

Mimeographed Circular M-276

March, 1956

COTTON VARIETY TESTS

1955



## RECOMMENDED VARIETIES

### WESTERN OKLAHOMA

Lankart 57\*  
Lankart 611\*  
Lockett No. 1 (Stormproff No. 1)\*  
Lockett 140  
Marv-L-S-Cluster  
Northern Star\*  
Parrott\*

### EASTERN OKLAHOMA

Deltapine 15  
D & PL Fox  
Empire  
Stoneville 62

Varieties for central Oklahoma can be selected from either list above, depending on local conditions and type of harvest anticipated.

Varieties recommended for eastern Oklahoma can be expected to perform well in western Oklahoma when grown under irrigation. Paymaster 54, an early variety, has given best yields under irrigation when tests were planted in June.

\*Varieties adapted to stripper harvest.

## COTTON VARIETY TESTS, 1955

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Cotton variety tests planted in 1955 included 8 planted for stripper harvest in Central and Western Oklahoma, 6 under irrigation for hand harvest, and 8 under dry land conditions for hand harvest. Tests not harvested were stripper tests at Davidson, Tipton, and Hobart. Difficulties with drouth at Hobart resulted in very small plants and low yield level. At Tipton, the harvest date intended was too late for the plant condition, and excessive pre-harvest losses occurred in all varieties. This difficulty could have been avoided by timely harvesting. The test at Davidson was harvested, but the results are not being reported because of mistakes in harvesting.

In general, conditions for cotton production were favorable. Late planting dates resulting from loss of stand influenced results in some tests, and these cases are pointed out in the text.

Data obtained on the various tests are presented in this circular as follows:

|                               |           |
|-------------------------------|-----------|
| STRIPPER HARVESTED TESTS----- | pages 2-7 |
| IRRIGATED TESTS -----         | " 8-14    |
| DRYLAND TESTS -----           | " 15-24   |

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### STRIPPER HARVESTED TESTS

Varieties considered to be well adapted to stripper harvest were included in tests at 8 locations. Although the stripper is not selective in its action, only varieties with sufficient storm resistance to insure reasonably low pre-harvest losses under most conditions were included. Under extreme conditions, such as were experienced at Tipton in 1955, no variety had satisfactory storm resistance.

The combination of late rains followed by a relatively early hard frost resulted in plants that were out of condition for stripping very soon after the frost. The brittleness of the plants resulted in somewhat lower lint percentages and machine efficiencies than usual.

Each of the tests consisted of 3 replicates of 4 row x 100 foot plots, the 2 center rows being harvested with a John Deere stripper. All tests were harvested with the same machine. Plot yields were taken in the field, and samples were taken to the laboratory for determinations of lint %, staple, other lint properties and for seed analysis. Information concerning each test is given in Table 1.

TABLE 1. Location, soil type, and other information on the 1955 stripper-harvested tests.

| <u>Nearest Town</u> | <u>Soil Type</u>         | <u>Planted</u> | <u>Harvested</u> | <u>Other</u>                                     |
|---------------------|--------------------------|----------------|------------------|--|
| Altus               | Clay loam                | June 13        | Nov. 17          | 500 # 8-10-0<br>14" irrigation water<br>6 sprays |
| Mangum              | Deep sand<br>Deep plowed | May 28         | Nov. 18          | 200# 12-24-12                                    |
| Elk City            | Fine sandy loam          | June 14        | Nov. 22          |  |
| Chickasha           | Silty clay loam          | May 30         | Nov. 9           |  |
| Pocassett           | Upland clay              | June 7         | Nov. 12          |  |

TABLE 2. Results with 12 varieties in an irrigated stripper test at Altus in 1955, and average results with 5 varieties.

| <u>Variety</u>     | <u>#Lint<br/>Harvested<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> | <u>Pre-Harvest<br/>Loss-%</u> | <u>Harvest<br/>Loss-%</u> |
|--------------------|---------------------------------------|---------------------------|---------------|-------------------------------|---------------------------|
| Western Stormproof | 880                                   | 28                        | 27.2          | 0.1                           | 5.5                       |
| Northern Star      | 834                                   | 28                        | 22.9          | 0.2                           | 6.7                       |
| CR-4               | 817                                   | 28                        | 24.9          | 0.0                           | 7.7                       |
| Lankart 57         | 810                                   | 29                        | 23.8          | 0.1                           | 6.4                       |
| Paymaster 54-B     | 809                                   | 28                        | 25.7          | 0.8                           | 17.7                      |
| Lankart 611        | 696                                   | 30                        | 23.7          | 0.1                           | 7.5                       |
| Lockett No. 1      | 687                                   | 28                        | 22.0          | 0.1                           | 9.0                       |
| Parrott            | 674                                   | 28                        | 24.8          | 0.4                           | 8.0                       |
| Wacona             | 671                                   | 28                        | 22.2          | 0.2                           | 8.2                       |
| Stormrider         | 654                                   | --                        | 21.8          | 0.3                           | 10.6                      |
| CR-3-221           | 608                                   | --                        | 23.1          | 0.4                           | 10.4                      |
| Lockett 88         | 558                                   | 28                        | 25.4          | 0.1                           | 7.0                       |
| L.S.D.(5%)*        | 90                                    |                           |               |                               |                           |

Average Results, 1952, 1954, 1955.

|               |     |      |     |     |
|---------------|-----|------|-----|-----|
| Parrott       | 966 | 27.9 | 1.4 | 6.0 |
| Lankart 57    | 929 | 26.5 | 0.2 | 7.1 |
| Lockett No. 1 | 929 | 27.2 | 1.2 | 9.2 |
| Northern Star | 921 | 25.7 | 0.7 | 6.8 |
| Lankart 611   | 816 | 26.3 | 0.2 | 6.7 |

\* Least significant difference; differences among varieties smaller than 90 lbs. are probably due to chance rather than to

TABLE 3. Results with 11 varieties and strains in a stripper-harvested test at Mangum in 1955, and average results with 5 varieties.

| <u>Variety</u>     | <u># Lint<br/>Harvested<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> | <u>Pre-Harvest<br/>Loss (%)</u> | <u>Harvest<br/>Loss (%)</u> |
|--------------------|--|---------------------------|---------------|---------------------------------|-----------------------------|
| Parrott            | 442                                    | 28                        | 29.0          | 1.5                             | 5.5                         |
| Lankart 57         | 431                                    | 29                        | 28.0          | 1.6                             | 4.2                         |
| CR-3-221           | 428                                    | 28                        | 28.5          | 0.9                             | 4.5                         |
| Lankart 611        | 406                                    | 28                        | 27.5          | 0.8                             | 3.4                         |
| Wacona             | 401                                    | 30                        | 25.3          | 0.7                             | 3.4                         |
| CR-4               | 379                                    | 28                        | 28.8          | 0.8                             | 6.6                         |
| Lockett 88         | 347                                    | 28                        | 26.4          | 0.6                             | 2.7                         |
| Western Stormproof | 344                                    | 28                        | 29.2          | 0.9                             | 3.9                         |
| Lockett No. 1      | 339                                    | 28                        | 26.1          | 2.1                             | 5.4                         |
| Northern Star      | 278                                    | 29                        | 24.7          | 1.5                             | 7.3                         |
| Stormrider         | 259                                    | 26                        | 25.1          | 1.1                             | 6.7                         |
| L.S.D. (5%)        | 99                                     |                           |               |                                 |                             |

Average Results, 1953, 1955.

|               |     |     |     |
|---------------|-----|-----|-----|
| Parrott       | 449 | 2.4 | 8.4 |
| Lockett No. 1 | 390 | 2.4 | 7.2 |
| Lankart 611   | 381 | 1.8 | 5.9 |
| Lankart 57    | 368 | 2.3 | 8.5 |
| Northern Star | 312 | 6.9 | 8.0 |

TABLE 4. Results with 11 varieties in a stripper-harvested test at Elk City in 1955, and average results with 5 varieties.

| <u>Variety</u>     | <u># Lint<br/>Harvested<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> | <u>Pre-Harvest<br/>Loss (%)</u> | <u>Harvest<br/>Loss (%)</u> |
|--------------------|--|---------------------------|---------------|---------------------------------|-----------------------------|
| Lankart 611        | 293                                    | 26                        | 28.2          | 0.5                             | 1.6                         |
| Lankart 57         | 283                                    | 28                        | 27.9          | 0.5                             | 1.4                         |
| CR-3-221           | 283                                    | 28                        | 26.5          | 1.5                             | 3.1                         |
| Lockett 88         | 272                                    | 28                        | 27.6          | 0.9                             | 1.2                         |
| Parrott            | 271                                    | 28                        | 28.7          | 1.6                             | 4.9                         |
| CR-4               | 271                                    | 28                        | 27.4          | 1.8                             | 2.7                         |
| Western Stormproof | 266                                    | 28                        | 28.6          | 1.3                             | 2.5                         |
| Lockett No. 1      | 263                                    | 28                        | 26.1          | 1.3                             | 2.4                         |
| Stormrider         | 260                                    | 28                        | 25.3          | 1.4                             | 2.4                         |
| Wacona             | 250                                    | 28                        | 25.9          | 1.2                             | 2.2                         |
| Northern Star      | 238                                    | 26                        | 25.6          | 1.8                             | 2.8                         |
| L.S.D. (5%)        | 28                                     |                           |               |                                 |                             |

Average Results, 1952 - 1955

|               |     |      |     |     |
|---------------|-----|------|-----|-----|
| Parrott       | 270 | 28.3 | 5.7 | 5.2 |
| Lankart 611   | 257 | 26.1 | 4.4 | 2.7 |
| Lockett No. 1 | 252 | 26.8 | 4.6 | 4.3 |
| Lankart 57    | 237 | 29.0 | 5.3 | 4.0 |
| Northern Star | 227 | 26.4 | 9.3 | 4.9 |

TABLE 5. Results with 17 varieties and strains in a stripper-harvested test at Chickasha in 1955, and average results with 8 varieties.

| <u>Variety</u>         | <u># Lint<br/>Harvested<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> | <u>Pre-Harvest<br/>Loss (%)</u> | <u>Harvest<br/>Loss (%)</u> |
|------------------------|--|---------------------------|---------------|---------------------------------|-----------------------------|
| Lankart 57*            | 873                                    | 28                        | 29.0          | 1.1                             | 1.6                         |
| Wacona*                | 843                                    | 30                        | 26.5          | 1.6                             | 1.9                         |
| Lankart 57-109         | 777                                    | 28                        | 28.2          | 1.1                             | 2.2                         |
| Half & Half Stormproof | 777                                    | 26                        | 30.7          | 2.1                             | 2.3                         |
| CR-4                   | 766                                    | 26                        | 29.4          | 1.3                             | 2.8                         |
| Northern Star          | 759                                    | 29                        | 28.3          | 2.2                             | 3.6                         |
| Lockett 88             | 758                                    | 28                        | 29.8          | 1.9                             | 3.0                         |
| Lankart 611W           | 739                                    | 28                        | 28.2          | 1.2                             | 2.6                         |
| Western Stormproof     | 736                                    | 28                        | 30.6          | 2.5                             | 3.4                         |
| Harper's R-4           | 734                                    | 29                        | 27.5          | 1.8                             | 3.1                         |
| Lockett No. 1          | 728                                    | 28                        | 29.0          | 2.7                             | 3.6                         |
| CR-3-221               | 726                                    | 28                        | 29.2          | 2.9                             | 3.6                         |
| Lankart 611            | 696                                    | 30                        | 28.1          | 1.5                             | 2.3                         |
| CA 291A BR             | 687                                    | 29                        | 27.5          | 1.6                             | 3.6                         |
| Parrott                | 684                                    | 28                        | 29.2          | 3.6                             | 3.8                         |
| Paymaster 101          | 669                                    | 28                        | 28.3          | 2.8                             | 5.3                         |
| Stormrider             | 609                                    | 26                        | 25.4          | 2.5                             | 2.8                         |
| L.S.D. (5%)            | 92                                     |                           |               |                                 |                             |

Average Results, 1954, 1955.

|                    |     |      |     |     |
|--------------------|-----|------|-----|-----|
| Lankart 57         | 524 | 27.3 | 1.2 | 2.0 |
| Wacona             | 512 | 25.2 | 2.2 | 2.6 |
| CR-4               | 487 | 28.8 | 1.0 | 4.2 |
| Western Stormproof | 472 | 29.2 | 2.6 | 3.5 |
| Lockett No. 1      | 466 | 28.1 | 4.6 | 3.8 |
| Northern Star      | 466 | 26.7 | 3.7 | 5.0 |
| Lankart 611        | 453 | 27.4 | 1.5 | 2.2 |
| Parrott            | 438 | 28.4 | 4.0 | 4.0 |

\* Lankart 57 and Wacona were harvested on Nov. 3, and green bolls in field weights may have biased yield results. The other varieties were harvested on Nov. 9.

TABLE 6. Results with 11 varieties in a stripper-harvested test at Pocassett in 1955.

| <u>Variety</u>     | <u># Lint<br/>Harvested<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> | <u>Pre-Harvest<br/>Loss (%)</u> | <u>Harvest<br/>Loss (%)</u> |
|--------------------|--|---------------------------|---------------|---------------------------------|-----------------------------|
| Wacona             | 585                                    | 29                        | 27.1          | 1.8                             | 3.0                         |
| Western Stormproof | 583                                    | 28                        | 30.1          | 1.8                             | 2.6                         |
| Lankart 57         | 577                                    | 30                        | 28.2          | 0.8                             | 4.0                         |
| Lockett 88         | 574                                    | 26                        | 29.4          | 1.3                             | 2.8                         |
| CR-4               | 565                                    | 26                        | 29.7          | 2.3                             | 4.8                         |
| Lockett No. 1      | 550                                    | 26                        | 28.1          | 2.0                             | 2.8                         |
| Northern Star      | 535                                    | 29                        | 27.5          | 2.6                             | 2.4                         |
| Lankart 611        | 533                                    | 30                        | 27.6          | 3.1                             | 3.2                         |
| Stormrider         | 498                                    | 26                        | 27.6          | 2.3                             | 2.5                         |
| Parrott            | 485                                    | 28                        | 29.0          | 2.9                             | 5.0                         |
| CR-3-221           | 422                                    | 28                        | 22.9          | 3.6                             | 5.8                         |
| L.S.D. (5%)        | 50                                     |                           |               |                                 |                             |

### IRRIGATED TESTS

Because of the increasing acreage of irrigated cotton in Oklahoma, the number of irrigated variety tests was increased to 6 in 1955. These were planted with 4 row plots 50 feet long, the 2 center rows being harvested for yield. Because irrigation tends to introduce additional variation in a test, 6 replicates were planted in each test. Even so, the precision of the tests was not very good.

Date of planting had a very marked effect on comparative performance of varieties. At Hollis, with the earliest planting date, late varieties gave their best performance. At Chickasha, planted May 2, the variety rank was not dissimilar to ranking of varieties on dry land. At Altus, Tipton, and Sickles, the late date of planting was reflected in the consistent high yield of Paymaster 54-B, an early variety. These results emphasize the importance of considering planting date in selecting a variety.

The test at Goodwell contained 9 varieties chosen for that area on the basis of previous tests. There were no significant differences in yield among varieties.

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TABLE 7. Location, soil type, and other information on tests grown under irrigation in 1955.

| <u>Nearest Town</u> | <u>Soil Type</u> | <u>Planted</u> | <u>Harvested</u>      | <u>Irrigation</u> | <u>Other</u>                               |
|---------------------|------------------|----------------|-----------------------|-------------------|--|
| Altus               | Clay loam        | June 13        | Nov. 1, 30.           | 5 times(14")      | 500 # 8-10-0                               |
| Hollis              | Sandy loam       | April 27       | 10-21, 11-21          | 5 times(10")      | 200 # 12-24-1                              |
| Tipton              | Sandy loam       | June 23        | 11-23                 |                   | 3 sprays                                   |
| Sickles             | Sand             | June 16        | 11-12, 12-5           |                   | Followed feri<br>rye and vetch<br>2 sprays |
| Chickasha           | Silty clay loam  | May 2          | 9-16, 10-17,<br>11-14 | 5 times(15")      | 3 sprays<br>5 dusts                        |
| Goodwell            | Clay loam        | June 6         | 11-15                 | 2 times           |  |

TABLE 8. Results with 23 varieties tested under irrigation at Altus in 1955, and average results with 12 varieties.

| <u>Variety</u>     | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|--------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                    |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Paymaster 54-B     | 810                                 | 27                        | 37.1          | 26.5           | 7.1                       | 57.3                               |
| D & PL Fox         | 661                                 | 29                        | 33.7          | 23.8           | 6.5                       | 55.7                               |
| Acala 1517         | 632                                 | 31                        | 34.3          | 24.4           | 7.5                       | 55.8                               |
| Deltapine 15       | 619                                 | 29                        | 36.1          | 24.8           | 6.4                       | 42.6                               |
| Stoneville 62      | 616                                 | 29                        | 35.9          | 25.3           | 6.9                       | 47.3                               |
| Hi-Bred            | 604                                 | 26                        | 37.5          | 27.1           | 7.0                       | 59.8                               |
| Western Stormproof | 597                                 | 28                        | 38.4          | 28.0           | 7.6                       | 50.7                               |
| Stormmaster        | 590                                 | 27                        | 35.3          | 25.1           | 6.3                       | 50.2                               |
| CR-4               | 573                                 | 26                        | 37.0          | 25.8           | 5.8                       | 41.0                               |
| Lankart 57         | 563                                 | 29                        | 34.3          | 23.9           | 8.3                       | 45.1                               |
| Northern Star      | 563                                 | 29                        | 35.1          | 24.5           | 7.6                       | 46.9                               |
| Lankart 611        | 560                                 | 29                        | 34.9          | 23.7           | 8.0                       | 45.1                               |
| CA 291A BR         | 542                                 | 27                        | 35.3          | 25.2           | 6.6                       | 47.3                               |
| Acala 4-42         | 540                                 | 31                        | 36.6          | 24.5           | 7.7                       | 45.4                               |
| Lockett No. 1      | 516                                 | 27                        | 36.6          | 25.7           | 6.7                       | 38.1                               |
| Parrott            | 505                                 | 29                        | 37.4          | 26.1           | 7.6                       | 48.4                               |
| Stoneville 2B      | 471                                 | 28                        | 34.3          | 24.7           | 7.3                       | 38.6                               |
| Hale D & PL 33     | 454                                 | 27                        | 36.2          | 25.4           | 6.4                       | 43.6                               |
| Floyds 8G Mebane   | 432                                 | 28                        | 33.0          | 23.1           | 7.8                       | 45.5                               |
| Empire             | 402                                 | 30                        | 34.2          | 23.0           | 7.4                       | 36.5                               |
| Qualla 60 Str. 6   | 367                                 | 27                        | 33.5          | 23.8           | 8.6                       | 44.0                               |
| Lockett 140        | 315                                 | 27                        | 38.0          | 26.0           | 6.5                       | 30.2                               |
| Cluster            | 296                                 | 27                        | 38.0          | 25.1           | 6.4                       | 25.2                               |
| L.S.D. (5%)        | 88                                  |                           |               |                |                           |                                    |

Average Results, 1952, 1954, 1955

|               |     |    |      |      |     |      |
|---------------|-----|----|------|------|-----|------|
| Paymaster 54  | 926 | 30 | 38.3 | 28.4 | 7.1 | 70.5 |
| Deltapine 15  | 879 | 33 | 38.5 | 27.3 | 6.4 | 59.1 |
| D & PL Fox    | 879 | 33 | 35.2 | 25.8 | 6.0 | 63.0 |
| Lockett No. 1 | 872 | 30 | 38.5 | 28.6 | 6.5 | 58.3 |
| Stoneville 62 | 850 | 31 | 37.1 | 27.7 | 6.4 | 63.6 |
| Northern Star | 807 | 32 | 35.7 | 26.6 | 7.3 | 59.4 |
| Lankart 57    | 806 | 31 | 37.7 | 26.7 | 8.5 | 53.6 |
| Lankart 611   | 800 | 32 | 36.7 | 26.4 | 8.1 | 62.1 |
| Stormmaster   | 799 | 31 | 36.7 | 25.8 | 6.4 | 63.5 |
| Lockett 140   | 787 | 29 | 37.7 | 28.0 | 6.5 | 59.5 |
| Parrott       | 765 | 31 | 39.0 | 28.1 | 7.0 | 63.3 |
| Empire        | 699 | 33 | 35.5 | 25.1 | 7.7 | 53.7 |

TABLE 9. Results with 20 varieties tested under irrigation at Hollis in 1955, and average results with 14 varieties.

| <u>Variety</u>     | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|--------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                    |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Lankart 57         | 900                                 | 30                        | 36.3          | 25.8           | 9.2                       | 35.4                               |
| Stoneville 62      | 896                                 | 32                        | 36.4          | 26.4           | 7.8                       | 43.7                               |
| D & PL Fox         | 847                                 | 31                        | 34.0          | 24.6           | 5.9                       | 42.2                               |
| Lockett 140        | 839                                 | 28                        | 38.1          | 28.1           | 6.9                       | 22.8                               |
| Empire             | 816                                 | 32                        | 35.0          | 25.8           | 8.2                       | 48.0                               |
| Lankart 611        | 805                                 | 30                        | 35.7          | 25.4           | 8.7                       | 51.8                               |
| Hi-Bred            | 805                                 | 28                        | 38.6          | 28.0           | 7.2                       | 33.0                               |
| CR-4               | 779                                 | 29                        | 37.5          | 27.7           | 7.3                       | 37.6                               |
| Cluster            | 769                                 | 29                        | 38.3          | 27.4           | 7.4                       | 23.5                               |
| Paymaster 54-B     | 752                                 | 29                        | 37.3          | 26.1           | 6.7                       | 34.7                               |
| Lockett No. 1      | 751                                 | 27                        | 36.5          | 25.9           | 6.9                       | 24.2                               |
| Deltapine 15       | 744                                 | 33                        | 37.2          | 26.1           | 6.4                       | 35.0                               |
| Acala 1517         | 732                                 | 33                        | 35.2          | 24.3           | 7.8                       | 23.4                               |
| Northern Star      | 709                                 | 31                        | 35.3          | 25.3           | 7.7                       | 34.7                               |
| Stoneville 2B      | 664                                 | 30                        | 33.6          | 23.7           | 7.4                       | 29.5                               |
| Parrott            | 643                                 | 30                        | 37.6          | 26.0           | 7.2                       | 23.8                               |
| Acala 4-42         | 636                                 | 34                        | 36.5          | 25.6           | 7.8                       | 30.9                               |
| Western Stormproof | 618                                 | 30                        | 36.1          | 25.7           | 8.2                       | 20.8                               |
| Stormmaster        | 534                                 | 32                        | 34.6          | 24.4           | 7.3                       | 22.0                               |
| Qualla 60 Str. 7   | 489                                 | 30                        | 34.9          | 24.8           | 8.0                       | 26.8                               |

L.S.D. (5%) 144

Average Results, 1954, 1955.

|               |     |    |      |      |     |      |
|---------------|-----|----|------|------|-----|------|
| Lankart 611   | 765 | 32 | 34.0 | 24.3 | 8.7 | 59.4 |
| Hi-Bred       | 763 | 29 | 37.9 | 27.4 | 7.1 | 52.4 |
| Lankart 57    | 734 | 31 | 35.0 | 24.3 | 9.0 | 42.4 |
| Stoneville 62 | 721 | 32 | 34.6 | 24.8 | 7.1 | 47.8 |
| Deltapine 15  | 703 | 33 | 35.3 | 25.1 | 6.4 | 48.0 |
| Empire        | 686 | 32 | 32.7 | 23.9 | 7.9 | 49.1 |
| D & PL Fox    | 677 | 32 | 32.8 | 23.3 | 5.8 | 50.1 |
| CR-4          | 659 | 30 | 36.3 | 26.3 | 6.9 | 48.3 |
| Acala 1517    | 656 | 34 | 33.9 | 23.7 | 8.0 | 38.4 |
| Parrott       | 650 | 30 | 36.5 | 25.9 | 7.1 | 43.0 |
| Cluster       | 614 | 29 | 35.9 | 25.8 | 7.1 | 31.6 |
| Northern Star | 590 | 33 | 33.5 | 24.0 | 7.7 | 43.7 |
| Lockett No. 1 | 588 | 29 | 34.7 | 25.2 | 6.7 | 33.4 |
| Stormmaster   | 575 | 32 | 34.2 | 24.2 | 7.0 | 40.7 |

TABLE 10. Results with 20 varieties tested under irrigation at Tipton in 1955.

| <u>Variety</u>     | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> |
|--------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|
|                    |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |
| Paymaster 54-B     | 368                                 | 28                        | 36.9          | 24.4           | 6.8                       |
| Western Stormproof | 266                                 | 28                        | 36.0          | 25.3           | 6.7                       |
| Hi-Bred            | 235                                 | 28                        | 36.3          | 24.9           | 7.5                       |
| Acala 4-42         | 205                                 | 30                        | 36.7          | 24.2           | 8.0                       |
| Lankart 611        | 205                                 | 29                        | 32.5          | 20.7           | 7.7                       |
| Parrott            | 205                                 | 26                        | 36.2          | 23.8           | 6.4                       |
| Acala 1517         | 188                                 | 31                        | 34.3          | 22.8           | 6.9                       |
| D & PL Fox         | 188                                 | 30                        | 33.3          | 22.8           | 6.3                       |
| Deltapine 15       | 181                                 | 29                        | 35.3          | 23.5           | 5.9                       |
| Stoneville 62      | 156                                 | 28                        | 35.5          | 23.1           | 6.3                       |
| Northern Star      | 155                                 | 29                        | 33.1          | 21.7           | 7.3                       |
| CR-4               | 147                                 | 28                        | 35.0          | 23.4           | 5.8                       |
| Lankart 57         | 141                                 | 28                        | 31.7          | 19.8           | 8.4                       |
| Stormmaster        | 129                                 | 28                        | 33.8          | 23.3           | 6.1                       |
| Lockett No. 1      | 114                                 | 28                        | 35.0          | 23.4           | 5.8                       |
| Lockett 140        | 111                                 | 28                        | 36.4          | 23.1           | 5.9                       |
| Stoneville 2B      | 97                                  | 28                        | 32.1          | 21.3           | 7.7                       |
| Cluster            | 86                                  | 28                        | 36.6          | 22.4           | 5.9                       |
| Qualla 60 Str. 7   | 71                                  | 29                        | 31.7          | 21.0           | 7.6                       |
| Empire             | 71                                  | 28                        | 33.3          | 20.5           | 7.8                       |
| L.S.D. (5%)        | 65                                  |                           |               |                |                           |

TABLE 11. Results with 20 varieties tested under irrigation at Sickles in 1955.

| <u>Variety</u>     | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|--------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                    |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Paymaster 54-B     | 472                                 | 29                        | 40.2          | 28.1           | 7.0                       | 49.7                               |
| Hi-Bred            | 362                                 | 27                        | 40.3          | 28.5           | 7.8                       | 49.0                               |
| Stoneville 62      | 359                                 | 28                        | 39.3          | 26.1           | 6.8                       | 40.7                               |
| Lankart 611        | 299                                 | 30                        | 37.1          | 23.9           | 8.9                       | 47.6                               |
| Deltapine 15       | 292                                 | 31                        | 39.6          | 26.5           | 6.3                       | 37.2                               |
| CR-4               | 278                                 | 28                        | 39.6          | 28.0           | 7.2                       | 47.5                               |
| Acala 1517         | 278                                 | 32                        | 38.3          | 26.0           | 7.5                       | 41.3                               |
| Parrott            | 262                                 | 29                        | 41.3          | 26.9           | 6.9                       | 50.5                               |
| D & PL Fox         | 243                                 | 30                        | 35.9          | 23.7           | 5.8                       | 37.1                               |
| Lockett 140        | 233                                 | 28                        | 40.9          | 24.4           | 7.0                       | 46.9                               |
| Stoneville 2B      | 229                                 | 28                        | 36.3          | 25.2           | 7.0                       | 41.2                               |
| Western Stormproof | 228                                 | 29                        | 38.7          | 25.7           | 7.1                       | 42.3                               |
| Lockett No. 1      | 224                                 | 28                        | 38.6          | 25.2           | 7.2                       | 57.9                               |
| Acala 4-42         | 224                                 | 32                        | 39.4          | 25.8           | 7.7                       | 44.0                               |
| Lankart 57         | 221                                 | 29                        | 37.4          | 22.0           | 8.6                       | 31.9                               |
| Northern Star      | 214                                 | 30                        | 37.4          | 25.0           | 8.1                       | 33.2                               |
| Cluster            | 199                                 | 28                        | 40.3          | 26.1           | 7.3                       | 35.4                               |
| Stormmaster        | 198                                 | 27                        | 38.5          | 27.4           | 6.4                       | 44.4                               |
| Empire             | 192                                 | 31                        | 37.2          | 24.5           | 7.8                       | 47.6                               |
| Qualla 60 Str. 7   | 95                                  | 27                        | 35.1          | 21.4           | 7.5                       | 27.7                               |
| L.S.D. (5%)        | 83                                  |                           |               |                |                           |                                    |

TABLE 12. Results with 20 varieties tested under irrigation at Chickasha in 1955.

| <u>Variety</u>     | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|--------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                    |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Stoneville 62      | 917                                 | 31                        | 35.8          | 27.0           | 7.1                       | 38.1                               |
| Deltapine 15       | 912                                 | 32                        | 36.7          | 27.0           | 6.3                       | 24.3                               |
| Cluster            | 896                                 | 28                        | 37.2          | 28.1           | 7.4                       | 21.4                               |
| Empire             | 890                                 | 32                        | 34.7          | 26.6           | 8.7                       | 31.0                               |
| D & PL Fox         | 889                                 | 33                        | 33.6          | 25.2           | 6.4                       | 34.8                               |
| Hi-Bred            | 883                                 | 29                        | 37.9          | 28.6           | 7.6                       | 34.6                               |
| Paymaster 54-B     | 871                                 | 30                        | 35.8          | 25.8           | 7.3                       | 38.3                               |
| Lankart 57         | 861                                 | 29                        | 35.5          | 26.5           | 8.8                       | 26.8                               |
| Northern Star      | 857                                 | 31                        | 34.4          | 25.6           | 8.2                       | 34.9                               |
| Lankart 611        | 852                                 | 31                        | 34.5          | 25.3           | 9.1                       | 36.5                               |
| Lockett 140        | 839                                 | 28                        | 37.2          | 27.9           | 7.3                       | 23.2                               |
| Acala 1517         | 837                                 | 35                        | 34.3          | 25.3           | 7.5                       | 27.4                               |
| Stormmaster        | 825                                 | 30                        | 33.1          | 26.3           | 6.9                       | 19.2                               |
| Lockett No. 1      | 819                                 | 28                        | 35.2          | 26.6           | 6.7                       | 30.3                               |
| Acala 4-42         | 819                                 | 33                        | 36.5          | 26.6           | 8.7                       | 21.9                               |
| CR-4               | 807                                 | 29                        | 35.6          | 27.4           | 6.5                       | 31.8                               |
| Parrott            | 804                                 | 29                        | 37.7          | 27.8           | 6.7                       | 25.4                               |
| Stoneville 2B      | 709                                 | 31                        | 33.3          | 25.0           | 7.2                       | 14.6                               |
| Western Stormproof | 674                                 | 29                        | 35.4          | 27.3           | 7.3                       | 13.2                               |
| Qualla 60 Str. 7   | 643                                 | 30                        | 34.2          | 25.5           | 8.2                       | 19.4                               |
| L.S.D. (5%)        | 116                                 |                           |               |                |                           |                                    |

TABLE 13. Results with 9 varieties tested under irrigation at Goodwell in 1955, and average results with 6 varieties.

| <u>Variety</u>   | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %<br/>Picked</u> | <u>Lint %<br/>Snapped</u> | <u>Grams<br/>per Boll</u> |
|------------------|-------------------------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| CR-4             | 526                                 | 28                        | 37.1                     | 27.4                      | 6.5                       |
| Paymaster 54-C   | 520                                 | 28                        | 38.4                     | 26.5                      | 7.4                       |
| Paymaster 1250-2 | 506                                 | 28                        | 37.3                     | 27.3                      | 6.9                       |
| Stormmaster      | 479                                 | 26                        | 36.0                     | 26.7                      | 7.0                       |
| Parrott          | 474                                 | 26                        | 39.0                     | 28.3                      | 7.1                       |
| Lankart 611      | 473                                 | 28                        | 37.5                     | 27.1                      | 8.3                       |
| Paymaster 54-B   | 459                                 | 28                        | 38.3                     | 27.2                      | 7.0                       |
| BBR 62 A         | 428                                 | 28                        | 36.6                     | 26.6                      | 6.8                       |
| Hi-Bred          | 412                                 | 26                        | 38.0                     | 26.7                      | 6.7                       |

No significant differences

Average Results, 1954, 1955.

|                |     |    |      |      |     |
|----------------|-----|----|------|------|-----|
| CR-4           | 484 | 29 | 37.8 | 28.0 | 6.6 |
| Stormmaster    | 470 | 28 | 36.3 | 26.5 | 6.7 |
| Paymaster 54-B | 463 | 29 | 38.3 | 27.6 | 7.0 |
| Lankart 611    | 454 | 31 | 37.5 | 26.8 | 8.2 |
| Parrott        | 449 | 28 | 39.2 | 28.4 | 6.6 |
| Hi-Bred        | 430 | 27 | 39.2 | 28.4 | 6.8 |

## DRY-LAND VARIETY TESTS

Tests of 16 varieties and strains were planted at 6 locations in central and eastern Oklahoma. All tests except Broken Arrow consisted of 6 replicates of plots 50 feet long and 4 rows wide. Only 3 replicates were planted at Broken Arrow in order to fit the test inside a terrace.

At Chickasha and Tipton the varieties tested were included in a strains test, and consequently the number of varieties tested was not so large.

Yield levels were relatively high except at Perkins, Tipton, Madill, and Lone Grove. At these locations rainfall distribution was not favorable for good production. Insect control was adequate on most of these tests. The farmer-cooperators were selected as good cotton growers, and they followed recommended practices in producing the crop.

Considering yield and staple length, the recommended varieties appear to be best adapted to the areas involved. There is some disagreement in average results at Caddo and Madill, both black land locations. The longer-time averages at Caddo should be more accurate, and at that location the highest yielding varieties are those recommended for that part of the state.

TABLE 14. Location, soil types, and other information concerning hand-harvested, dry-land tests in 1955.

| <u>Nearest Town</u> | <u>Soil Type</u>          | <u>Planted</u> | <u>Other</u>  |
|---------------------|---------------------------|----------------|---|
| Perkins             | Very fine sandy loam      | May 30         | 5 sprays Tox. & DDT                                       |
| Broken Arrow        | Sandy loam                | May 31         | 150 # 13-13-13<br>3 sprays, 4 dusts                       |
| Webber's Falls      | Sandy loam                | May 3          | 250 # 3-9-18<br>100 # Ammon. Nitrate<br>5 sprays, 3 dusts |
| Lone Grove          | Deep sand,<br>deep plowed | May 21         | 150 # 5-10-5  |
| Caddo               | Black land                | June 3         | 8 sprays  |
| Madill              | Black land                | June 3         | 3 insecticide applicatio                                  |
| Chickasha           | Silty clay loam           | May 30         | 2 sprays, 3 dusts   |
| Tipton              | Sandy loam                | June 6         |   |

TABLE 15. Results obtained with 16 varieties and strains tested at Perkins in 1955, and average results with 10 varieties.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| CR-4                   | 333                                 | 28                        | 35.9          | 26.7           | 5.1                       | 92.9                               |
| Parrott                | 301                                 | 28                        | 36.2          | 26.6           | 5.0                       | 93.0                               |
| CR-3-221               | 299                                 | 30                        | 34.3          | 25.8           | 5.3                       | 94.2                               |
| Lankart 57             | 296                                 | 30                        | 36.1          | 25.7           | 5.9                       | 82.3                               |
| Hi-Bred                | 295                                 | 28                        | 37.0          | 26.6           | 5.3                       | 94.1                               |
| Western Stormproof     | 288                                 | 28                        | 35.6          | 27.3           | 5.3                       | 87.9                               |
| Lankart 611            | 283                                 | 32                        | 34.7          | 24.9           | 6.1                       | 88.5                               |
| BBR 62 B               | 275                                 | 32                        | 33.0          | 24.3           | 5.1                       | 92.2                               |
| Stoneville 62          | 273                                 | 30                        | 32.1          | 24.3           | 4.8                       | 90.2                               |
| Deltapine 15           | 266                                 | 30                        | 34.9          | 24.6           | 4.3                       | 82.7                               |
| D & PL Fox             | 265                                 | 33                        | 31.6          | 23.6           | 4.7                       | 89.9                               |
| Watson's Stoneville 62 | 263                                 | 30                        | 30.6          | 23.3           | 5.0                       | 92.0                               |
| Empire                 | 260                                 | 32                        | 33.4          | 24.5           | 5.6                       | 88.9                               |
| BBR 62 A               | 260                                 | 31                        | 31.9          | 23.8           | 4.9                       | 91.1                               |
| Lockett No. 1          | 242                                 | 26                        | 34.4          | 25.8           | 4.9                       | 83.4                               |
| Lockett 140            | 241                                 | 28                        | 36.0          | 26.8           | 5.3                       | 79.3                               |
| L.S.D. (5%)            | 24                                  |                           |               |                |                           |                                    |

Average Results, 1951, 1952, 1953, 1955.

|               | <u>Years<br/>Tested</u> |     |    |      |      |     |
|---------------|-------------------------|-----|----|------|------|-----|
| Stoneville 62 | 4                       | 479 | 31 | 36.8 | 28.8 | 5.8 |
| Hi-Bred       | 4                       | 458 | 29 | 39.8 | 30.8 | 6.3 |
| Empire        | 4                       | 434 | 32 | 36.7 | 27.8 | 6.8 |
| D & PL Fox    | 4                       | 433 | 33 | 36.4 | 26.4 | 5.2 |
| Lockett 140   | 4                       | 428 | 28 | 38.5 | 29.4 | 6.1 |
| Deltapine 15  | 4                       | 424 | 32 | 38.8 | 27.9 | 5.2 |
| Lockett No. 1 | 4                       | 399 | 29 | 36.5 | 28.0 | 5.8 |
| Lankart 57    | 4                       | 394 | 31 | 39.5 | 27.7 | 7.3 |
| Lankart 611   | 3                       | 448 | 31 | 38.5 | 28.1 | 7.5 |
| Parrott       | 3                       | 437 | 29 | 39.6 | 29.7 | 6.3 |

TABLE 16. Results obtained with 16 varieties and strains tested at Broken Arrow in 1955, and average results with 10 varieties.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Deltapine 15           | 935                                 | 31                        | 38.3          | 28.8           | 6.4                       | 44.4                               |
| Hi-Bred                | 889                                 | 28                        | 38.6          | 30.3           | 7.9                       | 56.7                               |
| Parrott                | 886                                 | 30                        | 39.6          | 30.1           | 7.2                       | 50.8                               |
| CR-3-221               | 880                                 | 30                        | 38.0          | 29.3           | 7.4                       | 47.3                               |
| Lockett 140            | 875                                 | 29                        | 38.2          | 29.4           | 7.1                       | 41.0                               |
| Western Stormproof     | 874                                 | 30                        | 37.9          | 30.6           | 7.7                       | 50.0                               |
| Lockett No. 1          | 872                                 | 30                        | 37.3          | 29.2           | 6.6                       | 46.9                               |
| CR-4                   | 866                                 | 29                        | 38.3          | 29.9           | 6.7                       | 52.7                               |
| Lankart 57             | 840                                 | 31                        | 37.8          | 23.1           | 8.6                       | 49.4                               |
| Lankart 611            | 831                                 | 31                        | 37.3          | 28.6           | 8.4                       | 52.5                               |
| Stoneville 62          | 830                                 | 31                        | 37.5          | 28.4           | 6.7                       | 46.2                               |
| BBR 62 B               | 789                                 | 32                        | 36.6          | 27.7           | 7.0                       | 46.6                               |
| Empire                 | 781                                 | 32                        | 36.7          | 27.0           | 7.9                       | 44.0                               |
| Watson's Stoneville 62 | 779                                 | 31                        | 36.8          | 27.6           | 8.6                       | 42.4                               |
| D & PL Fox             | 775                                 | 34                        | 34.3          | 25.8           | 6.0                       | 50.6                               |
| BBR 62 A               | 771                                 | 32                        | 36.3          | 26.8           | 7.0                       | 47.2                               |
| L.S.D. (5%)            | 120                                 |                           |               |                |                           |                                    |

Average Results, 1951, 1952, 1953, 1955.

|               | <u>Years<br/>Tested</u> |     |    |      |      |     |
|---------------|-------------------------|-----|----|------|------|-----|
| D & PL Fox    | 4                       | 768 | 34 | 36.8 | 27.4 | 5.9 |
| Hi-Bred       | 4                       | 767 | 29 | 40.9 | 30.3 | 7.4 |
| Empire        | 4                       | 747 | 34 | 36.9 | 27.1 | 7.8 |
| Stoneville 62 | 4                       | 743 | 32 | 37.8 | 28.3 | 6.5 |
| Lockett 140   | 4                       | 738 | 30 | 38.7 | 29.0 | 6.9 |
| Lockett No. 1 | 4                       | 736 | 31 | 37.7 | 28.5 | 6.2 |
| Deltapine 15  | 4                       | 732 | 33 | 39.9 | 28.8 | 5.8 |
| Lankart 57    | 4                       | 712 | 33 | 38.2 | 27.3 | 8.2 |
| Parrott       | 3                       | 783 | 32 | 40.0 | 29.4 | 6.8 |
| Lankart 611   | 3                       | 712 | 33 | 37.9 | 27.7 | 8.3 |

TABLE 17. Results obtained with 16 varieties and strains tested at Webber's Falls in 1955, and average results with 10 varieties.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |               | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|---------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Pulled</u> |                           |                                    |
| Western Stormproof     | 1026                                | 30                        | 38.4          | 29.6          | 6.6                       | 36.1                               |
| Lockett 140            | 950                                 | 28                        | 38.7          | 29.8          | 7.0                       | 43.6                               |
| CR-3-221               | 948                                 | 31                        | 38.0          | 28.7          | 7.8                       | 42.4                               |
| Deltapine 15           | 944                                 | 33                        | 38.8          | 28.2          | 6.0                       | 40.8                               |
| Parrott                | 928                                 | 29                        | 39.0          | 28.9          | 6.7                       | 48.7                               |
| Lockett No. 1          | 927                                 | 29                        | 37.4          | 28.9          | 6.5                       | 59.5                               |
| D & PL Fox             | 917                                 | 33                        | 34.6          | 25.7          | 5.9                       | 62.9                               |
| Lankart 57             | 888                                 | 31                        | 37.6          | 27.3          | 8.9                       | 47.3                               |
| CR-4                   | 856                                 | 30                        | 38.4          | 27.4          | 6.2                       | 56.7                               |
| Hi-Bred                | 840                                 | 29                        | 39.1          | 29.7          | 6.7                       | 65.4                               |
| BBR 62 A               | 827                                 | 32                        | 36.2          | 27.1          | 6.4                       | 60.8                               |
| BBR 62 B               | 822                                 | 32                        | 36.0          | 26.6          | 6.5                       | 60.7                               |
| Empire                 | 780                                 | 32                        | 36.4          | 26.6          | 7.6                       | 71.3                               |
| Stoneville 62          | 760                                 | 31                        | 37.5          | 27.6          | 6.1                       | 64.7                               |
| Watson's Stoneville 62 | 760                                 | 32                        | 36.1          | 26.9          | 6.8                       | 62.6                               |
| Lankart 611            | 738                                 | 31                        | 37.4          | 27.1          | 8.3                       | 62.3                               |
| L.S.D. (5%)            | 121                                 |                           |               |               |                           |                                    |

Average Results, 1952, 1953, 1955.

|               |     |    |      |      |     |      |
|---------------|-----|----|------|------|-----|------|
| Lockett 140   | 743 | 29 | 38.7 | 30.1 | 6.7 | 45.5 |
| Parrott       | 730 | 31 | 40.5 | 30.3 | 6.8 | 45.6 |
| Deltapine 15  | 711 | 33 | 40.3 | 29.3 | 5.8 | 37.5 |
| Lockett No. 1 | 710 | 31 | 37.9 | 29.0 | 6.4 | 48.7 |
| Hi-Bred       | 703 | 30 | 40.0 | 31.1 | 6.7 | 58.5 |
| Lankart 57    | 678 | 32 | 39.6 | 28.6 | 8.6 | 40.2 |
| D & PL Fox    | 672 | 33 | 36.1 | 26.3 | 5.7 | 54.4 |
| Stoneville 62 | 644 | 31 | 37.2 | 28.0 | 6.0 | 56.9 |
| Empire        | 641 | 33 | 36.7 | 26.9 | 7.5 | 55.4 |
| Lankart 611   | 600 | 32 | 38.9 | 27.7 | 8.4 | 51.5 |

TABLE 18. Results obtained with 16 varieties and strains tested at Lone Grove in 1955.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Hi-Bred                | 334                                 | 26                        | 39.7          | 28.7           | 6.3                       | 93.0                               |
| Stoneville 62          | 308                                 | 29                        | 37.5          | 25.3           | 4.9                       | 88.3                               |
| Parrott                | 305                                 | 30                        | 39.8          | 27.0           | 5.8                       | 92.1                               |
| CR-3-221               | 289                                 | 29                        | 38.9          | 26.8           | 6.5                       | 86.6                               |
| Lockett 140            | 281                                 | 28                        | 38.9          | 28.1           | 5.8                       | 92.7                               |
| Watson's Stoneville 62 | 278                                 | 30                        | 36.5          | 25.5           | 5.7                       | 90.8                               |
| BBR 62 B               | 276                                 | 30                        | 36.3          | 25.0           | 6.3                       | 88.4                               |
| D & PL Fox             | 257                                 | 32                        | 34.5          | 22.8           | 5.2                       | 87.5                               |
| Deltapine 15           | 252                                 | 32                        | 37.8          | 24.7           | 5.0                       | 82.1                               |
| BBR 62 A               | 249                                 | 31                        | 36.6          | 24.9           | 5.6                       | 86.7                               |
| Lankart 611            | 243                                 | 29                        | 36.8          | 24.3           | 7.3                       | 87.8                               |
| Empire                 | 238                                 | 30                        | 35.4          | 23.4           | 6.3                       | 89.3                               |
| Lankart 57             | 232                                 | 29                        | 38.4          | 24.6           | 6.6                       | 74.6                               |
| CR-4                   | 229                                 | 26                        | 39.0          | 25.4           | 5.5                       | 83.4                               |
| Lockett No. 1          | 188                                 | 28                        | 36.7          | 24.1           | 5.6                       | 81.3                               |
| Western Stormproof     | 142                                 | 28                        | 37.6          | 23.6           | 5.5                       | 76.9                               |
| L.S.D. (5%)            | 42                                  |                           |               |                |                           |                                    |

TABLE 19. Results obtained with 16 varieties and strains tested at Caddo in 1955, and average results with 10 varieties.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| CR-4                   | 688                                 | 28                        | 39.3          | 30.0           | 6.0                       | 39.7                               |
| Hi-Bred                | 662                                 | 28                        | 40.6          | 30.8           | 5.6                       | 41.7                               |
| Lockett No. 1          | 655                                 | 29                        | 39.2          | 29.6           | 6.1                       | 34.2                               |
| Deltapine 15           | 650                                 | 31                        | 39.5          | 28.9           | 5.6                       | 37.2                               |
| D & PL Fox             | 636                                 | 32                        | 36.4          | 26.4           | 5.0                       | 31.2                               |
| Parrott                | 630                                 | 29                        | 40.8          | 31.0           | 6.2                       | 30.2                               |
| CR-3-221               | 625                                 | 30                        | 39.8          | 29.7           | 6.5                       | 30.7                               |
| BBR 62 A               | 622                                 | 29                        | 37.6          | 29.0           | 5.6                       | 32.5                               |
| Stoneville 62          | 621                                 | 30                        | 38.5          | 28.0           | 6.4                       | 41.1                               |
| Lankart 57             | 608                                 | 30                        | 39.3          | 30.2           | 8.0                       | 13.1                               |
| BBR 62 B               | 601                                 | 29                        | 37.9          | 27.4           | 6.6                       | 26.9                               |
| Empire                 | 598                                 | 31                        | 37.8          | 27.3           | 6.3                       | 37.4                               |
| Watson's Stoneville 62 | 591                                 | 30                        | 37.8          | 27.3           | 5.9                       | 30.9                               |
| Lankart 611            | 573                                 | 30                        | 38.3          | 28.2           | 7.6                       | 41.0                               |
| Lockett 140            | 561                                 | 28                        | 39.9          | 29.8           | 6.0                       | 19.2                               |
| Western Stormproof     | 530                                 | 28                        | 39.4          | 28.5           | 6.8                       | 36.1                               |
| L.S.D. (5%)            |                                     | 62                        |               |                |                           |                                    |

Average Results, 1951, 1952, 1953, 1955.

|               | <u>Years<br/>Tested</u> |     |    |      |      |     |
|---------------|-------------------------|-----|----|------|------|-----|
| Deltapine 15  | 4                       | 379 | 33 | 40.1 | 28.7 | 5.1 |
| D & PL Fox    | 4                       | 377 | 33 | 36.7 | 27.0 | 4.7 |
| Stoneville 62 | 4                       | 375 | 31 | 37.9 | 27.4 | 5.4 |
| Empire        | 4                       | 359 | 32 | 37.1 | 26.2 | 6.1 |
| Lockett No. 1 | 4                       | 357 | 30 | 38.2 | 28.6 | 5.8 |
| Hi-Bred       | 4                       | 357 | 28 | 40.9 | 30.7 | 5.4 |
| Lankart 57    | 4                       | 334 | 31 | 39.3 | 28.3 | 6.9 |
| Lockett 140   | 4                       | 329 | 29 | 38.9 | 29.4 | 5.8 |
| Parrott       | 3                       | 364 | 30 | 40.2 | 30.8 | 5.6 |
| Lankart 611   | 3                       | 320 | 32 | 38.4 | 26.8 | 6.8 |

TABLE 20. Results obtained with 16 varieties and strains tested at Madill in 1955, and 2-year average results with 10 varieties.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Parrott                | 401                                 | 29                        | 39.9          | 28.9           | 6.3                       | 89.4                               |
| Lankart 611            | 387                                 | 30                        | 37.6          | 26.7           | 7.5                       | 93.7                               |
| Hi-Bred                | 376                                 | 28                        | 38.8          | 29.0           | 6.3                       | 95.9                               |
| CR-4                   | 374                                 | 28                        | 38.4          | 29.0           | 5.4                       | 95.6                               |
| Stoneville 62          | 363                                 | 30                        | 38.3          | 27.7           | 5.5                       | 94.7                               |
| Empire                 | 362                                 | 31                        | 37.3          | 26.6           | 7.0                       | 94.9                               |
| D & PL Fox             | 360                                 | 31                        | 35.7          | 25.6           | 5.6                       | 95.0                               |
| Lankart 57             | 356                                 | 30                        | 38.8          | 27.6           | 7.2                       | 86.2                               |
| Watson's Stoneville 62 | 349                                 | 30                        | 37.0          | 27.4           | 5.8                       | 94.7                               |
| CR-3-221               | 331                                 | 30                        | 38.6          | 28.1           | 6.4                       | 89.6                               |
| Lockett No. 1          | 326                                 | 28                        | 37.3          | 27.1           | 5.8                       | 92.5                               |
| BBR 62 A               | 324                                 | 31                        | 36.8          | 26.4           | 5.9                       | 94.5                               |
| BBR 62 B               | 313                                 | 30                        | 37.1          | 26.5           | 5.5                       | 92.1                               |
| Deltapine 15           | 305                                 | 30                        | 38.4          | 26.3           | 5.3                       | 89.0                               |
| Lockett 140            | 292                                 | 28                        | 38.5          | 27.6           | 6.4                       | 89.0                               |
| Western Stormproof     | 273                                 | 28                        | 39.0          | 26.5           | 6.6                       | 92.4                               |
| L.S.D. (5%)            | 38                                  |                           |               |                |                           |                                    |

Average Results, 1952, 1955.

|               |     |    |      |      |     |      |
|---------------|-----|----|------|------|-----|------|
| Parrott       | 290 | 29 | 40.3 | 28.6 | 5.4 | 82.2 |
| Lankart 611   | 287 | 30 | 38.1 | 26.8 | 6.5 | 88.7 |
| Lankart 57    | 265 | 29 | 39.5 | 26.7 | 5.8 | 76.1 |
| Hi-Bred       | 261 | 29 | 39.6 | 28.1 | 5.2 | 87.2 |
| D & PL Fox    | 259 | 32 | 35.9 | 24.5 | 4.7 | 92.6 |
| Stoneville 62 | 256 | 31 | 37.7 | 26.2 | 4.7 | 90.2 |
| Empire        | 251 | 32 | 36.2 | 25.2 | 5.6 | 84.7 |
| Lockett 140   | 230 | 29 | 38.5 | 28.1 | 5.5 | 83.8 |
| Lockett No. 1 | 228 | 29 | 37.6 | 26.0 | 5.1 | 84.1 |
| Deltapine 15  | 224 | 32 | 38.5 | 23.4 | 4.5 | 76.9 |

TABLE 21. Results with 14 varieties tested at Chickasha in 1955,  
and average results with 11 varieties.

| <u>Variety</u>         | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|------------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                        |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Lockett 88             | 812                                 | 26                        | 40.1          | 30.7           | 7.3                       | 26.3                               |
| Empire                 | 775                                 | 29                        | 37.7          | 28.4           | 7.9                       | 39.3                               |
| Stoneville 62          | 773                                 | 28                        | 37.9          | 28.5           | 7.8                       | 37.6                               |
| Watson's Stoneville 62 | 732                                 | 28                        | 37.0          | 28.3           | 7.3                       | 40.8                               |
| Hi-Bred                | 732                                 | 26                        | 39.5          | 30.7           | 7.7                       | 49.0                               |
| Watson's Empire        | 722                                 | 29                        | 37.2          | 28.2           | 8.5                       | 21.7                               |
| D & PL Fox             | 675                                 | 29                        | 35.7          | 26.6           | 6.5                       | 36.6                               |
| Northern Star No. 5    | 660                                 | 29                        | 37.5          | 28.2           | 7.6                       | 30.0                               |
| CR-3-221               | 645                                 | 27                        | 39.5          | 28.7           | 8.0                       | 22.5                               |
| Dortch 4016            | 641                                 | 28                        | 40.0          | 28.8           | 6.8                       | 16.4                               |
| Paymaster 54-C         | 629                                 | 27                        | 38.3          | 28.2           | 7.0                       | 45.1                               |
| Deltapine 15           | 623                                 | 29                        | 39.4          | 28.0           | 6.8                       | 13.0                               |
| CA 291A BR             | 614                                 | 27                        | 37.3          | 27.9           | 7.1                       | 22.6                               |
| Watson Stormproof      | 578                                 | 27                        | 36.9          | 26.8           | 7.0                       | 18.2                               |
| L.S.D. (5%)            | 86                                  |                           |               |                |                           |                                    |

Average Results, 1950 - 1955.

|               | <u>Years<br/>Tested</u> |     |    |      |      |     |
|---------------|-------------------------|-----|----|------|------|-----|
| Parrott       | 3                       | 413 | 30 | 40.2 | 28.8 | 6.4 |
| Stoneville 62 | 6                       | 412 | 30 | 36.9 | 26.3 | 6.0 |
| Hi-Bred       | 5                       | 404 | 28 | 39.7 | 29.3 | 6.5 |
| D & PL Fox    | 6                       | 382 | 32 | 36.5 | 25.9 | 5.4 |
| Paymaster 54  | 6                       | 380 | 29 | 37.5 | 26.5 | 6.6 |
| Deltapine 15  | 6                       | 374 | 32 | 39.0 | 27.0 | 5.6 |
| Empire        | 6                       | 374 | 31 | 35.1 | 24.6 | 6.9 |
| Lockett No. 1 | 6                       | 363 | 29 | 35.8 | 26.3 | 5.9 |
| Lankart 611   | 3                       | 344 | 31 | 37.1 | 26.1 | 7.2 |
| Lankart 57    | 6                       | 342 | 31 | 37.4 | 25.2 | 7.3 |
| Northern Star | 6                       | 324 | 31 | 35.6 | 25.4 | 6.4 |

TABLE 22. Results with 12 varieties tested at Tipton in 1955, and average results with 8 varieties.

| <u>Variety</u>      | <u>Yield<br/>of Lint<br/>per A.</u> | <u>Staple<br/>in 32's</u> | <u>Lint %</u> |                | <u>Grams<br/>per Boll</u> | <u>% Harvested<br/>1st Harvest</u> |
|---------------------|-------------------------------------|---------------------------|---------------|----------------|---------------------------|------------------------------------|
|                     |                                     |                           | <u>Picked</u> | <u>Snapped</u> |                           |                                    |
| Paymaster 54-C      | 214                                 | 28                        | 34.6          | 24.2           | 5.1                       | 95.8                               |
| Hi-Bred             | 213                                 | 29                        | 36.4          | 26.6           | 5.6                       | 87.2                               |
| Lockett 88          | 202                                 | 24                        | 36.4          | 26.9           | 5.5                       | 73.3                               |
| Northern Star No. 5 | 201                                 | 29                        | 33.7          | 24.5           | 6.2                       | 83.9                               |
| Lankart 57          | 197                                 | 29                        | 36.3          | 25.4           | 6.5                       | 77.3                               |
| Lankart 611         | 197                                 | 29                        | 34.9          | 24.6           | 6.4                       | 92.1                               |
| CR-4                | 196                                 | 28                        | 35.9          | 26.3           | 5.1                       | 83.9                               |
| Paymaster 101       | 194                                 | 29                        | 35.0          | 25.1           | 5.1                       | 86.7                               |
| Lockett No. 1       | 171                                 | 25                        | 34.7          | 25.5           | 4.7                       | 72.3                               |
| Parrott             | 170                                 | 28                        | 35.7          | 25.5           | 5.9                       | 88.6                               |
| Northern Star       | 167                                 | 31                        | 33.0          | 23.9           | 6.2                       | 79.5                               |
| Lockett 140         | 157                                 | 28                        | 34.8          | 25.5           | 5.4                       | 86.3                               |
| L.S.D. (5%)         | 86                                  |                           |               |                |                           |                                    |

Average Results, 1950 - 1955.

|               | <u>Years<br/>Tested</u> |     |    |      |      |     |
|---------------|-------------------------|-----|----|------|------|-----|
| Hi-Bred       | 5                       | 272 | 27 | 39.3 | 29.6 | 5.6 |
| Parrott       | 4                       | 260 | 29 | 39.0 | 28.1 | 5.9 |
| Lockett 140   | 6                       | 251 | 29 | 36.8 | 27.9 | 5.3 |
| Lankart 611   | 4                       | 248 | 30 | 37.5 | 26.5 | 6.3 |
| Paymaster 54  | 6                       | 238 | 29 | 36.9 | 26.2 | 5.6 |
| Lankart 57    | 6                       | 230 | 30 | 37.9 | 26.9 | 6.2 |
| Lockett No. 1 | 6                       | 226 | 28 | 36.1 | 26.5 | 4.9 |
| Northern Star | 6                       | 222 | 31 | 35.0 | 26.0 | 5.9 |

TABLE 23. Sources of seed of varieties tested in 1955.

| <u>Varieties and Strains</u>  | <u>Source</u>   |
|---|---|
| Acala 1517  | New Mexico Agr. Exp. Sta.<br>State College, New Mexico  |
| Acala 4-42  | U. S. Cotton Field Sta.<br>Shafter, California          |
| CA 291A BR, Stormmaster   | Texas Agr. Exp. Station<br>Lubbock, Texas               |
| CR-4, CR-3-221, Parrott,<br>Half & Half Stmpf., Lankart 57-109,<br>Stoneville 62, BBR 62 A, BBR 62 B. | Oklahoma Cotton Research Station<br>Chickasha, Oklahoma |
| Cluster   | Marvin L. Sharp Seed Co.<br>Vernon, Texas               |
| Deltapine 15, Fox   | Delta and Pine Land Co.<br>Scott, Mississippi           |
| Dortch 4016   | Dortch Seed Co.<br>Scott, Arkansas                      |
| Empire  | Empire Pedigreed SeedCo.<br>Haralson, Georgia           |
| Floyd's 8G. Mebane,<br>Harper's R-4   | Harper Seed Farms<br>Martindale, Texas                  |
| Hale D & PL 33  | Hale Seed Farms<br>Burdette, Arkansas                   |
| Hi-Bred   | Summerour Seed Co.<br>Norcross, Georgia                 |
| Lankart 57, 611, 611-W  | Lankart Seed Farm<br>Waco, Texas                        |
| Lockett No. 1, 88, 140  | Lockett Seed Co.<br>Vernon, Texas                       |
| Northern Star, N. S. No. 5  | Northern Star Seed Farm<br>O'Brien, Texas               |
| Paymaster 54 B, 54-C, 101,<br>1250-2, Stormrider  | Paymaster Farm<br>Aiken, Texas                          |

Table 23 (cont'd)

| <u>Varieties and Strains</u>                  | <u>Source</u>  |
|---|--|
| Qualla 60, Str. 7                             | H. Conrads, Seed Breeder & Grower<br>San Marcos, Texas   |
| Stoneville 2B                                 | Stoneville Pedigreed Seed Co.<br>Stoneville, Mississippi |
| Wacona  | Wacona Seed Farms<br>Waco, Texas                         |
| Watson's Stoneville 62,<br>Empire, Stormproof | Ferris Watson Seed Co.<br>Garland, Texas                 |
| Western Stormproof                            | Van Roeder Seed Co.<br>Snyder, Texas                     |