | 3                      |
| Replications<br>other observations  | 2                       | 2                                  | 2                 | 2                                    | 3                      |
| Plot Size                           | 2 rows x 50'            | 4 rows x 50'                       | 4 rows x 50'      | 4 rows x 33'                         | 2 rows x 38'           |
| Hill Spacing                        | 12-14"                  | 12-14"                             | 12-14"            | 12-14"                               | 12-14"                 |
| Date Planted                        | May 6                   | May 7                              | May 5             | May 8                                | May 6                  |
| Fertilizer                          | 80+50+50                | 80+50+50                           | 100+50+50         | 80+80+80                             | 80+50+50               |
| Weed Control                        |                         | Treflan + Wide                     | Sweep             | Cultivation of Middles               |                        |
| Irrigations                         | None                    | 2                                  | 2                 | 3                                    | 2                      |
| Insecticide Applied                 | Recommended             | Recommended                        | Recommended       | Recommended                          | Recommended            |
| Defoliant Applied                   | Sept. 26                | Oct. 9                             | Oct. 3            | Oct. 6                               | Sept. 26               |
| Seed Cotton Sample                  | Machine                 | Machine                            | Machine           | Machine                              | Machine                |
| Harvesting                          | Machine                 | Machine                            | Machine           | Machine                              | Machine                |
| Date 1st Pick                       | Sept. 29                | Oct. 15                            | Oct. 16           | Oct. 17                              | Sept. 29               |
| Date 2nd Pick                       | Nov. 1                  | Nov. 6                             | Nov. 5            | Nov. 7                               | Nov. 1                 |

Table 4. Summary of Performance of Cotton Varieties Grown in Southeast Missouri, Combining Four Locations, 1969-71

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   |            |                       |
| Delcot 277              | 1001.75 a         | 910.96               | 91                    | 37.63           | 1.18              | 3.98       | 118.25                |
| Coker 310               | 902.85 b          | 810.55               | 90                    | 37.85           | 1.20              | 4.40       | 111.92                |
| Deltapine 16            | 895.21 bc         | 757.74               | 85                    | 37.18           | 1.16              | 4.30       | 108.08                |
| Deltapine 45A           | 881.90 bcd        | 756.23               | 86                    | 37.76           | 1.11              | 4.35       | 108.87                |
| Stoneville 213          | 860.69 cd         | 735.85               | 85                    | 37.12           | 1.11              | 4.53       | 102.46                |
| Stoneville 7A           | 855.65 de         | 690.56               | 81                    | 37.97           | 1.14              | 4.45       | 105.29                |
| Rex Smoothleaf 66       | 847.27 de         | 738.02               | 87                    | 35.05           | 1.13              | 4.10       | 103.71                |
| Auburn M                | 821.12 ef         | 743.69               | 91                    | 35.00           | 1.11              | 4.13       | 103.67                |
| MO-DEL                  | 794.07 f          | 694.33               | 87                    | 34.84           | 1.15              | 4.32       | 112.21                |
| Mean                    | 873.39            | 759.77               | 87                    | 36.71           | 1.14              | 4.29       | 108.27                |
| MI LSR (.05)            | 33.29             | 31.51                |                       | .51             | .01               | .07        | 1.83                  |
| Ma LSR (.05)            | 39.18             | 37.09                |                       | .60             | .01               | .08        | 2.15                  |
| C. V. %                 | 10.66             | 11.60                |                       | 2.45            | 1.65              | 2.79       | 2.98                  |

Table 5. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri, Combining Four Locations, 1969-71.

| Variety           | Seed Cotton<br>Lbs/Acre |     | Variety           | Total Lint<br>Lbs/Acre |     |
|-------------------|-------------------------|-----|-------------------|------------------------|-----|
| Delcot 277        | 2666.26                 | a   | Delcot 277        | 1001.75                | a   |
| Rex Smoothleaf 66 | 2412.07                 | b   | Coker 310         | 902.85                 | b   |
| Deltapine 16      | 2406.82                 | b   | Deltapine 16      | 895.21                 | bc  |
| Coker 310         | 2390.69                 | bc  | Deltapine 45A     | 881.90                 | bcd |
| Auburn M          | 2337.51                 | bcd | Stoneville 213    | 860.69                 | cd  |
| Deltapine 45A     | 2334.46                 | bcd | Stoneville 7A     | 855.65                 | de  |
| Stoneville 213    | 2298.75                 | cd  | Rex Smoothleaf 66 | 847.27                 | de  |
| MO-DEL            | 2273.12                 | d   | Auburn M          | 821.12                 | ef  |
| Stoneville 7A     | 2250.88                 | d   | MO-DEL            | 794.07                 | f   |

| Variety           | Lint-Lbs/Acre<br>1st Pick |   | Variety           | Stand<br>Hills/Plot |    |
|-------------------|---------------------------|---|-------------------|---------------------|----|
| Delcot 277        | 910.96                    | a | Deltapine 16      | 91.25               | a  |
| Coker 310         | 810.55                    | b | Deltapine 45A     | 90.85               | a  |
| Deltapine 16      | 757.74                    | c | Stoneville 213    | 90.42               | ab |
| Deltapine 45A     | 756.23                    | c | Stoneville 7A     | 90.28               | ab |
| Auburn M          | 743.69                    | c | Coker 310         | 90.20               | ab |
| Rex Smoothleaf 66 | 738.02                    | c | MO-DEL            | 90.12               | ab |
| Stoneville 213    | 735.85                    | c | Delcot 277        | 89.72               | ab |
| MO-DEL            | 694.33                    | d | Auburn M          | 89.40               | ab |
| Stoneville 7A     | 690.56                    | d | Rex Smoothleaf 66 | 88.45               | b  |

| Variety           | 1st Flower-Days |     |
|-------------------|-----------------|-----|
| Deltapine 45A     | 64.67           | a   |
| Deltapine 16      | 64.65           | a   |
| Stoneville 7A     | 64.62           | a   |
| Delcot 277        | 64.37           | ab  |
| Rex Smoothleaf 66 | 63.85           | ab  |
| Stoneville 213    | 63.50           | abc |
| MO-DEL            | 63.23           | bc  |
| Coker 310         | 62.38           | cd  |
| Auburn M          | 61.30           | d   |

Table 5. Continued

| Variety           | Verticillium<br>Wilt Rating <sup>1/</sup> |
|-------------------|---|
| Delcot 277        | 4.06 a                                    |
| Deltapine 45A     | 3.39 b                                    |
| Deltapine 16      | 3.31 b                                    |
| Stoneville 7A     | 3.19 bc                                   |
| Stoneville 213    | 2.95 cd                                   |
| MO-DEL            | 2.89 d                                    |
| Rex Smoothleaf 66 | 2.78 d                                    |
| Auburn M          | 2.45 e                                    |
| Coker 310         | 2.24 e                                    |

| Variety           | Fusarium Wilt<br>% Plants <sup>2/</sup> |
|-------------------|---|
| Stoneville 7A     | 24.60 a                                 |
| Stoneville 213    | 24.10 a                                 |
| Rex Smoothleaf 66 | 8.50 b                                  |
| Deltapine 16      | 7.30 b                                  |
| MO-DEL            | 7.30 b                                  |
| Coker 310         | 6.50 b                                  |
| Deltapine 45A     | 6.30 b                                  |
| Auburn M          | 5.20 b                                  |
| Delcot 277        | 2.10 b                                  |

| Variety           | Bacterial Blight<br>Incidence <sup>3/</sup> |
|-------------------|---|
| Rex Smoothleaf 66 | 4.85 a                                      |
| MO-DEL            | 4.28 b                                      |
| Stoneville 7A     | 4.08 bc                                     |
| Deltapine 45A     | 3.95 cd                                     |
| Deltapine 16      | 3.93 cd                                     |
| Delcot 277        | 3.78 de                                     |
| Coker 310         | 3.75 de                                     |
| Stoneville 213    | 3.70 e                                      |
| Auburn M          | 3.20 f                                      |

| Variety           | Seedling<br>Vigor Index |
|-------------------|-------------------------|
| Delcot 277        | 3.65 a                  |
| MO-DEL            | 3.63 a                  |
| Coker 310         | 3.53 ab                 |
| Deltapine 45A     | 3.50 ab                 |
| Stoneville 213    | 3.50 ab                 |
| Stoneville 7A     | 3.37 bc                 |
| Auburn M          | 3.25 cd                 |
| Deltapine 16      | 3.18 d                  |
| Rex Smoothleaf 66 | 3.15 d                  |

| Variety           | Height Index |
|-------------------|--------------|
| MO-DEL            | 2.32 a       |
| Coker 310         | 2.20 ab      |
| Stoneville 7A     | 2.14 b       |
| Deltapine 45A     | 2.10 b       |
| Delcot 277        | 2.08 bc      |
| Stoneville 213    | 2.07 bc      |
| Deltapine 16      | 1.94 c       |
| Auburn M          | 1.60 d       |
| Rex Smoothleaf 66 | 1.47 d       |

<sup>1/</sup> From Verticillium wilt test 1969-71.

<sup>2/</sup> From Fusarium wilt test 1969-70.

<sup>3/</sup> 1970-71 only.

Table 5. Continued

| Variety           | Lodging Index | Variety           | Storm Resistance Index |
|-------------------|---------------|-------------------|------------------------|
| MO-DEL            | 2.95 a        | MO-DEL            | 3.00 a                 |
| Coker 310         | 2.88 ab       | Coker 310         | 2.82 b                 |
| Stoneville 7A     | 2.83 ab       | Stoneville 213    | 2.80 b                 |
| Stoneville 213    | 2.80 abc      | Stoneville 7A     | 2.75 b                 |
| Deltapine 16      | 2.75 bc       | Deltapine 16      | 2.73 b                 |
| Deltapine 45A     | 2.65 c        | Delcot 277        | 2.45 c                 |
| Delcot 277        | 2.35 d        | Deltapine 45A     | 2.40 cd                |
| Rex Smoothleaf 66 | 2.07 e        | Auburn M          | 2.28 de                |
| Auburn M          | 1.97 e        | Rex Smoothleaf 66 | 2.22 e                 |

| Variety           | Seed Index <sup>1/</sup> |
|-------------------|--------------------------|
| Rex Smoothleaf 66 | 13.95 a                  |
| MO-DEL            | 13.80 a                  |
| Delcot 277        | 12.80 b                  |
| Auburn M          | 12.10 c                  |
| Stoneville 213    | 11.40 d                  |
| Stoneville 7A     | 11.20 d                  |
| Coker 310         | 11.10 d                  |
| Deltapine 45A     | 11.05 d                  |
| Deltapine 16      | 11.00 d                  |

| Variety           | Seed Grade <sup>1/</sup> |
|-------------------|--------------------------|
| Stoneville 213    | 8.00 a                   |
| Stoneville 7A     | 8.00 a                   |
| Delcot 277        | 8.00 a                   |
| Coker 310         | 8.00 a                   |
| Deltapine 45A     | 7.75 ab                  |
| Auburn M          | 7.75 ab                  |
| MO-DEL            | 7.75 ab                  |
| Deltapine 16      | 7.50 b                   |
| Rex Smoothleaf 66 | 7.50 b                   |

| Variety           | Lint Percent |
|-------------------|--------------|
| Stoneville 7A     | 37.97 a      |
| Coker 310         | 37.85 a      |
| Deltapine 45A     | 37.76 a      |
| Delcot 277        | 37.63 ab     |
| Deltapine 16      | 37.18 b      |
| Stoneville 213    | 37.12 b      |
| Rex Smoothleaf 66 | 35.05 c      |
| Auburn M          | 35.00 c      |
| MO-DEL            | 34.84 c      |

<sup>1/</sup> From wilt-free, non-irrigated, sandy loam test, 1970-71.

Table 5. Continued

| Variety           | Boll Weight <sup>1/</sup> | Variety           | 50% Span Length |
|-------------------|---------------------------|-------------------|-----------------|
| Rex Smoothleaf 66 | 7.60 a                    | Delcot 277        | 0.52 a          |
| MO-DEL            | 7.33 a                    | Deltapine 16      | 0.51 ab         |
| Delcot 277        | 7.20 a                    | MO-DEL            | 0.51 ab         |
| Auburn M          | 6.58 b                    | Coker 310         | 0.51 ab         |
| Coker 310         | 6.45 bc                   | Deltapine 45A     | 0.50 bc         |
| Deltapine 16      | 6.28 bc                   | Stoneville 7A     | 0.50 bc         |
| Stoneville 213    | 6.25 bc                   | Stoneville 213    | 0.49 c          |
| Stoneville 7A     | 6.23 bc                   | Auburn M          | 0.49 c          |
| Deltapine 45A     | 6.00 c                    | Rex Smoothleaf 66 | 0.49 c          |

| Variety           | 2.5%<br>Span Length | Variety           | Length<br>Uniformity Index |
|-------------------|---------------------|-------------------|----------------------------|
| Coker 310         | 1.20 a              | Deltapine 45A     | 44.71 a                    |
| Delcot 277        | 1.18 b              | MO-DEL            | 44.33 ab                   |
| Deltapine 16      | 1.16 c              | Stoneville 213    | 43.79 bc                   |
| MO-DEL            | 1.15 cd             | Delcot 277        | 43.79 bc                   |
| Stoneville 7A     | 1.14 de             | Deltapine 16      | 43.67 bc                   |
| Rex Smoothleaf 66 | 1.13 e              | Auburn M          | 43.58 c                    |
| Stoneville 213    | 1.11 f              | Stoneville 7A     | 43.29 c                    |
| Auburn M          | 1.11 f              | Rex Smoothleaf 66 | 43.12 cd                   |
| Deltapine 45A     | 1.11 f              | Coker 310         | 42.54 d                    |

| Variety           | Micronaire |
|-------------------|------------|
| Stoneville 213    | 4.53 a     |
| Stoneville 7A     | 4.45 b     |
| Coker 310         | 4.40 bc    |
| Deltapine 45A     | 4.35 cd    |
| MO-DEL            | 4.32 d     |
| Deltapine 16      | 4.30 d     |
| Auburn M          | 4.13 e     |
| Rex Smoothleaf 66 | 4.10 e     |
| Delcot 277        | 3.98 f     |

<sup>1/</sup> From wilt-free, non-irrigated, sandy loam test, 1970-71.

Table 5. Continued

| Variety           | Colorimeter<br>Rd | Variety           | Colorimeter<br>b |
|-------------------|-------------------|-------------------|------------------|
| Deltapine 16      | 73.08 a           | MO-DEL            | 8.35 a           |
| Stoneville 7A     | 71.71 b           | Delcot 277        | 8.27 a           |
| Deltapine 45A     | 71.33 bc          | Stoneville 213    | 8.12 b           |
| Rex Smoothleaf 66 | 71.08 bcd         | Coker 310         | 8.10 b           |
| Auburn M          | 70.83 cd          | Rex Smoothleaf 66 | 8.10 b           |
| Stoneville 213    | 70.58 d           | Auburn M          | 7.98 bc          |
| Delcot 277        | 70.50 de          | Deltapine 45A     | 7.92 cd          |
| Coker 310         | 69.87 ef          | Stoneville 7A     | 7.83 de          |
| MO-DEL            | 69.42 f           | Deltapine 16      | 7.77 e           |

| Variety           | Trash   | Variety           | Yarn Strength<br>22's |
|-------------------|---------|-------------------|-----------------------|
| Coker 310         | 3.54 a  | Delcot 277        | 118.25 a              |
| Deltapine 45A     | 3.50 a  | MO-DEL            | 112.21 b              |
| Delcot 277        | 3.50 a  | Coker 310         | 111.92 b              |
| MO-DEL            | 3.50 a  | Deltapine 45A     | 108.87 c              |
| Auburn M          | 3.37 ab | Deltapine 16      | 108.08 c              |
| Stoneville 213    | 3.37 ab | Stoneville 7A     | 105.29 d              |
| Rex Smoothleaf 66 | 3.37 ab | Rex Smoothleaf 66 | 103.71 de             |
| Stoneville 7A     | 3.33 ab | Auburn M          | 103.67 de             |
| Deltapine 16      | 3.17 b  | Stoneville 213    | 102.46 e              |

| Variety           | Yarn Tenacity 27 Tex <sup>1/</sup> |
|-------------------|------------------------------------|
| Delcot 277        | 13.46 a                            |
| MO-DEL            | 12.89 b                            |
| Coker 310         | 12.80 b                            |
| Deltapine 45A     | 12.65 bc                           |
| Deltapine 16      | 12.45 c                            |
| Stoneville 7A     | 12.08 d                            |
| Stoneville 213    | 12.06 d                            |
| Auburn M          | 12.06 d                            |
| Rex Smoothleaf 66 | 12.06 d                            |

<sup>1/</sup> 1971 only.



Table 6. Summary of Performance of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1969-71

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   |            |                       |
| Delcot 277              | 1084.16 a         | 1003.73              | 93                    | 37.12           | 1.16              | 3.95       | 117.83                |
| Stoneville 213          | 1061.78 ab        | 897.62               | 85                    | 37.37           | 1.10              | 4.70       | 103.67                |
| Coker 310               | 1036.74 abc       | 932.84               | 90                    | 37.62           | 1.18              | 4.62       | 114.50                |
| Stoneville 7A           | 1008.59 abc       | 806.38               | 80                    | 38.15           | 1.13              | 4.65       | 106.50                |
| Deltapine 16            | 997.86 bcd        | 853.42               | 86                    | 37.15           | 1.14              | 4.52       | 109.33                |
| Deltapine 45A           | 966.50 cd         | 807.57               | 84                    | 37.42           | 1.10              | 4.50       | 110.67                |
| Auburn M                | 961.09 cd         | 877.72               | 91                    | 34.95           | 1.11              | 4.25       | 106.50                |
| Rex Smoothleaf 66       | 954.30 cd         | 867.09               | 91                    | 34.58           | 1.14              | 4.25       | 104.00                |
| MO-DEL                  | 918.63 d          | 811.97               | 88                    | 34.68           | 1.13              | 4.52       | 113.67                |
| Mean                    | 998.85            | 873.15               | 88                    | 36.56           | 1.13              | 4.44       | 109.63                |
| MiLSR (.05)             | 75.01             | 73.86                |                       | .91             | .02               | .14        | 3.74                  |
| MaLSR (.05)             | 87.38             | 86.04                |                       | 1.05            | .02               | .16        | 4.32                  |
| C. V. %                 | 10.18             | 11.47                |                       | 2.08            | 1.54              | 2.69       | 2.86                  |

Table 7. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1969-71.

| Variety           | Seed Cotton<br>Lbs/Acre |
|-------------------|-------------------------|
| Delcot 277        | 2927.28 a               |
| Stoneville 213    | 2834.65 ab              |
| Coker 310         | 2754.87 abc             |
| Rex Smoothleaf 66 | 2747.53 abc             |
| Auburn M          | 2742.03 abc             |
| Deltapine 16      | 2676.92 bc              |
| MO-DEL            | 2653.07 bc              |
| Stoneville 7A     | 2647.57 bc              |
| Deltapine 45A     | 2577.87 c               |

| Variety           | Total Lint<br>Lbs/Acre |
|-------------------|------------------------|
| Delcot 277        | 1084.16 a              |
| Stoneville 213    | 1061.78 ab             |
| Coker 310         | 1036.74 abc            |
| Stoneville 7A     | 1008.59 abc            |
| Deltapine 16      | 997.86 bcd             |
| Deltapine 45A     | 966.50 cd              |
| Auburn M          | 961.09 cd              |
| Rex Smoothleaf 66 | 954.30 cd              |
| MO-DEL            | 918.63 d               |

| Variety           | Lint-Lbs/Acre<br>1st Pick |
|-------------------|---------------------------|
| Delcot 277        | 1003.73 a                 |
| Coker 310         | 932.84 ab                 |
| Stoneville 213    | 897.62 b                  |
| Auburn M          | 877.72 bc                 |
| Rex Smoothleaf 66 | 867.09 bc                 |
| Deltapine 16      | 853.42 bc                 |
| MO-DEL            | 811.97 c                  |
| Deltapine 45A     | 807.57 c                  |
| Stoneville 7A     | 806.38 c                  |

| Variety           | Stand<br>Hills/Plot |
|-------------------|---------------------|
| Deltapine 16      | 95.67 a             |
| Deltapine 45A     | 94.87 ab            |
| MO-DEL            | 94.13 abc           |
| Stoneville 213    | 93.33 abcd          |
| Stoneville 7A     | 93.27 abcd          |
| Coker 310         | 93.00 abcd          |
| Delcot 277        | 92.53 bcd           |
| Auburn M          | 91.53 cd            |
| Rex Smoothleaf 66 | 91.33 d             |

| Variety           | 1st Flower-Days |
|-------------------|-----------------|
| Deltapine 45A     | 64.47 a         |
| Stoneville 213    | 64.27 a         |
| Deltapine 16      | 64.20 a         |
| Delcot 277        | 64.20 a         |
| Stoneville 7A     | 64.00 a         |
| Rex Smoothleaf 66 | 63.80 a         |
| MO-DEL            | 63.60 a         |
| Coker 310         | 63.53 a         |
| Auburn M          | 59.67 b         |

Table 7. Continued

| Variety           | Bacterial Blight <sup>1/</sup><br>Incidence | Variety           | Seedling<br>Vigor Index |
|-------------------|---|-------------------|-------------------------|
| Rex Smoothleaf 66 | 4.90 a                                      | MO-DEL            | 3.87 a                  |
| Stoneville 7A     | 4.50 ab                                     | Stoneville 213    | 3.73 ab                 |
| MO-DEL            | 4.30 bc                                     | Delcot 277        | 3.73 ab                 |
| Deltapine 16      | 4.10 bc                                     | Deltapine 16      | 3.67 abc                |
| Stoneville 213    | 4.10 bc                                     | Coker 310         | 3.67 abc                |
| Deltapine 45A     | 4.00 bc                                     | Auburn M          | 3.53 abc                |
| Coker 310         | 3.90 c                                      | Stoneville 7A     | 3.47 bc                 |
| Delcot 277        | 3.90 c                                      | Deltapine 45A     | 3.40 bc                 |
| Auburn M          | 3.20 d                                      | Rex Smoothleaf 66 | 3.33 c                  |

| Variety           | Height Index |
|-------------------|--------------|
| MO-DEL            | 2.30 a       |
| Stoneville 213    | 2.17 a       |
| Stoneville 7A     | 2.10 a       |
| Coker 310         | 2.07 a       |
| Delcot 277        | 2.07 a       |
| Deltapine 45A     | 2.03 a       |
| Auburn M          | 1.70 b       |
| Deltapine 16      | 1.67 b       |
| Rex Smoothleaf 66 | 1.57 b       |

| Variety           | Lodging Index |
|-------------------|---------------|
| MO-DEL            | 2.80 a        |
| Stoneville 7A     | 2.73 a        |
| Stoneville 213    | 2.73 a        |
| Coker 310         | 2.67 ab       |
| Deltapine 16      | 2.47 abc      |
| Deltapine 45A     | 2.33 bcd      |
| Delcot 277        | 2.13 cd       |
| Auburn M          | 2.00 d        |
| Rex Smoothleaf 66 | 2.00 d        |

| Variety           | Storm Resistance Index |
|-------------------|------------------------|
| MO-DEL            | 3.07 a                 |
| Stoneville 7A     | 2.93 ab                |
| Coker 310         | 2.73 bc                |
| Deltapine 45A     | 2.67 bcd               |
| Deltapine 16      | 2.60 cd                |
| Stoneville 213    | 2.53 cd                |
| Delcot 277        | 2.53 cd                |
| Auburn M          | 2.47 cd                |
| Rex Smoothleaf 66 | 2.40 d                 |

<sup>1/</sup> 1970-71 only

Table 7 Continued

| Variety           | Seed Index <sup>1/</sup> | Variety           | Seed Grade <sup>1/</sup> |
|-------------------|--------------------------|-------------------|--------------------------|
| Rex Smoothleaf 66 | 13.95 a                  | Stoneville 213    | 8.00 a                   |
| MO-DEL            | 13.80 a                  | Stoneville 7A     | 8.00 a                   |
| Delcot 277        | 12.80 b                  | Delcot 277        | 8.00 a                   |
| Auburn M          | 12.10 c                  | Coker 310         | 8.00 a                   |
| Stoneville 213    | 11.40 d                  | Deltapine 45A     | 7.75 ab                  |
| Stoneville 7A     | 11.20 d                  | Auburn M          | 7.75 ab                  |
| Coker 310         | 11.10 d                  | MO-DEL            | 7.75 ab                  |
| Deltapine 45A     | 11.05 d                  | Deltapine 16      | 7.50 b                   |
| Deltapine 16      | 11.00 d                  | Rex Smoothleaf 66 | 7.50 b                   |

| Variety           | Lint Percent | Variety           | Boll Weight <sup>1/</sup> |
|-------------------|--------------|-------------------|---------------------------|
| Stoneville 7A     | 38.15 a      | Rex Smoothleaf 66 | 7.60 a                    |
| Coker 310         | 37.62 ab     | MO-DEL            | 7.33 a                    |
| Deltapine 45A     | 37.42 ab     | Delcot 277        | 7.20 a                    |
| Stoneville 213    | 37.37 ab     | Auburn M          | 6.58 b                    |
| Deltapine 16      | 37.15 ab     | Coker 310         | 6.45 bc                   |
| Delcot 277        | 37.12 b      | Deltapine 16      | 6.28 bc                   |
| Auburn M          | 34.95 c      | Stoneville 213    | 6.25 bc                   |
| MO-DEL            | 34.68 c      | Stoneville 7A     | 6.23 bc                   |
| Rex Smoothleaf 66 | 34.58 c      | Deltapine 45A     | 6.00 c                    |

| Variety           | 50% Span Length |
|-------------------|-----------------|
| MO-DEL            | 0.51 a          |
| Coker 310         | 0.51 a          |
| Delcot 277        | 0.51 a          |
| Stoneville 7A     | 0.50 a          |
| Rex Smoothleaf 66 | 0.50 a          |
| Deltapine 16      | 0.50 a          |
| Stoneville 213    | 0.49 a          |
| Auburn M          | 0.49 a          |
| Deltapine 45A     | 0.49 a          |

<sup>1/</sup> 1970-71 only

Table 7 Continued

| Variety           | 2.5%<br>Span Length |
|-------------------|---------------------|
| Coker 310         | 1.18 a              |
| Delcot 277        | 1.16 ab             |
| Rex Smoothleaf 66 | 1.14 bc             |
| Deltapine 16      | 1.14 bc             |
| MO-DEL            | 1.13 cd             |
| Stoneville 7A     | 1.13 cd             |
| Auburn M          | 1.11 de             |
| Stoneville 213    | 1.10 e              |
| Deltapine 45A     | 1.10 e              |

| Variety           | Length<br>Uniformity Index |
|-------------------|----------------------------|
| MO-DEL            | 44.50 a                    |
| Stoneville 213    | 44.50 a                    |
| Auburn M          | 44.33 a                    |
| Deltapine 45A     | 44.33 a                    |
| Stoneville 7A     | 44.00 a                    |
| Deltapine 16      | 44.00 a                    |
| Coker 310         | 43.50 a                    |
| Delcot 277        | 43.33 a                    |
| Rex Smoothleaf 66 | 43.17 a                    |

| Variety           | Micronaire |
|-------------------|------------|
| Stoneville 213    | 4.70 a     |
| Stoneville 7A     | 4.65 ab    |
| Coker 310         | 4.62 ab    |
| MO-DEL            | 4.52 b     |
| Deltapine 16      | 4.52 b     |
| Deltapine 45A     | 4.50 b     |
| Rex Smoothleaf 66 | 4.25 c     |
| Auburn M          | 4.25 c     |
| Delcot 277        | 3.95 d     |

| Variety           | Colorimeter Rd |
|-------------------|----------------|
| Deltapine 16      | 73.33 a        |
| Stoneville 7A     | 72.83 ab       |
| Deltapine 45A     | 72.17 abc      |
| Rex Smoothleaf 66 | 72.17 abc      |
| Stoneville 213    | 71.67 bc       |
| Auburn M          | 71.50 bcd      |
| Delcot 277        | 71.33 bcd      |
| MO-DEL            | 71.00 cd       |
| Coker 310         | 70.17 d        |

| Variety           | Colorimeter b |
|-------------------|---------------|
| MO-DEL            | 8.42 a        |
| Delcot 277        | 8.33 ab       |
| Coker 310         | 8.25 abc      |
| Auburn M          | 8.17 bc       |
| Rex Smoothleaf 66 | 8.08 cd       |
| Stoneville 213    | 8.08 cd       |
| Stoneville 7A     | 7.92 de       |
| Deltapine 45A     | 7.92 de       |
| Deltapine 16      | 7.83 e        |

Table 7 Continued

| Variety           | Trash   | Variety           | Yarn Strength<br>22's |
|-------------------|---------|-------------------|-----------------------|
| Coker 310         | 3.67 a  | Delcot 277        | 117.83 a              |
| Deltapine 45A     | 3.50 ab | Coker 310         | 114.50 ab             |
| Delcot 277        | 3.50 ab | MO-DEL            | 113.67 b              |
| Stoneville 7A     | 3.50 ab | Deltapine 45A     | 110.67 bc             |
| Rex Smoothleaf 66 | 3.50 ab | Deltapine 16      | 109.33 cd             |
| Deltapine 16      | 3.50 ab | Stoneville 7A     | 106.50 de             |
| MO-DEL            | 3.50 ab | Auburn M          | 106.50 de             |
| Auburn M          | 3.33 b  | Rex Smoothleaf 66 | 104.00 e              |
| Stoneville 213    | 3.33 b  | Stoneville 213    | 103.67 e              |

| Variety           | Yarn Tenacity 27 Tex <sup>1/</sup> |
|-------------------|------------------------------------|
| Delcot 277        | 13.65 a                            |
| Coker 310         | 12.85 b                            |
| MO-DEL            | 12.85 b                            |
| Deltapine 45A     | 12.75 b                            |
| Deltapine 16      | 12.55 bc                           |
| Stoneville 7A     | 12.25 bc                           |
| Stoneville 213    | 12.00 c                            |
| Auburn M          | 12.00 c                            |
| Rex Smoothleaf 66 | 11.95 c                            |

<sup>1/</sup> 1971 only

Table 8. Summary of Performance of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Irrigated Soil Infected with *Verticillium* Wilt Disease, 1969-71

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   |            |                       |
| Delcot 277              | 1125.06 a         | 1013.63              | 90                    | 38.05           | 1.18              | 3.72       | 116.17                |
| Deltapine 16            | 983.83 b          | 824.17               | 84                    | 36.80           | 1.15              | 3.97       | 105.33                |
| Deltapine 45A           | 894.69 c          | 783.91               | 88                    | 37.72           | 1.10              | 3.95       | 105.50                |
| Coker 310               | 868.65 cd         | 805.18               | 93                    | 37.70           | 1.19              | 3.92       | 109.50                |
| Stoneville 7A           | 859.02 cde        | 705.50               | 82                    | 37.62           | 1.14              | 4.10       | 101.00                |
| Stoneville 213          | 830.04 de         | 716.41               | 86                    | 36.12           | 1.11              | 4.17       | 98.17                 |
| Rex Smoothleaf 66       | 827.56 de         | 746.68               | 90                    | 34.87           | 1.12              | 3.65       | 100.50                |
| MO-DEL                  | 805.83 e          | 723.11               | 90                    | 34.27           | 1.13              | 3.72       | 110.00                |
| Auburn M                | 803.63 e          | 739.52               | 92                    | 34.60           | 1.11              | 3.77       | 102.83                |
| Mean                    | 888.70            | 784.23               | 88                    | 36.41           | 1.14              | 3.88       | 105.44                |
| miLSR (.05)             | 56.42             | 56.11                |                       | .93             | .02               | .18        | 3.89                  |
| MaLSR (.05)             | 65.73             | 65.36                |                       | 1.07            | .02               | .20        | 4.48                  |
| C. V. %                 | 8.61              | 9.70                 |                       | 2.14            | 1.59              | 3.80       | 3.09                  |

Table 9. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Irrigated Soil Infected with *Verticillium* Wilt Disease, 1969-71.

| Variety           | Seed Cotton<br>Lbs/Acre | Variety           | Total Lint<br>Lbs/Acre |
|-------------------|-------------------------|-------------------|------------------------|
| Delcot 277        | 2967.63 a               | Delcot 277        | 1125.06 a              |
| Deltapine 16      | 2674.17 b               | Deltapine 16      | 983.83 b               |
| Rex Smoothleaf 66 | 2365.11 c               | Deltapine 45A     | 894.69 c               |
| Deltapine 45A     | 2361.45 c               | Coker 310         | 868.65 cd              |
| MO-DEL            | 2334.85 c               | Stoneville 7A     | 859.02 cde             |
| Auburn M          | 2319.26 c               | Stoneville 213    | 830.04 de              |
| Coker 310         | 2291.75 c               | Rex Smoothleaf 66 | 827.56 de              |
| Stoneville 213    | 2284.41 c               | MO-DEL            | 805.83 e               |
| Stoneville 7A     | 2267.90 c               | Auburn M          | 803.63 e               |

  

| Variety           | Lint-Lbs/Acre<br>1st Pick | Variety           | Stand<br>Hills/Plot |
|-------------------|---------------------------|-------------------|---------------------|
| Delcot 277        | 1013.63 a                 | Deltapine 16      | 94.73 a             |
| Deltapine 16      | 824.17 b                  | Stoneville 213    | 94.53 ab            |
| Coker 310         | 805.18 bc                 | Coker 310         | 93.80 abc           |
| Deltapine 45A     | 783.91 bcd                | Deltapine 45A     | 93.60 abc           |
| Rex Smoothleaf 66 | 746.68 cde                | Delcot 277        | 93.60 abc           |
| Auburn M          | 739.52 de                 | Stoneville 7A     | 93.33 abc           |
| MO-DEL            | 723.11 de                 | MO-DEL            | 93.27 abc           |
| Stoneville 213    | 716.41 e                  | Auburn M          | 92.40 bc            |
| Stoneville 7A     | 705.50 e                  | Rex Smoothleaf 66 | 92.27 c             |

  

| Variety           | 1st Flower<br>Days | Variety           | Verticillium<br>Wilt Rating |
|-------------------|--------------------|-------------------|-----------------------------|
| Delcot 277        | 64.07 a            | Delcot 277        | 4.06 a                      |
| Stoneville 7A     | 64.07 a            | Deltapine 45A     | 3.39 b                      |
| Deltapine 16      | 64.07 a            | Deltapine 16      | 3.31 b                      |
| Rex Smoothleaf 66 | 64.00 a            | Stoneville 7A     | 3.19 bc                     |
| Deltapine 45A     | 63.73 a            | Stoneville 213    | 2.95 cd                     |
| MO-DEL            | 62.60 a            | MO-DEL            | 2.89 d                      |
| Coker 310         | 62.20 a            | Rex Smoothleaf 66 | 2.78 d                      |
| Auburn M          | 61.73 a            | Auburn M          | 2.45 e                      |
| Stoneville 213    | 59.67 a            | Coker 310         | 2.24 e                      |

| Variety           | Bacterial Blight Incidence <sup>1/</sup> |
|-------------------|--|
| Rex Smoothleaf 66 | 4.80 a                                   |
| MO-DEL            | 4.30 b                                   |
| Deltapine 45A     | 3.70 c                                   |
| Deltapine 16      | 3.60 c                                   |
| Coker 310         | 3.50 cd                                  |
| Stoneville 7A     | 3.50 cd                                  |
| Stoneville 213    | 3.50 cd                                  |
| Delcot 277        | 3.50 cd                                  |
| Auburn M          | 3.10 d                                   |

<sup>1/</sup> 1970-71 only



Table 9 Continued

| Variety           | Seedling<br>Vigor Index |
|-------------------|-------------------------|
| MO-DEL            | 3.87 a                  |
| Delcot 277        | 3.87 a                  |
| Coker 310         | 3.80 a                  |
| Deltapine 45A     | 3.80 a                  |
| Stoneville 213    | 3.80 a                  |
| Stoneville 7A     | 3.73 a                  |
| Rex Smoothleaf 66 | 3.40 b                  |
| Deltapine 16      | 3.33 b                  |
| Auburn M          | 3.33 b                  |

| Variety           | Height Index |
|-------------------|--------------|
| Stoneville 7A     | 2.43 a       |
| Stoneville 213    | 2.23 ab      |
| MO-DEL            | 2.20 b       |
| Coker 310         | 2.10 b       |
| Deltapine 45A     | 2.10 b       |
| Deltapine 16      | 2.10 b       |
| Delcot 277        | 2.00 b       |
| Auburn M          | 1.37 c       |
| Rex Smoothleaf 66 | 1.23 c       |

| Variety           | Lodging<br>Index |
|-------------------|------------------|
| Stoneville 7A     | 2.93 a           |
| Stoneville 213    | 2.73 ab          |
| Coker 310         | 2.67 ab          |
| Deltapine 16      | 2.67 ab          |
| MO-DEL            | 2.60 ab          |
| Deltapine 45A     | 2.53 b           |
| Delcot 277        | 2.13 c           |
| Rex Smoothleaf 66 | 1.73 d           |
| Auburn M          | 1.47 d           |

| Variety           | Storm Resistance<br>Index |
|-------------------|---------------------------|
| MO-DEL            | 3.67 a                    |
| Stoneville 213    | 3.00 b                    |
| Coker 310         | 2.93 bc                   |
| Stoneville 7A     | 2.80 bc                   |
| Deltapine 16      | 2.67 cd                   |
| Deltapine 45A     | 2.47 d                    |
| Delcot 277        | 2.47 d                    |
| Rex Smoothleaf 66 | 2.40 de                   |
| Auburn M          | 2.13 e                    |

| Variety           | Lint Percent |
|-------------------|--------------|
| Delcot 277        | 38.05 a      |
| Deltapine 45A     | 37.72 ab     |
| Coker 310         | 37.70 ab     |
| Stoneville 7A     | 37.62 ab     |
| Deltapine 16      | 36.80 bc     |
| Stoneville 213    | 36.12 c      |
| Rex Smoothleaf 66 | 34.87 d      |
| Auburn M          | 34.60 d      |
| MO-DEL            | 34.27 d      |

| Variety           | 50% Span Length |
|-------------------|-----------------|
| Delcot 277        | 0.52 a          |
| MO-DEL            | 0.50 ab         |
| Deltapine 16      | 0.49 b          |
| Coker 310         | 0.49 b          |
| Deltapine 45A     | 0.49 b          |
| Stoneville 7A     | 0.48 b          |
| Stoneville 213    | 0.48 b          |
| Auburn M          | 0.48 b          |
| Rex Smoothleaf 66 | 0.48 b          |

| Variety           | 2.5% Span Length |
|-------------------|------------------|
| Coker 310         | 1.19 a           |
| Delcot 277        | 1.18 a           |
| Deltapine 16      | 1.15 b           |
| Stoneville 7A     | 1.14 bc          |
| MO-DEL            | 1.13 bcd         |
| Rex Smoothleaf 66 | 1.12 cde         |
| Stoneville 213    | 1.11 de          |
| Auburn M          | 1.11 de          |
| Deltapine 45A     | 1.10 e           |

Table 9 Continued

| Variety           | Length<br>Uniformity Index |
|-------------------|----------------------------|
| Deltapine 45A     | 44.33 a                    |
| MO-DEL            | 44.00 ab                   |
| Delcot 277        | 43.33 abc                  |
| Auburn M          | 42.83 abcd                 |
| Stoneville 213    | 42.83 abcd                 |
| Rex Smoothleaf 66 | 42.50 bed                  |
| Deltapine 16      | 42.33 cd                   |
| Stoneville 7A     | 42.17 cd                   |
| Coker 310         | 41.33 d                    |

| Variety           | Colorimeter Rd |
|-------------------|----------------|
| Deltapine 16      | 73.50 a        |
| Deltapine 45A     | 71.33 b        |
| Stoneville 7A     | 71.33 b        |
| Rex Smoothleaf 66 | 71.17 b        |
| Auburn M          | 70.67 bc       |
| Delcot 277        | 70.33 bc       |
| Coker 310         | 70.33 bc       |
| Stoneville 213    | 69.67 c        |
| MO-DEL            | 69.50 c        |

| Variety           | Trash   |
|-------------------|---------|
| Deltapine 45A     | 3.67 a  |
| Coker 310         | 3.67 a  |
| Delcot 277        | 3.50 a  |
| MO-DEL            | 3.50 a  |
| Auburn M          | 3.33 ab |
| Rex Smoothleaf 66 | 3.33 ab |
| Stoneville 7A     | 3.17 ab |
| Stoneville 213    | 3.17 ab |
| Deltapine 16      | 2.83 b  |

| Variety           | Micronaire |
|-------------------|------------|
| Stoneville 213    | 4.17 a     |
| Stoneville 7A     | 4.10 ab    |
| Deltapine 16      | 3.97 b     |
| Deltapine 45A     | 3.95 bc    |
| Coker 310         | 3.92 bc    |
| Auburn M          | 3.77 cd    |
| MO-DEL            | 3.72 d     |
| Delcot 277        | 3.72 d     |
| Rex Smoothleaf 66 | 3.65 d     |

| Variety           | Colorimeter b |
|-------------------|---------------|
| Stoneville 213    | 8.25 a        |
| Delcot 277        | 8.25 a        |
| Rex Smoothleaf 66 | 8.17 ab       |
| MO-DEL            | 8.17 ab       |
| Deltapine 45A     | 8.08 ab       |
| Coker 310         | 8.00 ab       |
| Stoneville 7A     | 7.92 b        |
| Deltapine 16      | 7.92 b        |
| Auburn M          | 7.92 b        |

| Variety           | Yarn Strength<br>22's |
|-------------------|-----------------------|
| Delcot 277        | 116.17 a              |
| MO-DEL            | 110.00 b              |
| Coker 310         | 109.50 b              |
| Deltapine 45A     | 105.50 c              |
| Deltapine 16      | 105.33 c              |
| Auburn M          | 102.83 cd             |
| Stoneville 7A     | 101.00 de             |
| Rex Smoothleaf 66 | 100.50 de             |
| Stoneville 213    | 98.17 e               |

| Variety           | Yarn Tenacity 27 Tex <sup>1/</sup> |
|-------------------|------------------------------------|
| Delcot 277        | 13.20 a                            |
| MO-DEL            | 13.10 ab                           |
| Coker 310         | 12.75 abc                          |
| Deltapine 45A     | 12.55 abc                          |
| Deltapine 16      | 12.50 abc                          |
| Rex Smoothleaf 66 | 12.30 bc                           |
| Auburn M          | 12.20 c                            |
| Stoneville 213    | 12.15 c                            |
| Stoneville 7A     | 11.90 c                            |

1/ 1971 only

Table 10. Summary of Performance of Cotton Varieties Grown in Southeast Missouri on Heavy Clay, Wilt-free, Irrigated Soil, 1969-71

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   |            |                       |
| Deltapine 16            | 752.27 a          | 616.27               | 82                    | 37.13           | 1.17              | 4.57       | 108.83                |
| Delcot 277              | 750.53 a          | 654.14               | 87                    | 37.32           | 1.19              | 4.23       | 122.50                |
| Stoneville 7A           | 735.49 ab         | 589.12               | 80                    | 38.02           | 1.15              | 4.73       | 109.17                |
| Stoneville 213          | 734.20 ab         | 608.38               | 83                    | 37.70           | 1.13              | 4.73       | 107.50                |
| Coker 310               | 714.21 ab         | 613.24               | 86                    | 37.78           | 1.20              | 4.70       | 114.50                |
| Deltapine 45A           | 708.80 b          | 587.38               | 83                    | 37.68           | 1.12              | 4.55       | 112.33                |
| Rex Smoothleaf 66       | 671.11 c          | 539.05               | 80                    | 34.68           | 1.14              | 4.40       | 106.67                |
| MO-DEL                  | 593.43 d          | 500.53               | 84                    | 35.07           | 1.16              | 4.55       | 114.83                |
| Auburn M                | 578.12 d          | 509.25               | 88                    | 34.90           | 1.13              | 4.33       | 106.67                |
| Mean                    | 693.13            | 579.71               | 84                    | 36.70           | 1.15              | 4.53       | 111.44                |
| MI <sub>LSR</sub> (.05) | 36.18             | 32.16                |                       | .90             | .02               | .11        | 2.79                  |
| Ma <sub>LSR</sub> (.05) | 42.14             | 37.47                |                       | 1.04            | .03               | .13        | 3.21                  |
| C. V. %                 | 7.08              | 7.52                 |                       | 2.05            | 1.61              | 2.02       | 2.10                  |

Table 11. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Heavy Clay Wilt-free, Irrigated Soil, 1969-71.

| Variety           | Seed Cotton<br>Lbs/Acre | Variety           | Total Lint<br>Lbs/Acre |
|-------------------|-------------------------|-------------------|------------------------|
| Deltapine 16      | 2034.97 a               | Deltapine 16      | 752.27 a               |
| Delcot 277        | 2012.04 a               | Delcot 277        | 750.53 a               |
| Stoneville 213    | 1959.77 ab              | Stoneville 7A     | 735.49 ab              |
| Stoneville 7A     | 1952.43 ab              | Stoneville 213    | 734.20 ab              |
| Rex Smoothleaf 66 | 1941.43 ab              | Coker 310         | 714.21 ab              |
| Coker 310         | 1892.82 b               | Deltapine 45A     | 708.80 b               |
| Deltapine 45A     | 1891.91 b               | Rex Smoothleaf 66 | 671.11 c               |
| MO-DEL            | 1691.07 c               | MO-DEL            | 593.43 d               |
| Auburn M          | 1659.89 c               | Auburn M          | 578.12 d               |

| Variety           | Lint-Lbs/Acre<br>1st Pick | Variety           | Stand<br>Hills/Plot |
|-------------------|---------------------------|-------------------|---------------------|
| Delcot 277        | 654.14 a                  | Stoneville 7A     | 107.67 a            |
| Deltapine 16      | 616.27 b                  | Deltapine 16      | 107.60 a            |
| Coker 310         | 613.24 b                  | Deltapine 45A     | 107.40 a            |
| Stoneville 213    | 608.38 b                  | Coker 310         | 107.07 a            |
| Stoneville 7A     | 589.12 b                  | Auburn M          | 106.47 ab           |
| Deltapine 45A     | 587.38 b                  | Stoneville 213    | 106.33 ab           |
| Rex Smoothleaf 66 | 539.05 c                  | MO-DEL            | 106.20 ab           |
| Auburn M          | 509.25 cd                 | Delcot 277        | 105.40 ab           |
| MO-DEL            | 500.53 d                  | Rex Smoothleaf 66 | 104.13 b            |

| Variety           | 1st Flower-Days |
|-------------------|-----------------|
| Deltapine 45A     | 70.47 a         |
| Stoneville 7A     | 70.20 a         |
| Deltapine 16      | 70.07 a         |
| Delcot 277        | 69.80 a         |
| Stoneville 213    | 69.67 ab        |
| Rex Smoothleaf 66 | 68.53 b         |
| MO-DEL            | 68.53 b         |
| Auburn M          | 66.60 c         |
| Coker 310         | 65.60 c         |

Table 11 Continued

| Variety           | Bacterial Blight <sup>1/</sup><br>Incidence | Variety           | Seedling<br>Vigor Index |
|-------------------|---|-------------------|-------------------------|
| Rex Smoothleaf 66 | 5.00 a                                      | MO-DEL            | 3.33 a                  |
| Stoneville 7A     | 4.30 b                                      | Coker 310         | 3.27 a                  |
| MO-DEL            | 4.20 bc                                     | Delcot 277        | 3.27 a                  |
| Deltapine 16      | 4.10 bcd                                    | Deltapine 45A     | 3.27 a                  |
| Delcot 277        | 3.90 bcd                                    | Stoneville 7A     | 3.13 ab                 |
| Deltapine 45A     | 3.80 cd                                     | Stoneville 213    | 3.13 ab                 |
| Coker 310         | 3.70 d                                      | Deltapine 16      | 3.07 ab                 |
| Stoneville 213    | 3.70 d                                      | Auburn M          | 2.87 bc                 |
| Auburn M          | 3.20 e                                      | Rex Smoothleaf 66 | 2.80 c                  |

| Variety           | Height Index | Variety           | Lodging Index |
|-------------------|--------------|-------------------|---------------|
| MO-DEL            | 2.33 a       | Coker 310         | 3.27 a        |
| Coker 310         | 2.30 a       | MO-DEL            | 3.13 a        |
| Delcot 277        | 1.83 b       | Deltapine 45A     | 2.80 b        |
| Stoneville 7A     | 1.83 b       | Stoneville 7A     | 2.80 b        |
| Deltapine 16      | 1.80 b       | Deltapine 16      | 2.80 b        |
| Deltapine 45A     | 1.73 b       | Stoneville 213    | 2.73 b        |
| Stoneville 213    | 1.67 b       | Delcot 277        | 2.20 c        |
| Auburn M          | 1.30 c       | Auburn M          | 1.93 cd       |
| Rex Smoothleaf 66 | 1.23 c       | Rex Smoothleaf 66 | 1.87 d        |

| Variety           | Storm Resistance Index |
|-------------------|------------------------|
| MO-DEL            | 3.07 a                 |
| Stoneville 213    | 2.73 b                 |
| Coker 310         | 2.67 b                 |
| Stoneville 7A     | 2.53 bc                |
| Deltapine 45A     | 2.33 c                 |
| Deltapine 16      | 2.33 c                 |
| Delcot 277        | 2.33 c                 |
| Rex Smoothleaf 66 | 2.27 c                 |
| Auburn M          | 2.00 d                 |

<sup>1/</sup> 1970-71 only

Table 11 Continued

| Variety           | Lint Percent |
|-------------------|--------------|
| Stoneville 7A     | 38.02 a      |
| Coker 310         | 37.78 a      |
| Stoneville 213    | 37.70 a      |
| Deltapine 45A     | 37.68 a      |
| Delcot 277        | 37.32 a      |
| Deltapine 16      | 37.13 a      |
| MO-DEL            | 35.07 b      |
| Auburn M          | 34.90 b      |
| Rex Smoothleaf 66 | 34.68 b      |

| Variety           | 50% Span Length |
|-------------------|-----------------|
| Delcot 277        | 0.53 a          |
| Deltapine 16      | 0.52 ab         |
| Coker 310         | 0.52 ab         |
| Deltapine 45A     | 0.51 abc        |
| MO-DEL            | 0.51 abc        |
| Stoneville 7A     | 0.50 bc         |
| Stoneville 213    | 0.50 bc         |
| Rex Smoothleaf 66 | 0.50 bc         |
| Auburn M          | 0.49 c          |

| Variety           | 2.5% Span Length |
|-------------------|------------------|
| Coker 310         | 1.20 a           |
| Delcot 277        | 1.19 ab          |
| Deltapine 16      | 1.17 bc          |
| MO-DEL            | 1.16 cd          |
| Stoneville 7A     | 1.15 cde         |
| Rex Smoothleaf 66 | 1.14 def         |
| Stoneville 213    | 1.13 ef          |
| Auburn M          | 1.13 ef          |
| Deltapine 45A     | 1.12 f           |

| Variety           | Length<br>Uniformity Index |
|-------------------|----------------------------|
| Deltapine 45A     | 45.33 a                    |
| Delcot 277        | 44.33 ab                   |
| Stoneville 213    | 44.17 ab                   |
| Stoneville 7A     | 43.83 bc                   |
| Deltapine 16      | 43.83 bc                   |
| MO-DEL            | 43.67 bc                   |
| Rex Smoothleaf 66 | 43.33 bc                   |
| Auburn M          | 43.17 bc                   |
| Coker 310         | 42.67 c                    |

| Variety           | Micronaire |
|-------------------|------------|
| Stoneville 213    | 4.73 a     |
| Stoneville 7A     | 4.73 a     |
| Coker 310         | 4.70 a     |
| Deltapine 16      | 4.57 b     |
| Deltapine 45A     | 4.55 b     |
| MO-DEL            | 4.55 b     |
| Rex Smoothleaf 66 | 4.40 c     |
| Auburn M          | 4.33 cd    |
| Delcot 277        | 4.23 d     |

Table 11 Continued

| Variety           | Colorimeter<br>Rd | Variety           | Colorimeter<br>b |
|-------------------|-------------------|-------------------|------------------|
| Deltapine 16      | 72.83 a           | MO-DEL            | 8.17 a           |
| Deltapine 45A     | 71.67 b           | Delcot 277        | 8.08 ab          |
| Stoneville 7A     | 71.50 bc          | Coker 310         | 7.92 abc         |
| Stoneville 213    | 71.33 bcd         | Rex Smoothleaf 66 | 7.83 bcd         |
| Rex Smoothleaf 66 | 71.17 bcd         | Stoneville 213    | 7.83 bcd         |
| Auburn M          | 70.33 cde         | Auburn M          | 7.75 cde         |
| Delcot 277        | 70.17 de          | Deltapine 45A     | 7.58 de          |
| Coker 310         | 69.83 e           | Stoneville 7A     | 7.50 e           |
| MO-DEL            | 69.50 e           | Deltapine 16      | 7.50 e           |

| Variety           | Trash  | Variety           | Yarn Strength<br>22's |
|-------------------|--------|-------------------|-----------------------|
| Stoneville 213    | 3.50 a | Delcot 277        | 122.50 a              |
| Stoneville 7A     | 3.33 a | MO-DEL            | 114.83 b              |
| Rex Smoothleaf 66 | 3.33 a | Coker 310         | 114.50 b              |
| Auburn M          | 3.33 a | Deltapine 45A     | 112.33 b              |
| MO-DEL            | 3.33 a | Stoneville 7A     | 109.17 c              |
| Delcot 277        | 3.33 a | Deltapine 16      | 108.83 c              |
| Deltapine 16      | 3.17 a | Stoneville 213    | 107.50 c              |
| Coker 310         | 3.17 a | Auburn M          | 106.67 c              |
| Deltapine 45A     | 3.17 a | Rex Smoothleaf 66 | 106.67 c              |

| Variety           | Yarn Tenacity 27 Tex <sup>1/</sup> |
|-------------------|------------------------------------|
| Delcot 277        | 14.10 a                            |
| Deltapine 45A     | 13.15 b                            |
| Coker 310         | 13.05 b                            |
| MO-DEL            | 12.85 bc                           |
| Rex Smoothleaf 66 | 12.70 bc                           |
| Deltapine 16      | 12.40 c                            |
| Stoneville 213    | 12.35 c                            |
| Auburn M          | 12.30 c                            |
| Stoneville 7A     | 12.20 c                            |

1/ 1971 only

Table 12. Summary of Performance of Cotton Varieties Grown in Southeast Missouri on Sandy, Irrigated Soil, 1969-71

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Yarn Strength |        |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|---------------|--------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   | Micronaire    | 22's   |
| Delcot 277              | 1047.24 a         | 972.35               | 93                    | 38.05           | 1.19              | 4.02          | 116.50 |
| Coker 310               | 991.80 ab         | 890.93               | 90                    | 38.30           | 1.22              | 4.38          | 109.17 |
| Deltapine 45A           | 957.62 abc        | 846.05               | 88                    | 38.23           | 1.12              | 4.38          | 107.00 |
| Auburn M                | 941.64 abc        | 848.27               | 90                    | 35.57           | 1.10              | 4.17          | 98.67  |
| Rex Smoothleaf 66       | 917.60 bcd        | 780.74               | 85                    | 36.05           | 1.13              | 4.10          | 103.67 |
| MO-DEL                  | 858.41 cd         | 741.70               | 86                    | 35.33           | 1.16              | 4.52          | 110.33 |
| Deltapine 16            | 846.88 cd         | 737.11               | 87                    | 37.63           | 1.17              | 4.15          | 108.83 |
| Stoneville 7A           | 819.51 d          | 661.25               | 81                    | 38.10           | 1.14              | 4.32          | 104.50 |
| Stoneville 213          | 816.73 d          | 720.99               | 88                    | 37.30           | 1.12              | 4.53          | 100.50 |
| Mean                    | 910.83            | 799.93               | 88                    | 37.17           | 1.15              | 4.29          | 106.57 |
| MiLSR (.05)             | 104.00            | 95.16                |                       | 1.54            | .02               | .15           | 4.52   |
| MaLSR (.05)             | 121.10            | 110.90               |                       | 1.78            | .02               | .17           | 5.21   |
| C. V. %                 | 15.48             | 16.13                |                       | 3.48            | 1.44              | 2.90          | 3.55   |



Table 13. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Sandy Irrigated Soil, 1969-71.

| Seed Cotton       |             | Total Lint        |            |
|-------------------|-------------|-------------------|------------|
| Variety           | Lbs/Acre    | Variety           | Lbs/Acre   |
| Delcot 277        | 2758.09 a   | Delcot 277        | 1047.24 a  |
| Auburn M          | 2628.87 ab  | Coker 310         | 991.80 ab  |
| Coker 310         | 2623.31 ab  | Deltapine 45A     | 957.62 abc |
| Rex Smoothleaf 66 | 2542.72 abc | Auburn M          | 941.64 abc |
| Deltapine 45A     | 2506.60 abc | Rex Smoothleaf 66 | 917.60 bcd |
| MO-DEL            | 2413.50 bcd | MO-DEL            | 858.41 cd  |
| Deltapine 16      | 2241.21 cd  | Deltapine 16      | 846.88 cd  |
| Stoneville 7A     | 2135.61 d   | Stoneville 7A     | 819.51 d   |
| Stoneville 213    | 2116.16 d   | Stoneville 213    | 816.73 d   |

  

| Lint-Lbs/Acre     |           | Stand             |            |
|-------------------|-----------|-------------------|------------|
| Variety           | 1st Pick  | Variety           | Hills/Plot |
| Delcot 277        | 972.35 a  | Deltapine 45A     | 67.53 a    |
| Coker 310         | 890.93 ab | Stoneville 213    | 67.47 a    |
| Auburn M          | 848.27 bc | Delcot 277        | 67.33 ab   |
| Deltapine 45A     | 846.05 bc | Auburn M          | 67.20 ab   |
| Rex Smoothleaf 66 | 780.74 cd | Deltapine 16      | 67.00 ab   |
| MO-DEL            | 741.70 de | Coker 310         | 66.93 ab   |
| Deltapine 16      | 737.11 de | MO-DEL            | 66.87 ab   |
| Stoneville 213    | 720.99 de | Stoneville 7A     | 66.87 ab   |
| Stoneville 7A     | 661.25 e  | Rex Smoothleaf 66 | 66.07 b    |

  

| 1st Flower        |          | Fusarium Wilt <sup>1/</sup> |          |
|-------------------|----------|-----------------------------|----------|
| Variety           | Days     | Variety                     | % Plants |
| Stoneville 213    | 60.40 a  | Stoneville 7A               | 24.60 a  |
| Deltapine 16      | 60.27 ab | Stoneville 213              | 24.10 a  |
| Stoneville 7A     | 60.20 ab | Rex Smoothleaf 66           | 8.50 b   |
| Deltapine 45A     | 60.00 ab | Deltapine 16                | 7.30 b   |
| Delcot 277        | 59.40 bc | MO-DEL                      | 7.30 b   |
| Rex Smoothleaf 66 | 59.07 c  | Coker 310                   | 6.50 b   |
| Coker 310         | 58.20 d  | Deltapine 45A               | 6.30 b   |
| MO-DEL            | 58.20 d  | Auburn M                    | 5.20 b   |
| Auburn M          | 57.20 e  | Delcot 277                  | 2.10 b   |

  

| Bacterial Blight Incidence <sup>2/</sup> |          |
|--|----------|
| Variety                                  |          |
| Rex Smoothleaf 66                        | 4.70 a   |
| Deltapine 45A                            | 4.30 ab  |
| MO-DEL                                   | 4.30 ab  |
| Stoneville 7A                            | 4.00 bc  |
| Coker 310                                | 3.90 bcd |
| Deltapine 16                             | 3.90 bcd |
| Delcot 277                               | 3.80 cd  |
| Stoneville 213                           | 3.50 de  |
| Auburn M                                 | 3.30 e   |

<sup>1/</sup> 1969-70 only<sup>2/</sup> 1970-71 only

Table 13 Continued

| Variety           | Seedling<br>Vigor Index |
|-------------------|-------------------------|
| Delcot 277        | 3.73 a                  |
| Deltapine 45A     | 3.53 ab                 |
| MO-DEL            | 3.47 ab                 |
| Coker 310         | 3.40 ab                 |
| Stoneville 213    | 3.33 ab                 |
| Auburn M          | 3.27 ab                 |
| Stoneville 7A     | 3.13 b                  |
| Rex Smoothleaf 66 | 3.07 bc                 |
| Deltapine 16      | 2.67 c                  |

  

| Variety           | Lodging Index |
|-------------------|---------------|
| MO-DEL            | 3.27 a        |
| Deltapine 16      | 3.07 ab       |
| Stoneville 213    | 3.00 abc      |
| Coker 310         | 2.93 abc      |
| Deltapine 45A     | 2.93 abc      |
| Delcot 277        | 2.93 abc      |
| Stoneville 7A     | 2.87 bc       |
| Rex Smoothleaf 66 | 2.67 cd       |
| Auburn M          | 2.47 d        |

  

| Variety           | Lint Percent |
|-------------------|--------------|
| Coker 310         | 38.30 a      |
| Deltapine 45A     | 38.23 a      |
| Stoneville 7A     | 38.10 a      |
| Delcot 277        | 38.05 a      |
| Deltapine 16      | 37.63 ab     |
| Stoneville 213    | 37.30 ab     |
| Rex Smoothleaf 66 | 36.05 bc     |
| Auburn M          | 35.57 c      |
| MO-DEL            | 35.33 c      |

  

| Variety           | Height Index |
|-------------------|--------------|
| Deltapine 45A     | 2.53 a       |
| Delcot 277        | 2.43 ab      |
| MO-DEL            | 2.43 ab      |
| Coker 310         | 2.33 ab      |
| Stoneville 213    | 2.23 abc     |
| Stoneville 7A     | 2.20 abc     |
| Deltapine 16      | 2.20 abc     |
| Auburn M          | 2.03 bc      |
| Rex Smoothleaf 66 | 1.87 c       |

  

| Variety           | Storm Resistance<br>Index |
|-------------------|---------------------------|
| Deltapine 16      | 3.33 a                    |
| Stoneville 213    | 2.93 ab                   |
| Coker 310         | 2.93 ab                   |
| Stoneville 7A     | 2.73 b                    |
| Auburn M          | 2.53 bc                   |
| Delcot 277        | 2.47 bc                   |
| MO-DEL            | 2.20 cd                   |
| Deltapine 45A     | 2.13 cd                   |
| Rex Smoothleaf 66 | 1.80 d                    |

  

| Variety           | 50% Span Length |
|-------------------|-----------------|
| Delcot 277        | 0.53 a          |
| Deltapine 16      | 0.52 a          |
| MO-DEL            | 0.52 a          |
| Coker 310         | 0.52 a          |
| Deltapine 45A     | 0.50 b          |
| Rex Smoothleaf 66 | 0.50 b          |
| Stoneville 7A     | 0.49 b          |
| Auburn M          | 0.49 b          |
| Stoneville 213    | 0.49 b          |

  

| Variety           | 2.5% Span Length |
|-------------------|------------------|
| Coker 310         | 1.22 a           |
| Delcot 277        | 1.19 b           |
| Deltapine 16      | 1.17 c           |
| MO-DEL            | 1.16 c           |
| Stoneville 7A     | 1.14 d           |
| Rex Smoothleaf 66 | 1.13 d           |
| Stoneville 213    | 1.12 de          |
| Deltapine 45A     | 1.12 de          |
| Auburn M          | 1.10 e           |

Table 13 Continued

| Length            |                  | Micronaire        |            |
|-------------------|------------------|-------------------|------------|
| Variety           | Uniformity Index | Variety           | Micronaire |
| MO-DEL            | 45.17 a          | Stoneville 213    | 4.53 a     |
| Deltapine 45A     | 44.83 ab         | MO-DEL            | 4.52 a     |
| Deltapine 16      | 44.50 abc        | Coker 310         | 4.38 ab    |
| Delcot 277        | 44.17 abcd       | Deltapine 45A     | 4.38 ab    |
| Auburn M          | 44.00 abcd       | Stoneville 7A     | 4.32 b     |
| Stoneville 213    | 43.67 cde        | Auburn M          | 4.17 c     |
| Rex Smoothleaf 66 | 43.50 cde        | Deltapine 16      | 4.15 c     |
| Stoneville 7A     | 43.17 de         | Rex Smoothleaf 66 | 4.10 c     |
| Coker 310         | 42.67 e          | Delcot 277        | 4.02 c     |

| Colorimeter Rd    |                | Colorimeter b  |               |
|-------------------|----------------|----------------|---------------|
| Variety           | Colorimeter Rd | Variety        | Colorimeter b |
| Deltapine 16      | 72.67 a        | MO-DEL         | 8.67 a        |
| Stoneville 7A     | 71.17 ab       | Delcot 277     | 8.42 ab       |
| Auburn M          | 70.83 bc       | Rex Smoothleaf | 8.33 abc      |
| Deltapine 45A     | 70.17 bc       | Stoneville 213 | 8.33 abc      |
| Delcot 277        | 70.17 bc       | Coker 310      | 8.25 bc       |
| Rex Smoothleaf 66 | 69.83 bc       | Auburn M       | 8.08 bcd      |
| Stoneville 213    | 69.67 bc       | Deltapine 45A  | 8.08 bcd      |
| Coker 310         | 69.17 cd       | Stoneville 7A  | 8.00 cd       |
| MO-DEL            | 67.67 d        | Deltapine 16   | 7.83 d        |

| Trash             |         | Yarn Strength<br>22's |                       |
|-------------------|---------|-----------------------|-----------------------|
| Variety           | Trash   | Variety               | Yarn Strength<br>22's |
| Deltapine 45A     | 3.67 a  | Delcot 277            | 116.50 a              |
| Coker 310         | 3.67 a  | MO-DEL                | 110.33 b              |
| Delcot 277        | 3.67 a  | Coker 310             | 109.17 bc             |
| MO-DEL            | 3.67 a  | Deltapine 16          | 108.83 bc             |
| Auburn M          | 3.50 ab | Deltapine 45A         | 107.00 bcd            |
| Stoneville 213    | 3.50 ab | Stoneville 7A         | 104.50 cde            |
| Stoneville 7A     | 3.33 ab | Rex Smoothleaf 66     | 103.67 de             |
| Rex Smoothleaf 66 | 3.33 ab | Stoneville 213        | 100.50 ef             |
| Deltapine 16      | 3.17 b  | Auburn M              | 98.67 f               |

| Variety           | Yarn Tenacity 27 Tex <sup>1/</sup> |
|-------------------|------------------------------------|
| Delcot 277        | 12.90 a                            |
| MO-DEL            | 12.75 ab                           |
| Coker 310         | 12.55 abc                          |
| Deltapine 16      | 12.35 abc                          |
| Deltapine 45A     | 11.95 abcd                         |
| Stoneville 7A     | 11.95 bcd                          |
| Stoneville 213    | 11.75 cd                           |
| Auburn M          | 11.70 cd                           |
| Rex Smoothleaf 66 | 11.30 d                            |

1/ 1971 only

Table 14. Summary of Performance of Cotton Varieties, Planted May 20 (late), in Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1970-71

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   |            |                       |
| Coker 310               | 945.86 a          | 945.86               | 100                   | 38.82           | 1.21              | 4.15       | 108.75                |
| Delcot 277              | 918.90 ab         | 918.90               | 100                   | 37.55           | 1.19              | 3.70       | 113.75                |
| Deltapine 45A           | 859.06 bc         | 859.06               | 100                   | 37.95           | 1.11              | 4.25       | 103.50                |
| Deltapine 16            | 821.23 cd         | 821.23               | 100                   | 37.65           | 1.15              | 4.12       | 107.00                |
| Stoneville 213          | 813.67 cd         | 813.67               | 100                   | 37.62           | 1.11              | 4.40       | 100.25                |
| Stoneville 7A           | 785.33 de         | 785.33               | 100                   | 38.75           | 1.11              | 4.27       | 102.50                |
| Auburn M                | 775.84 de         | 775.84               | 100                   | 35.70           | 1.09              | 4.02       | 96.00                 |
| Rex Smoothleaf 66       | 724.80 e          | 724.80               | 100                   | 34.35           | 1.12              | 3.87       | 98.75                 |
| MO-DEL                  | 619.29 f          | 619.29               | 100                   | 35.55           | 1.13              | 4.32       | 100.75                |
| Mean                    | 807.11            | 807.11               | 100                   | 37.11           | 1.14              | 4.12       | 103.47                |
| MiLSR (.05)             | 61.65             | 61.65                |                       | .76             | .02               | .16        | 4.98                  |
| MaLSR (.05)             | 72.08             | 72.08                |                       | .86             | .02               | .18        | 5.66                  |
| C. V. %                 | 8.53              | 8.53                 |                       | 1.36            | 1.24              | 2.54       | 3.21                  |

Table 15 Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Sandy Loam Wilt-free, Non-irrigated Soil, 1970-71, Planted May 20 (late).

| Variety           | Seed Cotton<br>Lbs/Acre | Variety           | Total Lint<br>Lbs/Acre |
|-------------------|-------------------------|-------------------|------------------------|
| Delcot 277        | 2437.56 a               | Coker 310         | 945.86 a               |
| Coker 310         | 2434.81 a               | Delcot 277        | 918.90 ab              |
| Deltapine 45A     | 2247.73 b               | Deltapine 45A     | 859.06 bc              |
| Deltapine 16      | 2180.33 bc              | Deltapine 16      | 821.23 cd              |
| Auburn M          | 2178.95 bc              | Stoneville 213    | 813.67 cd              |
| Stoneville 213    | 2156.94 bc              | Stoneville 7A     | 785.33 de              |
| Rex Smoothleaf 66 | 2084.03 bc              | Auburn M          | 775.84 de              |
| Stoneville 7A     | 2013.88 c               | Rex Smoothleaf 66 | 724.80 e               |
| MO-DEL            | 1747.01 d               | MO-DEL            | 619.29 f               |

| Variety           | Lint-Lbs/Acre<br>1st Pick |
|-------------------|---------------------------|
| Coker 310         | 945.86 a                  |
| Delcot 277        | 918.90 ab                 |
| Deltapine 45A     | 859.06 bc                 |
| Deltapine 16      | 821.23 cd                 |
| Stoneville 213    | 813.67 cd                 |
| Stoneville 7A     | 785.33 de                 |
| Auburn M          | 775.84 de                 |
| Rex Smoothleaf 66 | 724.80 e                  |
| MO-DEL            | 619.29 f                  |

| Variety           | Stand<br>Hills/Plot |
|-------------------|---------------------|
| Coker 310         | 87.50 a             |
| Rex Smoothleaf 66 | 87.20 ab            |
| MO-DEL            | 87.20 ab            |
| Delcot 277        | 86.90 ab            |
| Stoneville 213    | 86.70 ab            |
| Deltapine 45A     | 86.50 ab            |
| Stoneville 7A     | 86.00 ab            |
| Auburn M          | 85.40 ab            |
| Deltapine 16      | 84.80 b             |

| Variety           | 1st Flower-Days |
|-------------------|-----------------|
| Stoneville 7A     | 61.70 a         |
| Stoneville 213    | 61.40 ab        |
| Deltapine 45A     | 61.00 ab        |
| Rex Smoothleaf 66 | 60.90 ab        |
| Delcot 277        | 60.80 ab        |
| MO-DEL            | 60.50 ab        |
| Deltapine 16      | 60.20 b         |
| Coker 310         | 58.30 c         |
| Auburn M          | 58.00 c         |

Table 15 Continued

| Variety           | Bacterial Blight <sup>1/</sup><br>Incidence | Variety           | Seedling<br>Vigor Index |
|-------------------|---|-------------------|-------------------------|
| Rex Smoothleaf 66 | 5.00 a                                      | MO-DEL            | 3.70 a                  |
| Coker 310         | 4.40 b                                      | Coker 310         | 3.70 a                  |
| Stoneville 213    | 4.20 bc                                     | Delcot 277        | 3.70 a                  |
| Stoneville 7A     | 4.20 bc                                     | Stoneville 7A     | 3.60 ab                 |
| Deltapine 45A     | 4.00 bc                                     | Deltapine 45A     | 3.60 ab                 |
| Deltapine 16      | 4.00 bc                                     | Stoneville 213    | 3.60 ab                 |
| Delcot 277        | 4.00 bc                                     | Deltapine 16      | 3.50 ab                 |
| MO-DEL            | 4.00 bc                                     | Auburn M          | 3.50 ab                 |
| Auburn M          | 3.80 c                                      | Rex Smoothleaf 66 | 3.10 b                  |

  

| Variety           | Height Index <sup>2/</sup> | Variety           | Lodging Index <sup>2/</sup> |
|-------------------|----------------------------|-------------------|-----------------------------|
| MO-DEL            | 2.80 a                     | Deltapine 45A     | 2.40 a                      |
| Stoneville 7A     | 2.60 ab                    | MO-DEL            | 2.20 a                      |
| Coker 310         | 2.60 ab                    | Stoneville 7A     | 2.00 a                      |
| Deltapine 16      | 2.60 ab                    | Coker 310         | 2.00 a                      |
| Deltapine 45A     | 2.40 ab                    | Stoneville 213    | 2.00 a                      |
| Stoneville 213    | 2.00 bc                    | Deltapine 16      | 2.00 a                      |
| Delcot 277        | 2.00 bc                    | Delcot 277        | 2.00 a                      |
| Auburn M          | 1.40 c                     | Rex Smoothleaf 66 | 1.40 b                      |
| Rex Smoothleaf 66 | 1.40 c                     | Auburn M          | 1.20 b                      |

  

| Variety           | Storm Resistance Index <sup>2/</sup> |
|-------------------|--------------------------------------|
| MO-DEL            | 4.00 a                               |
| Deltapine 16      | 2.40 b                               |
| Rex Smoothleaf 66 | 2.40 b                               |
| Coker 310         | 2.00 b                               |
| Stoneville 213    | 2.00 b                               |
| Stoneville 7A     | 2.00 b                               |
| Delcot 277        | 2.00 b                               |
| Auburn M          | 2.00 b                               |
| Deltapine 45A     | 2.00 b                               |

1/ 1971 only

2/ 1970 only

Table 15 Continued

| Variety           | Lint Percent |
|-------------------|--------------|
| Coker 310         | 38.82 a      |
| Stoneville 7A     | 38.75 a      |
| Deltapine 45A     | 37.95 b      |
| Deltapine 16      | 37.65 b      |
| Stoneville 213    | 37.62 b      |
| Delcot 277        | 37.55 b      |
| Auburn M          | 35.70 c      |
| MO-DEL            | 35.55 c      |
| Rex Smoothleaf 66 | 34.35 d      |

| Variety           | 50% Span Length |
|-------------------|-----------------|
| Delcot 277        | 0.51 a          |
| Coker 310         | 0.51 a          |
| Deltapine 16      | 0.50 ab         |
| Deltapine 45A     | 0.49 bc         |
| MO-DEL            | 0.49 bc         |
| Stoneville 213    | 0.49 bc         |
| Stoneville 7A     | 0.48 cd         |
| Auburn M          | 0.47 d          |
| Rex Smoothleaf 66 | 0.47 d          |

| Variety           | 2.5% Span Length |
|-------------------|------------------|
| Coker 310         | 1.21 a           |
| Delcot 277        | 1.19 a           |
| Deltapine 16      | 1.15 b           |
| MO-DEL            | 1.13 bc          |
| Rex Smoothleaf 66 | 1.12 c           |
| Stoneville 7A     | 1.11 cd          |
| Stoneville 213    | 1.11 cd          |
| Deltapine 45A     | 1.11 cd          |
| Auburn M          | 1.09 d           |

| Variety           | Length<br>Uniformity Index |
|-------------------|----------------------------|
| Deltapine 45A     | 44.00 a                    |
| Stoneville 213    | 43.50 ab                   |
| MO-DEL            | 43.50 ab                   |
| Stoneville 7A     | 43.25 abc                  |
| Deltapine 16      | 43.25 abc                  |
| Auburn M          | 43.00 abc                  |
| Delcot 277        | 42.25 bcd                  |
| Rex Smoothleaf 66 | 41.75 cd                   |
| Coker 310         | 41.50 d                    |

| Variety           | Micronaire |
|-------------------|------------|
| Stoneville 213    | 4.40 a     |
| MO-DEL            | 4.32 a     |
| Stoneville 7A     | 4.27 ab    |
| Deltapine 45A     | 4.25 ab    |
| Coker 310         | 4.15 bc    |
| Deltapine 16      | 4.12 bc    |
| Auburn M          | 4.02 cd    |
| Rex Smoothleaf 66 | 3.87 d     |
| Delcot 277        | 3.70 e     |

Table 15 Continued

| Variety           | Colorimeter<br>Rd |
|-------------------|-------------------|
| Deltapine 16      | 71.50 a           |
| Deltapine 45A     | 70.50 ab          |
| Auburn M          | 70.25 ab          |
| Stoneville 7A     | 70.25 ab          |
| Rex Smoothleaf 66 | 69.50 b           |
| Delcot 277        | 69.00 b           |
| Coker 310         | 68.75 b           |
| Stoneville 213    | 68.75 b           |
| MO-DEL            | 66.75 c           |

| Variety           | Colorimeter<br>b |
|-------------------|------------------|
| MO-DEL            | 8.37 a           |
| Stoneville 213    | 8.12 ab          |
| Delcot 277        | 8.12 ab          |
| Auburn M          | 8.00 ab          |
| Rex Smoothleaf 66 | 8.00 ab          |
| Stoneville 7A     | 7.87 b           |
| Coker 310         | 7.87 b           |
| Deltapine 45A     | 7.87 b           |
| Deltapine 16      | 7.75 b           |

| Variety           | Trash  |
|-------------------|--------|
| MO-DEL            | 4.00 a |
| Stoneville 7A     | 4.00 a |
| Auburn M          | 4.00 a |
| Stoneville 213    | 3.75 a |
| Deltapine 45A     | 3.75 a |
| Deltapine 16      | 3.75 a |
| Delcot 277        | 3.75 a |
| Coker 310         | 3.75 a |
| Rex Smoothleaf 66 | 3.75 a |

| Variety           | Yarn Strength<br>22's |
|-------------------|-----------------------|
| Delcot 277        | 113.75 a              |
| Coker 310         | 108.75 b              |
| Deltapine 16      | 107.00 bc             |
| Deltapine 45A     | 103.50 cd             |
| Stoneville 7A     | 102.50 cd             |
| MO-DEL            | 100.75 de             |
| Stoneville 213    | 100.25 de             |
| Rex Smoothleaf 66 | 98.75 de              |
| Auburn M          | 96.00 e               |

| Variety           | Yarn Tenacity 27 Tex <sup>1/</sup> |
|-------------------|------------------------------------|
| Delcot 277        | 13.20 a                            |
| Deltapine 45A     | 12.80 ab                           |
| Coker 310         | 12.60 ab                           |
| Deltapine 16      | 12.50 ab                           |
| Stoneville 7A     | 12.05 bc                           |
| Stoneville 213    | 12.00 bc                           |
| Rex Smoothleaf 66 | 11.90 bc                           |
| MO-DEL            | 11.50 c                            |
| Auburn M          | 11.20 c                            |

<sup>1/</sup> 1971 only



Table 16. Performance of Cotton Varieties Grown in Southeast Missouri (1971) Combining Six Locations (7111 - 7122 - 7133 - 7144 - 7151 - 71156).

| Variety<br>or<br>Strain | Lint Yield        |                      | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire <sup>1/</sup> | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--------------|-----------|-------------------|--------------------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |              |           |                   |                          |                       |
| S69-988                 | 1003.48 a         | 942.07               | 94           | 37.21     | 1.16              | 3.77                     | 107.50                |
| Delcot 277 (170-3)      | 992.30 ab         | 941.28               | 95           | 38.28     | 1.20              | 3.47                     | 115.92                |
| Mo. 63-277F             | 976.04 ab         | 908.49               | 93           | 37.79     | 1.19              | 3.58                     | 116.50                |
| Delcot 277              | 951.42 ab         | 900.96               | 95           | 37.58     | 1.17              | 3.57                     | 115.58                |
| Coker 310               | 946.02 b          | 885.07               | 94           | 39.02     | 1.21              | 3.94                     | 109.50                |
| Auburn M                | 857.08 c          | 820.40               | 96           | 35.77     | 1.12              | 3.81                     | 102.17                |
| S69-973                 | 852.85 cd         | 761.70               | 89           | 37.31     | 1.14              | 3.72                     | 111.75                |
| Stoneville 603          | 833.37 cde        | 749.98               | 90           | 36.40     | 1.12              | 3.86                     | 106.08                |
| Deltapine 16            | 816.37 cde        | 719.75               | 88           | 37.07     | 1.15              | 3.81                     | 108.08                |
| Stoneville 213          | 808.64 cdef       | 749.98               | 86           | 38.12     | 1.10              | 4.24                     | 103.75                |
| Deltapine 6225          | 796.53 def        | 668.81               | 84           | 39.09     | 1.12              | 4.07                     | 110.92                |
| MO-DEL 1                | 789.79 ef         | 729.18               | 92           | 35.43     | 1.14              | 4.04                     | 107.17                |
| Rex SL 66               | 789.16 ef         | 737.82               | 93           | 35.35     | 1.13              | 3.77                     | 103.75                |
| Deltapine 45A           | 786.84 ef         | 676.49               | 86           | 38.19     | 1.11              | 3.97                     | 109.08                |
| Brycot 4-XP4            | 782.95 ef         | 650.78               | 83           | 37.82     | 1.11              | 3.99                     | 104.75                |
| Stoneville 7A           | 753.26 f          | 601.30               | 80           | 38.68     | 1.11              | 4.10                     | 103.42                |
| Mean                    | 858.50            | 774.25               | 90           | 37.45     | 1.14              | 3.86                     | 108.49                |
| MiLSR (.05)             | 50.85             | 50.85                |              | .50       | .01               | .13                      | 2.69                  |
| MaLSR (.05)             | 61.46             | 61.46                |              | .59       | .01               | .15                      | 3.24                  |
| C.V. %                  | 9.91              | 10.20                |              | 1.59      | 1.29              | 3.97                     | 3.01                  |

<sup>1/</sup> Lower than normal readings due to premature bottom defoliation of tests 7111, 7144 and 71156; severe Verticillium wilt in test 7122 and season. Commercial fields produced crops with lower than normal micronaire during 1971.

Table 17 Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri, Combining Six Locations, 1971 (7111-7122-7133-7144-7151-71156)

| Variety            | Seed Cotton<br>Lbs/Acre |     | Variety            | Total Lint<br>Lbs/Acre |      |
|--------------------|-------------------------|-----|--------------------|------------------------|------|
| S69-988            | 2773.67                 | a   | S69-988            | 1003.48                | a    |
| Delcot 277 (I70-3) | 2677.83                 | a   | Delcot 277 (I70-3) | 992.30                 | ab   |
| Delcot 277         | 2524.22                 | b   | Mo63-277F          | 976.04                 | ab   |
| Mo63-277F          | 2494.42                 | bc  | Delcot 277         | 951.42                 | ab   |
| Coker 310          | 2394.92                 | bcd | Coker 310          | 946.02                 | b    |
| Auburn M           | 2389.42                 | bcd | Auburn M           | 857.08                 | c    |
| S69-973            | 2339.89                 | cde | S69-973            | 852.85                 | cd   |
| Stoneville 603     | 2290.83                 | de  | Stoneville 603     | 833.37                 | cde  |
| Rex SL 66          | 2230.31                 | def | Deltapine 16       | 816.37                 | cde  |
| Deltapine 16       | 2225.26                 | def | Stoneville 213     | 808.64                 | cdef |
| MO-DEL 1           | 2171.15                 | ef  | Deltapine 6225     | 796.53                 | def  |
| Stoneville 213     | 2100.08                 | fg  | MO-DEL 1           | 789.79                 | ef   |
| Deltapine 45A      | 2067.53                 | fgh | Rex SL 66          | 789.16                 | ef   |
| Brycot 4-XP4       | 2063.86                 | fgh | Deltapine 45A      | 786.84                 | ef   |
| Deltapine 6225     | 1978.11                 | gh  | Brycot 4-XP4       | 782.95                 | ef   |
| Stoneville 7A      | 1916.67                 | h   | Stoneville 7A      | 753.26                 | f    |

| Variety            | 1st Pick<br>Lint-Lbs/Acre |      | Variety            | Stand-Hills/Plot |     |
|--------------------|---------------------------|------|--------------------|------------------|-----|
| S69-988            | 942.07                    | a    | MO-DEL 1           | 103.80           | a   |
| Delcot 277 (I70-3) | 941.28                    | a    | Mo63-277F          | 102.63           | ab  |
| Mo63-277F          | 908.49                    | ab   | Brycot 4-XP4       | 102.13           | ab  |
| Delcot 277         | 900.96                    | ab   | Stoneville 7A      | 102.07           | abc |
| Coker 310          | 885.07                    | b    | Stoneville 213     | 101.67           | bcd |
| Auburn M           | 820.40                    | c    | S69-973            | 101.67           | bcd |
| S69-973            | 761.70                    | d    | S69-988            | 101.50           | bcd |
| Stoneville 603     | 749.98                    | de   | Coker 310          | 101.33           | bcd |
| Rex SL 66          | 737.82                    | de   | Deltapine 16       | 101.00           | bcd |
| MO-DEL 1           | 729.18                    | def  | Stoneville 603     | 100.97           | bcd |
| Deltapine 16       | 719.75                    | defg | Deltapine 6225     | 100.87           | bcd |
| Stoneville 213     | 694.01                    | efgh | Deltapine 45A      | 100.77           | bcd |
| Deltapine 45A      | 676.49                    | fgh  | Delcot 277 (I70-3) | 99.93            | cde |
| Deltapine 6225     | 668.81                    | gh   | Delcot 277         | 99.83            | de  |
| Brycot 4-XP4       | 650.78                    | hi   | Rex SL 66          | 98.70            | ef  |
| Stoneville 7A      | 601.30                    | i    | Auburn M           | 97.40            | f   |

| Variety            | 1st Flower-days |     | Variety            | Wilt-Rating<br>Verticillium |     |
|--------------------|-----------------|-----|--------------------|-----------------------------|-----|
| S69-973            | 68.40           | a   | S69-988            | 4.20                        | a   |
| Deltapine 6225     | 67.67           | b   | Delcot 277 (I70-3) | 4.00                        | ab  |
| Delcot 277 (I70-3) | 67.53           | b   | Mo63-277F          | 4.00                        | ab  |
| Stoneville 213     | 67.47           | bc  | Delcot 277         | 4.00                        | ab  |
| Stoneville 7A      | 67.43           | bc  | Deltapine 6225     | 4.00                        | ab  |
| Mo63-277F          | 67.33           | bc  | S69-973            | 4.00                        | ab  |
| Deltapine 45A      | 67.23           | bcd | Deltapine 45A      | 3.80                        | ab  |
| Delcot 277         | 67.23           | bcd | Deltapine 16       | 3.40                        | bc  |
| Stoneville 603     | 66.97           | bcd | Stoneville 7A      | 3.40                        | bc  |
| Deltapine 16       | 66.90           | bcd | Stoneville 213     | 3.00                        | cd  |
| Brycot 4-XP4       | 66.90           | bcd | MO-DEL 1           | 3.00                        | cd  |
| Rex SL 66          | 66.87           | bcd | Brycot 4-XP4       | 2.80                        | de  |
| S69-988            | 66.70           | cd  | Rex SL 66          | 2.60                        | def |
| MO-DEL 1           | 66.50           | d   | Stoneville 603     | 2.40                        | efg |
| Coker 310          | 65.03           | e   | Coker 310          | 2.20                        | fg  |
| Auburn M           | 64.57           | e   | Auburn M           | 2.00                        | g   |

Table 17 continued

| Variety            | Bacterial Blight Incidence | Variety            | Seedling Vigor Index |
|--------------------|----------------------------|--------------------|----------------------|
| Rex SL 66          | 5.00 a                     | S69-988            | 3.83 a               |
| S69-988            | 5.00 a                     | S69-973            | 3.73 ab              |
| S69-973            | 4.87 a                     | MO-DEL 1           | 3.70 ab              |
| Stoneville 7A      | 4.43 b                     | Stoneville 213     | 3.67 abc             |
| Stoneville 213     | 4.30 bc                    | Brycot 4-XP4       | 3.63 abc             |
| Brycot 4-XP4       | 4.27 bcd                   | Mo63-277F          | 3.60 abcd            |
| MO-DEL 1           | 4.23 cde                   | Delcot 277 (I70-3) | 3.50 bcd             |
| Delcot 277 (I70-3) | 4.17 cdef                  | Delcot 277         | 3.50 bcd             |
| Deltapine 16       | 4.17 cdef                  | Stoneville 603     | 3.40 cde             |
| Deltapine 45A      | 4.10 defg                  | Coker 310          | 3.40 cde             |
| Coker 310          | 4.07 efg                   | Deltapine 6225     | 3.33 de              |
| Delcot 277         | 4.00 fg                    | Stoneville 7A      | 3.20 e               |
| Deltapine 6225     | 3.97 g                     | Deltapine 45A      | 3.17 ef              |
| Mo63-277F          | 3.93 g                     | Deltapine 16       | 3.13 ef              |
| Stoneville 603     | 3.60 h                     | Auburn M           | 2.90 f               |
| Auburn M           | 3.47 h                     | Rex SL 66          | 2.90 f               |

| Variety            | Height Index | Variety            | Lodging Index |
|--------------------|--------------|--------------------|---------------|
| Brycot 4-XP4       | 2.70 a       | Brycot 4-XP4       | 3.00 a        |
| Stoneville 7A      | 2.70 a       | Deltapine 45A      | 3.00 a        |
| Stoneville 213     | 2.68 ab      | Stoneville 7A      | 3.00 a        |
| Deltapine 6225     | 2.66 ab      | MO-DEL 1           | 3.00 a        |
| Deltapine 45A      | 2.64 ab      | Deltapine 6225     | 3.00 a        |
| S69-988            | 2.64 ab      | Coker 310          | 3.00 a        |
| MO-DEL 1           | 2.62 abc     | Stoneville 213     | 2.96 a        |
| S69-973            | 2.54 abcd    | S69-973            | 2.92 a        |
| Deltapine 16       | 2.52 abcd    | Deltapine 16       | 2.92 a        |
| Stoneville 603     | 2.48 bcd     | S69-988            | 2.92 a        |
| Delcot 277         | 2.44 cd      | Stoneville 603     | 2.72 b        |
| Coker 310          | 2.38 de      | Delcot 277 (I70-3) | 2.44 c        |
| Delcot 277 (I70-3) | 2.24 e       | Delcot 277         | 2.44 c        |
| Mo63-277F          | 2.22 e       | Mo63-277F          | 2.36 cd       |
| Auburn M           | 2.02 f       | Auburn M           | 2.28 d        |
| Rex SL 66          | 1.92 f       | Rex SL 66          | 2.08 e        |

| Variety            | Storm Resistance Index | Variety            | Seed Index |
|--------------------|------------------------|--------------------|------------|
| S69-973            | 3.76 a                 | Rex SL 66          | 15.10 a    |
| Stoneville 603     | 3.68 ab                | MO-DEL 1           | 15.00 a    |
| MO-DEL 1           | 3.60 ab                | S69-973            | 13.80 ab   |
| Deltapine 6225     | 3.52 abc               | S69-988            | 13.80 ab   |
| Deltapine 16       | 3.40 bc                | Delcot 277 (I70-3) | 13.40 abc  |
| Stoneville 7A      | 3.24 cd                | Delcot 277         | 13.40 abc  |
| Deltapine 45A      | 3.08 d                 | Mo63-277F          | 13.10 abc  |
| Coker 310          | 3.00 d                 | Auburn M           | 12.60 bc   |
| Stoneville 213     | 3.00 d                 | Stoneville 603     | 12.00 bc   |
| Brycot 4-XP4       | 2.60 e                 | Stoneville 213     | 11.80 bc   |
| Rex SL 66          | 2.40 ef                | Stoneville 7A      | 11.80 bc   |
| Auburn M           | 2.24 fg                | Deltapine 45A      | 11.70 bc   |
| Delcot 277         | 2.20 fg                | Deltapine 6225     | 11.50 c    |
| Mo63-277F          | 2.12 fg                | Coker 310          | 11.40 c    |
| Delcot 277 (I70-3) | 2.08 g                 | Brycot 4-XP4       | 11.40 c    |
| S69-988            | 2.08 g                 | Deltapine 16       | 11.40 c    |

Table 17 continued

| Variety            | Seed Grade |
|--------------------|------------|
| Brycot 4-XP4       | 8.00 a     |
| Coker 310          | 8.00 a     |
| Stoneville 7A      | 8.00 a     |
| Stoneville 213     | 8.00 a     |
| Stoneville 603     | 8.00 a     |
| Delcot 277         | 8.00 a     |
| Mo63-277F          | 8.00 a     |
| Delcot 277 (I70-3) | 8.00 a     |
| MO-DEL 1           | 7.50 ab    |
| Deltapine 45A      | 7.50 ab    |
| S69-973            | 7.50 ab    |
| Auburn M           | 7.50 ab    |
| Deltapine 16       | 7.00 b     |
| Rex SL 66          | 7.00 b     |
| Deltapine 6225     | 7.00 b     |
| S69-988            | 7.00 b     |

| Variety            | Lint Percent |
|--------------------|--------------|
| Deltapine 6225     | 39.09 a      |
| Coker 310          | 39.02 a      |
| Stoneville 7A      | 38.68 ab     |
| Delcot 277 (I70-3) | 38.28 bc     |
| Deltapine 45A      | 38.19 bc     |
| Stoneville 213     | 38.12 c      |
| Brycot 4-XP4       | 37.82 cd     |
| Mo63-277F          | 37.79 cd     |
| Delcot 277         | 37.58 de     |
| S69-973            | 37.31 de     |
| S69-988            | 37.21 e      |
| Deltapine 16       | 37.07 e      |
| Stoneville 603     | 36.40 f      |
| Auburn M           | 35.77 g      |
| MO-DEL 1           | 35.43 g      |
| Rex SL 66          | 35.35 g      |

| Variety            | Boll Weight |
|--------------------|-------------|
| Delcot 277 (I70-3) | 8.45 a      |
| MO-DEL 1           | 7.80 ab     |
| S69-988            | 7.75 bc     |
| Delcot 277         | 7.45 bcd    |
| Rex SL 66          | 7.40 bcd    |
| S60-973            | 7.05 cde    |
| Auburn M           | 7.05 cde    |
| Mo63-277F          | 6.90 def    |
| Stoneville 7A      | 6.45 efg    |
| Stoneville 213     | 6.30 fg     |
| Stoneville 603     | 6.25 fg     |
| Deltapine 16       | 6.25 fg     |
| Coker 310          | 6.20 fg     |
| Brycot 4-XP4       | 6.10 g      |
| Deltapine 6225     | 6.00 g      |
| Deltapine 45A      | 6.00 g      |

| Variety            | 50% Span Length |
|--------------------|-----------------|
| Delcot 277 (I70-3) | 0.52 a          |
| Mo 63-277F         | 0.52 a          |
| Coker 310          | 0.51 ab         |
| S69-988            | 0.50 bc         |
| Deltapine 6225     | 0.50 bc         |
| Delcot 277         | 0.50 bc         |
| S69-973            | 0.50 bc         |
| MO-DEL 1           | 0.50 bc         |
| Stoneville 603     | 0.49 cd         |
| Deltapine 45A      | 0.49 cd         |
| Auburn M           | 0.49 cd         |
| Deltapine 16       | 0.49 cd         |
| Rex SL 66          | 0.49 cd         |
| Brycot 4-XP4       | 0.48 d          |
| Stoneville 7A      | 0.48 d          |
| Stoneville 213     | 0.48 d          |

| Variety            | 2.5%<br>Span Length |
|--------------------|---------------------|
| Coker 310          | 1.21 a              |
| Delcot 277 (I70-3) | 1.20 ab             |
| Mo63-277F          | 1.19 b              |
| Delcot 277         | 1.17 c              |
| S69-988            | 1.16 cd             |
| Deltapine 16       | 1.15 de             |
| S69-973            | 1.14 ef             |
| MO-DEL 1           | 1.14 ef             |
| Rex SL 66          | 1.13 fg             |
| Stoneville 603     | 1.12 gh             |
| Deltapine 6225     | 1.12 gh             |
| Auburn M           | 1.12 gh             |
| Brycot 4-XP4       | 1.11 hi             |
| Deltapine 45A      | 1.11 hi             |
| Stoneville 7A      | 1.11 hi             |
| Stoneville 213     | 1.10 i              |

| Variety            | Length-Uniformity<br>Index |
|--------------------|----------------------------|
| Deltapine 6225     | 44.08 a                    |
| Deltapine 45A      | 44.08 a                    |
| MO-DEL 1           | 43.83 ab                   |
| Stoneville 603     | 43.58 ab                   |
| S69-973            | 43.50 abc                  |
| Stoneville 213     | 43.33 abcd                 |
| Auburn M           | 43.33 abcd                 |
| S69-988            | 43.25 abcd                 |
| Brycot 4-XP4       | 43.08 abcd                 |
| Stoneville 7A      | 43.00 bcd                  |
| Mo63-277F          | 43.00 bcd                  |
| Rex SL 66          | 42.83 bcd                  |
| Delcot 277 (I70-3) | 42.83 bcd                  |
| Deltapine 16       | 42.50 cd                   |
| Delcot 277         | 42.42 d                    |
| Coker 310          | 41.42 e                    |

Table 17 continued

| Variety            | Micronaire | Variety            | Colorimeter Rd |
|--------------------|------------|--------------------|----------------|
| Stoneville 213     | 4.24 a     | Deltapine 16       | 72.92 a        |
| Stoneville 7A      | 4.10 b     | Auburn M           | 71.67 b        |
| Deltapine 6225     | 4.07 bc    | Rex SL 66          | 71.50 bc       |
| MO-DEL 1           | 4.04 bc    | Deltapine 45A      | 71.25 bcd      |
| Brycot 4-XP4       | 3.99 bcd   | Deltapine 6225     | 71.00 bcde     |
| Deltapine 45A      | 3.97 bcd   | Stoneville 7A      | 71.00 bcde     |
| Coker 310          | 3.94 cde   | Delcot 277 (I70-3) | 70.92 bcde     |
| Stoneville 603     | 3.86 def   | Delcot 277         | 70.92 bcde     |
| Auburn M           | 3.81 ef    | Mo63-277F          | 70.83 bcde     |
| Deltapine 16       | 3.81 ef    | Stoneville 603     | 70.67 bcde     |
| Rex SL 66          | 3.77 f     | S69-988            | 70.50 bcde     |
| S69-988            | 3.77 f     | Stoneville 213     | 70.50 bcde     |
| S69-973            | 3.72 f     | Brycot 4-XP4       | 70.42 cde      |
| Mo63-277F          | 3.58 g     | Coker 310          | 70.17 de       |
| Delcot 277         | 3.57 g     | S69-973            | 69.83 e        |
| Delcot 277 (I70-3) | 3.47 g     | Mo-DEL 1           | 68.67 f        |

| Variety            | Colorimeter b | Variety            | Trash   |
|--------------------|---------------|--------------------|---------|
| MO-DEL 1           | 8.58 a        | Mo63-277F          | 4.50 a  |
| S69-973            | 8.50 ab       | Coker 310          | 4.42 ab |
| Delcot 277 (I70-3) | 8.25 bc       | MO-DEL 1           | 4.42 ab |
| Delcot 277         | 8.25 bc       | Delcot 277 (I70-3) | 4.33 ab |
| Stoneville 213     | 8.25 bc       | Deltapine 45A      | 4.33 ab |
| S69-988            | 8.25 bc       | Delcot 277         | 4.33 ab |
| Mo63-277F          | 8.21 cd       | S69-973            | 4.25 ab |
| Brycot 4-XP4       | 8.08 cde      | Stoneville 7A      | 4.25 ab |
| Stoneville 7A      | 8.00 cde      | Stoneville 603     | 4.08 b  |
| Rex SL 66          | 7.96 de       | Stoneville 213     | 4.08 b  |
| Deltapine 6225     | 7.96 de       | Brycot 4-XP4       | 4.08 b  |
| Coker 310          | 7.96 de       | S69-988            | 4.08 b  |
| Auburn M           | 7.92 e        | Deltapine 6225     | 4.08 b  |
| Deltapine 45A      | 7.87 e        | Rex SL 66          | 4.08 b  |
| Deltapine 16       | 7.87 e        | Auburn M           | 4.08 b  |
| Stoneville 603     | 7.83 e        | Deltapine 16       | 3.67 c  |

| Variety            | Yarn Strength 22's | Variety            | Yarn Tenacity 27 tex |
|--------------------|--------------------|--------------------|----------------------|
| Mo63-277F          | 116.50 a           | Mo63-277F          | 13.43 a              |
| Delcot 277 (I70-3) | 115.92 a           | Delcot 277 (I70-3) | 13.37 a              |
| Delcot 277         | 115.58 a           | Delcot 277         | 13.29 a              |
| S69-973            | 111.75 b           | Deltapine 6225     | 12.77 b              |
| Deltapine 6225     | 110.92 bc          | S69-973            | 12.75 b              |
| Coker 310          | 109.50 bcd         | Coker 310          | 12.62 bc             |
| Deltapine 45A      | 109.08 bcd         | Deltapine 45A      | 12.57 bc             |
| Deltapine 16       | 108.08 cde         | Deltapine 16       | 12.39 cd             |
| S69-988            | 107.50 def         | S69-988            | 12.38 cd             |
| MO-DEL 1           | 107.17 def         | MO-DEL 1           | 12.34 cde            |
| Stoneville 603     | 106.08 efg         | Stoneville 603     | 12.17 def            |
| Brycot 4-XP4       | 104.75 fgh         | Brycot 4-XP4       | 12.05 efg            |
| Rex SL 66          | 103.75 gh          | Rex SL 66          | 11.95 fg             |
| Stoneville 213     | 103.75 gh          | Stoneville 213     | 11.95 fg             |
| Stoneville 7A      | 103.42 gh          | Stoneville 7A      | 11.94 fg             |
| Auburn M           | 102.17 h           | Auburn M           | 11.77 g              |

Table 18. Performance of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971 (7111), Portageville.

| Variety<br>or<br>Strain | Lint Yield        |                      | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire <sup>1/</sup> | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--------------|-----------|-------------------|--------------------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |              |           |                   |                          |                       |
| S69-988                 | 1145.35 a         | 1046.91              | 91           | 35.80     | 1.16              | 3.65                     | 107.50                |
| Coker 310               | 1080.99 ab        | 925.66               | 86           | 37.85     | 1.21              | 3.80                     | 111.50                |
| Delcot 277 (I70-3)      | 1069.07 abc       | 1000.12              | 94           | 36.55     | 1.20              | 3.35                     | 118.50                |
| Mo. 63-277F             | 1068.97 abc       | 978.40               | 92           | 36.75     | 1.19              | 3.35                     | 119.50                |
| Delcot 277              | 1068.09 abc       | 975.13               | 91           | 36.90     | 1.20              | 3.25                     | 118.50                |
| S69-973                 | 1054.57 bcd       | 898.58               | 85           | 36.55     | 1.16              | 3.75                     | 116.00                |
| Deltapine 6225          | 1018.09 bcd       | 712.11               | 70           | 38.55     | 1.14              | 4.00                     | 112.00                |
| Stoneville 213          | 1016.03 bcd       | 728.54               | 72           | 37.05     | 1.11              | 4.30                     | 104.00                |
| Auburn M                | 1013.54 bcd       | 922.44               | 91           | 35.20     | 1.14              | 3.90                     | 104.50                |
| MO-DEL 1                | 996.55 bcde       | 884.14               | 89           | 34.55     | 1.15              | 4.05                     | 111.50                |
| Deltapine 16            | 993.47 cde        | 786.19               | 79           | 36.60     | 1.16              | 3.85                     | 109.00                |
| Brycot 4-XP4            | 981.88 cde        | 676.19               | 69           | 37.00     | 1.12              | 3.90                     | 108.50                |
| Stoneville 603          | 974.98 de         | 792.95               | 81           | 35.50     | 1.13              | 3.85                     | 109.50                |
| Deltapine 45A           | 924.16 ef         | 652.00               | 71           | 37.40     | 1.12              | 3.90                     | 111.00                |
| Rex SL 66               | 913.19 ef         | 827.19               | 91           | 34.75     | 1.16              | 3.65                     | 103.50                |
| Stoneville 7A           | 843.31 f          | 489.94               | 58           | 37.95     | 1.14              | 4.20                     | 106.00                |
| Mean                    | 1010.15           | 831.03               | 82           | 36.56     | 1.16              | 3.80                     | 110.69                |
| MiLSR (.05)             | 77.26             | 88.74                |              | 1.16      | .02               | .20                      | 5.44                  |
| MaLSR (.05)             | 91.97             | 105.60               |              | 1.33      | .03               | .23                      | 6.25                  |
| C.V. %                  | 5.92              | 8.26                 |              | 1.49      | 0.97              | 2.45                     | 2.31                  |

<sup>1/</sup> Low readings likely due to premature bottom defoliation.

Table 19. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971 (7111 Portageville, Lee Field)

| Variety            | Seed Cotton<br>Lbs/Acre |     | Variety            | Total Lint<br>Lbs/Acre |      |
|--------------------|-------------------------|-----|--------------------|------------------------|------|
| S69-988            | 3238.16                 | a   | S69-988            | 1145.35                | a    |
| S69-973            | 2954.79                 | ab  | Coker 310          | 1080.99                | ab   |
| Delcot 277 (I70-3) | 2941.03                 | ab  | Delcot 277 (I70-3) | 1069.07                | abc  |
| Mo63-277F          | 2866.75                 | bc  | Mo63-277F          | 1068.97                | abc  |
| Delcot 277         | 2864.00                 | bc  | Delcot 277         | 1068.09                | abc  |
| Auburn M           | 2861.25                 | bc  | S69-973            | 1054.57                | bcd  |
| Stoneville 603     | 2847.49                 | bc  | Deltapine 6225     | 1018.09                | bcd  |
| Coker 310          | 2822.73                 | bc  | Stoneville 213     | 1016.03                | bcd  |
| Deltapine 16       | 2751.20                 | bcd | Auburn M           | 1013.54                | bcd  |
| Stoneville 213     | 2748.45                 | bcd | MO-DEL 1           | 996.55                 | bcde |
| MO-DEL 1           | 2737.44                 | bcd | Deltapine 16       | 993.47                 | cde  |
| Rex SL 66          | 2718.18                 | bcd | Brycot 4-XP4       | 981.88                 | cde  |
| Deltapine 6225     | 2632.90                 | bcd | Stoneville 603     | 974.98                 | de   |
| Brycot 4-XP4       | 2572.37                 | cd  | Deltapine 45A      | 924.16                 | ef   |
| Deltapine 45A      | 2429.31                 | de  | Rex SL 66          | 913.19                 | ef   |
| Stoneville 7A      | 2231.22                 | e   | Stoneville 7A      | 843.31                 | f    |

| Variety            | 1st Pick<br>Lint-Lbs/Acre |     | Variety            | Stand<br>Hills/Plot |     |
|--------------------|---------------------------|-----|--------------------|---------------------|-----|
| S69-988            | 1046.91                   | a   | Mo63-277F          | 111.80              | a   |
| Delcot 277 (I70-3) | 1000.12                   | ab  | Deltapine 16       | 111.00              | a   |
| Mo63-277F          | 978.40                    | abc | MO-DEL 1           | 111.00              | a   |
| Delcot 277         | 975.13                    | abc | Deltapine 45A      | 110.40              | a   |
| Coker 310          | 925.66                    | bc  | S69-973            | 109.80              | a   |
| Auburn M           | 922.44                    | bcd | Brycot 4-XP4       | 109.60              | a   |
| S69-973            | 898.58                    | cd  | Stoneville 213     | 109.20              | a   |
| MO-DEL 1           | 884.14                    | cde | S69-988            | 108.60              | ab  |
| Rex SL 66          | 827.19                    | def | Stoneville 7A      | 108.20              | ab  |
| Stoneville 603     | 792.95                    | efg | Deltapine 6225     | 106.20              | abc |
| Deltapine 16       | 786.19                    | fg  | Delcot 277 (I70-3) | 106.20              | abc |
| Stoneville 213     | 728.54                    | gh  | Coker 310          | 106.00              | abc |
| Deltapine 6225     | 712.11                    | gh  | Stoneville 603     | 105.60              | abc |
| Brycot 4-XP4       | 676.19                    | h   | Delcot 277         | 105.60              | abc |
| Deltapine 45A      | 652.00                    | h   | Rex SL 66          | 103.00              | bc  |
| Stoneville 7A      | 489.94                    | i   | Auburn M           | 100.80              | c   |

| Variety            | 1st Flower-days |    | Variety            | Bacterial Blight<br>Incidence |     |
|--------------------|-----------------|----|--------------------|-------------------------------|-----|
| Deltapine 6225     | 71.20           | a  | S69-973            | 5.00                          | a   |
| Deltapine 45A      | 71.00           | a  | Rex SL 66          | 5.00                          | a   |
| S69-973            | 70.80           | a  | S69-988            | 5.00                          | a   |
| Stoneville 603     | 70.80           | a  | Stoneville 7A      | 4.60                          | ab  |
| Mo63-277F          | 70.60           | a  | Stoneville 213     | 4.40                          | bc  |
| S69-988            | 70.40           | ab | Brycot 4-XP4       | 4.00                          | cd  |
| Brycot 4-XP4       | 70.40           | ab | Delcot 277 (I70-3) | 4.00                          | cd  |
| Delcot 277         | 70.20           | ab | Deltapine 16       | 4.00                          | cd  |
| Stoneville 213     | 70.20           | ab | MO-DEL 1           | 4.00                          | cd  |
| Coker 310          | 70.00           | ab | Deltapine 45A      | 3.80                          | de  |
| Stoneville 7A      | 70.00           | ab | Deltapine 6225     | 3.60                          | def |
| Deltapine 16       | 70.00           | ab | Delcot 277         | 3.60                          | def |
| Delcot 277 (I70-3) | 69.80           | ab | Coker 310          | 3.40                          | efg |
| Rex SL 66          | 69.80           | ab | Mo63-277F          | 3.20                          | fg  |
| MO-DEL 1           | 69.80           | ab | Stoneville 603     | 3.00                          | g   |
| Auburn M           | 69.00           | b  | Auburn M           | 2.20                          | h   |

Table 19 continued

| Variety            | Seedling Vigor Index |
|--------------------|----------------------|
| S69-973            | 3.80 a               |
| S69-988            | 3.80 a               |
| Deltapine 6225     | 3.60 ab              |
| MO-DEL 1           | 3.60 ab              |
| Mo63-277F          | 3.60 ab              |
| Delcot 277         | 3.40 ab              |
| Delcot 277 (I70-3) | 3.40 ab              |
| Stoneville 213     | 3.40 ab              |
| Brycot 4-XP4       | 3.20 abc             |
| Stoneville 603     | 3.20 abc             |
| Coker 310          | 3.00 abcd            |
| Deltapine 16       | 3.00 abcd            |
| Auburn M           | 2.80 bcd             |
| Rex SL 66          | 2.80 bcd             |
| Stoneville 7A      | 2.40 cd              |
| Deltapine 45A      | 2.20 d               |

| Variety            | Height Index |
|--------------------|--------------|
| Stoneville 7A      | 3.10 a       |
| Stoneville 213     | 3.10 a       |
| Brycot 4-XP4       | 3.00 ab      |
| Deltapine 6225     | 3.00 ab      |
| Deltapine 45A      | 2.90 abc     |
| MO-DEL 1           | 2.90 abc     |
| S69-973            | 2.70 bcd     |
| S69-988            | 2.70 bcd     |
| Stoneville 603     | 2.60 cd      |
| Coker 310          | 2.60 cd      |
| Delcot 277         | 2.60 cd      |
| Deltapine 16       | 2.60 cd      |
| Delcot 277 (I70-3) | 2.50 d       |
| Mo63-277F          | 2.40 de      |
| Auburn M           | 2.10 e       |
| Rex SL 66          | 2.10 e       |

| Variety            | Lodging Index |
|--------------------|---------------|
| Brycot 4-XP4       | 3.00 a        |
| Deltapine 45A      | 3.00 a        |
| Stoneville 7A      | 3.00 a        |
| Stoneville 213     | 3.00 a        |
| Deltapine 6225     | 3.00 a        |
| Coker 310          | 3.00 a        |
| S69-973            | 3.00 a        |
| MO-DEL 1           | 3.00 a        |
| Deltapine 16       | 3.00 a        |
| Stoneville 603     | 2.80 a        |
| S69-988            | 2.80 a        |
| Delcot 277 (I70-3) | 2.40 b        |
| Mo63-277F          | 2.20 bc       |
| Rex SL 66          | 2.20 bc       |
| Delcot 277         | 2.20 bc       |
| Auburn M           | 2.00 c        |

| Variety            | Storm Resistance Index |
|--------------------|------------------------|
| Stoneville 7A      | 4.00 a                 |
| MO-DEL 1           | 3.80 ab                |
| S69-973            | 3.80 ab                |
| Coker 310          | 3.60 ab                |
| Stoneville 603     | 3.60 ab                |
| Deltapine 6225     | 3.60 ab                |
| Deltapine 45A      | 3.40 bc                |
| Stoneville 213     | 3.00 cd                |
| Deltapine 16       | 3.00 cd                |
| Brycot 4-XP4       | 2.80 de                |
| Auburn M           | 2.40 ef                |
| Rex SL 66          | 2.20 f                 |
| Mo63-277F          | 2.20 f                 |
| Delcot 277         | 2.20 f                 |
| Delcot 277 (I70-3) | 2.00 f                 |
| S69-988            | 2.00 f                 |

| Variety            | Seed Index |
|--------------------|------------|
| Rex SL 66          | 15.10 a    |
| MO-DEL 1           | 15.00 a    |
| S69-973            | 13.80 ab   |
| S69-988            | 13.80 ab   |
| Delcot 277 (I70-3) | 13.40 abc  |
| Delcot 277         | 13.40 abc  |
| Mo63-277F          | 13.10 abc  |
| Auburn M           | 12.60 bc   |
| Stoneville 603     | 12.00 bc   |
| Stoneville 213     | 11.80 bc   |
| Stoneville 7A      | 11.80 bc   |
| Deltapine 45A      | 11.70 bc   |
| Deltapine 6225     | 11.50 c    |
| Coker 310          | 11.40 c    |
| Brycot 4-XP4       | 11.40 c    |
| Deltapine 16       | 11.40 c    |

| Variety            | Seed Grade |
|--------------------|------------|
| Brycot 4-XP4       | 8.00 a     |
| Coker 310          | 8.00 a     |
| Stoneville 7A      | 8.00 a     |
| Stoneville 213     | 8.00 a     |
| Stoneville 603     | 8.00 a     |
| Delcot 277         | 8.00 a     |
| Mo63-277F          | 8.00 a     |
| Delcot 277 (I70-3) | 8.00 a     |
| MO-DEL 1           | 7.50 ab    |
| Deltapine 45A      | 7.50 ab    |
| S69-973            | 7.50 ab    |
| Auburn M           | 7.50 ab    |
| Deltapine 16       | 7.00 b     |
| Rex SL 66          | 7.00 b     |
| Deltapine 6225     | 7.00 b     |
| S69-988            | 7.00 b     |



Table 19 continued

| Variety            | Lint Percent | Variety            | Boll Weight |
|--------------------|--------------|--------------------|-------------|
| Deltapine 6225     | 38.55 a      | Delcot 277 (I70-3) | 8.45 a      |
| Stoneville 7A      | 37.95 ab     | MO-DEL 1           | 7.80 ab     |
| Coker 310          | 37.85 abc    | S69-988            | 7.75 bc     |
| Deltapine 45A      | 37.40 abc    | Delcot 277         | 7.45 bcd    |
| Stoneville 213     | 37.05 bcd    | Rex SL 66          | 7.40 bcd    |
| Brycot 4-XP4       | 37.00 bcd    | S69-973            | 7.05 cde    |
| Delcot 277         | 36.90 bcd    | Auburn M           | 7.05 cde    |
| Mo63-277F          | 36.75 bcde   | Mo63-277F          | 6.90 def    |
| Deltapine 16       | 36.60 cde    | Stoneville 7A      | 6.45 efg    |
| Delcot 277 (I70-3) | 36.55 cde    | Stoneville 213     | 6.30 fg     |
| S69-973            | 36.55 cde    | Stoneville 603     | 6.25 fg     |
| S69-988            | 35.80 def    | Deltapine 16       | 6.25 fg     |
| Stoneville 603     | 35.50 ef     | Coker 310          | 6.20 fg     |
| Auburn M           | 35.20 f      | Brycot 4-XP4       | 6.10 g      |
| Rex SL 66          | 34.75 f      | Deltapine 6225     | 6.00 g      |
| MO-DEL 1           | 34.55 f      | Deltapine 45A      | 6.00 g      |

| Variety            | 50% Span Length | Variety            | 2.5% Span Length |
|--------------------|-----------------|--------------------|------------------|
| Deltapine 6225     | 0.53 a          | Coker 310          | 1.21 a           |
| Mo63-277F          | 0.53 a          | Delcot 277 (I70-3) | 1.20 a           |
| Rex SL 66          | 0.52 ab         | Delcot 277         | 1.20 a           |
| MO-DEL 1           | 0.52 ab         | Mo63-277F          | 1.19 a           |
| Delcot 277 (I70-3) | 0.52 ab         | S69-973            | 1.16 b           |
| S69-973            | 0.52 ab         | Deltapine 16       | 1.16 b           |
| Auburn M           | 0.52 ab         | S69-988            | 1.16 b           |
| Coker 310          | 0.51 ab         | Rex SL 66          | 1.16 b           |
| Deltapine 16       | 0.51 ab         | MO-DEL 1           | 1.15 bc          |
| Deltapine 45A      | 0.51 ab         | Deltapine 6225     | 1.14 bcd         |
| Stoneville 7A      | 0.51 ab         | Stoneville 7A      | 1.14 bcd         |
| S69-988            | 0.51 ab         | Auburn M           | 1.14 bcd         |
| Delcot 277         | 0.51 ab         | Stoneville 603     | 1.13 cde         |
| Stoneville 603     | 0.50 ab         | Deltapine 45A      | 1.12 de          |
| Stoneville 213     | 0.50 ab         | Brycot 4-XP4       | 1.12 de          |
| Brycot 4-XP4       | 0.49 b          | Stoneville 213     | 1.11 e           |

| Variety            | Length Uniformity Index | Variety            | Micronaire |
|--------------------|-------------------------|--------------------|------------|
| Deltapine 6225     | 46.50 a                 | Stoneville 213     | 4.30 a     |
| Deltapine 45A      | 45.50 ab                | Stoneville 7A      | 4.20 ab    |
| Auburn M           | 45.50 ab                | MO-DEL 1           | 4.05 bc    |
| MO-DEL 1           | 45.50 ab                | Deltapine 6225     | 4.00 bcd   |
| Stoneville 213     | 45.00 abc               | Brycot 4-XP4       | 3.90 cde   |
| Stoneville 603     | 44.50 bcd               | Deltapine 45A      | 3.90 cde   |
| Stoneville 7A      | 44.50 bcd               | Auburn M           | 3.90 cde   |
| Rex SL 66          | 44.50 bcd               | Deltapine 16       | 3.85 cdef  |
| S69-973            | 44.50 bcd               | Stoneville 603     | 3.85 cdef  |
| Deltapine 16       | 44.00 bcd               | Coker 310          | 3.80 def   |
| Brycot 4-XP4       | 44.00 bcd               | S69-973            | 3.75 ef    |
| S69-988            | 43.50 cde               | Rex SL 66          | 3.65 f     |
| Mo63-277F          | 43.50 cde               | S69-988            | 3.65 f     |
| Delcot 277 (I70-3) | 43.00 de                | Delcot 277 (I70-3) | 3.35 g     |
| Coker 310          | 42.00 e                 | Mo63-277F          | 3.35 g     |
| Delcot 277         | 42.00 e                 | Delcot 277         | 3.25 g     |

Table 19 continued

| Variety            | Colorimeter Rd |
|--------------------|----------------|
| Rex SL 66          | 74.50 a        |
| Auburn M           | 74.00 ab       |
| Deltapine 16       | 74.00 ab       |
| Stoneville 603     | 73.00 abc      |
| Deltapine 6225     | 73.00 abc      |
| Delcot 277         | 73.00 abc      |
| Stoneville 7A      | 73.00 abc      |
| Stoneville 213     | 72.50 bcd      |
| Delcot 277 (I70-3) | 72.50 bcd      |
| Deltapine 45A      | 72.50 bcd      |
| Mo63-277F          | 72.00 cde      |
| S69-988            | 72.00 cde      |
| S69-973            | 72.00 cde      |
| Coker 310          | 71.00 de       |
| MO-DEL 1           | 71.00 de       |
| Brycot 4-XP4       | 70.50 e        |

| Variety            | Colorimeter b |
|--------------------|---------------|
| MO-DEL 1           | 8.75 a        |
| S69-973            | 8.50 ab       |
| Delcot 277 (I70-3) | 8.25 bc       |
| S69-988            | 8.25 bc       |
| Stoneville 603     | 8.00 cd       |
| Coker 310          | 8.00 cd       |
| Stoneville 7A      | 8.00 cd       |
| Delcot 277         | 8.00 cd       |
| Brycot 4-XP4       | 8.00 cd       |
| Stoneville 213     | 8.00 cd       |
| Mo63-277F          | 8.00 cd       |
| Deltapine 6225     | 8.00 cd       |
| Auburn M           | 8.00 cd       |
| Deltapine 45A      | 7.75 de       |
| Deltapine 16       | 7.75 de       |
| Rex SL 66          | 7.50 e        |

| Variety            | Trash   |
|--------------------|---------|
| Coker 310          | 5.00 a  |
| Brycot 4-XP4       | 4.50 ab |
| Stoneville 7A      | 4.50 ab |
| Deltapine 16       | 4.50 ab |
| Stoneville 603     | 4.50 ab |
| Deltapine 45A      | 4.50 ab |
| Mo63-277F          | 4.50 ab |
| S69-988            | 4.50 ab |
| Delcot 277 (I70-3) | 4.50 ab |
| Rex SL 66          | 4.50 ab |
| Deltapine 6225     | 4.50 ab |
| MO-DEL 1           | 4.50 ab |
| Delcot 277         | 4.50 ab |
| S69-973            | 4.00 b  |
| Auburn M           | 4.00 b  |
| Stoneville 213     | 4.00 b  |

| Variety            | Yarn Strength 22's |
|--------------------|--------------------|
| Mo63-277F          | 119.50 a           |
| Delcot 277         | 118.50 a           |
| Delcot 277 (I70-3) | 118.50 a           |
| S69-973            | 116.00 ab          |
| Deltapine 6225     | 112.00 bc          |
| MO-DEL 1           | 111.50 bc          |
| Coker 310          | 111.50 bc          |
| Deltapine 45A      | 111.00 bc          |
| Stoneville 603     | 109.50 cd          |
| Deltapine 16       | 109.00 cd          |
| Brycot 4-XP4       | 108.50 cd          |
| S69-988            | 107.50 cd          |
| Stoneville 7A      | 106.00 cd          |
| Auburn M           | 104.50 d           |
| Stoneville 213     | 104.00 d           |
| Rex SL 66          | 103.50 d           |

| Variety            | Yarn Tenacity<br>27 tex |
|--------------------|-------------------------|
| Mo63-277F          | 13.75 a                 |
| Delcot 277 (I70-3) | 13.70 a                 |
| Delcot 277         | 13.65 a                 |
| S69-973            | 13.35 ab                |
| Deltapine 6225     | 12.90 bc                |
| MO-DEL 1           | 12.85 bc                |
| Coker 310          | 12.85 bc                |
| Deltapine 45A      | 12.75 bc                |
| Stoneville 603     | 12.60 cd                |
| Deltapine 16       | 12.55 cd                |
| Brycot 4-XP4       | 12.45 cd                |
| S69-988            | 12.40 cd                |
| Stoneville 7A      | 12.25 cd                |
| Stoneville 213     | 12.00 d                 |
| Auburn M           | 12.00 d                 |
| Rex SL 66          | 11.95 d                 |

Table 20. Performance of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Non-irrigated Soil Infected with Verticillium Wilt Disease, 1971 (7122), Portageville.

| Variety<br>or<br>Strain | Lint Yield        |                      |  | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--|--------------|-----------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |  |              |           |                   |            |                       |
| Delcot 277 (I70-3)      | 1354.74 a         | 1245.11              |  | 92           | 39.55     | 1.18              | 3.45       | 116.00                |
| Mo. 63-277F             | 1345.42 a         | 1230.82              |  | 91           | 38.40     | 1.22              | 3.70       | 120.00                |
| Delcot 277              | 1319.13 a         | 1228.38              |  | 93           | 37.90     | 1.18              | 3.55       | 115.00                |
| S69-988                 | 1265.04 a         | 1159.82              |  | 92           | 37.25     | 1.16              | 3.65       | 110.50                |
| S69-973                 | 1097.47 b         | 979.15               |  | 89           | 37.00     | 1.15              | 3.65       | 112.00                |
| Coker 310               | 1042.63 bc        | 1005.06              |  | 96           | 40.05     | 1.23              | 3.75       | 110.50                |
| Deltapine 16            | 1023.36 bcd       | 901.04               |  | 88           | 36.75     | 1.16              | 3.75       | 108.50                |
| Deltapine 6225          | 999.79 bcde       | 829.28               |  | 83           | 39.30     | 1.13              | 3.75       | 112.50                |
| Deltapine 45A           | 988.92 bcde       | 891.19               |  | 90           | 39.20     | 1.11              | 4.00       | 109.00                |
| Rex SL 66               | 985.93 bcde       | 930.22               |  | 94           | 36.25     | 1.14              | 3.50       | 107.00                |
| Stoneville 7A           | 963.93 cde        | 771.59               |  | 80           | 38.95     | 1.12              | 4.10       | 103.00                |
| Stoneville 603          | 935.02 cde        | 867.25               |  | 93           | 36.20     | 1.13              | 3.40       | 110.50                |
| MO-DEL 1                | 926.85 cde        | 853.00               |  | 92           | 35.10     | 1.15              | 3.60       | 113.50                |
| Auburn M                | 912.09 de         | 890.03               |  | 98           | 35.30     | 1.14              | 3.50       | 106.00                |
| Stoneville 213          | 896.39 ef         | 789.01               |  | 88           | 37.30     | 1.12              | 3.95       | 105.50                |
| Brycot 4-XP4            | 803.06 f          | 670.34               |  | 83           | 38.10     | 1.12              | 3.70       | 104.00                |
| Mean                    | 1053.74           | 952.58               |  | 90           | 37.66     | 1.15              | 3.69       | 110.22                |
| MiLSR (.05)             | 102.60            | 96.16                |  |              | 1.52      | .03               | .30        | 7.50                  |
| MaLSR (.05)             | 122.10            | 114.50               |  |              | 1.74      | .03               | .34        | 8.62                  |
| C.V. %                  | 7.53              | 7.81                 |  |              | 1.89      | 1.04              | 3.76       | 3.20                  |

Table 21. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Non-irrigated Soil Infected with Verticillium Wilt Disease, 1971 (7122 Portageville, Lee Field)

| Variety            | Seed Cotton<br>Lbs/Acre |    | Variety            | Total Lint<br>Lbs/Acre |      |
|--------------------|-------------------------|----|--------------------|------------------------|------|
| Mo63-277F          | 3513.28                 | a  | Delcot 277 (I70-3) | 1354.74                | a    |
| Delcot 277         | 3496.77                 | a  | Mo63-277F          | 1345.42                | a    |
| S69-988            | 3394.98                 | a  | Delcot 277         | 1319.13                | a    |
| Delcot 277 (I70-3) | 3367.47                 | a  | S69-988            | 1265.04                | a    |
| S69-973            | 3007.06                 | b  | S69-973            | 1097.47                | b    |
| Deltapine 16       | 2762.20                 | bc | Coker 310          | 1042.63                | bc   |
| Rex SL 66          | 2742.95                 | bc | Deltapine 16       | 1023.36                | bcd  |
| MO-DEL 1           | 2693.42                 | bc | Deltapine 6225     | 999.79                 | bcde |
| Coker 310          | 2635.65                 | cd | Deltapine 45A      | 988.92                 | bcde |
| Auburn M           | 2564.12                 | cd | Rex SL 66          | 985.93                 | bcde |
| Stoneville 603     | 2558.61                 | cd | Stoneville 7A      | 963.93                 | cde  |
| Deltapine 45A      | 2522.85                 | cd | Stoneville 603     | 935.02                 | cde  |
| Deltapine 6225     | 2520.10                 | cd | MO-DEL 1           | 926.85                 | cde  |
| Stoneville 7A      | 2462.32                 | cd | Auburn M           | 912.09                 | de   |
| Stoneville 213     | 2346.77                 | de | Stoneville 213     | 896.39                 | ef   |
| Brycot 4-XP4       | 2129.43                 | e  | Brycot 4-XP4       | 803.06                 | f    |

| Variety            | 1st Pick<br>Lint-Lbs/Acre |     | Variety            | Stand<br>Hills/Plot |    |
|--------------------|---------------------------|-----|--------------------|---------------------|----|
| Delcot 277 (I70-3) | 1245.11                   | a   | MO-DEL 1           | 112.20              | a  |
| Mo63-277F          | 1230.82                   | a   | Mo63-277F          | 111.80              | a  |
| Delcot 277         | 1228.38                   | a   | S69-988            | 111.00              | ab |
| S69-988            | 1159.82                   | a   | Deltapine 16       | 110.60              | ab |
| Coker 310          | 1005.06                   | b   | Stoneville 213     | 110.20              | ab |
| S69-973            | 979.15                    | bc  | Delcot 277         | 110.00              | ab |
| Rex SL 66          | 930.22                    | bcd | S69-973            | 109.80              | ab |
| Deltapine 16       | 901.04                    | cd  | Deltapine 6225     | 109.60              | ab |
| Deltapine 45A      | 891.19                    | cde | Coker 310          | 109.40              | ab |
| Auburn M           | 890.03                    | cde | Brycot 4-XP4       | 108.40              | ab |
| Stoneville 603     | 867.25                    | def | Delcot 277 (I70-3) | 107.80              | ab |
| MO-DEL 1           | 853.00                    | def | Stoneville 7A      | 107.80              | ab |
| Deltapine 6225     | 829.28                    | def | Deltapine 45A      | 107.60              | ab |
| Stoneville 213     | 789.01                    | ef  | Stoneville 603     | 106.60              | b  |
| Stoneville 7A      | 771.59                    | f   | Auburn M           | 106.40              | b  |
| Brycot 4-XP4       | 670.34                    | g   | Rex SL 66          | 106.20              | b  |

| Variety            | 1st Flower-days |     | Variety            | Verticillium<br>Wilt-Rating |     |
|--------------------|-----------------|-----|--------------------|-----------------------------|-----|
| S69-973            | 69.60           | a   | S69-988            | 4.20                        | a   |
| Deltapine 16       | 69.40           | ab  | Delcot 277 (I70-3) | 4.00                        | ab  |
| Delcot 277 (I70-3) | 69.40           | ab  | Mo63-277F          | 4.00                        | ab  |
| Delcot 277         | 69.20           | ab  | Delcot 277         | 4.00                        | ab  |
| Deltapine 6225     | 69.20           | ab  | Deltapine 6225     | 4.00                        | ab  |
| S69-988            | 69.20           | ab  | S69-973            | 4.00                        | ab  |
| Stoneville 7A      | 69.00           | abc | Deltapine 45A      | 3.80                        | ab  |
| Stoneville 603     | 69.00           | abc | Deltapine 16       | 3.40                        | bc  |
| Rex SL 66          | 68.80           | abc | Stoneville 7A      | 3.40                        | bc  |
| Coker 310          | 68.80           | abc | Stoneville 213     | 3.00                        | cd  |
| Stoneville 213     | 68.80           | abc | MO-DEL 1           | 3.00                        | cd  |
| MO-DEL 1           | 68.80           | abc | Brycot 4-XP4       | 2.80                        | de  |
| Brycot 4-XP4       | 68.60           | abc | Rex SL 66          | 2.60                        | def |
| Deltapine 45A      | 68.60           | abc | Stoneville 603     | 2.40                        | efg |
| Mo63-277F          | 68.40           | bc  | Coker 310          | 2.20                        | fg  |
| Auburn M           | 68.00           | c   | Auburn M           | 2.00                        | g   |

Table 21 continued

| Variety            | Bacterial Blight Incidence | Variety            | Seedling Vigor Index |
|--------------------|----------------------------|--------------------|----------------------|
| S69-973            | 5.00 a                     | Brycot 4-XP4       | 4.00 a               |
| Rex SL 66          | 5.00 a                     | Coker 310          | 4.00 a               |
| S69-988            | 5.00 a                     | Mo63-277F          | 4.00 a               |
| Coker 310          | 4.20 b                     | Stoneville 213     | 4.00 a               |
| MO-DEL 1           | 4.20 b                     | Stoneville 603     | 4.00 a               |
| Brycot 4-XP4       | 4.00 bc                    | Delcot 277         | 4.00 a               |
| Delcot 277 (I70-3) | 4.00 bc                    | S69-973            | 4.00 a               |
| Stoneville 7A      | 4.00 bc                    | S69-988            | 4.00 a               |
| Mo63-277F          | 4.00 bc                    | Delcot 277 (I70-3) | 4.00 a               |
| Deltapine 45A      | 4.00 bc                    | MO-DEL 1           | 4.00 a               |
| Stoneville 213     | 4.00 bc                    | Deltapine 6225     | 4.00 a               |
| Delcot 277         | 4.00 bc                    | Deltapine 45A      | 3.80 a               |
| Deltapine 6225     | 3.80 c                     | Stoneville 7A      | 3.80 a               |
| Deltapine 16       | 3.80 c                     | Rex SL 66          | 3.40 b               |
| Auburn M           | 3.40 d                     | Auburn M           | 3.20 b               |
| Stoneville 603     | 3.00 e                     | Deltapine 16       | 3.20 b               |

| Variety            | Height Index | Variety            | Lodging Index |
|--------------------|--------------|--------------------|---------------|
| Deltapine 6225     | 2.50 a       | Brycot 4-XP4       | 3.00 a        |
| MO-DEL 1           | 2.40 a       | Deltapine 45A      | 3.00 a        |
| Brycot 4-XP4       | 2.40 a       | Stoneville 7A      | 3.00 a        |
| Stoneville 213     | 2.30 ab      | Stoneville 213     | 3.00 a        |
| Stoneville 7A      | 2.30 ab      | Deltapine 6225     | 3.00 a        |
| S69-988            | 2.30 ab      | Coker 310          | 3.00 a        |
| S69-973            | 2.30 ab      | S69-973            | 3.00 a        |
| Deltapine 45A      | 2.10 bc      | MO-DEL 1           | 3.00 a        |
| Stoneville 603     | 2.10 bc      | Deltapine 16       | 2.80 a        |
| Deltapine 16       | 2.10 bc      | S69-988            | 2.80 a        |
| Mo63-277F          | 2.00 c       | Stoneville 603     | 2.40 b        |
| Delcot 277         | 2.00 c       | Auburn M           | 2.20 bc       |
| Delcot 277 (I70-3) | 2.00 c       | Delcot 277 (I70-3) | 2.00 c        |
| Coker 310          | 1.90 c       | Rex SL 66          | 2.00 c        |
| Auburn M           | 1.50 d       | Mo63-277F          | 2.00 c        |
| Rex SL 66          | 1.50 d       | Delcot 277         | 2.00 c        |

| Variety            | Storm Resistance Index | Variety            | Lint Percent |
|--------------------|------------------------|--------------------|--------------|
| S69-973            | 4.00 a                 | Coker 310          | 40.05 a      |
| MO-DEL 1           | 4.00 a                 | Delcot 277 (I70-3) | 39.55 ab     |
| Stoneville 603     | 3.40 b                 | Deltapine 6225     | 39.30 ab     |
| Coker 310          | 3.40 b                 | Deltapine 45A      | 39.20 ab     |
| Deltapine 6225     | 3.40 b                 | Stoneville 7A      | 38.95 abc    |
| Deltapine 45A      | 3.00 bc                | Mo63-277F          | 38.40 abcd   |
| Stoneville 7A      | 3.00 bc                | Brycot 4-XP4       | 38.10 bcd    |
| Stoneville 213     | 3.00 bc                | Delcot 277         | 37.90 bcde   |
| Deltapine 16       | 3.00 bc                | Stoneville 213     | 37.30 cde    |
| Brycot 4-XP4       | 2.80 c                 | S69-988            | 37.25 de     |
| Mo63-277F          | 2.00 d                 | S69-973            | 37.00 de     |
| Rex SL 66          | 2.00 d                 | Deltapine 16       | 36.75 def    |
| Delcot 277 (I70-3) | 2.00 d                 | Rex SL 66          | 36.25 ef     |
| Delcot 277         | 2.00 d                 | Stoneville 603     | 36.20 ef     |
| Auburn M           | 2.00 d                 | Auburn M           | 35.30 f      |
| S69-988            | 2.00 d                 | MO-DEL 1           | 35.10 f      |

Table 21 continued

| Variety            | 50% Span Length | Variety            | 2.5% Span Length |
|--------------------|-----------------|--------------------|------------------|
| Mo63-277F          | 0.54 a          | Coker 310          | 1.23 a           |
| Delcot 277 (I70-3) | 0.53 ab         | Mo63-277F          | 1.22 a           |
| Coker 310          | 0.52 abc        | Delcot 277 (I70-3) | 1.18 b           |
| MO-DEL 1           | 0.52 abc        | Delcot 277         | 1.18 b           |
| S69-973            | 0.52 abc        | Deltapine 16       | 1.16 bc          |
| Delcot 277         | 0.52 abc        | S69-988            | 1.16 bc          |
| Deltapine 6225     | 0.51 abcd       | S69-973            | 1.15 cd          |
| S69-988            | 0.51 abcd       | MO-DEL 1           | 1.15 cd          |
| Stoneville 603     | 0.50 bcd        | Auburn M           | 1.14 cde         |
| Deltapine 45A      | 0.50 bcd        | Rex SL 66          | 1.14 cde         |
| Auburn M           | 0.50 bcd        | Stoneville 603     | 1.13 def         |
| Deltapine 16       | 0.50 bcd        | Deltapine 6225     | 1.13 def         |
| Brycot 4-XP4       | 0.49 cd         | Brycot 4-XP4       | 1.12 ef          |
| Stoneville 7A      | 0.49 cd         | Stoneville 213     | 1.12 ef          |
| Rex SL 66          | 0.48 d          | Stoneville 7A      | 1.12 ef          |
| Stoneville 213     | 0.48 d          | Deltapine 45A      | 1.11 f           |

| Variety            | Length Uniformity Index | Variety            | Micronaire |
|--------------------|-------------------------|--------------------|------------|
| Deltapine 6225     | 45.50 a                 | Stoneville 7A      | 4.10 a     |
| Deltapine 45A      | 45.50 a                 | Deltapine 45A      | 4.00 ab    |
| Mo63-277F          | 45.00 a                 | Stoneville 213     | 3.95 abc   |
| S69-973            | 45.00 a                 | Deltapine 6225     | 3.75 bcd   |
| MO-DEL 1           | 44.50 ab                | Coker 310          | 3.75 bcd   |
| Delcot 277         | 44.00 ab                | Deltapine 16       | 3.75 bcd   |
| Brycot 4-XP4       | 44.00 ab                | Brycot 4-XP4       | 3.70 bcde  |
| S69-988            | 44.00 ab                | Mo63-277F          | 3.70 bcde  |
| Delcot 277 (I70-3) | 44.00 ab                | S69-973            | 3.65 cde   |
| Stoneville 603     | 44.00 abv               | S69-988            | 3.65 cde   |
| Stoneville 7A      | 43.50 ab                | MO-DEL 1           | 3.60 de    |
| Auburn M           | 43.50 ab                | Delcot 277         | 3.55 de    |
| Stoneville 213     | 43.00 ab                | Auburn M           | 3.50 de    |
| Deltapine 16       | 43.00 ab                | Rex SL 66          | 3.50 de    |
| Rex SL 66          | 42.00 b                 | Delcot 277 (I70-3) | 3.45 de    |
| Coker 310          | 42.00 b                 | Stoneville 603     | 3.40 e     |

| Variety            | Colorimeter Rd | Variety            | Colorimeter b |
|--------------------|----------------|--------------------|---------------|
| Deltapine 16       | 72.50 a        | Delcot 277 (I70-3) | 8.50 a        |
| Deltapine 45A      | 73.50 b        | Mo63-277F          | 8.50 a        |
| Rex SL 66          | 73.50 b        | S69-973            | 8.50 a        |
| Deltapine 6225     | 72.50 b        | S69-988            | 8.25 ab       |
| Stoneville 7A      | 72.50 b        | Brycot 4-XP4       | 8.25 ab       |
| S69-973            | 72.50 b        | Delcot 277         | 8.00 bc       |
| Auburn M           | 72.50 b        | Stoneville 213     | 8.00 bc       |
| S69-988            | 72.00 b        | MO-DEL 1           | 8.00 bc       |
| Delcot 277 (I70-3) | 72.00 b        | Deltapine 6225     | 8.00 bc       |
| Coker 310          | 72.00 b        | Rex SL 66          | 7.75 cd       |
| Stoneville 603     | 72.00 b        | Stoneville 7A      | 7.75 cd       |
| Stoneville 213     | 72.00 b        | Coker 310          | 7.75 cd       |
| Mo63-277F          | 72.00 b        | Deltapine 16       | 7.75 cd       |
| Delcot 277         | 72.00 b        | Stoneville 603     | 7.50 d        |
| Brycot 4-XP4       | 71.50 b        | Auburn M           | 7.50 d        |
| MO-DEL 1           | 71.50 b        | Deltapine 45A      | 7.50 d        |

Table 21 continued

| Variety            | Trash   | Variety            | Yarn Strength 22's |
|--------------------|---------|--------------------|--------------------|
| Delcot 277 (I70-3) | 4.00 a  | Mo63-277F          | 120.00 a           |
| Deltapine 45A      | 4.00 a  | Delcot 277 (I70-3) | 116.00 ab          |
| Stoneville 7A      | 4.00 a  | Delcot 277         | 115.00 abc         |
| S69-988            | 4.00 a  | MO-DEL 1           | 113.50 abcd        |
| Mo63-277F          | 4.00 a  | Deltapine 6225     | 112.50 abcde       |
| Coker 310          | 4.00 a  | S69-973            | 112.00 abcde       |
| MO-DEL 1           | 4.00 a  | Coker 310          | 110.50 bcdef       |
| Delcot 277         | 4.00 a  | S69-988            | 110.50 bcdef       |
| Stoneville 603     | 3.50 ab | Stoneville 603     | 110.50 bcdef       |
| Brycot 4-XP4       | 3.50 ab | Deltapine 45A      | 109.00 bcdef       |
| S69-973            | 3.50 ab | Deltapine 16       | 108.50 bcdef       |
| Stoneville 213     | 3.50 ab | Rex SL 66          | 107.00 cdef        |
| Auburn M           | 3.50 ab | Auburn M           | 106.00 def         |
| Rex SL 66          | 3.50 ab | Stoneville 213     | 105.50 def         |
| Deltapine 6225     | 3.00 ab | Brycot 4-XP4       | 104.00 ef          |
| Deltapine 16       | 2.50 b  | Stoneville 7A      | 103.00 f           |

| Variety            | Yarn Tenacity<br>27 tex |
|--------------------|-------------------------|
| Mo63-277F          | 13.80 a                 |
| Delcot 277 (I70-3) | 13.40 ab                |
| Delcot 277         | 13.20 abc               |
| MO-DEL 1           | 13.10 abcd              |
| Deltapine 6225     | 12.95 abcd              |
| Coker 310          | 12.75 bcde              |
| S69-988            | 12.75 bcde              |
| Deltapine 45A      | 12.55 bcde              |
| Deltapine 16       | 12.50 bcde              |
| Stoneville 603     | 12.40 cde               |
| S69-973            | 12.30 cde               |
| Rex SL 66          | 12.30 cde               |
| Auburn M           | 12.20 de                |
| Stoneville 213     | 12.15 de                |
| Brycot 4-XP4       | 11.95 e                 |
| Stoneville 7A      | 11.90 e                 |

Table 22. Performance of Cotton Varieties Grown in Southeast Missouri on Heavy Clay, Wilt-free, Non-irrigated Soil, 1971 (7133), Portageville.

| Variety<br>or<br>Strain | Lint Yield        |                      | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--------------|-----------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |              |           |                   |            |                       |
| Delcot 277 (I70-3)      | 850.20 a          | 751.99               | 88           | 38.10     | 1.22              | 4.20       | 117.50                |
| Mo. 63-277F             | 840.73 a          | 697.69               | 83           | 37.50     | 1.24              | 4.35       | 121.00                |
| Delcot 277              | 812.48 ab         | 699.89               | 86           | 38.20     | 1.20              | 4.30       | 123.00                |
| S69-973                 | 801.17 abc        | 634.04               | 79           | 37.45     | 1.16              | 4.45       | 118.00                |
| S69-988                 | 768.39 bcd        | 655.54               | 85           | 37.30     | 1.18              | 4.30       | 109.00                |
| Brycot 4-XP4            | 761.96 bcde       | 569.21               | 75           | 37.25     | 1.13              | 4.80       | 109.00                |
| Deltapine 16            | 740.45 cdef       | 577.17               | 78           | 37.10     | 1.17              | 4.60       | 107.50                |
| Coker 310               | 727.75 defg       | 613.90               | 85           | 38.10     | 1.23              | 4.55       | 113.50                |
| Stoneville 7A           | 726.89 defg       | 522.74               | 72           | 38.45     | 1.12              | 5.00       | 105.50                |
| Stoneville 213          | 717.05 defg       | 523.40               | 73           | 38.45     | 1.13              | 4.90       | 107.50                |
| Deltapine 6225          | 699.70 efgh       | 522.72               | 75           | 38.75     | 1.16              | 4.65       | 113.00                |
| Deltapine 45A           | 686.44 fgh        | 503.55               | 73           | 37.45     | 1.15              | 4.60       | 114.00                |
| Rex SL 66               | 667.68 ghi        | 552.74               | 83           | 34.75     | 1.16              | 4.55       | 110.00                |
| Stoneville 603          | 652.05 hi         | 502.36               | 77           | 35.45     | 1.17              | 4.50       | 109.00                |
| Auburn M                | 609.88 ij         | 533.11               | 87           | 34.95     | 1.14              | 4.50       | 107.00                |
| MO-DEL 1                | 573.63 j          | 451.37               | 79           | 34.90     | 1.17              | 4.60       | 111.50                |
| Mean                    | 727.28            | 581.96               | 80           | 37.13     | 1.17              | 4.55       | 112.25                |
| MI LSR (.05)            | 58.40             | 56.67                |              | 1.17      | .03               | .22        | 4.20                  |
| Ma LSR (.05)            | 69.51             | 67.45                |              | 1.35      | .04               | .25        | 4.83                  |
| C.V. %                  | 6.21              | 7.53                 |              | 1.49      | 1.22              | 2.27       | 1.76                  |



Table 23. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Heavy Clay, Wilt-free, Non-irrigated Soil, 1971 (7133 Portageville, Lee Field)

| Variety            | Seed Cotton<br>Lbs/Acre | Variety            | Total Lint<br>Lbs/Acre |
|--------------------|-------------------------|--------------------|------------------------|
| Delcot 277 (I70-3) | 2244.98 a               | Delcot 277 (I70-3) | 850.20 a               |
| Mo63-277F          | 2154.19 ab              | Mo63-277F          | 840.73 a               |
| S69-973            | 2137.68 ab              | Delcot 277         | 812.48 ab              |
| Delcot 277         | 2123.93 ab              | S69-973            | 801.17 abc             |
| S69-988            | 2118.42 ab              | S69-988            | 768.39 bcd             |
| Brycot 4-XP4       | 2066.15 abc             | Brycot 4-XP4       | 761.96 bcde            |
| Deltapine 16       | 2033.14 abcd            | Deltapine 16       | 740.45 cdef            |
| Rex SL 66          | 1967.11 bcde            | Coker 310          | 727.75 defg            |
| Stoneville 7A      | 1920.34 bcde            | Stoneville 7A      | 726.89 defg            |
| Deltapine 45A      | 1884.57 cde             | Stoneville 213     | 717.05 defg            |
| Coker 310          | 1843.30 cde             | Deltapine 6225     | 699.70 efgh            |
| Stoneville 213     | 1837.80 cde             | Deltapine 45A      | 686.44 fgh             |
| Deltapine 6225     | 1824.05 de              | Rex SL 66          | 667.68 ghi             |
| Stoneville 603     | 1796.53 de              | Stoneville 603     | 652.05 hi              |
| Auburn M           | 1744.26 ef              | Auburn M           | 609.88 ij              |
| MO-DEL 1           | 1570.93 f               | MO-DEL 1           | 573.63 j               |

| Variety            | 1st Pick<br>Lint-Lbs/Acre |
|--------------------|---------------------------|
| Delcot 277 (I70-3) | 751.99 a                  |
| Delcot 277         | 699.89 ab                 |
| Mo63-277F          | 697.69 ab                 |
| S69-988            | 655.54 bc                 |
| S69-973            | 634.04 cd                 |
| Coker 310          | 613.90 cde                |
| Deltapine 16       | 577.17 def                |
| Brycot 4-XP4       | 569.21 ef                 |
| Rex SL 66          | 552.74 efg                |
| Auburn M           | 533.11 fg                 |
| Stoneville 213     | 523.40 fg                 |
| Stoneville 7A      | 522.74 fg                 |
| Deltapine 6225     | 522.72 fg                 |
| Deltapine 45A      | 503.55 gh                 |
| Stoneville 603     | 502.36 gh                 |
| MO-DEL 1           | 451.37 h                  |

| Variety            | Stand<br>Hills/Plot |
|--------------------|---------------------|
| Stoneville 7A      | 119.80 a            |
| Delcot 277 (I70-3) | 118.40 ab           |
| MO-DEL 1           | 118.20 ab           |
| Coker 310          | 118.00 ab           |
| Mo63-277F          | 118.00 ab           |
| Brycot 4-XP4       | 117.80 ab           |
| Deltapine 16       | 117.20 ab           |
| Stoneville 213     | 117.00 ab           |
| Deltapine 6225     | 117.00 ab           |
| Stoneville 603     | 116.80 ab           |
| Auburn M           | 116.60 ab           |
| Deltapine 45A      | 116.40 ab           |
| S69-988            | 115.80 ab           |
| S69-973            | 115.60 ab           |
| Rex SL 66          | 114.40 b            |
| Delcot 277         | 114.00 b            |

| Variety            | 1st Flower-days |
|--------------------|-----------------|
| S69-973            | 74.40 a         |
| Delcot 277 (I70-3) | 73.80 ab        |
| Deltapine 45A      | 73.40 abc       |
| Deltapine 6225     | 73.40 abc       |
| Delcot 277         | 72.80 abc       |
| Mo63-277F          | 72.80 abc       |
| Stoneville 603     | 72.60 abcd      |
| Stoneville 7A      | 72.60 abcd      |
| Stoneville 213     | 72.20 abcd      |
| Deltapine 16       | 71.80 bcd       |
| Rex SL 66          | 71.80 bcd       |
| Brycot 4-XP4       | 71.60 bcd       |
| MO-DEL 1           | 71.20 cd        |
| S69-988            | 70.40 d         |
| Auburn M           | 67.80 e         |
| Coker 310          | 67.80 e         |

| Variety            | Bacterial Blight<br>Incidence |
|--------------------|-------------------------------|
| Rex SL 66          | 5.00 a                        |
| S69-988            | 5.00 a                        |
| Stoneville 7A      | 4.80 ab                       |
| S69-973            | 4.80 ab                       |
| Brycot 4-XP4       | 4.40 abc                      |
| Deltapine 6225     | 4.40 abc                      |
| Stoneville 213     | 4.20 bc                       |
| Deltapine 16       | 4.20 bc                       |
| Mo63-277F          | 4.20 bc                       |
| MO-DEL 1           | 4.20 bc                       |
| Delcot 277 (I70-3) | 4.00 cd                       |
| Delcot 277         | 4.00 cd                       |
| Deltapine 45A      | 4.00 cd                       |
| Coker 310          | 3.80 cd                       |
| Stoneville 603     | 3.40 d                        |
| Auburn M           | 3.40 d                        |

| Variety            | Seedling Vigor |     |
|--------------------|----------------|-----|
|                    | Index          |     |
| Mo63-277F          | 4.00           | a   |
| S69-988            | 4.00           | a   |
| S69-973            | 4.00           | a   |
| MO-DEL 1           | 4.00           | a   |
| Brycot 4-XP4       | 3.80           | ab  |
| Deltapine 45A      | 3.80           | ab  |
| Stoneville 7A      | 3.80           | ab  |
| Coker 310          | 3.80           | ab  |
| Delcot 277         | 3.80           | ab  |
| Stoneville 213     | 3.80           | ab  |
| Deltapine 6225     | 3.60           | abc |
| Delcot 277 (I70-3) | 3.60           | abc |
| Deltapine 16       | 3.60           | abc |
| Stoneville 603     | 3.40           | abc |
| Auburn M           | 3.20           | bc  |
| Rex SL 66          | 3.00           | c   |

| Variety            | Lodging Index |      |
|--------------------|---------------|------|
|                    | Brycot 4-XP4  | 3.00 |
| Deltapine 45A      | 3.00          | a    |
| Stoneville 7A      | 3.00          | a    |
| S69-988            | 3.00          | a    |
| Deltapine 6225     | 3.00          | a    |
| Coker 310          | 3.00          | a    |
| MO-DEL 1           | 3.00          | a    |
| S69-973            | 2.80          | a    |
| Stoneville 213     | 2.80          | a    |
| Deltapine 16       | 2.80          | a    |
| Stoneville 603     | 2.60          | a    |
| Delcot 277 (I70-3) | 2.20          | b    |
| Mo63-277F          | 2.00          | bc   |
| Delcot 277         | 2.00          | bc   |
| Auburn M           | 1.80          | c    |
| Rex SL 66          | 1.00          | d    |

| Variety            | Lint Percent   |       |
|--------------------|----------------|-------|
|                    | Deltapine 6225 | 38.75 |
| Stoneville 213     | 38.45          | ab    |
| Stoneville 7A      | 38.45          | ab    |
| Delcot 277         | 38.20          | abc   |
| Delcot 277 (I70-3) | 38.10          | abc   |
| Coker 310          | 38.10          | abc   |
| Mo63-277F          | 37.50          | abc   |
| Deltapine 45A      | 37.45          | abc   |
| S69-973            | 37.45          | abc   |
| S69-988            | 37.30          | bc    |
| Brycot 4-XP4       | 37.25          | bc    |
| Deltapine 16       | 37.10          | c     |
| Stoneville 603     | 35.45          | d     |
| Auburn M           | 34.95          | d     |
| MO-DEL 1           | 34.90          | d     |
| Rex SL 66          | 34.75          | d     |

| Variety            | 2.5% Span Length |      |
|--------------------|------------------|------|
|                    | Mo63-277F        | 1.24 |
| Coker 310          | 1.23             | ab   |
| Delcot 277 (I70-3) | 1.22             | ab   |
| Delcot 277         | 1.20             | bc   |
| S69-988            | 1.18             | cd   |
| Stoneville 603     | 1.17             | cde  |
| Deltapine 16       | 1.17             | cde  |
| MO-DEL 1           | 1.17             | cde  |
| S69-973            | 1.16             | def  |
| Deltapine 6225     | 1.16             | def  |
| Rex SL 66          | 1.16             | def  |
| Deltapine 45A      | 1.15             | defg |
| Auburn M           | 1.14             | efg  |
| Brycot 4-XP4       | 1.13             | fg   |
| Stoneville 213     | 1.13             | fg   |
| Stoneville 7A      | 1.12             | g    |

| Variety            | Height Index |      |
|--------------------|--------------|------|
|                    | MO-DEL 1     | 2.80 |
| Deltapine 45A      | 2.60         | ab   |
| S69-988            | 2.60         | ab   |
| Stoneville 7A      | 2.50         | abc  |
| Coker 310          | 2.50         | abc  |
| Stoneville 603     | 2.40         | bcd  |
| Stoneville 213     | 2.40         | bcd  |
| Deltapine 16       | 2.40         | bcd  |
| Brycot 4-XP4       | 2.30         | bcd  |
| S69-973            | 2.30         | bcd  |
| Deltapine 6225     | 2.20         | cdef |
| Delcot 277         | 2.10         | def  |
| Mo63-277F          | 2.00         | ef   |
| Delcot 277 (I70-3) | 2.00         | ef   |
| Auburn M           | 1.90         | f    |
| Rex SL 66          | 1.50         | g    |

| Variety            | Storm Resistance Index |      |
|--------------------|------------------------|------|
|                    | Stoneville 603         | 3.80 |
| S69-973            | 3.20                   | b    |
| Deltapine 6225     | 3.20                   | b    |
| Deltapine 45A      | 3.00                   | bc   |
| Stoneville 213     | 3.00                   | bc   |
| Deltapine 16       | 3.00                   | bc   |
| MO-DEL 1           | 2.80                   | bc   |
| Stoneville 7A      | 2.60                   | cd   |
| Coker 310          | 2.60                   | cd   |
| Rex SL 66          | 2.20                   | de   |
| Delcot 277         | 2.20                   | de   |
| S69-988            | 2.20                   | de   |
| Brycot 4-XP4       | 2.00                   | e    |
| Mo63-277F          | 2.00                   | e    |
| Delcot 277 (I70-3) | 2.00                   | e    |
| Auburn M           | 2.00                   | e    |

| Variety            | 50% Span Length |      |
|--------------------|-----------------|------|
|                    | Mo63-277F       | 0.57 |
| Delcot 277 (I70-3) | 0.55            | ab   |
| Deltapine 45A      | 0.53            | bc   |
| S69-988            | 0.53            | bc   |
| Stoneville 603     | 0.53            | bc   |
| Coker 310          | 0.53            | bc   |
| MO-DEL 1           | 0.53            | bc   |
| Delcot 277         | 0.53            | bc   |
| S69-973            | 0.52            | bcd  |
| Deltapine 6225     | 0.52            | bcd  |
| Brycot 4-XP4       | 0.51            | cd   |
| Stoneville 213     | 0.51            | cd   |
| Rex SL 66          | 0.51            | cd   |
| Deltapine 16       | 0.51            | cd   |
| Stoneville 7A      | 0.49            | d    |
| Auburn M           | 0.49            | d    |

| Variety            | Length-Uniformity Index |       |
|--------------------|-------------------------|-------|
|                    | Mo63-277F               | 46.00 |
| Deltapine 45A      | 46.00                   | a     |
| Stoneville 603     | 45.00                   | ab    |
| Stoneville 213     | 45.00                   | ab    |
| Deltapine 6225     | 45.00                   | ab    |
| MO-DEL 1           | 45.00                   | ab    |
| S69-973            | 45.00                   | ab    |
| Delcot 277         | 44.50                   | abc   |
| Brycot 4-XP4       | 44.50                   | abc   |
| S69-988            | 44.50                   | abc   |
| Delcot 277 (I70-3) | 44.50                   | abc   |
| Rex SL 66          | 44.00                   | abc   |
| Stoneville 7A      | 44.00                   | abc   |
| Deltapine 16       | 43.50                   | bc    |
| Auburn M           | 43.00                   | bc    |
| Coker 310          | 42.50                   | c     |

Table 23 continued

| Variety            | Micronaire | Variety            | Colorimeter Rd |
|--------------------|------------|--------------------|----------------|
| Stoneville 7A      | 5.00 a     | Deltapine 16       | 73.50 a        |
| Stoneville 213     | 4.90 a     | Deltapine 45A      | 72.50 ab       |
| Brycot 4-XP4       | 4.80 ab    | Rex SL 66          | 72.50 ab       |
| Deltapine 6225     | 4.65 bc    | Brycot 4-XP4       | 72.00 ab       |
| Deltapine 45A      | 4.60 bc    | Mo63-277F          | 72.00 ab       |
| MO-DEL 1           | 4.60 bc    | S69-973            | 72.00 ab       |
| Deltapine 16       | 4.60 bc    | Deltapine 6225     | 71.50 ab       |
| Coker 310          | 4.55 cd    | Stoneville 213     | 71.50 ab       |
| Rex SL 66          | 4.55 cd    | Delcot 277 (I70-3) | 71.50 ab       |
| Auburn M           | 4.50 cde   | Coker 310          | 71.50 ab       |
| Stoneville 603     | 4.50 cde   | Auburn M           | 71.00 abc      |
| S69-973            | 4.45 cde   | S69-988            | 71.00 abc      |
| Mo63-277F          | 4.35 def   | Delcot 277         | 71.00 abc      |
| Delcot 277         | 4.30 ef    | Stoneville 603     | 70.50 bc       |
| S69-988            | 4.30 ef    | Stoneville 7A      | 70.50 bc       |
| Delcot 277 (I70-3) | 4.20 f     | MO-DEL 1           | 68.50 c        |

| Variety            | Colorimeter b | Variety            | Trash   |
|--------------------|---------------|--------------------|---------|
| Delcot 277         | 8.50 a        | Stoneville 213     | 4.50 a  |
| MO-DEL 1           | 8.50 a        | Brycot 4-XP4       | 4.00 ab |
| Delcot 277 (I70-3) | 8.25 ab       | Stoneville 7A      | 4.00 ab |
| S69-973            | 8.25 ab       | Deltapine 45A      | 4.00 ab |
| S69-988            | 8.25 ab       | Stoneville 603     | 4.00 ab |
| Mo63-277F          | 8.00 abc      | Coker 310          | 4.00 ab |
| Auburn M           | 8.00 abc      | S69-973            | 4.00 ab |
| Rex SL 66          | 8.00 abc      | S69-988            | 4.00 ab |
| Coker 310          | 8.00 abc      | Delcot 277 (I70-3) | 4.00 ab |
| Stoneville 213     | 8.00 abc      | Rex SL 66          | 4.00 ab |
| Stoneville 603     | 7.75 bc       | Mo63-277F          | 4.00 ab |
| Brycot 4-XP4       | 7.75 bc       | MO-DEL 1           | 4.00 ab |
| Deltapine 6225     | 7.75 bc       | Deltapine 6225     | 4.00 ab |
| Deltapine 45A      | 7.75 bc       | Delcot 277         | 4.00 ab |
| Stoneville 7A      | 7.75 bc       | Auburn M           | 4.00 ab |
| Deltapine 16       | 7.50 c        | Deltapine 16       | 3.50 b  |

| Variety            | Yarn Strength 22's | Variety            | Yarn Tenacity 27 tex |
|--------------------|--------------------|--------------------|----------------------|
| Delcot 277         | 123.00 a           | Delcot 277         | 14.10 a              |
| Mo63-277F          | 121.00 ab          | Mo63-277F          | 13.95 ab             |
| S69-973            | 118.00 bc          | Delcot 277 (I70-3) | 13.55 bc             |
| Delcot 277 (I70-3) | 117.50 bcd         | S69-973            | 13.50 bc             |
| Deltapine 45A      | 114.00 cde         | Deltapine 45A      | 13.15 cd             |
| Coker 310          | 113.50 cdef        | Coker 310          | 13.05 cde            |
| Deltapine 6225     | 113.00 def         | Deltapine 6225     | 13.05 cde            |
| MO-DEL 1           | 111.50 efg         | MO-DEL 1           | 12.85 def            |
| Rex SL 66          | 110.00 efg         | Rex SL 66          | 12.70 defg           |
| Brycot 4-XP4       | 109.00 fgh         | S69-988            | 12.60 efg            |
| Stoneville 603     | 109.00 fgh         | Brycot 4-XP4       | 12.55 efg            |
| S69-988            | 109.00 fgh         | Stoneville 603     | 12.55 efg            |
| Stoneville 213     | 107.50 gh          | Deltapine 16       | 12.40 fg             |
| Deltapine 16       | 107.50 gh          | Stoneville 213     | 12.35 fg             |
| Auburn M           | 107.00 gh          | Auburn M           | 12.30 g              |
| Stoneville 7A      | 105.50 h           | Stoneville 7A      | 12.20 g              |

Table 24. Performance of Cotton Varieties Grown in Southeast Missouri on Fine Sand, with Fusarium Wilt-Root Disease, Non-irrigated Soil, 1971 (7144), Portageville.<sup>1/</sup>

| Variety<br>or<br>Strain | Lint Yield        |                      | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--------------|-----------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |              |           |                   |            |                       |
| Coker 310               | 1117.15 a         | 1058.19              | 95           | 40.20     | 1.20              | 4.15       | 109.00                |
| S69-988                 | 1097.42 a         | 1045.48              | 95           | 37.95     | 1.15              | 3.70       | 107.00                |
| Auburn M                | 1093.60 a         | 1063.43              | 97           | 37.35     | 1.11              | 3.80       | 101.50                |
| Mo. 63-277F             | 1006.53 b         | 944.39               | 94           | 38.35     | 1.19              | 3.70       | 116.50                |
| Rex SL 66               | 988.93 bc         | 937.52               | 95           | 37.50     | 1.11              | 3.95       | 98.00                 |
| Stoneville 603          | 986.82 bc         | 885.94               | 90           | 37.55     | 1.11              | 4.15       | 105.00                |
| Delcot 277              | 971.04 bc         | 964.54               | 99           | 38.85     | 1.15              | 3.75       | 112.00                |
| Deltapine 6225          | 966.30 bc         | 853.43               | 88           | 41.45     | 1.10              | 4.30       | 110.00                |
| Delcot 277 (I70-3)      | 944.77 bc         | 915.44               | 97           | 37.80     | 1.20              | 3.60       | 115.50                |
| S69-973                 | 937.65 bc         | 832.19               | 89           | 37.80     | 1.10              | 3.65       | 109.50                |
| MO-DEL 1                | 924.01 bc         | 868.90               | 94           | 36.45     | 1.14              | 4.30       | 110.50                |
| Deltapine 45A           | 920.88 bc         | 811.55               | 88           | 39.80     | 1.11              | 4.05       | 105.50                |
| Stoneville 7A           | 918.56 bc         | 756.70               | 82           | 39.50     | 1.12              | 3.75       | 103.50                |
| Brycot 4-XP4            | 910.79 bc         | 748.92               | 82           | 40.25     | 1.12              | 4.20       | 100.50                |
| Deltapine 16            | 907.45 bc         | 820.61               | 90           | 38.35     | 1.15              | 3.90       | 110.00                |
| Stoneville 213          | 894.03 c          | 794.78               | 89           | 40.35     | 1.08              | 4.30       | 101.50                |
| Mean                    | 973.82            | 893.88               | 92           | 38.72     | 1.14              | 3.95       | 107.22                |
| MiLSR (.05)             | 88.14             | 102.00               |              | 1.37      | .03               | .49        | 7.48                  |
| MaLSR (.05)             | 104.90            | 121.40               |              | 1.57      | .03               | .56        | 8.91                  |
| C.V. %                  | 7.00              | 8.83                 |              | 1.66      | 1.22              | 5.81       | 3.39                  |

<sup>1/</sup> Fusarium Wilt-root knot disease very light.

Table 25. Performance and Characteristics of Cotton Varieties Grown in Southeast Missouri on Fine Sand, Wilt-free, Non-irrigated Soil, 1971 (7144 Portageville, Marsh Field)

| Variety            | Seed Cotton<br>Lbs/Acre |      | Variety            | Total Lint<br>Lbs/Acre |
|--------------------|-------------------------|------|--------------------|------------------------|
| Auburn M           | 3026.32                 | a    | Coker 310          | 1117.15                |
| S69-988            | 2894.26                 | ab   | S69-988            | 1097.42                |
| Delcot 277         | 2682.42                 | abc  | Auburn M           | 1093.60                |
| Coker 310          | 2663.16                 | abc  | Mo63-277F          | 1001.53                |
| Rex SL 66          | 2616.39                 | abcd | Rex SL 66          | 988.93                 |
| S69-973            | 2580.62                 | bcd  | Stoneville 603     | 986.82                 |
| Delcot 277 (I70-3) | 2572.37                 | bcd  | Delcot 277         | 971.04                 |
| Mo63-277F          | 2547.61                 | bcd  | Deltapine 6225     | 966.30                 |
| Stoneville 603     | 2533.85                 | bcd  | Delcot 277 (I70-3) | 944.77                 |
| MO-DEL 1           | 2432.06                 | cd   | S69-973            | 937.65                 |
| Deltapine 16       | 2418.30                 | cd   | MO-DEL 1           | 924.01                 |
| Deltapine 45A      | 2319.26                 | cd   | Deltapine 45A      | 920.88                 |
| Brycot 4-XP4       | 2289.00                 | cd   | Stoneville 7A      | 918.56                 |
| Stoneville 213     | 2258.73                 | cd   | Brycot 4-XP4       | 910.79                 |
| Stoneville 7A      | 2244.98                 | cd   | Deltapine 16       | 907.45                 |
| Deltapine 6225     | 2203.71                 | d    | Stoneville 213     | 894.03                 |

| Variety            | 1st Pick<br>Lint-Lbs/Acre |        | Variety            | Stand<br>Hills/Plot |
|--------------------|---------------------------|--------|--------------------|---------------------|
| Auburn M           | 1063.43                   | a      | Stoneville 213     | 90.00               |
| Coker 310          | 1058.19                   | a      | Stoneville 603     | 89.40               |
| S69-988            | 1045.48                   | ab     | Mo63-277F          | 89.40               |
| Delcot 277         | 964.54                    | abc    | Coker 310          | 89.40               |
| Mo63-277F          | 944.39                    | bcd    | Brycot 4-XP4       | 89.20               |
| Rex SL 66          | 937.52                    | bcd    | Deltapine 45A      | 89.00               |
| Delcot 277 (I70-3) | 915.44                    | cde    | S69-973            | 89.00               |
| Stoneville 603     | 885.94                    | cdef   | S69-988            | 89.00               |
| MO-DEL 1           | 868.90                    | cdefg  | Rex SL 66          | 89.00               |
| Deltapine 6225     | 853.43                    | cdefgh | Deltapine 16       | 89.00               |
| S69-973            | 832.19                    | defgh  | MO-DEL 1           | 88.80               |
| Deltapine 16       | 820.61                    | efgh   | Delcot 277 (I70-3) | 88.40               |
| Deltapine 45A      | 811.55                    | efgh   | Stoneville 7A      | 88.40               |
| Stoneville 213     | 794.78                    | fgh    | Deltapine 6225     | 88.40               |
| Stoneville 7A      | 756.70                    | gh     | Delcot 277         | 88.20               |
| Brycot 4-XP4       | 748.92                    | h      | Auburn M           | 87.40               |

| Variety            | 1st Flower-days |    | Variety            | Bacterial Blight<br>Incidence |
|--------------------|-----------------|----|--------------------|-------------------------------|
| S69-973            | 60.40           | a  | Brycot 4-XP4       | 5.00                          |
| Deltapine 16       | 59.40           | ab | Deltapine 45A      | 5.00                          |
| Brycot 4-XP4       | 59.40           | ab | Stoneville 7A      | 5.00                          |
| Deltapine 6225     | 59.40           | ab | Stoneville 213     | 5.00                          |
| Stoneville 7A      | 59.40           | ab | Stoneville 603     | 5.00                          |
| Delcot 277 (I70-3) | 59.40           | ab | Coker 310          | 5.00                          |
| S69-988            | 59.20           | ab | S69-973            | 5.00                          |
| Stoneville 213     | 59.20           | ab | S69-988            | 5.00                          |
| Rex SL 66          | 59.00           | ab | Delcot 277 (I70-3) | 5.00                          |
| Delcot 277         | 59.00           | ab | Rex SL 66          | 5.00                          |
| Mo63-277F          | 58.60           | ab | Mo63-277F          | 5.00                          |
| Deltapine 45A      | 58.60           | ab | Deltapine 16       | 5.00                          |
| Stoneville 603     | 58.40           | ab | Deltapine 6225     | 5.00                          |
| MO-DEL 1           | 57.80           | bc | Delcot 277         | 5.00                          |
| Coker 310          | 56.40           | cd | Auburn M           | 5.00                          |
| Auburn M           | 55.40           | d  | MO-DEL             | 5.00                          |

Table 25 continued

| Seedling Vigor     |        | Height Index       |         |
|--------------------|--------|--------------------|---------|
| Variety            | Index  | Variety            | Index   |
| Brycot 4-XP4       | 4.00 a | S69-988            | 2.90 a  |
| Delcot 277         | 4.00 a | Brycot 4-XP4       | 2.80 a  |
| Mo63-277F          | 4.00 a | Stoneville 7A      | 2.80 a  |
| Stoneville 213     | 4.00 a | Delcot 277         | 2.70 a  |
| Delcot 277 (I70-3) | 4.00 a | Stoneville 213     | 2.70 a  |
| S69-988            | 4.00 a | S69-973            | 2.60 ab |
| S69-973            | 4.00 a | Deltapine 45A      | 2.60 ab |
| Deltapine 45A      | 3.80 a | Deltapine 16       | 2.60 ab |
| Stoneville 603     | 3.80 a | Stoneville 603     | 2.50 ab |
| Coker 310          | 3.80 a | Deltapine 6225     | 2.50 ab |
| Deltapine 6225     | 3.80 a | MO-DEL 1           | 2.50 ab |
| MO-DEL 1           | 3.60 a | Delcot 277 (I70-3) | 2.40 ab |
| Rex SL 66          | 3.60 a | Coker 310          | 2.40 ab |
| Stoneville 7A      | 3.40 a | Auburn M           | 2.30 ab |
| Auburn M           | 3.40 a | Mo63-277F          | 2.00 b  |
| Deltapine 16       | 3.40 a | Rex SL 66          | 2.00 b  |

  

| Lodging Index      |          | Storm Resistance   |           |
|--------------------|----------|--------------------|-----------|
| Variety            | Index    | Variety            | Index     |
| Brycot 4-XP4       | 3.00 a   | Deltapine 16       | 4.00 a    |
| Deltapine 45A      | 3.00 a   | S69-973            | 3.80 ab   |
| Stoneville 7A      | 3.00 a   | Stoneville 603     | 3.60 abc  |
| Stoneville 213     | 3.00 a   | MO-DEL 1           | 3.60 abc  |
| Deltapine 6225     | 3.00 a   | Deltapine 6225     | 3.60 abc  |
| Coker 310          | 3.00 a   | Brycot 4-XP4       | 3.20 abcd |
| S69-988            | 3.00 a   | Stoneville 213     | 3.00 bcde |
| Delcot 277         | 3.00 a   | Stoneville 7A      | 3.00 bcde |
| Deltapine 16       | 3.00 a   | Coker 310          | 2.80 cde  |
| MO-DEL 1           | 3.00 a   | Rex SL 66          | 2.40 de   |
| S69-973            | 2.80 ab  | Deltapine 45A      | 2.20 e    |
| Stoneville 603     | 2.80 ab  | Mo63-277F          | 2.00 e    |
| Mo63-277F          | 2.60 abc | Delcot 277 (I70-3) | 2.00 e    |
| Delcot 277 (I70-3) | 2.60 abc | Delcot 277         | 2.00 e    |
| Auburn M           | 2.40 bc  | Auburn M           | 2.00 e    |
| Rex SL 66          | 2.20 c   | S69-988            | 2.00 e    |

  

| Lint Percent       |              | 50% Span Length    |                 |
|--------------------|--------------|--------------------|-----------------|
| Variety            | Lint Percent | Variety            | 50% Span Length |
| Deltapine 6225     | 41.45 a      | Delcot 277 (I70-3) | 0.52 a          |
| Stoneville 213     | 40.35 ab     | Mo63-277F          | 0.52 a          |
| Brycot 4-XP4       | 40.25 ab     | Coker 310          | 0.51 ab         |
| Coker 310          | 40.20 ab     | S69-988            | 0.51 ab         |
| Deltapine 45A      | 39.80 bc     | Delcot 277         | 0.51 ab         |
| Stoneville 7A      | 39.50 bc     | MO-DEL 1           | 0.51 ab         |
| Delcot 277         | 38.85 bcd    | Auburn M           | 0.50 abc        |
| Mo63-277F          | 38.35 cd     | Deltapine 16       | 0.50 abc        |
| Deltapine 16       | 38.35 cd     | Stoneville 603     | 0.49 abc        |
| S69-988            | 37.95 de     | Brycot 4-XP4       | 0.49 abc        |
| Delcot 277 (I70-3) | 37.80 de     | Deltapine 45A      | 0.49 abc        |
| S69-973            | 37.80 de     | Stoneville 7A      | 0.48 abc        |
| Stoneville 603     | 37.55 de     | Deltapine 6225     | 0.48 abc        |
| Rex SL 66          | 37.50 de     | Rex SL 66          | 0.48 abc        |
| Auburn M           | 37.35 de     | S69-973            | 0.47 bc         |
| MO-DEL 1           | 36.45 e      | Stoneville 213     | 0.46 c          |

  

| 2.5% Span Length   |                  | Length-Uniformity Index |         |
|--------------------|------------------|-------------------------|---------|
| Variety            | 2.5% Span Length | Variety                 | Index   |
| Delcot 277 (I70-3) | 1.20 a           | Auburn M                | 44.50 a |
| Coker 310          | 1.20 a           | MO-DEL 1                | 44.50 a |
| Mo63-277F          | 1.19 a           | Stoneville 603          | 44.00 a |
| Deltapine 16       | 1.15 b           | Deltapine 45A           | 44.00 a |
| Delcot 277         | 1.15 b           | S69-988                 | 44.00 a |
| S69-988            | 1.15 b           | Brycot 4-XP4            | 43.50 a |
| MO-DEL 1           | 1.14 bc          | Delcot 277              | 43.50 a |
| Brycot 4-XP4       | 1.12 bcd         | Rex SL 66               | 43.50 a |
| Stoneville 7A      | 1.12 bcd         | Deltapine 16            | 43.50 a |
| Stoneville 603     | 1.11 cde         | Stoneville 7A           | 43.00 a |
| Auburn M           | 1.11 cde         | Deltapine 6225          | 43.00 a |
| Deltapine 45A      | 1.11 cde         | Mo63-277F               | 43.00 a |
| Rex SL 66          | 1.11 cde         | Delcot 277 (I70-3)      | 42.50 a |
| Deltapine 6225     | 1.10 de          | Coker 310               | 42.00 a |
| S69-973            | 1.10 de          | S69-973                 | 42.00 a |
| Stoneville 213     | 1.08 e           | Stoneville 213          | 42.00 a |

Table 25 continued

| Variety            | Micronaire | Variety            | Colorimeter Rd |
|--------------------|------------|--------------------|----------------|
| Deltapine 6225     | 4.30 a     | Deltapine 16       | 72.50 a        |
| Stoneville 213     | 4.30 a     | Auburn M           | 71.50 ab       |
| MO-DEL 1           | 4.30 a     | Delcot 277 (I70-3) | 71.00 ab       |
| Brycot 4-XP4       | 4.20 ab    | Deltapine 6225     | 71.00 ab       |
| Stoneville 603     | 4.15 abc   | Stoneville 7A      | 70.50 ab       |
| Coker 310          | 4.15 abc   | Delcot 277         | 70.00 abc      |
| Deltapine 45A      | 4.05 abc   | S69-988            | 70.00 abc      |
| Rex SL 66          | 3.95 abc   | Stoneville 213     | 69.50 abc      |
| Deltapine 16       | 3.90 abc   | Brycot 4-XP4       | 69.00 abc      |
| Auburn M           | 3.80 abc   | Deltapine 45A      | 69.00 abc      |
| Stoneville 7A      | 3.75 abc   | Mo63-277F          | 68.50 abc      |
| Delcot 277         | 3.75 abc   | S69-973            | 68.50 abc      |
| Mo63-277F          | 3.70 bc    | Rex SL 66          | 68.00 bc       |
| S69-988            | 3.70 bc    | Coker 310          | 68.00 bc       |
| S69-973            | 3.65 bc    | Stoneville 603     | 68.00 bc       |
| Delcot 277 (I70-3) | 3.60 c     | MO-DEL 1           | 66.00 c        |

| Variety            | Colorimeter b | Variety            | Trash   |
|--------------------|---------------|--------------------|---------|
| S69-973            | 8.75 a        | Mo63-277F          | 5.00 a  |
| Delcot 277         | 8.75 a        | Coker 310          | 5.00 a  |
| MO-DEL 1           | 8.75 a        | MO-DEL 1           | 5.00 a  |
| Rex SL 66          | 8.50 ab       | Delcot 277 (I70-3) | 4.50 ab |
| S69-988            | 8.50 ab       | S69-973            | 4.50 ab |
| Delcot 277 (I70-3) | 8.25 abc      | Deltapine 45A      | 4.50 ab |
| Stoneville 603     | 8.25 abc      | Delcot 277         | 4.50 ab |
| Mo63-277F          | 8.25 abc      | Stoneville 603     | 4.00 b  |
| Deltapine 45A      | 8.25 abc      | Brycot 4-XP4       | 4.00 b  |
| Stoneville 213     | 8.25 abc      | Stoneville 213     | 4.00 b  |
| Coker 310          | 8.25 abc      | Stoneville 7A      | 4.00 b  |
| Brycot 4-XP4       | 8.00 bc       | S69-988            | 4.00 b  |
| Stoneville 7A      | 8.00 bc       | Deltapine 6225     | 4.00 b  |
| Deltapine 6225     | 7.75 c        | Rex SL 66          | 4.00 b  |
| Auburn M           | 7.75 c        | Auburn M           | 4.00 b  |
| Deltapine 16       | 7.75 c        | Deltapine 16       | 3.00 c  |

| Variety            | Yarn Strength 22's | Variety            | Yarn Tenacity<br>27 tex |
|--------------------|--------------------|--------------------|-------------------------|
| Mo63-277F          | 116.50 a           | Mo63-277F          | 13.45 a                 |
| Delcot 277 (I70-3) | 115.50 ab          | Delcot 277 (I70-3) | 13.35 ab                |
| Delcot 277         | 112.00 abc         | Delcot 277         | 12.90 abc               |
| MO-DEL 1           | 110.50 abc         | MO-DEL 1           | 12.75 abcd              |
| Deltapine 6225     | 110.00 abcd        | Deltapine 6225     | 12.65 abcd              |
| Deltapine 16       | 110.00 abcd        | S69-973            | 12.60 abcde             |
| S69-973            | 109.50 abcd        | Coker 310          | 12.55 bcdef             |
| Coker 310          | 109.00 abcde       | Deltapine 16       | 12.35 cdefg             |
| S69-988            | 107.00 bcde        | S69-988            | 12.30 cdefg             |
| Deltapine 45A      | 105.50 cdef        | Deltapine 45A      | 12.15 cdefgh            |
| Stoneville 603     | 105.00 cdef        | Stoneville 603     | 12.10 cdefgh            |
| Stoneville 7A      | 103.50 cdef        | Stoneville 7A      | 11.95 defgh             |
| Auburn M           | 101.50 def         | Stoneville 213     | 11.75 efg               |
| Stoneville 213     | 101.50 def         | Auburn M           | 11.70 fgh               |
| Brycot 4-XP4       | 100.50 ef          | Brycot 4-XP4       | 11.55 gh                |
| Rex SL 66          | 98.00 f            | Rex SL 66          | 11.30 h                 |

Table 26. Performance of Cotton Varieties, planted May 19 (late), in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971 (7151), Portageville.

| Variety<br>or<br>Strain | Lint Yield        |                      | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--------------|-----------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |              |           |                   |            |                       |
| Delcot 277 (I70-3)      | 921.78 a          | 921.78               | 100          | 38.05     | 1.19              | 3.40       | 115.00                |
| S69-988                 | 916.85 a          | 916.85               | 100          | 36.45     | 1.15              | 3.80       | 104.00                |
| Coker 310               | 916.07 a          | 916.07               | 100          | 39.55     | 1.20              | 3.95       | 109.50                |
| Mo. 63-277F             | 845.18 ab         | 845.18               | 100          | 38.30     | 1.16              | 3.50       | 116.50                |
| Delcot 277              | 825.11 abc        | 825.11               | 100          | 37.65     | 1.18              | 3.45       | 114.50                |
| Stoneville 603          | 757.43 bcd        | 757.43               | 100          | 36.70     | 1.11              | 4.00       | 106.00                |
| Deltapine 45A           | 736.76 cde        | 736.76               | 100          | 37.95     | 1.10              | 4.05       | 111.00                |
| Auburn M                | 696.00 def        | 696.00               | 100          | 35.95     | 1.08              | 3.85       | 97.00                 |
| Stoneville 213          | 670.90 defg       | 670.90               | 100          | 37.60     | 1.08              | 4.35       | 104.50                |
| Brycot 4-XP4            | 668.18 defg       | 668.18               | 100          | 38.05     | 1.08              | 4.15       | 106.00                |
| Deltapine 16            | 664.95 defg       | 664.95               | 100          | 36.80     | 1.13              | 3.85       | 109.00                |
| S69-973                 | 651.98 efgh       | 651.98               | 100          | 37.80     | 1.13              | 3.75       | 110.50                |
| Deltapine 6225          | 620.84 fghi       | 620.84               | 100          | 38.65     | 1.10              | 4.25       | 113.50                |
| Stoneville 7A           | 577.91 ghi        | 577.91               | 100          | 38.55     | 1.08              | 4.15       | 104.50                |
| Rex SL 66               | 566.59 hi         | 566.59               | 100          | 33.55     | 1.10              | 3.75       | 103.50                |
| MO-DEL 1                | 536.35 i          | 536.35               | 100          | 35.80     | 1.11              | 4.20       | 100.00                |
| Mean                    | 723.31            | 723.31               | 100          | 37.34     | 1.13              | 3.90       | 107.81                |
| MI LSR (.05)            | 88.59             | 88.59                |              | 1.07      | .04               | .25        | 6.99                  |
| MA LSR (.05)            | 105.40            | 105.40               |              | 1.23      | .04               | .29        | 8.04                  |
| C.V. %                  | 9.48              | 9.48                 |              | 1.35      | 1.63              | 2.99       | 3.05                  |



Table 27. Performance and Characteristics of Cotton Varieties Grown on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971 (7151 Portageville, Lee Farm) Planted May 19 (Late)

| Variety            | Seed Cotton<br>Lbs/Acre |     | Variety            | Total<br>Lint-Lbs/Acre |      |
|--------------------|-------------------------|-----|--------------------|------------------------|------|
| Delcot 277 (I70-3) | 2500.84                 | a   | Delcot 277 (I70-3) | 921.78                 | a    |
| S69-988            | 2412.80                 | ab  | S69-988            | 916.85                 | a    |
| Mo63-277F          | 2247.73                 | abc | Coker 310          | 916.07                 | a    |
| Coker 310          | 2242.23                 | abc | Mo63-277F          | 845.18                 | ab   |
| Stoneville 603     | 2154.19                 | abc | Delcot 277         | 825.11                 | abc  |
| Delcot 277         | 2123.93                 | abc | Stoneville 603     | 757.43                 | bcd  |
| Deltapine 45A      | 2022.13                 | bcd | Deltapine 45A      | 736.76                 | cde  |
| Auburn M           | 1950.60                 | cde | Auburn M           | 696.00                 | def  |
| Brycot 4-XP4       | 1925.84                 | cde | Stoneville 213     | 670.90                 | defg |
| Deltapine 16       | 1851.56                 | cde | Brycot 4-XP4       | 668.18                 | defg |
| Rex SL 66          | 1725.00                 | def | Deltapine 16       | 664.95                 | defg |
| S69-973            | 1708.49                 | def | S69-973            | 651.98                 | efgh |
| Deltapine 6225     | 1620.46                 | ef  | Deltapine 6225     | 620.84                 | fghi |
| Stoneville 213     | 1590.19                 | ef  | Stoneville 7A      | 577.91                 | ghi  |
| Stoneville 7A      | 1430.62                 | f   | Rex SL 66          | 566.59                 | hi   |
| MO-DEL 1           | 1427.87                 | f   | MO-DEL 1           | 536.35                 | i    |

| Variety            | 1st Pick<br>Lint-Lbs/Acre |      | Variety            | Stand<br>Hills/Plot |   |
|--------------------|---------------------------|------|--------------------|---------------------|---|
| Delcot 277 (I70-3) | 921.78                    | a    | S69-973            | 89.00               | a |
| S69-988            | 916.85                    | a    | Coker 310          | 89.00               | a |
| Coker 310          | 916.07                    | a    | Brycot 4-XP4       | 88.80               | a |
| Mo63-277F          | 845.18                    | ab   | Delcot 277         | 88.40               | a |
| Delcot 277         | 825.11                    | abc  | Stoneville 603     | 88.20               | a |
| Stoneville 603     | 757.43                    | bcd  | MO-DEL 1           | 88.20               | a |
| Deltapine 45A      | 736.76                    | cde  | Rex SL 66          | 88.00               | a |
| Auburn M           | 696.00                    | def  | Delcot 277 (I70-3) | 87.60               | a |
| Stoneville 213     | 670.90                    | defg | Mo63-277F          | 87.20               | a |
| Brycot 4-XP4       | 668.18                    | defg | Stoneville 213     | 86.20               | a |
| Deltapine 16       | 664.95                    | defg | Stoneville 7A      | 86.20               | a |
| S69-973            | 651.98                    | efgh | Deltapine 45A      | 86.20               | a |
| Deltapine 6225     | 620.84                    | fghi | Deltapine 6225     | 86.20               | a |
| Stoneville 7A      | 577.91                    | ghi  | S69-988            | 85.40               | a |
| Rex SL 66          | 566.59                    | hi   | Auburn M           | 85.00               | a |
| MO-DEL 1           | 536.35                    | i    | Deltapine 16       | 85.00               | a |

| Variety            | 1st Flower-days |     | Variety            | Bacterial Blight<br>Incidence |    |
|--------------------|-----------------|-----|--------------------|-------------------------------|----|
| S69-973            | 64.20           | a   | S69-973            | 5.00                          | a  |
| Stoneville 213     | 63.00           | ab  | Rex SL 66          | 5.00                          | a  |
| Stoneville 7A      | 62.40           | abc | S69-988            | 5.00                          | a  |
| Delcot 277 (I70-3) | 62.20           | abc | Coker 310          | 4.40                          | b  |
| Delcot 277         | 61.80           | abc | Brycot 4-XP4       | 4.20                          | bc |
| S69-988            | 61.80           | abc | Delcot 277 (I70-3) | 4.20                          | bc |
| Deltapine 6225     | 61.80           | abc | Stoneville 7A      | 4.20                          | bc |
| MO-DEL 1           | 61.80           | abc | Stoneville 213     | 4.20                          | bc |
| Mo63-277F          | 61.80           | abc | Stoneville 603     | 4.00                          | bc |
| Deltapine 45A      | 61.60           | abc | Deltapine 45A      | 4.00                          | bc |
| Rex SL 66          | 61.40           | bc  | Mo63-277F          | 4.00                          | bc |
| Brycot 4-XP4       | 61.20           | bcd | Deltapine 16       | 4.00                          | bc |
| Stoneville 603     | 61.00           | bcd | Deltapine 6225     | 4.00                          | bc |
| Deltapine 16       | 60.20           | cde | Delcot 277         | 4.00                          | bc |
| Coker 310          | 58.80           | de  | MO-DEL 1           | 4.00                          | bc |
| Auburn M           | 58.40           | e   | Auburn M           | 3.80                          | c  |

Table 27 continued

| Variety            | Seedling Vigor Index | Variety            | Lint Percent |
|--------------------|----------------------|--------------------|--------------|
| Brycot 4-XP4       | 3.60 a               | Coker 310          | 39.55 a      |
| Stoneville 213     | 3.60 a               | Deltapine 6225     | 38.65 ab     |
| S69-973            | 3.60 a               | Stoneville 7A      | 38.55 ab     |
| S69-988            | 3.60 a               | Mo63-277F          | 38.30 b      |
| Mo63-277F          | 3.40 ab              | Brycot 4-XP4       | 38.05 b      |
| Coker 310          | 3.40 ab              | Delcot 277 (I70-3) | 38.05 b      |
| Delcot 277         | 3.40 ab              | Deltapine 45A      | 37.95 bc     |
| MO-DEL 1           | 3.40 ab              | S69-973            | 37.80 bcd    |
| Stoneville 603     | 3.20 ab              | Delcot 277         | 37.65 bcd    |
| Delcot 277 (I70-3) | 3.20 ab              | Stoneville 213     | 37.60 bcde   |
| Stoneville 7A      | 3.20 ab              | Deltapine 16       | 36.80 cdef   |
| Deltapine 45A      | 3.20 ab              | Stoneville 603     | 36.70 def    |
| Auburn M           | 3.00 ab              | S69-988            | 36.45 ef     |
| Deltapine 16       | 3.00 ab              | Auburn M           | 35.95 f      |
| Deltapine 6225     | 2.80 ab              | MO-DEL 1           | 35.80 f      |
| Rex SL 66          | 2.60 b               | Rex SL 66          | 33.55 g      |

| Variety            | 50% Span Length | Variety            | 2.5% Span Length |
|--------------------|-----------------|--------------------|------------------|
| Delcot 277 (I70-3) | 0.51 a          | Coker 310          | 1.20 a           |
| Mo63-277F          | 0.50 ab         | Delcot 277 (I70-3) | 1.19 ab          |
| S69-973            | 0.50 ab         | Delcot 277         | 1.18 ab          |
| Coker 310          | 0.49 abc        | Mo63-277F          | 1.16 abc         |
| S69-988            | 0.49 abc        | S69-988            | 1.15 bcd         |
| Stoneville 603     | 0.49 abc        | S69-973            | 1.13 cde         |
| Delcot 277         | 0.48 abc        | Deltapine 16       | 1.13 cde         |
| Deltapine 16       | 0.48 abc        | Stoneville 603     | 1.11 def         |
| Deltapine 6225     | 0.48 abc        | MO-DEL 1           | 1.11 def         |
| Deltapine 45A      | 0.47 bc         | Deltapine 6225     | 1.10 ef          |
| Stoneville 7A      | 0.47 bc         | Deltapine 45A      | 1.10 ef          |
| MO-DEL 1           | 0.47 bc         | Rex SL 66          | 1.10 ef          |
| Brycot 4-XP4       | 0.46 c          | Stoneville 7A      | 1.08 f           |
| Rex SL 66          | 0.46 c          | Brycot 4-XP4       | 1.08 f           |
| Auburn M           | 0.46 c          | Auburn M           | 1.08 f           |
| Stoneville 213     | 0.46 c          | Stoneville 213     | 1.08 f           |

| Variety            | Length-Uniformity Index | Variety            | Micronaire |
|--------------------|-------------------------|--------------------|------------|
| Stoneville 603     | 43.50 a                 | Stoneville 213     | 4.35 a     |
| S69-973            | 43.50 a                 | Deltapine 6225     | 4.25 ab    |
| Deltapine 45A      | 43.00 a                 | MO-DEL 1           | 4.20 abc   |
| Deltapine 6225     | 43.00 a                 | Stoneville 7A      | 4.15 abc   |
| Stoneville 7A      | 43.00 a                 | Brycot 4-XP4       | 4.15 abc   |
| S69-988            | 42.50 ab                | Deltapine 45A      | 4.05 bcd   |
| Mo63-277F          | 42.50 ab                | Stoneville 603     | 4.00 bcde  |
| Auburn M           | 42.50 ab                | Coker 310          | 3.95 cde   |
| Stoneville 213     | 42.00 abc               | Auburn M           | 3.85 de    |
| Deltapine 16       | 42.00 abc               | Deltapine 16       | 3.85 de    |
| MO-DEL 1           | 42.00 abc               | S69-988            | 3.80 de    |
| Brycot 4-XP4       | 42.00 abc               | S69-973            | 3.75 ef    |
| Delcot 277 (I70-3) | 42.00 abc               | Rex SL 66          | 3.75 ef    |
| Rex SL 66          | 41.50 abc               | Mo63-277F          | 3.50 fg    |
| Delcot 277         | 40.50 bc                | Delcot 277         | 3.45 g     |
| Coker 310          | 40.00 c                 | Delcot 277 (I70-3) | 3.40 g     |

Table 27 continued

| Variety            | Colorimeter Rd | Variety            | Colorimeter b |
|--------------------|----------------|--------------------|---------------|
| Deltapine 16       | 72.00 a        | MO-DEL 1           | 9.00 a        |
| Stoneville 603     | 71.00 ab       | Stoneville 213     | 8.75 ab       |
| Deltapine 45A      | 71.00 ab       | Delcot 277 (I70-3) | 8.50 abc      |
| Stoneville 7A      | 70.50 ab       | Stoneville 7A      | 8.50 abc      |
| Brycot 4-XP4       | 70.50 ab       | S69-973            | 8.50 abc      |
| Delcot 277         | 70.50 ab       | S69-988            | 8.50 abc      |
| Deltapine 6225     | 70.50 ab       | Mo63-277F          | 8.25 bcd      |
| Rex SL 66          | 70.00 ab       | Rex SL 66          | 8.25 bcd      |
| Auburn M           | 70.00 ab       | Auburn M           | 8.25 bcd      |
| Coker 310          | 70.00 ab       | Delcot 277         | 8.25 bcd      |
| Mo63-277F          | 70.00 ab       | Deltapine 16       | 8.25 bcd      |
| Delcot 277 (I70-3) | 69.50 abc      | Stoneville 603     | 8.00 cd       |
| S69-988            | 69.00 bc       | Brycot 4-XP4       | 8.00 cd       |
| Stoneville 213     | 68.50 bc       | Deltapine 45A      | 8.00 cd       |
| S69-973            | 67.50 c        | Coker 310          | 8.00 cd       |
| MO-DEL 1           | 67.50 c        | Deltapine 6225     | 7.75 d        |

| Variety            | Trash  | Variety            | Yarn Strength 22's |
|--------------------|--------|--------------------|--------------------|
| Stoneville 7A      | 5.00 a | Mo63-277F          | 116.50 a           |
| MO-DEL 1           | 5.00 a | Delcot 277 (I70-3) | 115.00 a           |
| S69-973            | 5.00 a | Delcot 277         | 114.50 a           |
| Mo63-277F          | 5.00 a | Deltapine 6225     | 113.50 ab          |
| Auburn M           | 5.00 a | Deltapine 45A      | 111.00 abc         |
| Deltapine 45A      | 4.50 a | S69-973            | 110.50 abc         |
| Coker 310          | 4.50 a | Coker 310          | 109.50 abc         |
| Stoneville 213     | 4.50 a | Deltapine 16       | 109.00 abc         |
| Brycot 4-XP4       | 4.50 a | Brycot 4-XP4       | 106.00 bcd         |
| Rex SL 66          | 4.50 a | Stoneville 603     | 106.00 bcd         |
| Stoneville 603     | 4.50 a | Stoneville 213     | 104.50 cde         |
| Deltapine 16       | 4.50 a | Stoneville 7A      | 104.50 cde         |
| Delcot 277 (I70-3) | 4.50 a | S69-988            | 104.00 cde         |
| Delcot 277         | 4.50 a | Rex SL 66          | 103.50 cde         |
| Deltapine 6225     | 4.50 a | MO-DEL 1           | 100.00 de          |
| S69-988            | 4.50 a | Auburn M           | 97.00 e            |

| Variety            | Yarn Tenacity<br>27 tex |
|--------------------|-------------------------|
| Mo63-277F          | 13.45 a                 |
| Delcot 277 (I70-3) | 13.25 ab                |
| Delcot 277         | 13.20 ab                |
| Deltapine 6225     | 13.05 abc               |
| Deltapine 45A      | 12.80 abcd              |
| S69-973            | 12.70 abcd              |
| Coker 310          | 12.60 abcd              |
| Deltapine 16       | 12.50 bcd               |
| Brycot 4-XP4       | 12.20 cde               |
| Stoneville 603     | 12.20 cde               |
| Stoneville 7A      | 12.05 def               |
| Stoneville 213     | 12.00 def               |
| S69-988            | 11.95 def               |
| Rex SL 66          | 11.90 def               |
| MO-DEL 1           | 11.50 ef                |
| Auburn M           | 11.20 f                 |

Table 28. Performance of Cotton Varieties Grown in Southeast Missouri on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971 (71156), Sikeston.<sup>1/</sup>

| Variety<br>or<br>Strain | Lint Yield        |                      | % of<br>Crop | Lint<br>% | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |
|-------------------------|-------------------|----------------------|--------------|-----------|-------------------|------------|-----------------------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |              |           |                   |            |                       |
| S69-988                 | 827.48 a          | 827.48               | 100          | 38.50     | 1.12              | 3.55       | 107.00                |
| Auburn M                | 817.39 a          | 817.39               | 100          | 35.85     | 1.08              | 3.30       | 97.00                 |
| Delcot 277 (I70-3)      | 813.26 ab         | 813.26               | 100          | 39.65     | 1.16              | 2.80       | 113.00                |
| Coker 310               | 791.54 abc        | 791.54               | 100          | 38.40     | 1.17              | 3.45       | 103.00                |
| MO-DEL 1                | 781.35 abc        | 781.35               | 100          | 35.80     | 1.09              | 3.50       | 96.00                 |
| Mo. 63-277F             | 754.44 abcd       | 754.44               | 100          | 37.45     | 1.15              | 2.90       | 105.50                |
| Delcot 277              | 712.69 bcd        | 712.69               | 100          | 36.00     | 1.12              | 3.15       | 110.50                |
| Stoneville 603          | 693.94 cde        | 693.94               | 100          | 37.00     | 1.08              | 3.25       | 96.50                 |
| Stoneville 213          | 657.43 def        | 657.43               | 100          | 38.00     | 1.07              | 3.65       | 99.50                 |
| Rex SL 66               | 612.67 ef         | 612.67               | 100          | 35.30     | 1.12              | 3.25       | 100.50                |
| S69-973                 | 574.26 fg         | 574.26               | 100          | 37.25     | 1.12              | 3.10       | 104.50                |
| Brycot 4-XP4            | 571.82 fg         | 571.82               | 100          | 36.25     | 1.07              | 3.20       | 100.50                |
| Deltapine 16            | 568.52 fg         | 568.52               | 100          | 36.80     | 1.11              | 2.90       | 104.50                |
| Stoneville 7A           | 488.95 gh         | 488.95               | 100          | 38.70     | 1.07              | 3.40       | 98.00                 |
| Deltapine 6225          | 474.47 gh         | 474.47               | 100          | 37.85     | 1.11              | 3.50       | 104.50                |
| Deltapine 45A           | 463.89 h          | 463.89               | 100          | 37.35     | 1.08              | 3.25       | 104.00                |
| Mean                    | 662.78            | 662.78               | 100          | 37.26     | 1.11              | 3.26       | 102.78                |
| MiLSR (.05)             | 92.53             | 92.53                |              | 1.24      | .04               | .40        | 8.83                  |
| MaLSR (.05)             | 110.10            | 110.10               |              | 1.43      | .04               | .46        | 10.15                 |
| C.V. %                  | 10.80             | 10.80                |              | 1.57      | 1.53              | 5.79       | 4.03                  |

<sup>1/</sup> Rainfall excessive, July and August.

Table 29. Performance and Characteristics of Cotton Varieties Grown on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971 (71156 Sikeston)

| Variety            | Seed Cotton<br>Lbs/Acre |     | Variety            | Total Lint<br>Lbs/Acre |      |
|--------------------|-------------------------|-----|--------------------|------------------------|------|
| S69-988            | 2583.38                 | a   | S69-988            | 827.48                 | a    |
| Delcot 277 (I70-3) | 2440.31                 | ab  | Auburn M           | 817.39                 | a    |
| Auburn M           | 2189.95                 | abc | Delcot 277 (I70-3) | 813.26                 | ab   |
| MO-DEL 1           | 2165.19                 | abc | Coker 310          | 791.54                 | abc  |
| Coker 310          | 2162.44                 | abc | MO-DEL 1           | 781.35                 | abc  |
| Stoneville 603     | 1854.31                 | bcd | Mo63-277F          | 754.44                 | abcd |
| Delcot 277         | 1854.31                 | bcd | Delcot 277         | 712.69                 | bcd  |
| Stoneville 213     | 1818.54                 | bcd | Stoneville 603     | 693.94                 | cde  |
| S69-973            | 1650.72                 | cde | Stoneville 213     | 657.43                 | def  |
| Mo63-277F          | 1636.96                 | cde | Rex SL 66          | 613.67                 | ef   |
| Rex SL 66          | 1612.20                 | cde | S69-973            | 574.26                 | fg   |
| Deltapine 16       | 1535.17                 | cde | Brycot 4-XP4       | 571.82                 | fg   |
| Brycot 4-XP4       | 1400.36                 | de  | Deltapine 16       | 568.52                 | fg   |
| Deltapine 45A      | 1227.03                 | de  | Stoneville 7A      | 488.95                 | gh   |
| Stoneville 7A      | 1210.53                 | de  | Deltapine 6225     | 474.47                 | gh   |
| Deltapine 6225     | 1067.47                 | e   | Deltapine 45A      | 463.89                 | h    |

  

| Variety            | 1st Pick<br>Lint-Lbs/Acre |      | Variety            | Stand-Hills/Plot |      |
|--------------------|---------------------------|------|--------------------|------------------|------|
| S69-988            | 827.84                    | a    | MO-DEL 1           | 104.40           | a    |
| Auburn M           | 817.39                    | a    | Stoneville 7A      | 102.00           | ab   |
| Delcot 277 (I70-3) | 813.26                    | ab   | Stoneville 603     | 99.20            | abc  |
| Coker 310          | 791.54                    | abc  | S69-988            | 99.20            | abc  |
| MO-DEL 1           | 781.35                    | abc  | Brycot 4-XP4       | 99.00            | abc  |
| Mo63-277F          | 754.44                    | abcd | Deltapine 6225     | 97.80            | abcd |
| Delcot 277         | 712.69                    | bcd  | Mo63-277F          | 97.60            | abcd |
| Stoneville 603     | 693.94                    | cde  | Stoneville 213     | 97.40            | bcd  |
| Stoneville 213     | 657.43                    | def  | S69-973            | 96.80            | bcd  |
| Rex SL 66          | 612.67                    | ef   | Coker 310          | 96.20            | bcd  |
| S69-973            | 574.26                    | fg   | Deltapine 45A      | 95.00            | bcd  |
| Brycot 4-XP4       | 571.82                    | fg   | Deltapine 16       | 93.20            | cde  |
| Deltapine 16       | 568.52                    | fg   | Delcot 277         | 92.80            | cde  |
| Stoneville 7A      | 488.95                    | gh   | Rex SL 66          | 91.60            | de   |
| Deltapine 6225     | 474.47                    | gh   | Delcot 277 (I70-3) | 91.20            | de   |
| Deltapine 45A      | 463.89                    | h    | Auburn M           | 88.20            | e    |

  

| Variety            | 1st Flower-days |       | Variety            | Bacterial Blight<br>Incidence |     |
|--------------------|-----------------|-------|--------------------|-------------------------------|-----|
| Mo63-277F          | 71.80           | a     | Rex SL 66          | 5.00                          | a   |
| Stoneville 213     | 71.40           | ab    | S69-988            | 5.00                          | a   |
| Stoneville 7A      | 71.20           | abc   | S69-973            | 4.40                          | b   |
| Deltapine 6225     | 71.00           | abc   | Brycot 4-XP4       | 4.00                          | bc  |
| S69-973            | 71.00           | abc   | Stoneville 7A      | 4.00                          | bc  |
| Deltapine 16       | 70.60           | abcd  | Stoneville 213     | 4.00                          | bc  |
| Delcot 277 (I70-3) | 70.60           | abcd  | Deltapine 16       | 4.00                          | bc  |
| Rex SL 66          | 70.40           | abcde | MO-DEL 1           | 4.00                          | bc  |
| Delcot 277         | 70.40           | abcde | Delcot 277 (I70-3) | 3.80                          | cd  |
| Deltapine 45A      | 70.20           | abcde | Deltapine 45A      | 3.80                          | cd  |
| Brycot 4-XP4       | 70.20           | abcde | Coker 310          | 3.60                          | cde |
| Stoneville 603     | 70.00           | abcde | Delcot 277         | 3.40                          | def |
| MO-DEL 1           | 69.60           | bcde  | Stoneville 603     | 3.20                          | ef  |
| S69-988            | 69.20           | cde   | Mo63-277F          | 3.20                          | ef  |
| Auburn M           | 68.80           | de    | Deltapine 6225     | 3.00                          | f   |
| Coker 310          | 68.40           | e     | Auburn M           | 3.00                          | f   |

Table 29 continued

| Variety            | Seedling Vigor Index | Variety            | Height Index |
|--------------------|----------------------|--------------------|--------------|
| S69-988            | 3.60 a               | Deltapine 6225     | 3.10 a       |
| MO-DEL 1           | 3.60 a               | Deltapine 45A      | 3.00 ab      |
| Brycot 4-XP4       | 3.20 ab              | Brycot 4-XP4       | 3.00 ab      |
| Stoneville 213     | 3.20 ab              | Stoneville 213     | 2.90 ab      |
| S69-973            | 3.00 abc             | Deltapine 16       | 2.90 ab      |
| Stoneville 603     | 2.80 abcd            | Stoneville 7A      | 2.80 abc     |
| Delcot 277 (I70-3) | 2.80 abcd            | S69-973            | 2.80 abc     |
| Deltapine 16       | 2.60 bcde            | Delcot 277         | 2.80 abc     |
| Stoneville 7A      | 2.60 bcde            | Stoneville 603     | 2.80 abc     |
| Mo63-277F          | 2.60 bcde            | S69-988            | 2.70 abc     |
| Coker 310          | 2.40 bcde            | Mo63-277F          | 2.70 abc     |
| Delcot 277         | 2.40 bcde            | Rex SL 66          | 2.50 bc      |
| Deltapine 6225     | 2.20 cde             | Coker 310          | 2.50 bc      |
| Deltapine 45A      | 2.20 cde             | MO-DEL 1           | 2.50 bc      |
| Rex SL 66          | 2.00 de              | Delcot 277 (I70-3) | 2.30 c       |
| Auburn M           | 1.80 e               | Auburn M           | 2.30 c       |

| Variety            | Lodging Index | Variety            | Storm Resistance Index |
|--------------------|---------------|--------------------|------------------------|
| Brycot 4-XP4       | 3.00 a        | Stoneville 603     | 4.00 a                 |
| Deltapine 45A      | 3.00 a        | Deltapine 16       | 4.00 a                 |
| Stoneville 7A      | 3.00 a        | S69-973            | 4.00 a                 |
| Stoneville 213     | 3.00 a        | Deltapine 45A      | 3.80 ab                |
| Stoneville 603     | 3.00 a        | Deltapine 6225     | 3.80 ab                |
| Coker 310          | 3.00 a        | MO-DEL 1           | 3.80 ab                |
| S69-973            | 3.00 a        | Stoneville 7A      | 3.60 abc               |
| S69-988            | 3.00 a        | Rex SL 66          | 3.20 abcd              |
| Delcot 277 (I70-3) | 3.00 a        | Stoneville 213     | 3.00 bcde              |
| Rex SL 66          | 3.00 a        | Auburn M           | 2.80 cde               |
| Mo63-277F          | 3.00 a        | Coker 310          | 2.60 de                |
| Deltapine 16       | 3.00 a        | Delcot 277         | 2.60 de                |
| Deltapine 6225     | 3.00 a        | Delcot 277 (I70-3) | 2.40 de                |
| Delcot 277         | 3.00 a        | Mo63-277F          | 2.40 de                |
| Auburn M           | 3.00 a        | Brycot 4-XP4       | 2.20 e                 |
| MO-DEL 1           | 3.00 a        | S69-988            | 2.20 e                 |

| Variety            | Lint Percent | Variety            | 50% Span Length |
|--------------------|--------------|--------------------|-----------------|
| Delcot 277 (I70-3) | 39.65 a      | Delcot 277 (I70-3) | 0.48 a          |
| Stoneville 7A      | 38.70 ab     | Rex SL 66          | 0.47 a          |
| S69-988            | 38.50 abc    | Deltapine 6225     | 0.47 a          |
| Coker 310          | 38.40 abc    | Coker 310          | 0.47 a          |
| Stoneville 213     | 38.00 bcd    | S69-973            | 0.46 a          |
| Deltapine 6225     | 37.85 bcd    | Stoneville 213     | 0.46 a          |
| Mo63-277F          | 37.45 bcde   | S69-988            | 0.46 a          |
| Deltapine 45A      | 37.35 bcdef  | MO-DEL 1           | 0.46 a          |
| S69-973            | 37.25 cdef   | Delcot 277         | 0.45 a          |
| Stoneville 603     | 37.00 defg   | Mo63-277F          | 0.44 a          |
| Deltapine 16       | 36.80 defg   | Brycot 4-XP4       | 0.44 a          |
| Brycot 4-XP4       | 36.25 efgh   | Auburn M           | 0.44 a          |
| Delcot 277         | 36.00 fgh    | Stoneville 603     | 0.44 a          |
| Auburn M           | 35.85 gh     | Deltapine 45A      | 0.44 a          |
| MO-DEL 1           | 35.80 gh     | Stoneville 7A      | 0.43 a          |
| Rex SL 66          | 35.30 h      | Deltapine 16       | 0.43 a          |

Table 29 continued

| Variety            | 2.5% Span Length | Variety            | Length Uniformity Index |
|--------------------|------------------|--------------------|-------------------------|
| Coker 310          | 1.17 a           | Stoneville 213     | 43.00 a                 |
| Delcot 277 (I70-3) | 1.16 ab          | Deltapine 6225     | 41.50 ab                |
| Mo 63-277F         | 1.15 abc         | Rex SL 66          | 41.50 ab                |
| S69-988            | 1.12 bcd         | MO-DEL 1           | 41.50 ab                |
| S69-973            | 1.12 bcd         | S69-973            | 41.00 abc               |
| Rex SL 66          | 1.12 bcd         | Delcot 277 (I70-3) | 41.00 abc               |
| Delcot 277         | 1.12 bcd         | Auburn M           | 41.00 abc               |
| Deltapine 6225     | 1.11 cde         | S69-988            | 41.00 abc               |
| Deltapine 16       | 1.11 cde         | Brycot 4-XP4       | 40.50 abc               |
| MO-DEL 1           | 1.09 de          | Deltapine 45A      | 40.50 abc               |
| Stoneville 603     | 1.08 de          | Stoneville 603     | 40.50 abc               |
| Auburn M           | 1.08 de          | Coker 310          | 40.00 abc               |
| Deltapine 45A      | 1.08 de          | Stoneville 7A      | 40.00 abc               |
| Brycot 4-XP4       | 1.07 e           | Delcot 277         | 40.00 abc               |
| Stoneville 7A      | 1.07 e           | Deltapine 16       | 39.00 bc                |
| Stoneville 213     | 1.07 e           | Mo 63-277F         | 38.00 c                 |

  

| Variety            | Micronaire | Variety            | Colorimeter Rd |
|--------------------|------------|--------------------|----------------|
| Stoneville 213     | 3.65 a     | Auburn M           | 71.00 a        |
| S69-988            | 3.55 ab    | Rex SL 66          | 70.50 a        |
| Deltapine 6225     | 3.50 ab    | Mo 63-277F         | 70.50 a        |
| MO-DEL 1           | 3.50 ab    | Deltapine 16       | 70.00 ab       |
| Coker 310          | 3.45 ab    | Stoneville 603     | 69.50 ab       |
| Stoneville 7A      | 3.40 ab    | Delcot 277         | 69.00 ab       |
| Auburn M           | 3.30 abc   | Brycot 4-XP4       | 69.00 ab       |
| Stoneville 603     | 3.25 abcd  | S69-988            | 69.00 ab       |
| Deltapine 45A      | 3.25 abcd  | Delcot 277 (I70-3) | 69.00 ab       |
| Rex SL 66          | 3.25 abcd  | Deltapine 45A      | 69.00 ab       |
| Brycot 4-XP4       | 3.20 abcd  | Stoneville 7A      | 69.00 ab       |
| Delcot 277         | 3.15 bcd   | Stoneville 213     | 69.00 ab       |
| S69-973            | 3.10 bcd   | Coker 310          | 68.50 ab       |
| Mo 63-277F         | 2.90 cd    | Deltapine 6225     | 67.50 ab       |
| Deltapine 16       | 2.90 cd    | MO-DEL 1           | 67.50 ab       |
| Delcot 277 (I70-3) | 2.80 d     | S69-973            | 66.50 b        |

  

| Variety            | Colorimeter b | Variety            | Trash  |
|--------------------|---------------|--------------------|--------|
| Brycot 4-XP4       | 8.50 a        | Delcot 277 (I70-3) | 4.50 a |
| Stoneville 213     | 8.50 a        | Deltapine 45A      | 4.50 a |
| S69-973            | 8.50 a        | Mo63-277F          | 4.50 a |
| MO-DEL 1           | 8.50 a        | Delcot 277         | 4.50 a |
| Deltapine 6225     | 8.50 a        | Deltapine 6225     | 4.50 a |
| Deltapine 16       | 8.25 a        | S69-973            | 4.50 a |
| Mo63-277F          | 8.25 a        | Stoneville 213     | 4.00 a |
| Deltapine 45A      | 8.00 a        | MO-DEL 1           | 4.00 a |
| Stoneville 7A      | 8.00 a        | Brycot 4-XP4       | 4.00 a |
| Delcot 277         | 8.00 a        | Rex SL 66          | 4.00 a |
| Auburn M           | 8.00 a        | Stoneville 7A      | 4.00 a |
| Rex SL 66          | 7.75 a        | Deltapine 16       | 4.00 a |
| Delcot 277 (I70-3) | 7.75 a        | Stoneville 603     | 4.00 a |
| Coker 310          | 7.75 a        | Coker 310          | 4.00 a |
| S69-988            | 7.75 a        | Auburn M           | 4.00 a |
| Stoneville 603     | 7.50 a        | S69-988            | 3.50 a |

  

| Variety            | Yarn Strength 22's | Variety            | Yarn Tenacity 27 tex |
|--------------------|--------------------|--------------------|----------------------|
| Delcot 277 (I70-3) | 113.00 a           | Delcot 277 (I70-3) | 13.00 a              |
| Delcot 277         | 110.50 ab          | Delcot 277         | 12.70 ab             |
| S69-988            | 107.00 abc         | S69-988            | 12.30 abc            |
| Mo63-277F          | 105.50 abcd        | Mo63-277F          | 12.20 abc            |
| Deltapine 6225     | 104.50 abcd        | Deltapine 6225     | 12.05 abcd           |
| Deltapine 16       | 104.50 abcd        | Deltapine 16       | 12.05 abcd           |
| S69-973            | 104.50 abcd        | S69-973            | 12.05 abcd           |
| Deltapine 45A      | 104.00 abcd        | Deltapine 45A      | 12.00 abcd           |
| Coker 310          | 103.00 abcd        | Coker 310          | 11.90 abcd           |
| Brycot 4-XP4       | 100.50 bcd         | Brycot 4-XP4       | 11.60 bcd            |
| Rex SL 66          | 100.50 bcd         | Rex SL 66          | 11.55 bcd            |
| Stoneville 213     | 99.50 cd           | Stoneville 213     | 11.45 cd             |
| Stoneville 7A      | 98.00 cd           | Stoneville 7A      | 11.30 cd             |
| Auburn M           | 97.00 cd           | Auburn M           | 11.20 cd             |
| Stoneville 603     | 96.50 d            | Stoneville 603     | 11.15 cd             |
| MO-DEL 1           | 96.00 d            | MO-DEL 1           | 11.00 d              |

Table 30: Performance of Varieties and Strains Grown in the Missouri Regional Variety and High Quality Strains Tests on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971, Portageville.

| Variety<br>or<br>Strain | Lint Yield        |                      | Percent<br>of<br>Crop | Lint<br>Percent | Length<br>2.5% SL | Micronaire | Yarn Strength<br>22's |        |
|-------------------------|-------------------|----------------------|-----------------------|-----------------|-------------------|------------|-----------------------|--------|
|                         | Total<br>Lbs/Acre | 1st Pick<br>Lbs/Acre |                       |                 |                   |            |                       |        |
| Coker 310               | 1114.88           | a                    | 1008.48               | 90              | 37.93             | 1.19       | 3.80                  | 110.33 |
| CP 820589               | 1077.14           | ab                   | 1027.95               | 95              | 36.17             | 1.16       | 4.20                  | 120.00 |
| Coker 310-1901          | 1048.52           | abc                  | 913.86                | 87              | 37.73             | 1.20       | 3.57                  | 110.67 |
| MO. 63-079B             | 1033.73           | abcd                 | 967.86                | 94              | 34.70             | 1.17       | 3.50                  | 115.33 |
| Delcot 277              | 1030.73           | abcd                 | 935.43                | 91              | 36.17             | 1.17       | 3.33                  | 115.33 |
| Coker 201               | 1018.98           | abcd                 | 882.99                | 87              | 37.30             | 1.12       | 4.00                  | 107.33 |
| PD 4381-567             | 1013.75           | abcd                 | 890.91                | 88              | 35.07             | 1.15       | 3.50                  | 112.33 |
| PD 4381-54              | 1011.90           | abcd                 | 804.69                | 80              | 35.83             | 1.12       | 4.10                  | 110.67 |
| Stoneville 603          | 1009.66           | abcd                 | 850.33                | 84              | 36.30             | 1.09       | 3.80                  | 104.67 |
| Stoneville 804          | 1008.34           | abcd                 | 888.62                | 88              | 37.10             | 1.12       | 4.00                  | 113.67 |
| Deltapine 16            | 995.44            | bcde                 | 764.61                | 77              | 36.07             | 1.14       | 3.77                  | 109.33 |
| Coker 417               | 994.88            | bcde                 | 852.40                | 86              | 35.60             | 1.18       | 3.60                  | 115.67 |
| Stoneville 213          | 980.27            | bcdef                | 773.01                | 79              | 37.40             | 1.08       | 4.27                  | 102.67 |
| CP 828                  | 976.14            | bcdef                | 914.37                | 94              | 36.20             | 1.15       | 3.80                  | 123.67 |
| Deltapine 45A           | 953.99            | cdefg                | 802.59                | 84              | 37.03             | 1.10       | 3.63                  | 107.67 |
| Coker 8215              | 930.71            | defgh                | 755.84                | 81              | 38.33             | 1.17       | 3.97                  | 115.00 |
| PD 8619                 | 894.21            | efghi                | 681.18                | 76              | 36.73             | 1.18       | 3.97                  | 126.33 |
| Coker 8103              | 890.36            | efghij               | 766.29                | 87              | 36.20             | 1.16       | 3.70                  | 118.33 |
| Coker 423-70911         | 871.18            | fghijk               | 725.61                | 83              | 35.83             | 1.19       | 3.67                  | 117.33 |
| McNair 9416             | 854.85            | ghijk                | 705.49                | 83              | 34.57             | 1.09       | 4.13                  | 114.33 |
| LaDass 51               | 838.16            | hijk                 | 557.61                | 67              | 37.30             | 1.09       | 4.00                  | 111.00 |
| Stoneville 7A           | 787.07            | ijk                  | 529.95                | 67              | 37.13             | 1.09       | 4.13                  | 104.00 |
| Acala SJ-1              | 782.84            | ijk                  | 694.82                | 89              | 34.20             | 1.15       | 4.03                  | 121.67 |
| Paymaster III           | 780.14            | jk                   | 668.80                | 86              | 32.97             | 1.06       | 3.87                  | 100.67 |
| Deltapine 607           | 761.67            | k                    | 529.49                | 70              | 35.00             | 1.13       | 3.60                  | 117.67 |
| Mean                    | 946.40            |                      | 795.75                | 84              | 36.19             | 1.14       | 3.84                  | 113.03 |
| MLSR (.05)              | 98.24             |                      | 103.00                |                 | 1.16              | .03        | .22                   | 5.66   |
| MaLSR (.05)             | 120.10            |                      | 125.90                |                 | 1.41              | .04        | .26                   | 6.84   |
| C.V. %                  | 8.96              |                      | 11.17                 |                 | 1.94              | 1.63       | 3.42                  | 3.02   |



Table 31 Performance and Characteristics of Varieties and Strains Grown in the Missouri Regional Variety and High Quality Strains Tests on Sandy Loam, Wilt-free, Non-irrigated Soil, 1971  
(71101 Portageville, Lee Field)

| Variety         | Seed Cotton/Lbs/Acre | Variety         | Total Lint-Lbs/Acre | Variety         | Lint-Lbs/Acre-1st Pick |
|-----------------|----------------------|-----------------|---------------------|-----------------|------------------------|
| CP 820589       | 3055.88 a            | Coker 310       | 1114.88 a           | CP 820589       | 1027.95 a              |
| Mo63-079B       | 2971.42 ab           | CP 820589       | 1077.14 ab          | Coker 310       | 1008.48 a              |
| Coker 310       | 2917.12 abc          | Coker 310-1901  | 1048.52 abc         | Mo63-079B       | 967.86 ab              |
| Stoneville 603  | 2896.00 abcd         | Mo63-079B       | 1033.73 abcd        | Delcot 277      | 935.43 ab              |
| PD 4381-567     | 2808.52 abcde        | Delcot 277      | 1030.73 abcd        | CP 828          | 914.37 abc             |
| Coker 310-1901  | 2805.50 abcde        | Coker 201       | 1018.98 abcd        | Coker 310-1901  | 913.86 abc             |
| Delcot 277      | 2796.45 abcdef       | PD 4381-567     | 1013.75 abcd        | PD 4381-567     | 890.91 bcd             |
| Coker 417       | 2769.30 abcdefg      | PD 4381-54      | 1011.90 abcd        | Stoneville 804  | 888.62 bcd             |
| Deltapine 16    | 2763.27 abcdefg      | Stoneville 603  | 1009.66 abcd        | Coker 201       | 882.99 bcde            |
| Coker 201       | 2721.03 bcdefg       | Stoneville 804  | 1008.34 abcd        | Coker 417       | 852.40 bcdef           |
| PD 4381-54      | 2718.02 bcdefg       | Deltapine 16    | 995.44 bcde         | Stoneville 603  | 850.33 bcdef           |
| CP 828          | 2708.97 bcdefg       | Coker 417       | 994.88 bcde         | PD 4381-54      | 804.69 cdefg           |
| Stoneville 804  | 2663.72 bcdefg       | Stoneville 213  | 980.27 bcdef        | Deltapine 45A   | 802.59 cdefg           |
| Stoneville 213  | 2600.37 cdefgh       | CP 828          | 976.14 bcdef        | Stoneville 213  | 773.01 defgh           |
| Deltapine 45A   | 2573.22 defghi       | Deltapine 45A   | 953.99 cdefg        | Coker 8103      | 776.29 efgh            |
| Coker 423-70911 | 2527.97 efghi        | Coker 8215      | 930.71 defgh        | Deltapine 16    | 764.61 efgh            |
| McNair 9416     | 2512.88 efghi        | PD 8619         | 894.21 efghi        | Coker 8215      | 755.84 fgh             |
| Coker 8215      | 2470.65 fghij        | Coker 8103      | 890.36 efghij       | Coker 423-70911 | 725.61 gh              |
| PD 8619         | 2449.53 ghijk        | Coker 423-70911 | 871.18 fghijk       | McNair 9416     | 705.49 gh              |
| Coker 8103      | 2446.52 ghijk        | McNair 9416     | 854.85 ghijk        | Acala SJ-1      | 694.82 gh              |
| Paymaster III   | 2322.83 hijkl        | La Dass 51      | 838.16 hijk         | PD 8619         | 681.18 h               |
| Acala SJ-1      | 2256.47 ijkl         | Stoneville 7A   | 787.07 ijk          | Paymaster III   | 668.80 h               |
| Deltapine 607   | 2190.10 jkl          | Acala SJ-1      | 782.84 ijk          | La Dass 51      | 557.61 i               |
| La Dass 51      | 2138.82 kl           | Paymaster III   | 780.14 jk           | Stoneville 7A   | 529.95 i               |
| Stoneville 7A   | 2060.38 l            | Deltapine 607   | 761.67 k            | Deltapine 607   | 529.49 i               |

Table 31 continued

| Variety         | Stand-Hills/Plot | Variety         | 1st Flower-days | Variety         | Seedling Vigor Index |
|-----------------|------------------|-----------------|-----------------|-----------------|----------------------|
| Deltapine 45A   | 84.33 a          | Deltapine 607   | 67.50 a         | McNair 9416     | 3.83 a               |
| Coker 201       | 83.83 ab         | Stoneville 7A   | 66.33 ab        | Coker 201       | 3.83 a               |
| Stoneville 603  | 83.67 ab         | Delcot 277      | 66.33 ab        | Coker 310       | 3.67 ab              |
| Acala SJ-1      | 83.33 ab         | McNair 9416     | 66.33 ab        | Mo63-079B       | 3.67 ab              |
| Coker 310       | 82.83 ab         | Acala SJ-1      | 66.17 abc       | Acala SJ-1      | 3.50 ab              |
| Deltapine 607   | 82.33 ab         | La Dass 51      | 65.50 bcd       | Deltapine 45A   | 3.50 ab              |
| Coker 8103      | 81.83 ab         | Stoneville 213  | 65.50 bcd       | Delcot 277      | 3.50 ab              |
| McNair 9416     | 81.67 ab         | Deltapine 45A   | 65.17 bcde      | PD 4381-54      | 3.33 ab              |
| La Dass 51      | 81.33 ab         | Stoneville 603  | 65.00 bcdef     | Coker 8103      | 3.33 ab              |
| CP 820589       | 81.17 ab         | PD 4381-54      | 64.83 bcdef     | Stoneville 213  | 3.33 ab              |
| Mo63-079B       | 81.00 ab         | PD 8619         | 64.83 bcdef     | Stoneville 603  | 3.33 ab              |
| PD 4381-567     | 81.00 ab         | Deltapine 16    | 64.67 cdefg     | CP 820589       | 3.33 ab              |
| Deltapine 16    | 80.83 ab         | Coker 423-70911 | 64.50 defg      | PD 4381-567     | 3.33 ab              |
| PD 8619         | 80.33 abc        | Coker 310-1901  | 64.33 defg      | Coker 417       | 3.17 abc             |
| CP 828          | 80.00 abc        | Coker 417       | 64.17 defgh     | PD 8619         | 3.00 bcd             |
| Paymaster III   | 79.67 abc        | Coker 8103      | 64.00 defgh     | Deltapine 16    | 3.00 bcd             |
| Stoneville 213  | 79.33 abc        | PD 4381-567     | 63.67 efgh      | Paymaster III   | 3.00 bcd             |
| Delcot 277      | 79.00 abc        | Stoneville 804  | 63.67 efgh      | Stoneville 7A   | 3.00 bcd             |
| Coker 423-70911 | 78.67 abc        | Mo63-079B       | 63.50 fgh       | CP 828          | 3.00 bcd             |
| Coker 417       | 78.50 abc        | Coker 310       | 63.50 fgh       | Coker 423-70911 | 3.00 bcd             |
| Stoneville 7A   | 78.00 abc        | Coker 201       | 63.17 ghi       | La Dass 51      | 3.00 bcd             |
| Coker 8215      | 75.17 bc         | Paymaster III   | 63.17 ghi       | Stoneville 804  | 2.50 cde             |
| PD 4381-54      | 72.50 c          | Coker 8215      | 62.67 hi        | Coker 310-1901  | 2.33 de              |
| Coker 310-1901  | 72.17 c          | CP 828          | 61.83 ij        | Coker 8215      | 2.33 de              |
| Stoneville 804  | 72.00 c          | CP 820589       | 61.17 j         | Deltapine 607   | 1.83 e               |

Table 31 Continued

| Variety         | Height Index | Variety         | Lodging Index | Variety         | Storm Resistance Index |
|-----------------|--------------|-----------------|---------------|-----------------|------------------------|
| La Dass 51      | 3.83 a       | Coker 423-70911 | 3.00 a        | Paymaster III   | 3.83 a                 |
| Acala SJ-1      | 3.75 a       | Acala SJ-1      | 3.00 a        | Deltapine 607   | 3.83 a                 |
| Coker 8103      | 3.42 b       | Stoneville 213  | 3.00 a        | Deltapine 16    | 3.67 ab                |
| Deltapine 607   | 3.33 bc      | Coker 8103      | 2.83 ab       | La Dass 51      | 3.67 ab                |
| PD 4381-54      | 3.25 bcd     | Paymaster III   | 2.83 ab       | PD 4381-567     | 3.50 abc               |
| Coker 423-70911 | 3.17 bcde    | PD 4381-567     | 2.83 ab       | Coker 8103      | 3.50 abc               |
| Stoneville 7A   | 3.17 bcde    | La Dass 51      | 2.83 ab       | Coker 423-70911 | 3.33 abc               |
| Deltapine 45A   | 3.08 bcdef   | Coker 201       | 2.83 ab       | Coker 8215      | 3.33 abc               |
| PD 4381-567     | 3.08 bcdef   | Coker 310       | 2.83 ab       | Coker 310-1901  | 3.33 abc               |
| Stoneville 804  | 3.08 bcdef   | Deltapine 607   | 2.83 ab       | Stoneville 7A   | 3.33 abc               |
| Stoneville 213  | 3.08 bcdef   | Coker 417       | 2.67 abc      | Deltapine 45A   | 3.00 abcd              |
| McNair 9416     | 3.08 bcdef   | McNair 9416     | 2.67 abc      | Stoneville 213  | 3.00 abcd              |
| Paymaster III   | 3.00 cdefg   | Coker 8215      | 2.67 abc      | Stoneville 804  | 3.00 abcd              |
| Deltapine 16    | 3.00 cdefg   | Coker 310-1901  | 2.67 abc      | Stoneville 603  | 2.83 bcde              |
| Coker 201       | 2.92 defg    | Stoneville 804  | 2.67 abc      | Coker 417       | 2.83 bcde              |
| Coker 417       | 2.92 defg    | CP 820589       | 2.50 abcd     | Coker 201       | 2.67 cdef              |
| Stoneville 603  | 2.83 efg     | Stoneville 7A   | 2.50 abcd     | Coker 310       | 2.67 cdef              |
| Delcot 277      | 2.83 efgh    | Deltapine 16    | 2.50 abcd     | Acala SJ-1      | 2.67 cdef              |
| Coker 310       | 2.75 fgh     | Deltapine 45A   | 2.33 bcd      | PD 8619         | 2.67 cdef              |
| Coker 8215      | 2.75 fgh     | PD 4381-54      | 2.33 bcd      | PD 4381-54      | 2.33 def               |
| Mo63-079B       | 2.75 fgh     | Stoneville 603  | 2.17 cd       | Delcot 277      | 2.00 ef                |
| CP 828          | 2.75 fgh     | Delcot 277      | 2.17 cd       | Mo63-079B       | 2.00 ef                |
| PD 8619         | 2.67 gh      | CP 828          | 2.17 cd       | CP 828          | 1.83 f                 |
| Coker 310-1901  | 2.67 gh      | Mo63-079B       | 2.00 d        | CP 820589       | 1.83 f                 |
| CP 820589       | 2.50 h       | PD 8619         | 2.00 d        | McNair 9416     | 1.83 f                 |

Table 31 continued

| Variety         | Seed Index  | Variety         | Seed Grade | Variety         | Lint Percent |
|-----------------|-------------|-----------------|------------|-----------------|--------------|
| Mo63-079B       | 14.67 a     | Acala SJ-1      | 8.33 a     | Coker 8215      | 38.33 a      |
| Acala SJ-1      | 14.33 ab    | La Dass 51      | 8.00 ab    | Coker 310       | 37.93 ab     |
| CP828           | 13.87 abc   | Coker 201       | 8.00 ab    | Coker 310-1901  | 37.73 ab     |
| PD 4381-54      | 13.60 bcd   | Delcot 277      | 8.00 ab    | Stoneville 213  | 37.40 abc    |
| Delcot 277      | 13.60 bcd   | Stoneville 213  | 8.00 ab    | La Dass 51      | 37.30 abc    |
| PD 4381-567     | 13.60 bcd   | Stoneville 603  | 8.00 ab    | Coker 201       | 37.30 abc    |
| CP 820589       | 13.47 bcd   | Coker 310       | 8.00 ab    | Stoneville 7A   | 37.13 abcd   |
| Paymaster III   | 13.27 cde   | Coker 310-1901  | 8.00 ab    | Stoneville 804  | 37.10 abcd   |
| McNair 9416     | 13.07 cdef  | Stoneville 7A   | 7.67 abc   | Deltapine 45A   | 37.03 abcd   |
| Stoneville 603  | 12.93 cdef  | CP 820589       | 7.67 abc   | PD 8619         | 36.73 bcde   |
| PD 8619         | 12.60 defg  | PD 4381-567     | 7.67 abc   | Stoneville 603  | 36.30 cdef   |
| Coker 417       | 12.40 efgh  | Coker 8215      | 7.67 abc   | CP 828          | 36.20 cdef   |
| Stoneville 213  | 12.20 fghi  | Deltapine 607   | 7.67 abc   | Coker 8103      | 36.20 cdef   |
| Coker 8103      | 12.13 fghij | Paymaster III   | 7.33 bcd   | Delcot 277      | 36.17 cdef   |
| Coker 201       | 12.13 fghij | PD 4381-54      | 7.33 bcd   | CP 820589       | 36.17 cdef   |
| Deltapine 16    | 12.07 fghij | CP 828          | 7.33 bcd   | Deltapine 16    | 36.07 cdef   |
| Coker 423-70911 | 12.07 fghij | Coker 423-70911 | 7.33 bcd   | PD 4381-54      | 35.83 defg   |
| Stoneville 804  | 11.80 ghij  | Mo63-079B       | 7.33 bcd   | Coker 423-70911 | 35.83 defg   |
| Deltapine 45A   | 11.80 ghij  | Deltapine 16    | 7.00 cde   | Coker 417       | 35.60 efg    |
| Stoneville 7A   | 11.53 hij   | Coker 8103      | 7.00 cde   | PD 4381-567     | 35.07 fgh    |
| Coker 310       | 11.47 hij   | PD 8619         | 7.00 cde   | Deltapine 607   | 35.00 fgh    |
| Coker 310-1901  | 11.47 hij   | Coker 417       | 7.00 cde   | Mo63-079B       | 34.70 gh     |
| La Dass 51      | 11.27 ij    | Deltapine 45A   | 7.00 cde   | McNair 9416     | 34.57 gh     |
| Coker 8215      | 11.13 j     | McNair 9416     | 6.67 de    | Acala SJ-1      | 34.20 h      |
| Deltapine 607   | 11.13 j     | Stoneville 804  | 6.33 e     | Paymaster III   | 32.97 i      |

Table 31 continued

| Variety         | Boll Weight | Variety         | 50% Span Length | Variety         | 2.5% Span Length |
|-----------------|-------------|-----------------|-----------------|-----------------|------------------|
| Paymaster III   | 8.20 a      | PD 8619         | 0.51 a          | Coker 310-1901  | 1.20 a           |
| Mo63-079B       | 7.57 b      | CP 828          | 0.50 ab         | Coker 423-70911 | 1.19 ab          |
| Acala SJ-1      | 7.37 b      | Coker 423-70911 | 0.50 ab         | Coker 310       | 1.19 ab          |
| McNair 9416     | 7.33 bc     | CP 820589       | 0.50 ab         | Coker 417       | 1.18 abc         |
| CP 820589       | 7.30 bc     | Coker 8215      | 0.50 ab         | PD 8619         | 1.18 abc         |
| PD 4381-567     | 7.17 bcd    | Coker 417       | 0.49 abc        | Delcot 277      | 1.17 abcd        |
| Delcot 277      | 7.10 bcde   | PD 4381-567     | 0.49 abc        | Mo63-079B       | 1.17 abcd        |
| CP 828          | 6.97 bcdef  | Deltapine 607   | 0.49 abc        | Coker 8215      | 1.17 abcd        |
| PD 4381-54      | 6.70 cdefg  | Acala SJ-1      | 0.49 abc        | Coker 8103      | 1.16 bcde        |
| PD 8619         | 6.63 defg   | Coker 8103      | 0.48 abcd       | CP 820589       | 1.16 bcde        |
| Deltapine 16    | 6.63 defg   | PD 4381-54      | 0.48 abcd       | CP 828          | 1.15 cdef        |
| Coker 8103      | 6.63 defg   | Mo63-079B       | 0.48 abcd       | PD 4381-567     | 1.15 cdef        |
| Coker 310       | 6.60 defg   | Coker 201       | 0.48 abcd       | Acala SJ-1      | 1.15 cdef        |
| Coker 423-70911 | 6.57 defg   | Coker 310       | 0.48 abcd       | Deltapine 16    | 1.14 def         |
| Stoneville 804  | 6.47 efgh   | Delcot 277      | 0.48 abcd       | Deltapine 607   | 1.13 efg         |
| Coker 201       | 6.47 efgh   | McNair 9416     | 0.47 bcd        | PD 4381-54      | 1.12 fgh         |
| Coker 310-1901  | 6.43 fgh    | Deltapine 16    | 0.47 bcd        | Coker 201       | 1.12 fgh         |
| Stoneville 213  | 6.37 fghi   | Stoneville 804  | 0.47 bcd        | Stoneville 804  | 1.12 fgh         |
| Stoneville 603  | 6.20 ghi    | Deltapine 45A   | 0.47 bcd        | Deltapine 45A   | 1.10 ghi         |
| Coker 417       | 6.17 ghi    | Stoneville 7A   | 0.46 cd         | Stoneville 7A   | 1.09 hij         |
| Stoneville 7A   | 6.10 ghi j  | Stoneville 213  | 0.46 cd         | McNair 9416     | 1.09 hij         |
| La Dass 51      | 5.90 hij    | Coker 310-1901  | 0.46 cd         | La Dass 51      | 1.09 hij         |
| Deltapine 45A   | 5.83 hij    | Paymaster III   | 0.45 d          | Stoneville 603  | 1.09 hij         |
| Coker 8215      | 5.73 ij     | Stoneville 603  | 0.45 d          | Stoneville 213  | 1.08 ij          |
| Deltapine 607   | 5.50 j      | La Dass 51      | 0.45 d          | Paymaster III   | 1.06 j           |

Table 31 continued

| Variety         | Length-Uniformity Index | Variety         | Micronaire | Variety         | Colorimeter Rd |
|-----------------|-------------------------|-----------------|------------|-----------------|----------------|
| CP 820589       | 43.33 a                 | Stoneville 213  | 4.27 a     | Deltapine 16    | 73.33 a        |
| PD 8619         | 43.33 a                 | CP 820589       | 4.20 ab    | Stoneville 603  | 73.00 ab       |
| McNair 9416     | 43.00 ab                | Stoneville 7A   | 4.13 ab    | PD 4381-567     | 72.33 abc      |
| CP 828          | 43.00 ab                | McNair 9416     | 4.13 ab    | Coker 310       | 72.00 abcd     |
| Deltapine 607   | 42.67 abc               | PD 4381-54      | 4.10 abc   | Coker 310-1901  | 72.00 abcd     |
| Coker 8215      | 42.67 abc               | Acala SJ-1      | 4.03 abcd  | Coker 201       | 71.67 abcde    |
| Deltapine 45A   | 42.33 abcd              | Coker 201       | 4.00 bcde  | Delcot 277      | 71.67 abcde    |
| PD 4381-54      | 42.33 abcd              | Stoneville 804  | 4.00 bcde  | Mo63-079B       | 71.67 abcde    |
| Stoneville 213  | 42.33 abcd              | La Dass 51      | 4.00 bcde  | CP 828          | 71.33 abcdef   |
| Acala SJ-1      | 42.33 abcd              | PD 8619         | 3.97 bcde  | Coker 417       | 71.33 abcdefg  |
| Coker 201       | 42.00 abcd              | Coker 8215      | 3.97 bcde  | Deltapine 607   | 71.33 abcdefg  |
| PD 4381-567     | 42.00 abcd              | Paymaster III   | 3.87 cdef  | CP 820589       | 71.33 abcdefg  |
| Stoneville 7A   | 41.67 abcde             | Stoneville 603  | 3.80 defg  | Coker 8103      | 71.00 abcdefg  |
| Paymaster III   | 41.67 abcde             | CP 828          | 3.80 defg  | Coker 423-70911 | 71.00 abcdefg  |
| Coker 423-70911 | 41.33 abcde             | Coker 310       | 3.80 defg  | Acala SJ-1      | 70.67 bcdefgh  |
| Coker 417       | 41.33 abcde             | Deltapine 16    | 3.77 efg   | Stoneville 804  | 70.67 bcdefgh  |
| Stoneville 804  | 41.33 abcde             | Coker 8103      | 3.70 fgh   | Deltapine 45A   | 70.67 bcdefgh  |
| Stoneville 603  | 41.00 bcde              | Coker 423-70911 | 3.67 fgh   | PD 4381-54      | 70.33 cdefgh   |
| Coker 8103      | 41.00 bcde              | Deltapine 45A   | 3.63 fgh   | Stoneville 213  | 70.33 cdefgh   |
| La Dass 51      | 41.00 bcde              | Deltapine 607   | 3.60 gh    | Coker 8215      | 69.67 defghi   |
| Delcot 277      | 40.67 cde               | Coker 417       | 3.60 gh    | Stoneville 7A   | 69.33 efghi    |
| Deltapine 16    | 40.67 cde               | Coker 310-1901  | 3.57 gh    | McNair 9416     | 69.00 fghi     |
| Mo63-079B       | 40.33 de                | PD 4381-567     | 3.50 hi    | Paymaster III   | 69.00 ghi      |
| Coker 310       | 39.67 ef                | Mo63-079B       | 3.50 hi    | La Dass 51      | 68.67 hi       |
| Coker 310-1901  | 38.33 f                 | Delcot 277      | 3.33 i     | PD 8619         | 67.67 i        |

Table 31 continued

| Variety         | Colorimeter b | Variety         | Trash   | Variety         | Yarn Strength 22's |
|-----------------|---------------|-----------------|---------|-----------------|--------------------|
| Paymaster III   | 8.83 a        | La Dass 51      | 4.33 a  | PD 8619         | 126.33 a           |
| PD 4381-54      | 8.83 a        | Coker 417       | 4.33 a  | CP 828          | 123.67 ab          |
| Acala SJ-1      | 8.67 ab       | Coker 201       | 4.00 ab | Acala SJ-1      | 121.67 abc         |
| PD 8619         | 8.67 ab       | PD 8619         | 4.00 ab | CP 820589       | 120.00 bcd         |
| Coker 423-70911 | 8.50 abc      | McNair 9416     | 4.00 ab | Coker 8103      | 118.33 bcde        |
| Delcot 277      | 8.50 abc      | Paymaster III   | 4.00 ab | Deltapine 607   | 117.67 bcde        |
| La Dass 51      | 8.50 abc      | Coker 8103      | 4.00 ab | Coker 423-70911 | 117.33 bcdef       |
| Mo63-079B       | 8.50 abc      | Deltapine 45A   | 3.67 ab | Coker 417       | 115.67 cdefg       |
| Stoneville 213  | 8.50 abc      | Stoneville 213  | 3.67 ab | Mo63-079B       | 115.33 cdefg       |
| Stoneville 7A   | 8.50 abc      | Delcot 277      | 3.67 ab | Delcot 277      | 115.33 cdefg       |
| PD 4381-567     | 8.50 abc      | Acala SJ-1      | 3.67 ab | Coker 8215      | 115.00 defg        |
| Stoneville 804  | 8.33 abcd     | Coker 310-1901  | 3.67 ab | McNair 9416     | 114.33 defg        |
| Coker 8103      | 8.33 abcd     | Coker 310       | 3.67 ab | Stoneville 804  | 113.67 defgh       |
| Deltapine 45A   | 8.33 abcd     | PD 4381-54      | 3.67 ab | PD 4381-567     | 112.33 efg         |
| Coker 8215      | 8.17 abcd     | Deltapine 607   | 3.67 ab | La Dass 51      | 111.00 fghi        |
| Deltapine 16    | 8.17 abcd     | Stoneville 7A   | 3.67 ab | PD 4381-54      | 110.67 ghi         |
| Deltapine 607   | 8.17 abcd     | Stoneville 603  | 3.33 ab | Coker 310-1901  | 110.67 ghi         |
| Coker 201       | 8.00 bcd      | Coker 423-70911 | 3.33 ab | Coker 310       | 110.33 ghij        |
| Coker 417       | 8.00 bcd      | CP 820589       | 3.33 ab | Deltapine 16    | 109.33 ghij        |
| Coker 310-1901  | 8.00 bcd      | Mo63-079B       | 3.33 ab | Deltapine 45A   | 107.67 hijk        |
| McNair 9416     | 8.00 bcd      | Coker 8215      | 3.33 ab | Coker 201       | 107.33 hijk        |
| Stoneville 603  | 7.83 cd       | PD 4381-567     | 3.33 ab | Stoneville 603  | 104.67 ijkl        |
| CP 820589       | 7.83 cd       | Stoneville 804  | 3.33 ab | Stoneville 7A   | 104.00 jkl         |
| Coker 310       | 7.67 d        | CP 828          | 3.00 b  | Stoneville 213  | 102.67 kl          |
| CP 828          | 7.67 d        | Deltapine 16    | 3.00 b  | Paymaster III   | 100.67 l           |

Table 31 continued

| Variety         | Yarn Tenacity 27 tex |
|-----------------|----------------------|
| PD 8619         | 14.57 a              |
| CP 828          | 14.27 ab             |
| Acala SJ-1      | 13.97 abc            |
| CP 820589       | 13.83 bed            |
| Coker 8103      | 13.60 cde            |
| Coker 423-70911 | 13.50 cdef           |
| Coker 417       | 13.30 cdefg          |
| Deltapine 607   | 13.30 cdefg          |
| Mo63-079B       | 13.27 cdefgh         |
| Delcot 277      | 13.27 cdefgh         |
| Coker 8215      | 13.23 defgh          |
| McNair 9416     | 13.13 defgh          |
| Stoneville 804  | 13.10 efghi          |
| PD 4381-567     | 12.93 efghij         |
| La Dass 51      | 12.80 fghij          |
| PD 4381-54      | 12.77 ghijk          |
| Coker 310       | 12.70 ghijk          |
| Coker 310-1901  | 12.67 ghijk          |
| Deltapine 16    | 12.57 hijkl          |
| Deltapine 45A   | 12.40 ijklm          |
| Coker 201       | 12.37 jklm           |
| Stoneville 603  | 12.07 klmn           |
| Stoneville 7A   | 11.97 lmn            |
| Stoneville 213  | 11.87 mn             |
| Paymaster III   | 11.63 n              |