

# Tennessee Cotton Variety Test Results

## 2007

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## INTRODUCTION

The University of Tennessee cotton variety testing program provides an unbiased evaluation of new varieties for commercial cotton production in Tennessee. Experimental strains are also tested, and major cultivars are grown in county variety demonstrations. Results are intended to help cotton producers identify varieties that are well adapted to Tennessee, produce high quality fiber, and are relatively stable in yield performance. Results are also used by the seed industry, crop consultants, and the UT extension service to assess varietal adaptation to field environments in Tennessee.

Information contained within this report covers the major components of the 2007 cotton variety testing program of the University of Tennessee. Information reported includes yield, fiber quality data, CCC loan values and selected growth characteristics from the Official Variety Trials (OVT) and Stage IV Advanced Strains Testing. In addition to experiment station testing, the results from county standard test (CST) demonstrations of cotton varieties in West and Middle Tennessee are also included. A glossary is included at the end of this report to define technical terms and abbreviations used.

### GENERAL PROCEDURES

Seed of commercial cultivars was provided by the respective companies from commercial seed lots. Smaller quantities of seed of experimental strains were furnished by the respective entrants. Seed sources are listed on the next page.

For small plot testing, varieties were assigned to plots arranged in a randomized complete block design. Fertilizer and lime were applied according to soil test results and UT recommendations for cotton. Seedbeds were prepared with conventional tillage methods at the Agricenter International, and Fullen Farms while no-tillage methods were used at the West Tennessee Research and Education Center, Milan Research and Education Center and Ames Plantation. Seed were planted on raised beds at the Agricenter International and Fullen Farms, and in flat seedbeds at the other

locations. Varieties were planted in 2-row plots with row widths of 38 inches at all locations except Milan where 40 inch spacing was used. A systemic insecticide and fungicide were applied in-furrow while planting. UT-recommended weed and pest control measures were uniformly applied to all plots. Supplemental irrigation was applied at the West Tennessee Research & Education Center and the Research & Education Center at Milan. At all locations, seedcotton harvested from each plot was weighed at picking. Subsamples of seedcotton were collected from each plot, weighed, and air-dried, bulked by varietal entry for OVT testing. Gin turnout was determined for each sample using a 20-saw gin equipped with a stick machine, incline cleaners and two lint cleaners at the West Tennessee Research and Education Center. No heat was applied during ginning. Lint yields were calculated using seedcotton weights, gin turnouts, and harvested areas. Two subsamples of lint of each entry were analyzed by HVI procedures at the International Textile Center in Lubbock, TX.

County Standard Test demonstrations were conducted in 2007 to evaluate commercial cultivar performance in multiple large plot environments. County standard testing included Roundup Ready and Roundup Ready Flex cultivars. County standard tests of early season cultivars were planted in 15 locations with each location containing 12 cultivars. County standard tests of early-mid season cultivars were planted in 15 locations with each location containing 12 cultivars. County standard tests of Liberty Link cultivars were planted in 6 locations with each location containing 5 cultivars. Each cultivar was planted in only one plot at each location and was maintained using the individual grower's production practices. Seedcotton harvested from each plot was weighed and sampled at picking. Samples were weighed, air dried, and ginned at the West Tennessee Research and Education Center as described above. A sub sample of lint of each entry was analyzed by HVI and hand-classing procedures at the USDA Cotton Classing Office in Memphis, TN. Statistical analysis was not possible for each location but overall yield and fiber quality data were analyzed using Proc MIXED using locations as replications.

## **ACKNOWLEDGMENTS**

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- Dr. Blake A. Brown, Director, Milan Research and Education Center
- Dr. Robert M. Hayes, Director, West Tennessee Research and Education Center

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Research at Ames Plantation was partially funded by the Hobart Ames Foundation under terms of the will of the late Julia Colony Ames.

We appreciate the cooperation of county extension agents and producers who conducted the county variety demonstrations in 2007. We also appreciate the technical cooperation of the International Textile Center in Lubbock, TX, and the USDA-AMS Cotton Division Classing Office in Memphis, which provided the fiber quality data reported herein.

Special thanks to all who helped pick and gin cotton for these experiments.

## **SEED SOURCES**

Seeds for the 2007 University of Tennessee cotton variety tests and demonstrations were provided by:

- American Cotton Breeders, Inc. 5210 88th Street, Lubbock, TX 79424.
- Bayer CropScience, 311 Poplar View Lane West, Collierville TN 38017
- CropLan Genetics, 8700 Trail Lake Dr., Suite 100, Memphis, TN 38125
- Delta and Pine Land Co., P.O. Box 157, Scott MS 38772
- PhytoGen Seed Co., P.O. Box 27, Leland MS 38756
- Stoneville Pedigreed Seed Co., 6625 Lenox Park Drive, Suite 117, Memphis TN 38115
- United Agri-Products, 57 Germantown Court, Suite 200, Cordova, TN 38018

## OFFICIAL VARIETY TRIALS

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Two types of Official Variety Trials (OVTs) of cotton were conducted in Tennessee in 2007. Conventional varieties, and varieties with Liberty-Link (LL), Roundup-Ready (RR), or Roundup Ready Flex (RF) genes, were tested in **OVT-A** and **OVT-B** at five locations. There were 32 entries from seven seed companies in both trials, including five popular check cultivars in all the OVTs. All OVTs were planted between 30 April and 14 May 2007 in 2-row plots arranged in a RCB design with four replications at each location. The row spacing was 38 inches at all locations except at Milan, where row spacing was 40 inches. Planting dates, soil types, tillage and other details are footnoted in each of the yield tables.

Between 112 and 134 days after planting (DAP), nodes above cracked boll (NACB) to the highest harvestable boll were counted in each plot. Relative maturity of the entries was estimated by assuming 50 DD60s (degree-days, base 60 F) per main-stem node to open successive first-position bolls, up to the highest harvestable boll. Plots were spindle-picked between 134 and 150 DAP. Seedcotton from each plot was weighed, and two grab samples of each variety were ginned to calculate gin turnout. Two lint samples of each variety from each location were analyzed by HVI at the International Textile Center in Lubbock, TX.

**Table OVT1** presents average yield and gin turnout data for 32 entries tested in **OVT-A** across five locations in 2007. The highest yielding entry was DP 444 BG/RR (a check variety), but its yield was statistically equivalent to the top seven entries, including one other check cultivar. Micronaire was most in the premium grade range, Staple was 34-36, strength was intermediate to weak, and uniformity was mainly intermediate.

**Table OVT2 - OVT6** present lint yield, gin turnout, and fiber data from the five different **OVT-A** locations.

**Table OVT7** shows final plant height, and **Table 8** shows the relative maturity of the 32 **OVT-A** entries.

**Table OVT9** shows the average yield, gin turnout and fiber properties of 32 entries tested in **OVT-B** across five locations in 2007. The highest yielding entry was again a check cultivar, DP 444 BG/RR, and three other check varieties had statistically equivalent yields. The top twelve varieties were statistically similar to DP 444 BG/RR. Micronaire was mostly in the premium range, with a staple of 33-36, intermediate to weak strength, and low to intermediate uniformity.

**Tables OVT10 – OVT14** present lint yield, gin turnout, and fiber data from the five different **OVT-B** locations.

**Table OVT15** shows final plant height, and **Table OVT16** shows the relative maturity of the 32 **OVT-B** entries.

**Table OVT17.** Shows the node of the first fruiting branch of all varieties in **OVT-A** and **OVT-B**.

**Table OVT 18.** Presents the average yield and gin turnout for 23 varieties tested in **OVT-A** and **OVT-B** across all test locations for 2005, 2006, and 2007. The highest yielding variety was ST 5242 BR with the top eight varieties being statistically similar.

**Table OVT1.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at averaged across five test locations, listed by yield rank.

| Yield Rank        | Company           | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|-------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land | 444 BG/RR | ✓ | 1219                | 39.8             | 3.8             | 1.08                | 26.4                    | 81.0                | 0.4               | 51             |
| 2                 | Phytogen          | 375 WRF   |   | 1204                | 37.5             | 4.0             | 1.08                | 25.9                    | 80.4                | 0.4               | 43             |
| 3                 | Delta & Pine Land | 445 BG/RR |   | 1201                | 38.7             | 4.0             | 1.10                | 28.9                    | 81.7                | 0.4               | 43             |
| 4                 | Stoneville        | 4498 B2RF |   | 1178                | 36.1             | 4.1             | 1.09                | 29.0                    | 82.5                | 0.6               | 51             |
| 5                 | Stoneville        | 5599 BR   | ✓ | 1159                | 36.7             | 4.3             | 1.07                | 27.5                    | 79.7                | 0.5               | 43             |
| 6                 | Stoneville        | 5242 BR   |   | 1138                | 37.4             | 4.2             | 1.04                | 25.8                    | 80.6                | 0.3               | 43             |
| 7                 | Stoneville        | 4427 B2RF |   | 1128                | 36.6             | 4.1             | 1.09                | 26.5                    | 81.1                | 0.7               | 51             |
| 8                 | Phytogen          | 310 R     |   | 1121                | 37.3             | 4.3             | 1.04                | 27.6                    | 80.9                | 0.5               | 43             |
| 9                 | Phytogen          | 370 WR    | ✓ | 1119                | 36.8             | 4.3             | 1.05                | 27.1                    | 81.3                | 0.4               | 51             |
| 10                | Stoneville        | 4554 B2RF |   | 1110                | 35.9             | 4.4             | 1.08                | 29.0                    | 81.0                | 0.5               | 51             |
| 11                | Croplan Genetics  | 3035 RF   |   | 1108                | 38.4             | 4.2             | 1.07                | 26.9                    | 80.7                | 0.3               | 42             |
| 12                | Delta & Pine Land | 121 RF    |   | 1096                | 36.9             | 4.3             | 1.10                | 27.5                    | 81.0                | 0.5               | 51             |
| 13                | Delta & Pine Land | 432 RR    | ✓ | 1080                | 35.2             | 4.2             | 1.08                | 26.9                    | 81.5                | 0.4               | 51             |
| 14                | Phytogen          | 315 RF    |   | 1075                | 37.2             | 4.0             | 1.06                | 26.0                    | 80.3                | 0.4               | 43             |
| 15                | Delta & Pine Land | 434 RR    |   | 1073                | 38.5             | 4.0             | 1.10                | 26.0                    | 80.6                | 0.4               | 43             |
| 16                | Stoneville        | 4664 RF   |   | 1071                | 37.3             | 4.2             | 1.09                | 28.4                    | 81.4                | 0.6               | 51             |
| 17                | Delta & Pine Land | 393 RR    |   | 1062                | 36.9             | 4.2             | 1.10                | 28.3                    | 82.0                | 0.4               | 43             |
| 18                | Delta & Pine Land | 117 B2RF  |   | 1040                | 38.4             | 4.1             | 1.10                | 28.4                    | 80.8                | 0.7               | 51             |
| 19                | Americot          | 1504 B2RF |   | 1033                | 34.6             | 3.8             | 1.08                | 25.7                    | 81.2                | 0.4               | 51             |
| 20                | Dyna-Gro          | 2100 B2RF |   | 1026                | 35.3             | 3.7             | 1.07                | 25.3                    | 80.8                | 0.4               | 43             |
| 21                | Fibermax          | 960 BR    | ✓ | 1005                | 37.4             | 3.8             | 1.08                | 28.2                    | 80.6                | 0.4               | 43             |
| 22                | Fibermax          | 1740 B2RF |   | 993                 | 38.4             | 4.1             | 1.07                | 27.3                    | 80.4                | 0.4               | 43             |
| 23                | Dyna-Gro          | 2490 B2RF |   | 993                 | 35.4             | 3.6             | 1.06                | 25.9                    | 80.7                | 0.6               | 43             |
| 24                | Croplan Genetics  | 3020 B2RF |   | 975                 | 35.0             | 3.8             | 1.09                | 25.8                    | 81.5                | 0.4               | 43             |
| 25                | Croplan Genetics  | 3520 B2RF |   | 974                 | 34.4             | 3.8             | 1.10                | 25.8                    | 80.3                | 0.5               | 51             |
| 26                | Stoneville        | 4357 B2RF |   | 971                 | 35.7             | 3.9             | 1.10                | 25.6                    | 80.1                | 0.4               | 51             |
| 27                | Fibermax          | 9060 F    |   | 962                 | 37.1             | 3.7             | 1.12                | 26.4                    | 79.3                | 0.5               | 43             |
| 28                | Americot          | 1664 B2RF |   | 961                 | 35.1             | 3.9             | 1.11                | 26.2                    | 81.2                | 0.6               | 51             |
| 29                | Fibermax          | 955 LLB2  |   | 957                 | 34.1             | 4.1             | 1.12                | 27.0                    | 80.7                | 0.5               | 43             |
| 30                | Fibermax          | 1600 LL   |   | 954                 | 35.4             | 4.0             | 1.11                | 27.9                    | 81.4                | 0.5               | 42             |
| 31                | Dyna-Gro          | 2242 B2RF |   | 948                 | 33.9             | 3.9             | 1.10                | 26.0                    | 80.7                | 0.6               | 51             |
| 32                | Fibermax          | 1735 LLB2 |   | 945                 | 36.6             | 4.0             | 1.09                | 27.4                    | 80.6                | 0.4               | 43             |
| <b>Mean</b>       |                   |           |   | 1054                | 36.5             | 4.0             | 1.09                | 27.0                    | 80.9                | 0.5               | 46             |
| <b>LSD (0.05)</b> |                   |           |   | 90                  | 1.5              | 0.4             | 0.02                | 1.6                     | 1.3                 | 0.1               |                |
| <b>CV (%)</b>     |                   |           |   | 31.6                | 9.3              | 11.7            | 2.9                 | 7.3                     | 1.9                 | 38.4              |                |

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT2.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at the Agricenter International, Memphis, TN, listed by yield rank.

| Yield Rank        | Company           | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|-------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land | 444 BG/RR | ✓ | 977                 | 38.2             | 3.3             | 1.06                | 25.0                    | 78.5                | 0.3               | 42             |
| 2                 | Phytogen          | 375 WRF   |   | 883                 | 33.0             | 3.3             | 1.06                | 23.8                    | 78.0                | 0.3               | 41             |
| 3                 | Croplan Genetics  | 3035 RF   |   | 877                 | 41.9             | 3.6             | 1.05                | 25.2                    | 79.3                | 0.4               | 41             |
| 4                 | Stoneville        | 4664 RF   |   | 825                 | 36.3             | 3.5             | 1.08                | 26.9                    | 79.7                | 0.5               | 43             |
| 5                 | Stoneville        | 4498 B2RF |   | 807                 | 32.7             | 3.5             | 1.08                | 27.0                    | 81.4                | 0.7               | 43             |
| 6                 | Delta & Pine Land | 445 BG/RR |   | 806                 | 37.2             | 3.4             | 1.10                | 28.1                    | 80.2                | 0.5               | 41             |
| 7                 | Stoneville        | 5242 BR   |   | 795                 | 34.0             | 3.6             | 1.03                | 25.0                    | 79.4                | 0.2               | 41             |
| 8                 | Phytogen          | 310 R     |   | 790                 | 34.6             | 3.7             | 1.02                | 26.1                    | 79.2                | 0.4               | 42             |
| 9                 | Stoneville        | 4554 B2RF |   | 787                 | 32.1             | 3.7             | 1.08                | 28.3                    | 79.7                | 0.5               | 43             |
| 10                | Americot          | 1504 B2RF |   | 751                 | 33.2             | 3.1             | 1.06                | 23.6                    | 79.2                | 0.5               | 42             |
| 11                | Stoneville        | 5599 BR   | ✓ | 751                 | 32.3             | 3.4             | 1.07                | 25.0                    | 77.2                | 0.4               | 43             |
| 12                | Fibermax          | 1735 LLB2 |   | 725                 | 36.4             | 3.3             | 1.08                | 25.3                    | 79.1                | 0.5               | 42             |
| 13                | Delta & Pine Land | 121 RF    |   | 714                 | 32.5             | 3.7             | 1.10                | 25.6                    | 79.9                | 0.4               | 43             |
| 14                | Dyna-Gro          | 2242 B2RF |   | 706                 | 36.3             | 3.3             | 1.10                | 25.2                    | 80.1                | 0.5               | 43             |
| 15                | Croplan Genetics  | 3020 B2RF |   | 703                 | 34.8             | 3.1             | 1.05                | 23.7                    | 79.0                | 0.5               | 43             |
| 16                | Delta & Pine Land | 393 RR    |   | 688                 | 33.0             | 3.4             | 1.09                | 27.0                    | 80.6                | 0.4               | 43             |
| 17                | Phytogen          | 315 RF    |   | 679                 | 34.5             | 3.5             | 1.03                | 23.3                    | 78.7                | 0.6               | 42             |
| 18                | Fibermax          | 955 LLB2  |   | 676                 | 34.0             | 3.5             | 1.11                | 25.8                    | 78.8                | 0.5               | 41             |
| 19                | Delta & Pine Land | 432 RR    | ✓ | 668                 | 29.9             | 3.5             | 1.06                | 24.6                    | 79.7                | 0.5               | 43             |
| 20                | Fibermax          | 9060 F    |   | 659                 | 38.4             | 3.2             | 1.11                | 25.1                    | 77.9                | 0.5               | 42             |
| 21                | Phytogen          | 370 WR    | ✓ | 650                 | 31.7             | 3.5             | 1.04                | 24.7                    | 79.0                | 0.4               | 41             |
| 22                | Fibermax          | 1740 B2RF |   | 644                 | 40.1             | 3.4             | 1.07                | 25.6                    | 78.7                | 0.6               | 42             |
| 23                | Delta & Pine Land | 117 B2RF  |   | 627                 | 36.3             | 3.5             | 1.11                | 26.8                    | 80.2                | 0.7               | 43             |
| 24                | Delta & Pine Land | 434 RR    |   | 612                 | 38.1             | 3.2             | 1.09                | 23.9                    | 78.3                | 0.5               | 42             |
| 25                | Croplan Genetics  | 3520 B2RF |   | 608                 | 32.8             | 3.2             | 1.10                | 23.4                    | 78.9                | 0.7               | 43             |
| 26                | Americot          | 1664 B2RF |   | 608                 | 35.0             | 3.1             | 1.08                | 24.3                    | 79.1                | 0.8               | 51             |
| 27                | Dyna-Gro          | 2490 B2RF |   | 607                 | 33.0             | 3.1             | 1.06                | 24.2                    | 78.9                | 0.5               | 41             |
| 28                | Stoneville        | 4357 B2RF |   | 575                 | 33.0             | 3.1             | 1.06                | 23.2                    | 76.9                | 0.4               | 42             |
| 29                | Stoneville        | 4427 B2RF |   | 572                 | 30.1             | 3.2             | 1.09                | 23.5                    | 79.0                | 0.8               | 42             |
| 30                | Dyna-Gro          | 2100 B2RF |   | 556                 | 33.7             | 3.2             | 1.05                | 23.6                    | 79.4                | 0.3               | 42             |
| 31                | Fibermax          | 1600 LL   |   | 529                 | 31.2             | 3.3             | 1.10                | 26.4                    | 79.5                | 0.6               | 42             |
| 32                | Fibermax          | 960 BR    | ✓ | 509                 | 35.8             | 3.1             | 1.07                | 25.9                    | 79.6                | 0.4               | 42             |
| <b>Mean</b>       |                   |           |   | 690                 | 34.4             | 3.4             | 1.07                | 25.1                    | 79.1                | 0.5               | 42             |
| <b>LSD (0.05)</b> |                   |           |   | 175                 |                  |                 |                     |                         |                     |                   |                |
| <b>CV (%)</b>     |                   |           |   | 22.1                |                  |                 |                     |                         |                     |                   |                |

Planted 2 May 2007. Harvest aids applied 28 Sept, 2007. Harvested 11 Oct 2007. 100-60-90 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

Conventionally tilled, non-irrigated Falaya silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.



**Table OVT3.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at Ames Plantation, Grand junction, TN, listed by yield rank.

| Yield Rank        | Company           | Variety     | Lint Yield lb/ac | Gin turnout % | Micro-naire | Fiber Length in. | Fiber Strength g/tex | Unifor mity % | HVI Trash % | Color Grade |
|-------------------|-------------------|-------------|------------------|---------------|-------------|------------------|----------------------|---------------|-------------|-------------|
| 1                 | Phytogen          | 375 WRF     | 883              | 41.7          | 4.1         | 1.04             | 25.9                 | 78.9          | 0.3         | 51          |
| 2                 | Phytogen          | 310 R       | 862              | 41.7          | 4.5         | 1.02             | 26.1                 | 79.5          | 0.2         | 51          |
| 3                 | Stoneville        | 4498 B2RF   | 834              | 40.2          | 4.4         | 1.07             | 28.8                 | 81.1          | 0.6         | 52          |
| 4                 | Stoneville        | 5242 BR     | 820              | 39.9          | 4.2         | 1.01             | 24.5                 | 79.9          | 0.3         | 41          |
| 5                 | Phytogen          | 370 WR ✓    | 812              | 40.3          | 4.6         | 1.03             | 27.3                 | 80.1          | 0.3         | 51          |
| 6                 | Stoneville        | 4664 RF     | 806              | 40.3          | 4.3         | 1.06             | 28.1                 | 80.5          | 0.5         | 51          |
| 7                 | Delta & Pine Land | 393 RR      | 796              | 39.0          | 4.3         | 1.11             | 28.2                 | 82.0          | 0.3         | 51          |
| 8                 | Stoneville        | 5599 BR ✓   | 791              | 39.8          | 4.7         | 1.02             | 25.4                 | 78.2          | 0.4         | 42          |
| 9                 | Stoneville        | 4427 B2RF   | 787              | 38.2          | 4.3         | 1.07             | 26.3                 | 79.9          | 0.5         | 51          |
| 10                | Delta & Pine Land | 432 RR ✓    | 785              | 38.1          | 4.5         | 1.06             | 27.6                 | 80.8          | 0.4         | 51          |
| 11                | Delta & Pine Land | 121 RF      | 773              | 39.8          | 4.2         | 1.08             | 27.3                 | 80.5          | 0.3         | 52          |
| 12                | Stoneville        | 4554 B2RF   | 771              | 39.0          | 4.6         | 1.06             | 27.5                 | 80.1          | 0.3         | 51          |
| 13                | Delta & Pine Land | 445 BG/RR   | 770              | 40.1          | 4.1         | 1.09             | 29.1                 | 81.5          | 0.3         | 52          |
| 14                | Delta & Pine Land | 444 BG/RR ✓ | 764              | 40.6          | 3.8         | 1.04             | 24.9                 | 80.2          | 0.3         | 51          |
| 15                | Croplan Genetics  | 3035 RF     | 733              | 41.7          | 4.4         | 1.04             | 27.1                 | 78.9          | 0.2         | 42          |
| 16                | Phytogen          | 315 RF      | 717              | 40.4          | 4.0         | 1.06             | 25.6                 | 79.7          | 0.3         | 51          |
| 17                | Dyna-Gro          | 2100 B2RF   | 688              | 35.7          | 3.7         | 1.05             | 24.4                 | 79.6          | 0.2         | 51          |
| 18                | Stoneville        | 4357 B2RF   | 684              | 38.1          | 4.0         | 1.08             | 24.7                 | 79.0          | 0.3         | 51          |
| 19                | Fibermax          | 1740 B2RF   | 679              | 40.8          | 4.2         | 1.06             | 26.7                 | 79.5          | 0.3         | 51          |
| 20                | Croplan Genetics  | 3520 B2RF   | 672              | 36.2          | 3.7         | 1.08             | 24.6                 | 78.8          | 0.5         | 51          |
| 21                | Delta & Pine Land | 434 RR      | 665              | 39.9          | 3.9         | 1.10             | 25.3                 | 80.0          | 0.3         | 42          |
| 22                | Fibermax          | 955 LLB2    | 663              | 36.3          | 4.4         | 1.08             | 24.6                 | 78.6          | 0.3         | 43          |
| 23                | Americot          | 1504 B2RF   | 657              | 36.3          | 3.8         | 1.06             | 25.0                 | 80.1          | 0.4         | 51          |
| 24                | Fibermax          | 1600 LL     | 651              | 37.9          | 3.9         | 1.09             | 26.9                 | 80.5          | 0.4         | 51          |
| 25                | Americot          | 1664 B2RF   | 640              | 36.2          | 3.8         | 1.10             | 25.3                 | 79.5          | 0.4         | 51          |
| 26                | Croplan Genetics  | 3020 B2RF   | 630              | 35.6          | 3.7         | 1.07             | 24.9                 | 80.6          | 0.3         | 51          |
| 27                | Fibermax          | 1735 LLB2   | 623              | 36.3          | 3.9         | 1.07             | 25.2                 | 79.4          | 0.4         | 51          |
| 28                | Dyna-Gro          | 2242 B2RF   | 602              | 36.5          | 3.7         | 1.08             | 24.6                 | 79.4          | 0.5         | 51          |
| 29                | Delta & Pine Land | 117 B2RF    | 596              | 38.4          | 4.0         | 1.06             | 27.6                 | 79.2          | 0.6         | 51          |
| 30                | Dyna-Gro          | 2490 B2RF   | 590              | 36.2          | 3.4         | 1.05             | 25.1                 | 79.6          | 0.6         | 43          |
| 31                | Fibermax          | 960 BR ✓    | 588              | 39.1          | 3.9         | 1.04             | 25.2                 | 79.7          | 0.3         | 41          |
| 32                | Fibermax          | 9060 F      | 522              | 38.1          | 3.7         | 1.09             | 25.1                 | 78.0          | 0.4         | 51          |
| <b>Mean</b>       |                   |             | 709              | 38.6          | 4.1         | 1.06             | 26.1                 | 79.8          | 0.4         | 51          |
| <b>LSD (0.05)</b> |                   |             | 99               |               |             |                  |                      |               |             |             |
| <b>CV (%)</b>     |                   |             | 13.9             |               |             |                  |                      |               |             |             |

Planted 9 May 2007. Harvest aids applied 12 Oct, 2007. Harvested 1 Nov 2007. 80-30-100 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

No-tilled, non-irrigated Memphis silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT4.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at Fullen Farms, Ashport, TN, listed by yield rank.

| Yield Rank        | Company           | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|-------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land | 432 RR    | ✓ | 1531                | 33.9             | 3.9             | 1.10                | 26.2                    | 81.5                | 0.4               | 52             |
| 2                 | Delta & Pine Land | 445 BG/RR |   | 1482                | 34.8             | 3.9             | 1.10                | 27.9                    | 82.4                | 0.5               | 52             |
| 3                 | Stoneville        | 4427 B2RF |   | 1462                | 37.0             | 4.1             | 1.12                | 26.7                    | 82.2                | 0.7               | 52             |
| 4                 | Stoneville        | 4498 B2RF |   | 1449                | 33.8             | 4.0             | 1.13                | 29.5                    | 83.5                | 0.8               | 52             |
| 5                 | Phytogen          | 315 RF    |   | 1449                | 36.3             | 3.8             | 1.09                | 26.5                    | 80.7                | 0.5               | 43             |
| 6                 | Delta & Pine Land | 444 BG/RR | ✓ | 1425                | 36.5             | 3.8             | 1.13                | 27.7                    | 82.4                | 0.5               | 52             |
| 7                 | Delta & Pine Land | 121 RF    |   | 1407                | 34.2             | 4.1             | 1.11                | 28.1                    | 81.1                | 0.7               | 52             |
| 8                 | Dyna-Gro          | 2490 B2RF |   | 1390                | 33.9             | 3.4             | 1.09                | 25.7                    | 81.2                | 0.8               | 51             |
| 9                 | Delta & Pine Land | 117 B2RF  |   | 1383                | 38.7             | 4.1             | 1.11                | 27.0                    | 81.8                | 0.4               | 51             |
| 10                | Phytogen          | 375 WRF   |   | 1342                | 34.1             | 3.7             | 1.13                | 25.2                    | 81.8                | 0.7               | 52             |
| 11                | Croplan Genetics  | 3035 RF   |   | 1342                | 31.9             | 3.9             | 1.10                | 26.6                    | 80.9                | 0.5               | 52             |
| 12                | Dyna-Gro          | 2100 B2RF |   | 1330                | 34.3             | 3.5             | 1.10                | 25.2                    | 80.2                | 0.5               | 43             |
| 13                | Delta & Pine Land | 434 RR    |   | 1328                | 35.8             | 3.9             | 1.12                | 26.8                    | 80.9                | 0.4               | 43             |
| 14                | Phytogen          | 310 R     |   | 1317                | 34.5             | 3.9             | 1.09                | 27.8                    | 82.0                | 0.5               | 52             |
| 15                | Stoneville        | 4554 B2RF |   | 1310                | 32.5             | 4.1             | 1.12                | 29.8                    | 81.7                | 0.6               | 52             |
| 16                | Fibermax          | 9060 F    |   | 1303                | 35.9             | 3.6             | 1.14                | 25.9                    | 79.9                | 0.5               | 52             |
| 17                | Stoneville        | 5599 BR   | ✓ | 1301                | 32.6             | 4.0             | 1.09                | 28.5                    | 80.4                | 0.7               | 52             |
| 18                | Americot          | 1504 B2RF |   | 1285                | 32.5             | 3.7             | 1.11                | 25.4                    | 81.5                | 0.5               | 52             |
| 19                | Stoneville        | 5242 BR   |   | 1273                | 32.6             | 4.0             | 1.07                | 27.2                    | 80.7                | 0.4               | 52             |
| 20                | Americot          | 1664 B2RF |   | 1253                | 33.2             | 4.1             | 1.12                | 26.8                    | 81.6                | 0.6               | 52             |
| 21                | Phytogen          | 370 WR    | ✓ | 1251                | 33.4             | 4.2             | 1.08                | 27.6                    | 82.2                | 0.6               | 51             |
| 22                | Stoneville        | 4664 RF   |   | 1244                | 34.5             | 3.9             | 1.13                | 27.2                    | 82.7                | 0.7               | 52             |
| 23                | Croplan Genetics  | 3520 B2RF |   | 1210                | 31.7             | 3.7             | 1.13                | 24.9                    | 80.8                | 0.6               | 52             |
| 24                | Dyna-Gro          | 2242 B2RF |   | 1179                | 32.9             | 3.9             | 1.11                | 25.5                    | 80.2                | 0.6               | 52             |
| 25                | Stoneville        | 4357 B2RF |   | 1175                | 32.7             | 3.7             | 1.13                | 25.4                    | 81.3                | 0.4               | 52             |
| 26                | Delta & Pine Land | 393 RR    |   | 1173                | 35.2             | 4.2             | 1.12                | 27.4                    | 82.0                | 0.3               | 42             |
| 27                | Croplan Genetics  | 3020 B2RF |   | 1148                | 32.1             | 3.6             | 1.10                | 26.0                    | 82.4                | 0.4               | 52             |
| 28                | Fibermax          | 1600 LL   |   | 1139                | 33.9             | 4.0             | 1.14                | 27.4                    | 82.5                | 0.5               | 43             |
| 29                | Fibermax          | 960 BR    | ✓ | 1104                | 33.0             | 3.7             | 1.11                | 30.0                    | 80.5                | 0.6               | 52             |
| 30                | Fibermax          | 1740 B2RF |   | 1049                | 34.2             | 4.0             | 1.07                | 27.0                    | 79.5                | 0.4               | 43             |
| 31                | Fibermax          | 955 LLB2  |   | 993                 | 33.0             | 4.1             | 1.15                | 26.9                    | 81.1                | 0.3               | 51             |
| 32                | Fibermax          | 1735 LLB2 |   | 925                 | 35.1             | 3.9             | 1.12                | 27.5                    | 81.4                | 0.4               | 52             |
| <b>Mean</b>       |                   |           |   | 1272                | 34.1             | 3.9             | 1.11                | 27.0                    | 81.4                | 0.5               | 51             |
| <b>LSD (0.05)</b> |                   |           |   | 198                 |                  |                 |                     |                         |                     |                   |                |
| <b>CV (%)</b>     |                   |           |   | 14.6                |                  |                 |                     |                         |                     |                   |                |

Planted 7 May 2007. Harvest aids applied 30 Sept, 2007. Harvested 17 Oct 2007. 133-0-54 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

Conventionally tilled, non-irrigated Commerce silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT5.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at the Research and Education Center at Milan, Milan, TN, listed by yield rank.

| Yield Rank        | Company           | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|-------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Stoneville        | 5599 BR   | ✓ | 1754                | 39.5             | 4.8             | 1.09                | 30.5                    | 81.6                | 0.7               | 43             |
| 2                 | Delta & Pine Land | 445 BG/RR |   | 1711                | 42.1             | 4.6             | 1.11                | 29.9                    | 81.8                | 0.4               | 43             |
| 3                 | Delta & Pine Land | 444 BG/RR | ✓ | 1703                | 42.7             | 4.2             | 1.08                | 28.0                    | 82.4                | 0.4               | 51             |
| 4                 | Phytogen          | 375 WRF   |   | 1694                | 38.2             | 4.7             | 1.09                | 28.6                    | 81.9                | 0.3               | 43             |
| 5                 | Stoneville        | 4427 B2RF |   | 1672                | 39.7             | 4.6             | 1.10                | 29.0                    | 82.9                | 0.7               | 51             |
| 6                 | Phytogen          | 370 WR    | ✓ | 1618                | 39.0             | 4.9             | 1.06                | 28.5                    | 82.6                | 0.2               | 51             |
| 7                 | Stoneville        | 4498 B2RF |   | 1588                | 36.6             | 4.6             | 1.09                | 31.3                    | 83.4                | 0.4               | 43             |
| 8                 | Fibermax          | 960 BR    | ✓ | 1584                | 41.0             | 4.3             | 1.09                | 30.7                    | 81.6                | 0.3               | 41             |
| 9                 | Delta & Pine Land | 393 RR    |   | 1530                | 38.8             | 4.9             | 1.11                | 30.4                    | 82.8                | 0.3               | 43             |
| 10                | Delta & Pine Land | 434 RR    |   | 1521                | 39.1             | 4.7             | 1.13                | 27.9                    | 83.4                | 0.4               | 41             |
| 11                | Stoneville        | 4554 B2RF |   | 1456                | 37.4             | 4.9             | 1.07                | 30.4                    | 81.3                | 0.4               | 51             |
| 12                | Stoneville        | 5242 BR   |   | 1449                | 38.8             | 4.6             | 1.05                | 27.1                    | 81.7                | 0.4               | 43             |
| 13                | Dyna-Gro          | 2100 B2RF |   | 1420                | 36.7             | 4.4             | 1.09                | 27.7                    | 82.8                | 0.5               | 43             |
| 14                | Delta & Pine Land | 121 RF    |   | 1381                | 37.4             | 4.8             | 1.12                | 29.1                    | 83.1                | 0.5               | 51             |
| 15                | Fibermax          | 1740 B2RF |   | 1368                | 37.1             | 4.5             | 1.10                | 30.0                    | 82.1                | 0.5               | 41             |
| 16                | Delta & Pine Land | 117 B2RF  |   | 1366                | 38.9             | 4.4             | 1.10                | 31.8                    | 81.4                | 0.9               | 51             |
| 17                | Stoneville        | 4664 RF   |   | 1361                | 35.5             | 4.7             | 1.09                | 30.2                    | 82.5                | 0.7               | 51             |
| 18                | Fibermax          | 955 LLB2  |   | 1361                | 31.8             | 4.8             | 1.15                | 29.9                    | 82.7                | 0.6               | 41             |
| 19                | Americot          | 1504 B2RF |   | 1353                | 34.4             | 4.5             | 1.09                | 28.8                    | 83.0                | 0.3               | 43             |
| 20                | Croplan Genetics  | 3035 RF   |   | 1353                | 35.7             | 4.8             | 1.08                | 27.7                    | 81.8                | 0.4               | 41             |
| 21                | Croplan Genetics  | 3020 B2RF |   | 1338                | 36.8             | 4.4             | 1.10                | 27.4                    | 82.9                | 0.2               | 41             |
| 22                | Phytogen          | 310 R     |   | 1333                | 35.1             | 5.0             | 1.05                | 29.3                    | 81.8                | 0.3               | 41             |
| 23                | Delta & Pine Land | 432 RR    | ✓ | 1331                | 35.8             | 4.6             | 1.08                | 28.9                    | 82.6                | 0.4               | 51             |
| 24                | Stoneville        | 4357 B2RF |   | 1328                | 36.9             | 4.5             | 1.13                | 29.0                    | 81.6                | 0.4               | 41             |
| 25                | Fibermax          | 1600 LL   |   | 1310                | 35.0             | 4.5             | 1.11                | 30.6                    | 82.4                | 0.5               | 43             |
| 26                | Phytogen          | 315 RF    |   | 1295                | 34.1             | 4.7             | 1.09                | 28.3                    | 81.7                | 0.4               | 51             |
| 27                | Dyna-Gro          | 2242 B2RF |   | 1286                | 34.6             | 4.4             | 1.11                | 28.6                    | 82.2                | 0.7               | 43             |
| 28                | Fibermax          | 1735 LLB2 |   | 1209                | 36.0             | 4.4             | 1.09                | 30.4                    | 81.7                | 0.5               | 41             |
| 29                | Croplan Genetics  | 3520 B2RF |   | 1171                | 33.6             | 4.5             | 1.09                | 28.9                    | 81.5                | 0.4               | 51             |
| 30                | Americot          | 1664 B2RF |   | 1135                | 34.1             | 4.4             | 1.13                | 28.7                    | 83.2                | 0.5               | 51             |
| 31                | Fibermax          | 9060 F    |   | 1130                | 34.5             | 4.3             | 1.14                | 29.7                    | 80.5                | 0.6               | 41             |
| 32                | Dyna-Gro          | 2490 B2RF |   | 1068                | 29.4             | 4.2             | 1.06                | 27.6                    | 82.3                | 0.4               | 51             |
| <b>Mean</b>       |                   |           |   | 1412                | 36.7             | 4.6             | 1.09                | 29.2                    | 82.2                | 0.5               | 43             |
| <b>LSD (0.05)</b> |                   |           |   | 200                 |                  |                 |                     |                         |                     |                   |                |
| <b>CV (%)</b>     |                   |           |   | 13.2                |                  |                 |                     |                         |                     |                   |                |

Planted 14 May 2007. Harvest aids applied 14 Oct, 2007. Harvested 30 Oct 2007. 110-45-90 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

No-tilled, irrigated Loring silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT6.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at the West TN Research and Education Center, Jackson, TN, listed by yield rank.

| Yield Rank        | Company           | Variety     | Lint Yield lb/ac | Gin turnout % | Micro-naire | Fiber Length in. | Fiber Strength g/tex | Uniformity % | HVI Trash % | Color Grade |
|-------------------|-------------------|-------------|------------------|---------------|-------------|------------------|----------------------|--------------|-------------|-------------|
| 1                 | Stoneville        | 5242 BR     | 1356             | 41.8          | 4.5         | 1.03             | 25.3                 | 81.4         | 0.4         | 43          |
| 2                 | Phytogen          | 310 R       | 1303             | 40.7          | 4.4         | 1.05             | 28.7                 | 82.3         | 0.8         | 51          |
| 3                 | Phytogen          | 370 WR ✓    | 1263             | 39.9          | 4.4         | 1.06             | 27.5                 | 82.5         | 0.5         | 43          |
| 4                 | Fibermax          | 1735 LLB2   | 1243             | 39.4          | 4.2         | 1.11             | 28.9                 | 81.6         | 0.4         | 42          |
| 5                 | Fibermax          | 960 BR ✓    | 1242             | 38.1          | 3.8         | 1.09             | 29.1                 | 81.5         | 0.5         | 41          |
| 6                 | Delta & Pine Land | 434 RR      | 1241             | 39.5          | 4.2         | 1.09             | 26.4                 | 80.3         | 0.5         | 42          |
| 7                 | Delta & Pine Land | 445 BG/RR   | 1235             | 39.6          | 4.3         | 1.11             | 29.7                 | 82.8         | 0.4         | 42          |
| 8                 | Croplan Genetics  | 3035 RF     | 1234             | 41.1          | 4.3         | 1.09             | 28.1                 | 82.7         | 0.3         | 41          |
| 9                 | Phytogen          | 315 RF      | 1233             | 40.6          | 4.1         | 1.07             | 26.3                 | 80.6         | 0.4         | 42          |
| 10                | Stoneville        | 4554 B2RF   | 1229             | 38.6          | 4.5         | 1.08             | 29.1                 | 82.4         | 0.5         | 43          |
| 11                | Fibermax          | 1740 B2RF   | 1227             | 40.2          | 4.3         | 1.08             | 27.2                 | 82.2         | 0.5         | 42          |
| 12                | Delta & Pine Land | 117 B2RF    | 1227             | 39.8          | 4.3         | 1.11             | 28.7                 | 81.6         | 0.8         | 51          |
| 13                | Delta & Pine Land | 444 BG/RR ✓ | 1224             | 41.3          | 4.0         | 1.08             | 26.6                 | 81.4         | 0.3         | 42          |
| 14                | Phytogen          | 375 WRF     | 1217             | 40.7          | 4.3         | 1.08             | 25.9                 | 81.7         | 0.5         | 42          |
| 15                | Stoneville        | 4498 B2RF   | 1212             | 37.2          | 4.0         | 1.10             | 28.6                 | 83.0         | 0.6         | 43          |
| 16                | Croplan Genetics  | 3520 B2RF   | 1208             | 37.7          | 4.0         | 1.10             | 27.4                 | 81.5         | 0.5         | 43          |
| 17                | Delta & Pine Land | 121 RF      | 1207             | 40.8          | 4.6         | 1.09             | 27.6                 | 80.7         | 0.5         | 51          |
| 18                | Stoneville        | 5599 BR ✓   | 1201             | 39.7          | 4.6         | 1.07             | 28.4                 | 81.4         | 0.5         | 43          |
| 19                | Fibermax          | 9060 F      | 1196             | 39.0          | 3.9         | 1.12             | 26.3                 | 80.1         | 0.4         | 41          |
| 20                | Dyna-Gro          | 2242 B2RF   | 1192             | 37.0          | 4.2         | 1.11             | 26.0                 | 81.9         | 0.6         | 42          |
| 21                | Americot          | 1664 B2RF   | 1172             | 37.2          | 4.1         | 1.13             | 26.0                 | 82.8         | 0.5         | 42          |
| 22                | Stoneville        | 4427 B2RF   | 1149             | 38.1          | 4.4         | 1.09             | 26.9                 | 81.8         | 1.0         | 42          |
| 23                | Fibermax          | 1600 LL     | 1143             | 38.9          | 4.1         | 1.12             | 28.4                 | 82.2         | 0.4         | 42          |
| 24                | Dyna-Gro          | 2100 B2RF   | 1138             | 36.1          | 3.9         | 1.08             | 25.8                 | 82.0         | 0.5         | 42          |
| 25                | Delta & Pine Land | 393 RR      | 1125             | 38.7          | 4.5         | 1.11             | 28.8                 | 82.9         | 0.5         | 43          |
| 26                | Americot          | 1504 B2RF   | 1121             | 36.5          | 4.0         | 1.06             | 25.8                 | 82.1         | 0.5         | 42          |
| 27                | Stoneville        | 4664 RF     | 1118             | 39.9          | 4.4         | 1.08             | 30.0                 | 81.6         | 0.5         | 43          |
| 28                | Stoneville        | 4357 B2RF   | 1095             | 38.1          | 4.1         | 1.11             | 25.7                 | 82.1         | 0.5         | 51          |
| 29                | Fibermax          | 955 LLB2    | 1091             | 35.4          | 3.9         | 1.14             | 27.8                 | 82.6         | 0.8         | 42          |
| 30                | Delta & Pine Land | 432 RR ✓    | 1087             | 38.3          | 4.4         | 1.09             | 27.1                 | 83.0         | 0.5         | 43          |
| 31                | Dyna-Gro          | 2490 B2RF   | 1085             | 37.2          | 3.6         | 1.07             | 27.2                 | 81.7         | 0.8         | 42          |
| 32                | Croplan Genetics  | 3020 B2RF   | 1058             | 36.0          | 3.9         | 1.12             | 26.9                 | 82.9         | 0.4         | 42          |
| <b>Mean</b>       |                   |             | 1190             | 38.8          | 4.2         | 1.09             | 27.4                 | 81.9         | 0.5         | 43          |
| <b>LSD (0.05)</b> |                   |             | 126              |               |             |                  |                      |              |             |             |
| <b>CV (%)</b>     |                   |             | 9.2              |               |             |                  |                      |              |             |             |

Planted 30 April 2007. Harvest aids applied 6 Sept, 2007. Harvested 24 Sept 2007. 80-45-90 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

No-tilled, irrigated Lexington silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT7.** Final plant height of 32 entries in the 2007 Tennessee Official Variety Trial 'A' at five locations, listed by average plant height.

| <b>Company</b>    | <b>Variety</b> |   | <b>Agricenter</b> | <b>Ames Pln.</b> | <b>Fullen Farms</b> | <b>Milan REC</b> | <b>WTREC</b> | <b>Average</b> |
|-------------------|----------------|---|-------------------|------------------|---------------------|------------------|--------------|----------------|
|                   |                |   | <b>inch</b>       | <b>inch</b>      | <b>inch</b>         | <b>inch</b>      | <b>inch</b>  | <b>inch</b>    |
| Fibermax          | 960 BR         | ✓ | 33                | 33               | 26                  | 34               | 27           | 31             |
| Fibermax          | 9060 F         |   | 34                | 31               | 28                  | 34               | 29           | 31             |
| Fibermax          | 955 LLB2       |   | 33                | 36               | 25                  | 36               | 28           | 32             |
| Fibermax          | 1740 B2RF      |   | 34                | 33               | 28                  | 36               | 29           | 32             |
| Stoneville        | 4554 B2RF      |   | 34                | 35               | 29                  | 35               | 29           | 33             |
| Croplan Genetics  | 3020 B2RF      |   | 37                | 35               | 29                  | 35               | 28           | 33             |
| Americot          | 1504 B2RF      |   | 37                | 35               | 29                  | 35               | 29           | 33             |
| Stoneville        | 4498 B2RF      |   | 34                | 35               | 30                  | 36               | 28           | 33             |
| Dyna-Gro          | 2100 B2RF      |   | 35                | 34               | 29                  | 36               | 31           | 33             |
| Americot          | 1664 B2RF      |   | 36                | 35               | 29                  | 36               | 30           | 33             |
| Dyna-Gro          | 2490 B2RF      |   | 36                | 37               | 28                  | 38               | 31           | 34             |
| Dyna-Gro          | 2242 B2RF      |   | 37                | 36               | 30                  | 37               | 31           | 34             |
| Stoneville        | 4357 B2RF      |   | 39                | 36               | 30                  | 36               | 31           | 34             |
| Fibermax          | 1735 LLB2      |   | 37                | 38               | 30                  | 39               | 30           | 35             |
| Delta & Pine Land | 393 RR         |   | 38                | 38               | 28                  | 38               | 33           | 35             |
| Stoneville        | 4427 B2RF      |   | 39                | 37               | 30                  | 38               | 32           | 35             |
| Stoneville        | 4664 RF        |   | 38                | 36               | 30                  | 40               | 32           | 35             |
| Croplan Genetics  | 3520 B2RF      |   | 37                | 37               | 30                  | 40               | 31           | 35             |
| Delta & Pine Land | 445 BG/RR      |   | 38                | 38               | 31                  | 38               | 32           | 35             |
| Delta & Pine Land | 432 RR         | ✓ | 39                | 37               | 30                  | 39               | 33           | 35             |
| Stoneville        | 5242 BR        |   | 39                | 37               | 32                  | 39               | 32           | 36             |
| Delta & Pine Land | 434 RR         |   | 38                | 36               | 32                  | 40               | 32           | 36             |
| Delta & Pine Land | 117 B2RF       |   | 39                | 39               | 31                  | 39               | 32           | 36             |
| Phytogen          | 375 WRF        |   | 38                | 37               | 33                  | 39               | 33           | 36             |
| Croplan Genetics  | 3035 RF        |   | 40                | 38               | 32                  | 40               | 32           | 36             |
| Fibermax          | 1600 LL        |   | 41                | 38               | 28                  | 42               | 33           | 36             |
| Phytogen          | 370 WR         | ✓ | 39                | 40               | 31                  | 40               | 35           | 37             |
| Phytogen          | 315 RF         |   | 39                | 38               | 34                  | 41               | 34           | 37             |
| Delta & Pine Land | 121 RF         |   | 42                | 38               | 32                  | 40               | 33           | 37             |
| Phytogen          | 310 R          |   | 40                | 39               | 34                  | 39               | 34           | 37             |
| Stoneville        | 5599 BR        | ✓ | 42                | 39               | 36                  | 41               | 35           | 38             |
| Delta & Pine Land | 444 BG/RR      | ✓ | 41                | 38               | 34                  | 41               | 36           | 38             |
| <b>Mean</b>       |                |   | 38                | 36               | 30                  | 38               | 31           | 35             |
| <b>LSD (0.05)</b> |                |   | 2.6               | 3.2              | 3.3                 | 3.1              | 2.0          | 2.7            |
| <b>CV (%)</b>     |                |   | 4.9               | 6.4              | 7.8                 | 5.8              | 4.5          | 5.9            |

Tennessee Ag. Experiment Station data of Main et al. (2007).

**Table OVT8.** Nodes above cracked boll (NACB) on dates indicated, and estimated DD60's remaining to maturity of 32 entries in the 2007 Tennessee Official Variety Trial 'A', listed in order of average maturity.

| Company           | Variety   |   | Agricenter        |                   | Ames Pln. |          | Fullen Farms |          | Milan REC |          | WTREC    |          | Average |      |
|-------------------|-----------|---|-------------------|-------------------|-----------|----------|--------------|----------|-----------|----------|----------|----------|---------|------|
|                   |           |   | 09/18/07          | 09/18/07          | 09/18/07  | 09/18/07 | 09/07/07     | 09/07/07 | 09/20/07  | 09/20/07 | 08/30/07 | 08/30/07 | NACB    | DD60 |
|                   |           |   | NACB <sup>1</sup> | DD60 <sup>2</sup> | NACB      | DD60     | NACB         | DD60     | NACB      | DD60     | NACB     | DD60     | NACB    | DD60 |
| Croplan Genetics  | 3520 B2RF |   | 0.2               | 8                 | 0.1       | 3        | 0.9          | 43       | 2.9       | 143      | 2.1      | 105      | 1.2     | 60   |
| Dyna-Gro          | 2100 B2RF |   | 0.0               | 0                 | 0.7       | 35       | 0.8          | 40       | 3.1       | 153      | 1.8      | 88       | 1.3     | 63   |
| Phytogen          | 370 WR    | ✓ | 0.0               | 0                 | 0.8       | 40       | 1.0          | 48       | 3.2       | 158      | 1.5      | 75       | 1.3     | 64   |
| Americot          | 1664 B2RF |   | 0.0               | 0                 | 0.3       | 13       | 1.0          | 50       | 2.6       | 130      | 2.8      | 140      | 1.3     | 67   |
| Delta & Pine Land | 444 BG/RR | ✓ | 0.1               | 3                 | 0.6       | 28       | 0.8          | 40       | 3.2       | 158      | 2.1      | 105      | 1.3     | 67   |
| Phytogen          | 310 R     |   | 0.0               | 0                 | 0.5       | 23       | 1.1          | 53       | 3.7       | 183      | 1.8      | 90       | 1.4     | 70   |
| Dyna-Gro          | 2242 B2RF |   | 0.0               | 0                 | 0.3       | 13       | 0.9          | 45       | 4.1       | 203      | 1.9      | 95       | 1.4     | 71   |
| Phytogen          | 375 WRF   |   | 0.0               | 0                 | 0.1       | 5        | 0.8          | 38       | 2.8       | 138      | 3.5      | 175      | 1.4     | 71   |
| Croplan Genetics  | 3020 B2RF |   | 0.0               | 0                 | 0.2       | 8        | 0.9          | 43       | 3.6       | 178      | 2.6      | 130      | 1.4     | 72   |
| Fibermax          | 9060 F    |   | 0.0               | 0                 | 0.2       | 10       | 1.1          | 53       | 3.8       | 190      | 2.2      | 110      | 1.5     | 73   |
| Delta & Pine Land | 121 RF    |   | 0.0               | 0                 | 0.7       | 33       | 0.8          | 40       | 3.5       | 175      | 2.4      | 118      | 1.5     | 73   |
| Fibermax          | 1740 B2RF |   | 0.0               | 0                 | 0.5       | 23       | 1.0          | 48       | 3.4       | 170      | 2.7      | 133      | 1.5     | 75   |
| Phytogen          | 315 RF    |   | 0.1               | 3                 | 0.4       | 20       | 0.7          | 33       | 3.8       | 188      | 2.6      | 130      | 1.5     | 75   |
| Americot          | 1504 B2RF |   | 0.1               | 5                 | 0.7       | 35       | 0.7          | 35       | 3.7       | 185      | 2.4      | 120      | 1.5     | 76   |
| Delta & Pine Land | 432 RR    | ✓ | 0.0               | 0                 | 0.6       | 30       | 0.8          | 40       | 3.2       | 158      | 3.1      | 155      | 1.5     | 77   |
| Fibermax          | 1735 LLB2 |   | 0.1               | 3                 | 0.6       | 30       | 1.0          | 50       | 3.1       | 153      | 3.0      | 148      | 1.5     | 77   |
| Stoneville        | 4427 B2RF |   | 0.0               | 0                 | 0.6       | 28       | 0.7          | 33       | 4.2       | 210      | 2.8      | 138      | 1.6     | 82   |
| Fibermax          | 1600 LL   |   | 0.0               | 0                 | 0.4       | 18       | 1.0          | 48       | 4.2       | 210      | 2.9      | 143      | 1.7     | 84   |
| Croplan Genetics  | 3035 RF   |   | 0.2               | 8                 | 0.5       | 25       | 1.0          | 50       | 3.7       | 183      | 3.2      | 158      | 1.7     | 85   |
| Delta & Pine Land | 117 B2RF  |   | 0.1               | 5                 | 0.6       | 28       | 1.0          | 50       | 3.9       | 193      | 3.0      | 150      | 1.7     | 85   |
| Stoneville        | 4357 B2RF |   | 0.0               | 0                 | 0.6       | 30       | 1.1          | 55       | 4.1       | 203      | 2.8      | 140      | 1.7     | 86   |
| Stoneville        | 5242 BR   |   | 0.1               | 5                 | 0.6       | 28       | 1.0          | 48       | 4.6       | 228      | 2.5      | 125      | 1.7     | 87   |
| Delta & Pine Land | 434 RR    |   | 0.1               | 5                 | 0.5       | 25       | 0.9          | 43       | 4.0       | 200      | 3.4      | 168      | 1.8     | 88   |
| Delta & Pine Land | 445 BG/RR |   | 0.0               | 0                 | 0.4       | 20       | 0.9          | 45       | 4.2       | 210      | 3.5      | 175      | 1.8     | 90   |
| Stoneville        | 4498 B2RF |   | 0.3               | 13                | 0.9       | 45       | 0.8          | 40       | 3.9       | 193      | 3.5      | 173      | 1.9     | 93   |
| Dyna-Gro          | 2490 B2RF |   | 0.3               | 13                | 0.3       | 15       | 0.9          | 43       | 4.4       | 220      | 3.6      | 178      | 1.9     | 94   |
| Stoneville        | 4664 RF   |   | 0.0               | 0                 | 0.3       | 15       | 0.9          | 45       | 4.6       | 228      | 3.7      | 185      | 1.9     | 95   |
| Stoneville        | 4554 B2RF |   | 0.2               | 8                 | 1.2       | 60       | 1.0          | 48       | 3.4       | 170      | 3.9      | 193      | 1.9     | 96   |
| Fibermax          | 960 BR    | ✓ | 0.0               | 0                 | 0.7       | 33       | 1.0          | 48       | 4.8       | 240      | 3.3      | 163      | 1.9     | 97   |
| Delta & Pine Land | 393 RR    |   | 0.2               | 8                 | 0.7       | 33       | 1.0          | 50       | 4.7       | 233      | 3.5      | 173      | 2.0     | 99   |
| Fibermax          | 955 LLB2  |   | 0.0               | 0                 | 1.2       | 58       | 0.9          | 43       | 4.0       | 200      | 4.0      | 198      | 2.0     | 100  |
| Stoneville        | 5599 BR   | ✓ | 0.1               | 5                 | 0.7       | 33       | 1.0          | 48       | 5.1       | 255      | 4.4      | 218      | 2.2     | 112  |
| <b>Mean</b>       |           |   | 0                 | 3                 | 1         | 26       | 1            | 45       | 4         | 188      | 3        | 143      | 2       | 81   |
| <b>LSD (0.05)</b> |           |   | NS                | NS                | NS        | NS       | NS           | NS       | NS        | NS       | 1.2      | 57.0     | NS      | NS   |
| <b>CV (%)</b>     |           |   | 29.5              | 29.5              | 50.3      | 50.3     | 31.4         | 31.4     | 32.0      | 32.0     | 30.5     | 30.5     | 38.2    | 38.2 |

<sup>1</sup>NACB = nodes above highest 1st-position cracked boll to the highest harvestable boll.

<sup>2</sup>DD60 = degree-days, base 60F. DD60 to maturity = NACB x (50 DD60/node) to open the highest harvestable boll. Tennessee Ag. Experiment Station data of Main et al. (2007).

**Table OVT9.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at averaged across five test locations, listed by yield rank.

| Yield Rank        | Company              | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|----------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land    | 444 BG/RR | ✓ | 1054                | 37.4             | 3.8             | 1.07                | 26.5                    | 80.9                | 0.4               | 43             |
| 2                 | Stoneville           | 5599 BR   | ✓ | 1031                | 36.6             | 4.3             | 1.04                | 26.3                    | 79.4                | 0.4               | 43             |
| 3                 | Phytogen             | 370 WR    | ✓ | 1019                | 36.0             | 4.3             | 1.03                | 26.8                    | 80.4                | 0.4               | 43             |
| 4                 | Stoneville           | 5327 B2RF |   | 1015                | 36.0             | 4.2             | 1.07                | 28.7                    | 81.0                | 0.5               | 51             |
| 5                 | Delta & Pine Land    | 432 RR    | ✓ | 993                 | 34.8             | 4.2             | 1.06                | 26.8                    | 80.9                | 0.4               | 43             |
| 6                 | Croplan Genetics     | 3220 B2RF |   | 992                 | 37.5             | 4.2             | 1.08                | 26.2                    | 80.3                | 0.4               | 43             |
| 7                 | Americot             | 1550 B2RF |   | 992                 | 37.8             | 4.1             | 1.04                | 24.8                    | 79.1                | 0.3               | 43             |
| 8                 | Delta & Pine Land    | 161 B2RF  |   | 991                 | 34.9             | 4.2             | 1.13                | 27.2                    | 81.2                | 0.6               | 51             |
| 9                 | Stoneville           | 4596 B2RF |   | 984                 | 35.0             | 4.4             | 1.12                | 28.8                    | 81.1                | 0.5               | 51             |
| 10                | Delta & Pine Land    | 515 BG/RR |   | 979                 | 35.5             | 4.2             | 1.04                | 25.9                    | 79.4                | 0.3               | 43             |
| 11                | Delta & Pine Land    | 167 RF    |   | 978                 | 34.8             | 4.2             | 1.10                | 26.6                    | 80.4                | 0.4               | 43             |
| 12                | Delta & Pine Land    | 455 BG/RR |   | 975                 | 35.9             | 3.9             | 1.06                | 26.7                    | 79.5                | 0.3               | 41             |
| 13                | Phytogen             | 485 WRF   |   | 965                 | 36.3             | 4.3             | 1.08                | 28.0                    | 81.8                | 0.7               | 51             |
| 14                | Delta & Pine Land    | 454 BG/RR |   | 964                 | 38.0             | 3.9             | 1.02                | 26.3                    | 80.0                | 0.7               | 51             |
| 15                | Americot             | 1532 B2RF |   | 964                 | 35.4             | 3.9             | 1.09                | 25.3                    | 79.6                | 0.4               | 43             |
| 16                | Stoneville           | 5458 B2RF |   | 963                 | 35.6             | 4.3             | 1.08                | 26.7                    | 80.0                | 0.6               | 43             |
| 17                | Dyna-Gro             | 2383 B2RF |   | 950                 | 35.2             | 4.0             | 1.07                | 26.8                    | 80.7                | 0.7               | 51             |
| 18                | Stoneville           | 6351 B2RF |   | 949                 | 33.8             | 4.0             | 1.10                | 27.1                    | 79.7                | 0.4               | 43             |
| 19                | Bayer Crop Sci. Exp. | 2171 B2RF |   | 946                 | 35.9             | 4.0             | 1.08                | 26.6                    | 80.4                | 0.5               | 51             |
| 20                | Delta & Pine Land    | 141 B2RF  |   | 945                 | 35.3             | 4.1             | 1.12                | 27.1                    | 79.9                | 0.6               | 43             |
| 21                | Croplan Genetics     | 4020 B2RF |   | 932                 | 35.8             | 4.0             | 1.09                | 24.7                    | 79.7                | 0.4               | 43             |
| 22                | Delta & Pine Land    | 164 B2RF  |   | 931                 | 34.2             | 4.3             | 1.11                | 26.6                    | 80.4                | 0.4               | 43             |
| 23                | Delta & Pine Land    | 174 RF    |   | 928                 | 36.7             | 4.3             | 1.07                | 25.8                    | 79.8                | 0.4               | 42             |
| 24                | Stoneville           | 5283 RF   |   | 926                 | 34.9             | 4.2             | 1.07                | 29.0                    | 81.3                | 0.5               | 51             |
| 25                | Dyna-Gro             | 2520 B2RF |   | 923                 | 35.5             | 3.9             | 1.09                | 25.1                    | 79.9                | 0.4               | 51             |
| 26                | Phytogen             | 425 RF    |   | 906                 | 34.8             | 4.4             | 1.07                | 28.2                    | 81.6                | 0.6               | 51             |
| 27                | Delta & Pine Land    | 555 BG/RR |   | 898                 | 36.2             | 4.3             | 1.03                | 25.6                    | 78.7                | 0.4               | 43             |
| 28                | Phytogen             | 480 WR    |   | 894                 | 35.3             | 4.3             | 1.09                | 28.6                    | 82.0                | 0.6               | 51             |
| 29                | Stoneville           | 4678 B2RF |   | 885                 | 35.1             | 4.3             | 1.10                | 27.6                    | 80.9                | 0.8               | 43             |
| 30                | Delta & Pine Land    | 143 B2RF  |   | 882                 | 35.0             | 3.9             | 1.11                | 26.5                    | 78.9                | 0.6               | 43             |
| 31                | Fibermax             | 960 BR    | ✓ | 840                 | 35.8             | 3.7             | 1.07                | 27.6                    | 79.7                | 0.4               | 42             |
| 32                | Fibermax Exp.        | 4327 B2RF |   | 837                 | 34.8             | 3.9             | 1.09                | 26.7                    | 79.4                | 0.5               | 43             |
| <b>Mean</b>       |                      |           |   | 945                 | 35.6             | 4.1             | 1.08                | 26.8                    | 80.3                | 0.5               | 43             |
| <b>LSD (0.05)</b> |                      |           |   | 84                  | 1.5              | 0.5             | 0.02                | 1.5                     | 1.2                 | 0.2               |                |
| <b>CV (%)</b>     |                      |           |   | 34.3                | 9.7              | 13.5            | 3.3                 | 7.2                     | 1.9                 | 43.5              |                |

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT10.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at Agricenter International, Memphis, TN, listed by yield rank.

| Yield Rank        | Company              | Variety     | Lint Yield lb/ac | Gin turnout % | Micro-naire | Fiber Length in. | Fiber Strength g/tex | Unifor mity % | HVI Trash % | Color Grade |
|-------------------|----------------------|-------------|------------------|---------------|-------------|------------------|----------------------|---------------|-------------|-------------|
| 1                 | Delta & Pine Land    | 454 BG/RR   | 689              | 36.7          | 3.2         | 1.05             | 23.9                 | 79.2          | 0.8         | 42          |
| 2                 | Stoneville           | 5599 BR ✓   | 656              | 35.0          | 3.5         | 1.04             | 24.9                 | 78.6          | 0.5         | 43          |
| 3                 | Delta & Pine Land    | 455 BG/RR   | 648              | 34.7          | 3.4         | 1.05             | 24.9                 | 78.3          | 0.3         | 31          |
| 4                 | Stoneville           | 4596 B2RF   | 646              | 32.6          | 3.7         | 1.11             | 27.9                 | 79.7          | 0.7         | 43          |
| 5                 | Phytogen             | 370 WR ✓    | 594              | 37.4          | 3.4         | 1.01             | 23.7                 | 78.2          | 0.3         | 41          |
| 6                 | Stoneville           | 5283 RF     | 590              | 33.9          | 3.6         | 1.06             | 26.6                 | 79.5          | 0.6         | 43          |
| 7                 | Dyna-Gro             | 2383 B2RF   | 569              | 32.6          | 3.2         | 1.06             | 24.3                 | 78.9          | 0.7         | 43          |
| 8                 | Stoneville           | 5327 B2RF   | 560              | 30.9          | 3.6         | 1.07             | 28.3                 | 80.1          | 0.5         | 43          |
| 9                 | Stoneville           | 5458 B2RF   | 554              | 34.7          | 3.4         | 1.07             | 24.6                 | 79.3          | 0.6         | 43          |
| 10                | Americot             | 1550 B2RF   | 552              | 37.4          | 3.2         | 1.03             | 23.0                 | 77.2          | 0.3         | 31          |
| 11                | Phytogen             | 485 WRF     | 542              | 33.7          | 3.6         | 1.06             | 25.5                 | 79.9          | 0.8         | 43          |
| 12                | Dyna-Gro             | 2520 B2RF   | 535              | 32.9          | 3.2         | 1.09             | 22.9                 | 78.6          | 0.5         | 43          |
| 13                | Delta & Pine Land    | 515 BG/RR   | 511              | 32.9          | 3.2         | 1.03             | 24.5                 | 77.2          | 0.5         | 42          |
| 14                | Delta & Pine Land    | 164 B2RF    | 508              | 32.9          | 3.3         | 1.09             | 26.0                 | 78.2          | 0.6         | 43          |
| 15                | Delta & Pine Land    | 444 BG/RR ✓ | 498              | 34.2          | 3.2         | 1.08             | 25.4                 | 80.0          | 0.3         | 43          |
| 16                | Delta & Pine Land    | 432 RR ✓    | 497              | 33.7          | 3.5         | 1.05             | 25.5                 | 79.1          | 0.4         | 43          |
| 17                | Croplan Genetics     | 4020 B2RF   | 494              | 34.9          | 3.1         | 1.08             | 23.0                 | 77.1          | 0.4         | 41          |
| 18                | Delta & Pine Land    | 141 B2RF    | 492              | 33.9          | 3.3         | 1.09             | 25.3                 | 78.4          | 0.8         | 43          |
| 19                | Stoneville           | 4678 B2RF   | 487              | 32.6          | 3.6         | 1.11             | 26.6                 | 79.5          | 0.9         | 42          |
| 20                | Americot             | 1532 B2RF   | 478              | 35.7          | 3.0         | 1.11             | 23.5                 | 77.8          | 0.6         | 43          |
| 21                | Stoneville           | 6351 B2RF   | 476              | 32.2          | 3.2         | 1.08             | 24.5                 | 77.8          | 0.4         | 43          |
| 22                | Croplan Genetics     | 3220 B2RF   | 473              | 34.9          | 3.3         | 1.08             | 25.5                 | 78.0          | 0.3         | 43          |
| 23                | Bayer Crop Sci. Exp. | 2171 B2RF   | 472              | 32.5          | 3.1         | 1.06             | 25.4                 | 78.3          | 0.4         | 43          |
| 24                | Phytogen             | 425 RF      | 454              | 33.7          | 3.7         | 1.09             | 26.2                 | 80.4          | 0.7         | 43          |
| 25                | Delta & Pine Land    | 167 RF      | 451              | 31.1          | 3.5         | 1.08             | 24.2                 | 79.5          | 0.3         | 43          |
| 26                | Fibermax Exp.        | 4327 B2RF   | 444              | 35.0          | 3.0         | 1.10             | 24.2                 | 77.8          | 0.6         | 43          |
| 27                | Phytogen             | 480 WR      | 439              | 32.9          | 3.6         | 1.08             | 26.5                 | 79.9          | 0.6         | 43          |
| 28                | Fibermax             | 960 BR ✓    | 402              | 34.5          | 2.9         | 1.06             | 25.9                 | 78.9          | 0.3         | 42          |
| 29                | Delta & Pine Land    | 161 B2RF    | 395              | 34.0          | 3.3         | 1.11             | 26.0                 | 79.8          | 0.7         | 43          |
| 30                | Delta & Pine Land    | 555 BG/RR   | 392              | 36.1          | 3.5         | 1.02             | 23.7                 | 77.7          | 0.5         | 42          |
| 31                | Delta & Pine Land    | 143 B2RF    | 368              | 34.7          | 3.2         | 1.11             | 25.6                 | 78.3          | 0.7         | 43          |
| 32                | Delta & Pine Land    | 174 RF      | 347              | 36.4          | 3.6         | 1.05             | 23.2                 | 78.8          | 0.4         | 41          |
| <b>Mean</b>       |                      |             | 501              | 34.0          | 3.3         | 1.07             | 25.1                 | 78.7          | 0.5         | 43          |
| <b>LSD (0.05)</b> |                      |             | 148              |               |             |                  |                      |               |             |             |
| <b>CV (%)</b>     |                      |             | 22.2             |               |             |                  |                      |               |             |             |

Planted 2 May 2007. Harvest aids applied 28 Sept, 2007. Harvested 11 Oct 2007. 100-60-90 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

Conventionally tilled, non-irrigated Falaya silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.



**Table OVT11.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at Ames Plantation, Grand Junction, TN, listed by yield rank.

| Yield Rank        | Company              | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|----------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land    | 432 RR    | ✓ | 952                 | 38.9             | 4.7             | 1.03                | 26.3                    | 80.1                | 0.3               | 43             |
| 2                 | Stoneville           | 5599 BR   | ✓ | 911                 | 40.2             | 4.8             | 1.03                | 25.3                    | 78.1                | 0.3               | 51             |
| 3                 | Phytogen             | 370 WR    | ✓ | 898                 | 42.1             | 4.7             | 1.01                | 27.5                    | 79.7                | 0.3               | 52             |
| 4                 | Stoneville           | 5283 RF   |   | 866                 | 40.6             | 4.5             | 1.06                | 28.7                    | 81.1                | 0.5               | 52             |
| 5                 | Bayer Crop Sci. Exp. | 2171 B2RF |   | 845                 | 38.4             | 4.4             | 1.06                | 25.5                    | 79.3                | 0.4               | 51             |
| 6                 | Stoneville           | 5327 B2RF |   | 829                 | 40.3             | 4.5             | 1.05                | 28.0                    | 80.4                | 0.3               | 52             |
| 7                 | Delta & Pine Land    | 455 BG/RR |   | 824                 | 41.1             | 4.0             | 1.03                | 25.7                    | 78.8                | 0.2               | 51             |
| 8                 | Delta & Pine Land    | 164 B2RF  |   | 799                 | 37.7             | 4.8             | 1.08                | 26.4                    | 79.7                | 0.2               | 43             |
| 9                 | Delta & Pine Land    | 515 BG/RR |   | 797                 | 39.2             | 4.7             | 1.04                | 26.4                    | 79.7                | 0.2               | 51             |
| 10                | Delta & Pine Land    | 174 RF    |   | 796                 | 41.7             | 4.7             | 1.08                | 25.6                    | 79.3                | 0.4               | 43             |
| 11                | Delta & Pine Land    | 454 BG/RR |   | 795                 | 41.0             | 4.1             | 0.99                | 26.2                    | 78.9                | 0.5               | 51             |
| 12                | Dyna-Gro             | 2383 B2RF |   | 783                 | 38.4             | 4.4             | 1.06                | 26.6                    | 81.3                | 0.5               | 52             |
| 13                | Delta & Pine Land    | 444 BG/RR | ✓ | 781                 | 40.5             | 4.0             | 1.04                | 25.7                    | 80.5                | 0.4               | 51             |
| 14                | Phytogen             | 485 WRF   |   | 777                 | 38.4             | 4.7             | 1.05                | 27.4                    | 81.3                | 0.5               | 52             |
| 15                | Delta & Pine Land    | 141 B2RF  |   | 766                 | 38.1             | 4.5             | 1.12                | 26.9                    | 79.3                | 0.5               | 51             |
| 16                | Americot             | 1532 B2RF |   | 762                 | 38.9             | 4.2             | 1.07                | 24.9                    | 79.7                | 0.3               | 52             |
| 17                | Americot             | 1550 B2RF |   | 759                 | 41.4             | 4.5             | 1.02                | 24.5                    | 79.3                | 0.2               | 52             |
| 18                | Stoneville           | 4596 B2RF |   | 758                 | 37.8             | 4.6             | 1.10                | 28.4                    | 80.4                | 0.5               | 51             |
| 19                | Delta & Pine Land    | 555 BG/RR |   | 757                 | 41.8             | 4.6             | 1.02                | 25.9                    | 78.3                | 0.2               | 51             |
| 20                | Delta & Pine Land    | 167 RF    |   | 755                 | 37.5             | 4.4             | 1.08                | 25.5                    | 79.6                | 0.2               | 51             |
| 21                | Stoneville           | 6351 B2RF |   | 749                 | 35.6             | 4.2             | 1.09                | 27.8                    | 78.9                | 0.3               | 52             |
| 22                | Phytogen             | 425 RF    |   | 744                 | 37.8             | 4.8             | 1.05                | 28.8                    | 81.2                | 0.6               | 52             |
| 23                | Delta & Pine Land    | 161 B2RF  |   | 730                 | 38.0             | 4.5             | 1.11                | 26.8                    | 80.8                | 0.5               | 51             |
| 24                | Stoneville           | 4678 B2RF |   | 727                 | 37.1             | 4.3             | 1.09                | 27.6                    | 80.7                | 0.8               | 51             |
| 25                | Stoneville           | 5458 B2RF |   | 711                 | 39.7             | 4.6             | 1.05                | 26.0                    | 79.1                | 0.7               | 52             |
| 26                | Phytogen             | 480 WR    |   | 704                 | 36.7             | 4.6             | 1.09                | 28.9                    | 81.8                | 0.5               | 51             |
| 27                | Delta & Pine Land    | 143 B2RF  |   | 683                 | 38.6             | 4.1             | 1.10                | 26.8                    | 78.5                | 0.4               | 51             |
| 28                | Dyna-Gro             | 2520 B2RF |   | 676                 | 38.2             | 4.2             | 1.06                | 24.5                    | 79.1                | 0.3               | 52             |
| 29                | Fibermax Exp.        | 4327 B2RF |   | 660                 | 38.2             | 4.3             | 1.07                | 27.1                    | 78.5                | 0.4               | 42             |
| 30                | Croplan Genetics     | 4020 B2RF |   | 654                 | 38.2             | 4.2             | 1.09                | 24.5                    | 79.2                | 0.4               | 52             |
| 31                | Croplan Genetics     | 3220 B2RF |   | 631                 | 40.4             | 4.4             | 1.05                | 26.4                    | 79.3                | 0.3               | 52             |
| 32                | Fibermax             | 960 BR    | ✓ | 630                 | 35.9             | 4.2             | 1.04                | 27.2                    | 78.7                | 0.3               | 43             |
| <b>Mean</b>       |                      |           |   | 766                 | 39.0             | 4.4             | 1.06                | 26.5                    | 79.7                | 0.4               | 43             |
| <b>LSD (0.05)</b> |                      |           |   | 148                 |                  |                 |                     |                         |                     |                   |                |
| <b>CV (%)</b>     |                      |           |   | 22.1                |                  |                 |                     |                         |                     |                   |                |

Planted 9 May 2007. Harvest aids applied 12 Oct, 2007. Harvested 1 Nov 2007. 80-30-100 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

No-tilled, non-irrigated Memphis silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT12.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at Fullen Farms, Ashport, TN, listed by yield rank.

| Yield Rank        | Company              | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|----------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land    | 444 BG/RR | ✓ | 1394                | 36.4             | 3.5             | 1.09                | 26.0                    | 80.5                | 0.5               | 52             |
| 2                 | Fibermax Exp.        | 4327 B2RF |   | 1352                | 32.6             | 3.7             | 1.13                | 26.7                    | 80.2                | 0.6               | 52             |
| 3                 | Phytogen             | 425 RF    |   | 1333                | 33.5             | 4.1             | 1.10                | 27.7                    | 81.8                | 0.8               | 52             |
| 4                 | Delta & Pine Land    | 174 RF    |   | 1310                | 35.7             | 4.1             | 1.10                | 25.4                    | 80.4                | 0.6               | 51             |
| 5                 | Delta & Pine Land    | 455 BG/RR |   | 1299                | 36.8             | 3.6             | 1.11                | 27.5                    | 80.1                | 0.3               | 42             |
| 6                 | Stoneville           | 5599 BR   | ✓ | 1299                | 33.9             | 3.8             | 1.08                | 25.5                    | 79.5                | 0.4               | 52             |
| 7                 | Stoneville           | 5458 B2RF |   | 1286                | 34.9             | 3.9             | 1.12                | 26.8                    | 79.9                | 0.7               | 52             |
| 8                 | Delta & Pine Land    | 164 B2RF  |   | 1278                | 34.6             | 4.0             | 1.16                | 26.0                    | 81.1                | 0.6               | 52             |
| 9                 | Dyna-Gro             | 2383 B2RF |   | 1266                | 33.0             | 3.7             | 1.09                | 26.6                    | 80.4                | 1.0               | 52             |
| 10                | Americot             | 1550 B2RF |   | 1257                | 33.9             | 3.8             | 1.05                | 25.5                    | 78.5                | 0.5               | 52             |
| 11                | Croplan Genetics     | 3220 B2RF |   | 1255                | 35.2             | 3.8             | 1.12                | 25.7                    | 80.6                | 0.5               | 51             |
| 12                | Phytogen             | 370 WR    | ✓ | 1227                | 34.3             | 4.0             | 1.06                | 25.6                    | 80.6                | 0.4               | 51             |
| 13                | Delta & Pine Land    | 141 B2RF  |   | 1214                | 34.6             | 3.9             | 1.14                | 26.9                    | 79.8                | 1.1               | 52             |
| 14                | Bayer Crop Sci. Exp. | 2171 B2RF |   | 1193                | 33.8             | 3.8             | 1.13                | 25.6                    | 82.3                | 0.4               | 52             |
| 15                | Croplan Genetics     | 4020 B2RF |   | 1185                | 34.4             | 3.7             | 1.11                | 23.7                    | 79.1                | 0.4               | 52             |
| 16                | Delta & Pine Land    | 161 B2RF  |   | 1183                | 33.2             | 4.1             | 1.16                | 26.3                    | 81.2                | 0.8               | 52             |
| 17                | Delta & Pine Land    | 432 RR    | ✓ | 1178                | 32.2             | 3.8             | 1.10                | 26.5                    | 80.5                | 0.6               | 52             |
| 18                | Delta & Pine Land    | 454 BG/RR |   | 1171                | 33.4             | 3.5             | 1.06                | 25.6                    | 79.6                | 0.9               | 51             |
| 19                | Delta & Pine Land    | 555 BG/RR |   | 1157                | 33.7             | 4.2             | 1.08                | 24.8                    | 78.6                | 0.4               | 43             |
| 20                | Stoneville           | 5283 RF   |   | 1157                | 34.6             | 3.9             | 1.11                | 28.7                    | 81.6                | 0.5               | 52             |
| 21                | Dyna-Gro             | 2520 B2RF |   | 1140                | 32.9             | 3.5             | 1.13                | 24.0                    | 80.5                | 0.6               | 52             |
| 22                | Delta & Pine Land    | 143 B2RF  |   | 1123                | 30.6             | 3.5             | 1.14                | 26.0                    | 78.3                | 0.8               | 52             |
| 23                | Stoneville           | 4596 B2RF |   | 1122                | 30.5             | 4.2             | 1.13                | 28.2                    | 81.0                | 0.6               | 52             |
| 24                | Fibermax             | 960 BR    | ✓ | 1103                | 34.1             | 3.3             | 1.11                | 26.7                    | 79.7                | 0.5               | 41             |
| 25                | Stoneville           | 6351 B2RF |   | 1102                | 30.4             | 3.7             | 1.12                | 26.2                    | 80.0                | 0.4               | 52             |
| 26                | Delta & Pine Land    | 167 RF    |   | 1099                | 32.6             | 3.7             | 1.16                | 26.3                    | 81.4                | 0.7               | 52             |
| 27                | Stoneville           | 4678 B2RF |   | 1083                | 32.8             | 4.1             | 1.12                | 26.7                    | 80.4                | 0.7               | 51             |
| 28                | Americot             | 1532 B2RF |   | 1082                | 30.4             | 3.6             | 1.12                | 25.9                    | 79.8                | 0.4               | 42             |
| 29                | Phytogen             | 485 WRF   |   | 1082                | 31.9             | 4.1             | 1.12                | 28.3                    | 82.7                | 0.6               | 52             |
| 30                | Stoneville           | 5327 B2RF |   | 1075                | 32.9             | 3.9             | 1.10                | 28.3                    | 80.9                | 0.5               | 52             |
| 31                | Phytogen             | 480 WR    |   | 1070                | 32.8             | 4.0             | 1.13                | 27.9                    | 82.7                | 0.8               | 52             |
| 32                | Delta & Pine Land    | 515 BG/RR |   | 1013                | 33.4             | 3.9             | 1.09                | 25.4                    | 80.2                | 0.4               | 51             |
| <b>Mean</b>       |                      |           |   | 1190                | 33.4             | 3.8             | 1.11                | 26.3                    | 80.4                | 0.6               | 43             |
| <b>LSD (0.05)</b> |                      |           |   | 148                 |                  |                 |                     |                         |                     |                   |                |
| <b>CV (%)</b>     |                      |           |   | 13.2                |                  |                 |                     |                         |                     |                   |                |

Planted 7 May 2007. Harvest aids applied 30 Sept, 2007. Harvested 17 Oct 2007. 133-0-54 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

Conventionally tilled, non-irrigated Commerce silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT13.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at the Research and Education Center at Milan, Milan, TN, listed by yield rank.

| Yield Rank        | Company              | Variety     | Lint Yield lb/ac | Gin turnout % | Micro-naire | Fiber Length in. | Fiber Strength g/tex | Unifor mity % | HVI Trash % | Color Grade |
|-------------------|----------------------|-------------|------------------|---------------|-------------|------------------|----------------------|---------------|-------------|-------------|
| 1                 | Delta & Pine Land    | 161 B2RF    | 1499             | 38.5          | 5.0         | 1.12             | 28.4                 | 81.9          | 0.5         | 43          |
| 2                 | Stoneville           | 5599 BR ✓   | 1475             | 41.0          | 4.9         | 1.04             | 28.8                 | 80.2          | 0.4         | 41          |
| 3                 | Americot             | 1550 B2RF   | 1431             | 41.3          | 4.8         | 1.04             | 25.6                 | 80.4          | 0.2         | 43          |
| 4                 | Phytogen             | 370 WR ✓    | 1403             | 36.2          | 5.0         | 1.04             | 30.1                 | 82.0          | 0.5         | 43          |
| 5                 | Delta & Pine Land    | 432 RR ✓    | 1382             | 35.9          | 4.8         | 1.08             | 28.9                 | 83.1          | 0.4         | 43          |
| 6                 | Delta & Pine Land    | 444 BG/RR ✓ | 1369             | 39.7          | 4.2         | 1.08             | 28.1                 | 82.2          | 0.4         | 41          |
| 7                 | Delta & Pine Land    | 141 B2RF    | 1362             | 39.6          | 4.7         | 1.14             | 29.6                 | 81.9          | 0.3         | 41          |
| 8                 | Stoneville           | 5327 B2RF   | 1345             | 39.4          | 5.0         | 1.06             | 31.2                 | 82.2          | 0.5         | 51          |
| 9                 | Delta & Pine Land    | 515 BG/RR   | 1345             | 38.3          | 4.9         | 1.04             | 27.5                 | 80.3          | 0.3         | 41          |
| 10                | Stoneville           | 5458 B2RF   | 1338             | 35.5          | 5.0         | 1.08             | 29.1                 | 81.1          | 0.6         | 41          |
| 11                | Bayer Crop Sci. Exp. | 2171 B2RF   | 1338             | 37.3          | 4.9         | 1.06             | 28.9                 | 81.4          | 0.8         | 43          |
| 12                | Croplan Genetics     | 3220 B2RF   | 1284             | 38.1          | 5.0         | 1.08             | 26.5                 | 82.1          | 0.3         | 41          |
| 13                | Delta & Pine Land    | 164 B2RF    | 1246             | 36.2          | 5.0         | 1.10             | 28.0                 | 81.1          | 0.4         | 43          |
| 14                | Delta & Pine Land    | 455 BG/RR   | 1238             | 34.2          | 4.6         | 1.08             | 28.3                 | 81.4          | 0.5         | 41          |
| 15                | Stoneville           | 4596 B2RF   | 1234             | 35.0          | 5.0         | 1.12             | 29.8                 | 82.8          | 0.5         | 43          |
| 16                | Delta & Pine Land    | 167 RF      | 1216             | 35.2          | 4.9         | 1.11             | 29.8                 | 81.4          | 0.3         | 41          |
| 17                | Stoneville           | 5283 RF     | 1212             | 36.1          | 4.9         | 1.07             | 31.9                 | 82.1          | 0.3         | 43          |
| 18                | Phytogen             | 485 WRF     | 1211             | 37.5          | 4.9         | 1.08             | 30.0                 | 82.5          | 0.8         | 51          |
| 19                | Delta & Pine Land    | 454 BG/RR   | 1206             | 38.2          | 4.5         | 1.01             | 28.5                 | 81.3          | 0.9         | 51          |
| 20                | Phytogen             | 425 RF      | 1193             | 34.4          | 5.1         | 1.07             | 29.9                 | 83.2          | 0.7         | 51          |
| 21                | Delta & Pine Land    | 143 B2RF    | 1189             | 36.0          | 4.7         | 1.12             | 28.2                 | 80.4          | 0.7         | 41          |
| 22                | Stoneville           | 6351 B2RF   | 1181             | 34.1          | 4.6         | 1.11             | 29.6                 | 81.2          | 0.3         | 41          |
| 23                | Stoneville           | 4678 B2RF   | 1180             | 33.5          | 4.7         | 1.09             | 29.2                 | 81.8          | 0.7         | 43          |
| 24                | Americot             | 1532 B2RF   | 1177             | 35.2          | 4.8         | 1.08             | 26.1                 | 81.1          | 0.4         | 41          |
| 25                | Croplan Genetics     | 4020 B2RF   | 1168             | 36.0          | 4.7         | 1.09             | 26.7                 | 81.6          | 0.3         | 41          |
| 26                | Dyna-Gro             | 2520 B2RF   | 1157             | 37.7          | 4.7         | 1.10             | 28.5                 | 81.7          | 0.2         | 51          |
| 27                | Dyna-Gro             | 2383 B2RF   | 1119             | 34.0          | 4.7         | 1.07             | 29.5                 | 81.7          | 0.8         | 51          |
| 28                | Delta & Pine Land    | 555 BG/RR   | 1095             | 37.5          | 5.0         | 1.02             | 27.3                 | 80.0          | 0.4         | 41          |
| 29                | Fibermax             | 960 BR ✓    | 1092             | 37.0          | 4.3         | 1.07             | 30.4                 | 80.8          | 0.4         | 43          |
| 30                | Phytogen             | 480 WR      | 1062             | 35.1          | 4.9         | 1.06             | 30.5                 | 82.5          | 0.5         | 51          |
| 31                | Delta & Pine Land    | 174 RF      | 1027             | 35.2          | 4.9         | 1.08             | 28.4                 | 80.2          | 0.5         | 41          |
| 32                | Fibermax Exp.        | 4327 B2RF   | 1026             | 34.8          | 4.4         | 1.11             | 29.5                 | 81.3          | 0.5         | 43          |
| <b>Mean</b>       |                      |             | 1244             | 36.7          | 4.8         | 1.08             | 28.8                 | 81.5          | 0.5         | 43          |
| <b>LSD (0.05)</b> |                      |             | 148              |               |             |                  |                      |               |             |             |
| <b>CV (%)</b>     |                      |             | 12.2             |               |             |                  |                      |               |             |             |

Planted 14 May 2007. Harvest aids applied 14 Oct, 2007. Harvested 30 Oct 2007. 110-45-90 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

No-tilled, irrigated Loring silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT14.** Lint yield, gin turnout, and fiber quality of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at the West TN Research and Education Center, Jackson, TN, listed by yield rank.

| Yield Rank        | Company              | Variety   |   | Lint Yield<br>lb/ac | Gin turnout<br>% | Micro-<br>naire | Fiber Length<br>in. | Fiber Strength<br>g/tex | Unifor<br>mity<br>% | HVI<br>Trash<br>% | Color<br>Grade |
|-------------------|----------------------|-----------|---|---------------------|------------------|-----------------|---------------------|-------------------------|---------------------|-------------------|----------------|
| 1                 | Delta & Pine Land    | 444 BG/RR | ✓ | 1275                | 40.9             | 4.0             | 1.07                | 27.2                    | 81.4                | 0.5               | 42             |
| 2                 | Delta & Pine Land    | 174 RF    |   | 1272                | 43.7             | 4.3             | 1.07                | 26.4                    | 80.5                | 0.2               | 41             |
| 3                 | Phytogen             | 370 WR    | ✓ | 1264                | 41.2             | 4.5             | 1.05                | 27.1                    | 81.7                | 0.5               | 43             |
| 4                 | Americot             | 1550 B2RF |   | 1223                | 42.5             | 4.5             | 1.05                | 25.7                    | 80.3                | 0.3               | 43             |
| 5                 | Americot             | 1532 B2RF |   | 1198                | 38.6             | 4.1             | 1.10                | 26.2                    | 79.9                | 0.4               | 42             |
| 6                 | Stoneville           | 5327 B2RF |   | 1179                | 40.4             | 4.2             | 1.09                | 28.0                    | 81.6                | 0.5               | 43             |
| 7                 | Stoneville           | 5283 RF   |   | 1179                | 40.0             | 4.2             | 1.08                | 29.1                    | 82.2                | 0.6               | 43             |
| 8                 | Delta & Pine Land    | 164 B2RF  |   | 1163                | 38.8             | 4.3             | 1.12                | 26.9                    | 82.0                | 0.4               | 42             |
| 9                 | Phytogen             | 485 WRF   |   | 1161                | 38.9             | 4.4             | 1.08                | 29.1                    | 82.5                | 0.9               | 43             |
| 10                | Dyna-Gro             | 2383 B2RF |   | 1153                | 37.3             | 4.2             | 1.06                | 26.9                    | 81.2                | 0.6               | 42             |
| 11                | Stoneville           | 5458 B2RF |   | 1149                | 41.5             | 4.5             | 1.08                | 27.1                    | 80.7                | 0.5               | 43             |
| 12                | Delta & Pine Land    | 555 BG/RR |   | 1127                | 40.8             | 4.2             | 1.03                | 26.3                    | 79.2                | 0.3               | 42             |
| 13                | Delta & Pine Land    | 167 RF    |   | 1111                | 39.2             | 4.3             | 1.09                | 27.0                    | 80.3                | 0.4               | 42             |
| 14                | Delta & Pine Land    | 432 RR    | ✓ | 1105                | 39.7             | 4.4             | 1.06                | 26.9                    | 81.7                | 0.5               | 43             |
| 15                | Delta & Pine Land    | 515 BG/RR |   | 1102                | 41.2             | 4.4             | 1.03                | 25.9                    | 79.8                | 0.4               | 42             |
| 16                | Delta & Pine Land    | 454 BG/RR |   | 1099                | 42.0             | 4.1             | 1.02                | 27.2                    | 81.0                | 0.6               | 42             |
| 17                | Stoneville           | 4596 B2RF |   | 1098                | 37.7             | 4.5             | 1.13                | 29.9                    | 81.9                | 0.4               | 43             |
| 18                | Bayer Crop Sci. Exp. | 2171 B2RF |   | 1093                | 38.3             | 4.1             | 1.08                | 27.9                    | 81.0                | 0.6               | 42             |
| 19                | Stoneville           | 5599 BR   | ✓ | 1093                | 40.9             | 4.6             | 1.03                | 27.3                    | 80.8                | 0.4               | 41             |
| 20                | Croplan Genetics     | 4020 B2RF |   | 1092                | 39.7             | 4.2             | 1.11                | 25.8                    | 81.5                | 0.4               | 42             |
| 21                | Stoneville           | 6351 B2RF |   | 1089                | 38.0             | 4.3             | 1.10                | 27.7                    | 80.8                | 0.4               | 42             |
| 22                | Phytogen             | 480 WR    |   | 1087                | 42.4             | 4.4             | 1.09                | 29.4                    | 83.3                | 0.6               | 43             |
| 23                | Croplan Genetics     | 3220 B2RF |   | 1082                | 39.8             | 4.4             | 1.10                | 26.9                    | 81.6                | 0.3               | 41             |
| 24                | Delta & Pine Land    | 161 B2RF  |   | 1077                | 38.1             | 4.3             | 1.16                | 28.4                    | 82.5                | 0.5               | 42             |
| 25                | Phytogen             | 425 RF    |   | 1070                | 37.7             | 4.6             | 1.07                | 28.6                    | 81.7                | 0.5               | 43             |
| 26                | Delta & Pine Land    | 455 BG/RR |   | 1065                | 40.4             | 4.1             | 1.05                | 27.4                    | 79.2                | 0.3               | 31             |
| 27                | Stoneville           | 4678 B2RF |   | 1053                | 37.2             | 4.5             | 1.09                | 28.0                    | 82.2                | 0.8               | 42             |
| 28                | Dyna-Gro             | 2520 B2RF |   | 1050                | 39.1             | 4.1             | 1.08                | 25.6                    | 79.5                | 0.3               | 42             |
| 29                | Delta & Pine Land    | 143 B2RF  |   | 1017                | 37.9             | 4.0             | 1.10                | 25.9                    | 79.1                | 0.4               | 42             |
| 30                | Fibermax             | 960 BR    | ✓ | 1008                | 39.3             | 3.8             | 1.08                | 28.1                    | 80.3                | 0.5               | 31             |
| 31                | Fibermax Exp.        | 4327 B2RF |   | 1008                | 39.4             | 4.1             | 1.08                | 26.2                    | 79.3                | 0.4               | 42             |
| 32                | Delta & Pine Land    | 141 B2RF  |   | 963                 | 37.9             | 4.0             | 1.12                | 27.0                    | 80.0                | 0.5               | 42             |
| <b>Mean</b>       |                      |           |   | 1116                | 39.7             | 4.3             | 1.08                | 27.3                    | 80.9                | 0.5               | 41             |
| <b>LSD (0.05)</b> |                      |           |   | 148                 |                  |                 |                     |                         |                     |                   |                |
| <b>CV (%)</b>     |                      |           |   | 10.7                |                  |                 |                     |                         |                     |                   |                |

Planted 30 April 2007. Harvest aids applied 6 Sept, 2007. Harvested 24 Sept 2007. 80-45-90 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O.

No-tilled, irrigated Lexington silt loam.

Tennessee Ag. Experiment Station data of Main et al. (2007). HVI data furnished by ITC, Lubbock, TX.

**Table OVT15.** Final plant height of 32 entries in the 2007 Tennessee Official Variety Trial 'B' at five locations, listed by average plant height.

| Company              | Variety   |   | Agricenter | Ames Pln. | Fullen Farms | Milan REC | WTREC | Average |
|----------------------|-----------|---|------------|-----------|--------------|-----------|-------|---------|
|                      |           |   | inch       | inch      | inch         | inch      | inch  | inch    |
| Fibermax             | 960 BR    | ✓ | 31         | 33        | 33           | 33        | 29    | 33      |
| Fibermax Exp.        | 4327 B2RF |   | 31         | 31        | 29           | 31        | 29    | 33      |
| Croplan Genetics     | 4020 B2RF |   | 37         | 36        | 33           | 37        | 32    | 35      |
| Dyna-Gro             | 2520 B2RF |   | 35         | 37        | 34           | 36        | 34    | 35      |
| Stoneville           | 6351 B2RF |   | 38         | 34        | 32           | 36        | 31    | 35      |
| Americot             | 1550 B2RF |   | 37         | 33        | 34           | 37        | 33    | 36      |
| Stoneville           | 4678 B2RF |   | 35         | 36        | 33           | 37        | 34    | 36      |
| Americot             | 1532 B2RF |   | 36         | 35        | 34           | 37        | 33    | 36      |
| Stoneville           | 4596 B2RF |   | 37         | 35        | 33           | 37        | 33    | 36      |
| Stoneville           | 5458 B2RF |   | 38         | 34        | 35           | 37        | 32    | 36      |
| Croplan Genetics     | 3220 B2RF |   | 38         | 35        | 35           | 39        | 34    | 36      |
| Delta & Pine Land    | 174 RF    |   | 39         | 37        | 35           | 38        | 35    | 37      |
| Delta & Pine Land    | 141 B2RF  |   | 40         | 38        | 36           | 40        | 34    | 37      |
| Bayer Crop Sci. Exp. | 2171 B2RF |   | 40         | 37        | 35           | 39        | 34    | 37      |
| Phytogen             | 480 WR    |   | 36         | 39        | 37           | 39        | 36    | 37      |
| Stoneville           | 5327 B2RF |   | 40         | 38        | 36           | 40        | 33    | 37      |
| Delta & Pine Land    | 432 RR    | ✓ | 40         | 37        | 33           | 38        | 33    | 37      |
| Delta & Pine Land    | 164 B2RF  |   | 41         | 38        | 37           | 39        | 35    | 37      |
| Phytogen             | 370 WR    | ✓ | 42         | 40        | 37           | 41        | 36    | 38      |
| Phytogen             | 485 WRF   |   | 42         | 39        | 37           | 40        | 35    | 38      |
| Delta & Pine Land    | 161 B2RF  |   | 40         | 39        | 37           | 41        | 36    | 38      |
| Delta & Pine Land    | 555 BG/RR |   | 42         | 37        | 37           | 40        | 36    | 38      |
| Delta & Pine Land    | 143 B2RF  |   | 40         | 36        | 37           | 40        | 34    | 38      |
| Phytogen             | 425 RF    |   | 43         | 39        | 37           | 41        | 37    | 38      |
| Delta & Pine Land    | 455 BG/RR |   | 40         | 36        | 37           | 40        | 37    | 38      |
| Dyna-Gro             | 2383 B2RF |   | 42         | 37        | 35           | 40        | 35    | 38      |
| Delta & Pine Land    | 515 BG/RR |   | 43         | 38        | 37           | 40        | 37    | 38      |
| Delta & Pine Land    | 444 BG/RR | ✓ | 41         | 38        | 39           | 42        | 38    | 38      |
| Stoneville           | 5283 RF   |   | 43         | 39        | 36           | 40        | 35    | 38      |
| Delta & Pine Land    | 167 RF    |   | 42         | 40        | 38           | 41        | 36    | 39      |
| Stoneville           | 5599 BR   | ✓ | 44         | 38        | 39           | 40        | 36    | 39      |
| Delta & Pine Land    | 454 BG/RR |   | 44         | 39        | 39           | 43        | 36    | 39      |
| <b>Mean</b>          |           |   | 39         | 37        | 35           | 39        | 34    | 37      |
| <b>LSD (0.05)</b>    |           |   | 3.5        | 2.6       | 3.2          | 2.6       | 2.6   | 2.1     |
| <b>CV (%)</b>        |           |   | 6.5        | 5.1       | 6.4          | 4.7       | 5.4   | 5.9     |

Tennessee Ag. Experiment Station data of Main et al. (2007).

**Table OVT16.** Nodes above cracked boll (NACB) on dates indicated, and estimated DD60's remaining to maturity of 32 entries in the 2007 Tennessee Official Variety Trial 'B', listed in order of average maturity.

| Company              | Variety   |   | Agricenter<br>09/18/07 |                   | Ames Pln.<br>09/18/07 |      | Fullen Farms<br>09/07/07 |      | Milan REC<br>09/20/07 |      | WTREC<br>08/30/07 |      | Average |      |
|----------------------|-----------|---|------------------------|-------------------|-----------------------|------|--------------------------|------|-----------------------|------|-------------------|------|---------|------|
|                      |           |   | NACB <sup>1</sup>      | DD60 <sup>2</sup> | NACB                  | DD60 | NACB                     | DD60 | NACB                  | DD60 | NACB              | DD60 | NACB    | DD60 |
| Fibermax Exp.        | 4327 B2RF |   | 0.0                    | 0                 | 0.2                   | 8    | 0.3                      | 15   | 2.0                   | 98   | 1.1               | 53   | 0.9     | 45   |
| Delta & Pine Land    | 444 BG/RR | ✓ | 0.0                    | 0                 | 0.5                   | 23   | 0.3                      | 15   | 1.9                   | 93   | 1.5               | 75   | 1.0     | 48   |
| Dyna-Gro             | 2383 B2RF |   | 0.0                    | 0                 | 1.4                   | 68   | 0.3                      | 15   | 2.1                   | 105  | 1.5               | 73   | 1.0     | 52   |
| Americot             | 1532 B2RF |   | 0.2                    | 8                 | 0.3                   | 15   | 0.3                      | 15   | 2.1                   | 103  | 2.0               | 100  | 1.1     | 55   |
| Delta & Pine Land    | 432 RR    | ✓ | 0.1                    | 5                 | 0.9                   | 43   | 0.4                      | 20   | 2.1                   | 105  | 0.7               | 35   | 1.1     | 57   |
| Phytogen             | 485 WRF   |   | 0.0                    | 0                 | 1.0                   | 50   | 0.6                      | 28   | 2.0                   | 98   | 2.3               | 115  | 1.2     | 60   |
| Delta & Pine Land    | 454 BG/RR |   | 0.0                    | 0                 | 0.7                   | 35   | 0.3                      | 13   | 3.5                   | 175  | 0.6               | 28   | 1.2     | 62   |
| Fibermax             | 960 BR    | ✓ | 0.0                    | 0                 | 1.2                   | 58   | 1.4                      | 68   | 2.4                   | 120  | 2.2               | 110  | 1.3     | 63   |
| Croplan Genetics     | 4020 B2RF |   | 0.0                    | 0                 | 0.4                   | 18   | 0.6                      | 30   | 2.4                   | 120  | 1.8               | 90   | 1.3     | 63   |
| Dyna-Gro             | 2520 B2RF |   | 0.0                    | 0                 | 0.6                   | 30   | 0.4                      | 20   | 2.3                   | 113  | 2.5               | 125  | 1.3     | 64   |
| Phytogen             | 480 WR    |   | 0.2                    | 10                | 1.3                   | 63   | 0.9                      | 43   | 2.5                   | 123  | 2.1               | 105  | 1.3     | 65   |
| Phytogen             | 370 WR    | ✓ | 0.0                    | 0                 | 1.0                   | 50   | 0.6                      | 28   | 2.7                   | 133  | 1.9               | 93   | 1.3     | 65   |
| Croplan Genetics     | 3220 B2RF |   | 0.1                    | 3                 | 0.7                   | 35   | 1.5                      | 73   | 3.2                   | 160  | 1.7               | 85   | 1.3     | 66   |
| Delta & Pine Land    | 515 BG/RR |   | 0.2                    | 8                 | 1.3                   | 65   | 0.2                      | 10   | 3.4                   | 170  | 1.7               | 85   | 1.3     | 66   |
| Phytogen             | 425 RF    |   | 0.0                    | 0                 | 0.8                   | 38   | 0.4                      | 18   | 2.6                   | 130  | 1.8               | 90   | 1.4     | 68   |
| Stoneville           | 4678 B2RF |   | 0.0                    | 0                 | 1.0                   | 48   | 1.4                      | 68   | 3.5                   | 173  | 2.3               | 113  | 1.4     | 68   |
| Delta & Pine Land    | 164 B2RF  |   | 0.2                    | 10                | 1.7                   | 83   | 1.1                      | 55   | 3.3                   | 165  | 2.6               | 128  | 1.4     | 69   |
| Americot             | 1550 B2RF |   | 0.0                    | 0                 | 1.1                   | 53   | 0.8                      | 40   | 2.5                   | 125  | 2.0               | 98   | 1.4     | 70   |
| Stoneville           | 5283 RF   |   | 0.2                    | 10                | 1.7                   | 83   | 0.7                      | 35   | 2.6                   | 130  | 2.5               | 125  | 1.4     | 71   |
| Delta & Pine Land    | 455 BG/RR |   | 0.1                    | 5                 | 0.4                   | 18   | 1.0                      | 48   | 3.2                   | 158  | 2.0               | 100  | 1.4     | 71   |
| Stoneville           | 5327 B2RF |   | 0.0                    | 0                 | 0.6                   | 30   | 1.0                      | 48   | 3.4                   | 170  | 2.5               | 123  | 1.5     | 73   |
| Delta & Pine Land    | 143 B2RF  |   | 0.1                    | 5                 | 0.9                   | 45   | 1.0                      | 48   | 3.4                   | 170  | 2.0               | 100  | 1.5     | 73   |
| Stoneville           | 6351 B2RF |   | 0.0                    | 0                 | 0.5                   | 25   | 1.1                      | 53   | 3.2                   | 158  | 2.4               | 118  | 1.6     | 78   |
| Delta & Pine Land    | 167 RF    |   | 0.1                    | 3                 | 1.4                   | 70   | 1.1                      | 55   | 4.6                   | 228  | 1.8               | 88   | 1.6     | 80   |
| Delta & Pine Land    | 141 B2RF  |   | 0.0                    | 0                 | 1.0                   | 50   | 1.6                      | 80   | 4.9                   | 243  | 2.6               | 128  | 1.6     | 81   |
| Bayer Crop Sci. Exp. | 2171 B2RF |   | 0.0                    | 0                 | 1.2                   | 58   | 0.2                      | 10   | 3.5                   | 175  | 2.9               | 145  | 1.7     | 83   |
| Stoneville           | 4596 B2RF |   | 0.4                    | 18                | 1.3                   | 63   | 1.1                      | 53   | 3.6                   | 180  | 1.9               | 93   | 1.7     | 84   |
| Stoneville           | 5599 BR   | ✓ | 0.1                    | 5                 | 1.4                   | 68   | 1.7                      | 83   | 4.3                   | 215  | 2.6               | 130  | 1.7     | 87   |
| Delta & Pine Land    | 174 RF    |   | 0.2                    | 8                 | 0.9                   | 45   | 0.5                      | 25   | 3.5                   | 175  | 2.7               | 135  | 1.7     | 87   |
| Stoneville           | 5458 B2RF |   | 0.1                    | 5                 | 0.6                   | 28   | 1.3                      | 63   | 3.8                   | 190  | 2.7               | 135  | 1.8     | 90   |
| Delta & Pine Land    | 555 BG/RR |   | 0.1                    | 5                 | 1.4                   | 68   | 1.8                      | 88   | 4.5                   | 225  | 3.1               | 153  | 1.8     | 90   |
| Delta & Pine Land    | 161 B2RF  |   | 0.0                    | 0                 | 1.4                   | 68   | 1.6                      | 80   | 4.5                   | 225  | 2.8               | 140  | 1.8     | 92   |
| <b>Mean</b>          |           |   | 0                      | 3                 | 1                     | 47   | 1                        | 42   | 3                     | 155  | 2                 | 103  | 1       | 70   |
| <b>LSD (0.05)</b>    |           |   | NS                     | NS                | NS                    | NS   | 1.0                      | 41.7 | 1.4                   | 68.0 | NS                | NS   | NS      | NS   |
| <b>CV (%)</b>        |           |   | 27.8                   | 27.8              | 71.9                  | 71.9 | 71.4                     | 71.4 | 31.6                  | 31.6 | 53.7              | 53.7 | 38.2    | 38.2 |

<sup>1</sup>NACB = nodes above highest 1st-position cracked boll to the highest harvestable boll.

<sup>2</sup>DD60 = degree-days, base 60F. DD60 to maturity = NACB x (50 DD60/node) to open the highest harvestable boll. Tennessee Ag. Experiment Station data of Main et al. (2007).

**Table OVT17.** Average node of first fruiting branch of 32 entries in the 2007 Tennessee Official Variety Trial 'A and B' at the West TN Research and Education Center, Jackson, TN, listed by yield rank.

| Company           | Variety     | WTREC | Company             | Variety     | WTREC |
|-------------------|-------------|-------|---------------------|-------------|-------|
| Node No.          |             |       | Node No.            |             |       |
| Stoneville        | 4554 B2RF   | 4.7   | Croplan Genetics    | 4020 B2RF   | 5.0   |
| Croplan Genetics  | 3020 B2RF   | 5.0   | Stoneville          | 5283 RF     | 5.1   |
| Delta & Pine Land | 445 BG/RR   | 5.0   | Stoneville          | 6351 B2RF   | 5.3   |
| Stoneville        | 4498 B2RF   | 5.0   | Delta & Pine Land   | 444 BG/RR ✓ | 5.3   |
| Dyna-Gro          | 2490 B2RF   | 5.1   | Americot            | 1550 B2RF   | 5.4   |
| Delta & Pine Land | 393 RR      | 5.1   | Croplan Genetics    | 3220 B2RF   | 5.4   |
| Delta & Pine Land | 434 RR      | 5.1   | Dyna-Gro            | 2520 B2RF   | 5.4   |
| Dyna-Gro          | 2100 B2RF   | 5.2   | Stoneville          | 4596 B2RF   | 5.4   |
| Dyna-Gro          | 2242 B2RF   | 5.2   | Americot            | 1532 B2RF   | 5.5   |
| Delta & Pine Land | 444 BG/RR ✓ | 5.2   | Stoneville          | 5599 BR ✓   | 5.5   |
| Delta & Pine Land | 121 RF      | 5.2   | Stoneville          | 4678 B2RF   | 5.5   |
| Stoneville        | 5242 BR     | 5.2   | Stoneville          | 5327 B2RF   | 5.5   |
| Americot          | 1664 B2RF   | 5.3   | Stoneville          | 5458 B2RF   | 5.5   |
| Croplan Genetics  | 3035 RF     | 5.3   | Delta & Pine Land   | 174 RF      | 5.5   |
| Stoneville        | 4664 RF     | 5.3   | Phytogen            | 370 WR ✓    | 5.5   |
| Delta & Pine Land | 432 RR ✓    | 5.3   | Delta & Pine Land   | 141 B2RF    | 5.6   |
| Delta & Pine Land | 117 B2RF    | 5.4   | Phytogen            | 425 RF      | 5.7   |
| Phytogen          | 370 WR ✓    | 5.4   | Delta & Pine Land   | 454 BG/RR   | 5.7   |
| Stoneville        | 5599 BR ✓   | 5.4   | Delta & Pine Land   | 432 RR ✓    | 5.7   |
| Croplan Genetics  | 3520 B2RF   | 5.4   | Phytogen            | 480 WR      | 5.8   |
| Americot          | 1504 B2RF   | 5.5   | Dyna-Gro            | 2383 B2RF   | 5.8   |
| Phytogen          | 310 R       | 5.5   | Delta & Pine Land   | 161 B2RF    | 5.8   |
| Fibermax          | 1740 B2RF   | 5.5   | Phytogen            | 485 WRF     | 6.0   |
| Phytogen          | 315 RF      | 5.5   | Delta & Pine Land   | 143 B2RF    | 6.0   |
| Phytogen          | 375 WRF     | 5.6   | Bayer Crop Sci.Exp. | 2171 B2RF   | 6.1   |
| Stoneville        | 4357 B2RF   | 5.6   | Delta & Pine Land   | 515 BG/RR   | 6.2   |
| Stoneville        | 4427 B2RF   | 5.9   | Delta & Pine Land   | 164 B2RF    | 6.2   |
| Fibermax          | 960 BR ✓    | 6.0   | Delta & Pine Land   | 455 BG/RR   | 6.3   |
| Fibermax          | 955 LLB2    | 6.1   | Delta & Pine Land   | 167 RF      | 6.3   |
| Fibermax          | 9060 F      | 6.1   | Fibermax            | 960 BR ✓    | 6.3   |
| Fibermax          | 1735 LLB2   | 6.1   | Fibermax Exp.       | 4327 B2RF   | 6.4   |
| Fibermax          | 1600 LL     | 6.1   | Delta & Pine Land   | 555 BG/RR   | 6.7   |
| <b>Mean</b>       |             | 5     |                     |             | 6     |
| <b>LSD (0.05)</b> |             | 0.5   |                     |             | 0.4   |
| <b>CV (%)</b>     |             | 6.4   |                     |             | 5.2   |

Tennessee Ag. Experiment Station data of Main et al. (2007).

**Table OVT18.** Lint yield, gin turnout, and fiber quality of 23 entries in the 2005, 2006, and 2007 Tennessee Official Variety Trials averaged across 3 years and five locations, listed by yield rank.

| <b>Yield</b> |                   |                |                   |                    |
|--------------|-------------------|----------------|-------------------|--------------------|
| <b>Rank</b>  | <b>Company</b>    | <b>Variety</b> | <b>Lint Yield</b> | <b>Gin turnout</b> |
|              |                   |                | <b>lb/ac</b>      | <b>%</b>           |
| 1            | Stoneville        | 5242 BR        | 1323              | 38.5               |
| 2            | Stoneville        | 4554 B2RF      | 1319              | 36.6               |
| 3            | Phytogen          | 310 R          | 1297              | 39.4               |
| 4            | Delta & Pine Land | 444 BG/RR ✓    | 1270              | 39.2               |
| 5            | Delta & Pine Land | 432 RR ✓       | 1267              | 37.3               |
| 6            | Phytogen          | 370 WR ✓       | 1253              | 38.2               |
| 7            | Delta & Pine Land | 445 BG/RR      | 1218              | 39.2               |
| 8            | Delta & Pine Land | 117 B2RF       | 1211              | 37.9               |
| 9            | Stoneville        | 4357 B2RF      | 1195              | 36.5               |
| 10           | Delta & Pine Land | 393            | 1194              | 38.2               |
| 11           | Fibermax          | 960 BR ✓       | 1174              | 37.4               |
| 12           | Delta & Pine Land | 455 BG/RR      | 1172              | 39.1               |
| 13           | Phytogen          | 425 RF         | 1166              | 35.6               |
| 14           | Delta & Pine Land | 454 BG/RR      | 1165              | 39.2               |
| 15           | Croplan Genetics  | 4020 B2RF      | 1161              | 36.0               |
| 16           | Dyna-Gro          | 2520 B2RF      | 1160              | 36.2               |
| 17           | Phytogen          | 485 WRF        | 1157              | 36.5               |
| 18           | Delta & Pine Land | 434 RR         | 1141              | 39.7               |
| 19           | Croplan Genetics  | 3020 B2RF      | 1140              | 35.1               |
| 20           | Delta & Pine Land | 555 BG/RR      | 1136              | 38.1               |
| 21           | Croplan Genetics  | 3520 B2RF      | 1134              | 35.3               |
| 22           | Dyna-Gro          | 2100 B2RF      | 1131              | 35.3               |
| 23           | Dyna-Gro          | 2242 B2RF      | 1129              | 35.1               |
|              | <b>Mean</b>       |                | 1196              | 37.4               |
|              | <b>LSD (0.05)</b> |                | 119               | 0.8                |
|              | <b>CV (%)</b>     |                | 29.7              | 7.7                |

Tennessee Ag. Experiment Station data of Main et al. (2007).



## STAGE 4 ADVANCED STRAINS TEST

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Three experimental cotton strains and 13 commercial cultivars were tested in a Stage 4 Advanced Strains Test at the West Tennessee Research and Education Center in Jackson. Planting seed was furnished by Delta and Pine Land Co. There were 12 entries with Roundup-Ready Flex (F or RF) genes and four entries with Roundup Ready (RR) gene technology. Six entries had Bollgard II (B2 or D) genes and three entries had Bollgard (BG) gene technology.

All entries were planted on 8 May 2007 in 2-row plots arranged in a RCB design with 4 replications. A systemic insecticide and fungicide were applied in-furrow at planting. All plots received Roundup-Ready weed management and conventional insect pest control. Soil was an irrigated, no-tilled Loring-Calloway silt loam fertilized with 80-30-75 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O, per UT Extension recommendations for cotton fertilization. In addition, 18 lb S/ac were applied with the potash as K<sub>2</sub>SO<sub>4</sub>.

Seeding rate was adjusted for the germination of each seed lot, and all entries produced satisfactory stands. Plant populations averaged 47,500/acre. Supplemental irrigation was initiated 17 DAP by overhead sprinkler boom, and total of 3.6 inches of irrigation was applied by 97 DAP. The rainfall deficit increased by 5.8 inches during this time, relative to the long-term average, so irrigation supplied only a small fraction of crop water requirement during July and August. A total of 28 oz/ac of mepiquat-type PGR product was applied in two applications at 62 and 72 DAP. A defoliant and boll opener were applied at 120 and 127 DAP, when the latest maturing entry was >50% open, in preparation for once-over harvest. A total of 2535 DD60s accumulated between planting on 8 May and harvest on 20 September; 400 DD60s more than the long-term average for this period.

Seedcotton from each plot was spindle-picked into a separate bag and weighed. All seedcotton harvested from each plot was shipped to D&PL for ginning and analysis of fiber quality. Statistical analysis was performed on the lint yield, gin turnout and fiber data furnished by D&PL. In keeping with the research agreement, results are reported here only for experimental strains that were advanced by D&PL, as

well as all the commercial cultivars.

**Table 1** presents lint yield, gin turnout, and fiber data for 14 entries in the 2007 Stage 4 test at Jackson. Lint yields were statistically equivalent for the four top-yielding entries (DP444BG/RR, ST4664RF, DP121RF, and ST4554B2RF). The widely planted cultivar, DP444BG/RR, also posted the highest gin turnout. As a group, the BG/RR entries had higher gin turnout (37.2%) than the B2RF entries (34.3%), contributing to the relative lint yield performance of these two groups.

Micronaire values were relatively low, and the average micronaire of DP444BG/RR, DP143B2RF and DP147RF fell in the low discount range of the USDA-AMS schedule of premiums and discounts. Fiber strength and upper-half mean length were minimally adequate for most entries, although short staple and low strength were recorded for DP555BG/RR. Length uniformity of DP555BG/RR and DP143B2RF fell in the discount price range. The table also shows the maximum and minimum color grades of the four samples of each entry. Color grades of most samples were 32, 41, or better, indicating little discoloration of the lint. However, the data do not provide an accurate estimate of classer's leaf grade, so loan values are not reported.

**Table 1.** Lint yield, gin turnout, and fiber properties of 14 varieties tested in the 2007 Stage 4 advanced strains test at Jackson TN, listed by yield rank<sup>†</sup>.

| Yield Rank        | Entry        | Lint  | Gin     | Micro- | Staple | Fiber    | Uni-    | Color Grade      |                  |
|-------------------|--------------|-------|---------|--------|--------|----------|---------|------------------|------------------|
|                   |              | Yield | Turnout | naire  | Length | Strength | formity | min <sup>‡</sup> | max <sup>‡</sup> |
|                   |              | lb/ac | %       |        | 32nds  | g/tex    | %       |                  |                  |
| 1                 | DP 444 BG/RR | 1393  | 38.6    | 3.3    | 34.2   | 26.7     | 80.4    | 31               | 42               |
| 2                 | ST 4664 RF   | 1263  | 36.8    | 3.7    | 33.9   | 28.2     | 80.6    | 32               | 42               |
| 3                 | DP 121 RF    | 1216  | 37.6    | 3.9    | 34.6   | 27.6     | 81.1    | 32               | 42               |
| 4                 | ST 4554 B2RF | 1200  | 35.0    | 3.7    | 34.4   | 29.0     | 81.0    | 32               | 42               |
| 5                 | DP 174 RF    | 1173  | 38.0    | 3.7    | 34.8   | 26.3     | 79.9    | 32               | 32               |
| 6                 | DP 432 RR    | 1147  | 35.6    | 3.5    | 34.2   | 27.0     | 81.0    | 32               | 32               |
| 7                 | DP 445 BG/RR | 1131  | 36.4    | 3.5    | 34.7   | 27.9     | 81.2    | 32               | 32               |
| 8                 | DP 555 BG/RR | 1047  | 36.6    | 3.6    | 33.2   | 25.1     | 77.9    | 31               | 41               |
| 9                 | DPLX06T201F  | 1039  | 35.8    | 3.5    | 35.5   | 27.7     | 79.8    | 31               | 32               |
| 10                | DP 161 B2RF  | 982   | 34.0    | 3.6    | 36.1   | 26.8     | 79.5    | 31               | 41               |
| 11                | DP 117 B2RF  | 970   | 36.2    | 3.5    | 35.0   | 30.0     | 81.4    | 32               | 42               |
| 12                | DP 147 RF    | 954   | 34.3    | 3.2    | 35.8   | 26.5     | 78.9    | 31               | 42               |
| 13                | DP 143 B2RF  | 918   | 33.7    | 3.2    | 36.3   | 26.1     | 77.9    | 32               | 41               |
| 14                | DP 141 B2RF  | 824   | 32.9    | 3.5    | 35.9   | 27.2     | 79.2    | 31               | 52               |
| <b>Mean</b>       |              | 1090  | 35.8    | 3.5    | 34.9   | 27.3     | 80.0    |                  |                  |
| <b>LSD (0.05)</b> |              | 206   | 1.7     | 0.2    | 0.7    | 1.7      | 1.1     |                  |                  |
| <b>CV (%)</b>     |              | 13.5  | 3.3     | 4.7    | 1.4    | 4.3      | 1.0     |                  |                  |

Planted 8 May 2007. Harvest-aids applied 5 Sept and 12 Sept 2007. Harvested 20 Sept 2007.

Soil: No-tilled, irrigated Loring-Calloway silt loam. Fertilizer: 80-30-75 lb/ac N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O + 18S.

<sup>†</sup> Raw data from Delta and Pine Land Co. Statistical analysis by Tennessee Agricultural Experiment Station.

<sup>‡</sup> Minimum and maximum color grade values of four samples tested.

## COUNTY STANDARD TEST DEMONSTRATIONS

C. Main, G. Miles, T.D. Bush, and M. B. Ross  
West Tennessee Research and Education Center  
and Dyer County Extension  
The University of Tennessee

County Standard Test demonstrations were conducted in 2007 to evaluate commercial cultivar performance in multiple large plot environments. County standard testing included Roundup Ready and Roundup Ready Flex cultivars. County standard tests of early season cultivars were planted in 15 locations with each location containing 12 cultivars. County standard tests of early-mid season cultivars were planted in 15 locations with each location containing 12 cultivars. County standard tests of Liberty Link cultivars were planted in 6 locations with each location containing 5 cultivars. Each variety was planted in only one plot at each location and was maintained using the individual

grower's production practices. Cultivars were defoliated for a once-over harvest and harvested using spindle pickers. Seedcotton weights were determined using a boll buggy equipped with load cells. Seedcotton samples were ginned similarly to small-plot samples, as described previously. Lint samples were analyzed by HVI and hand classing methods at the USDA Cotton Classing Office in Memphis, TN. Loan values were calculated by the Cotton Loan Valuation Model from Cotton Inc. County standard test data were analyzed using Proc MIXED with locations as replications.

**Table CST1.** Results of early season cotton variety test, 15 Locations, 2007

| Rank              | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|                   |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1                 | Phytogen          | 310 R     | 39.2           | 771                      | 3.8        | 1.04               | 26.3                | 80.3                   | 42-1         | 4             | 48.76                    |
| 2                 | Delta & Pine Land | 444 BG/RR | 39.0           | 769                      | 3.5        | 1.06               | 26.8                | 79.5                   | 42-1         | 4             | 49.53                    |
| 3                 | Phytogen          | 370 WR    | 38.6           | 740                      | 3.9        | 1.04               | 26.5                | 80.4                   | 43-1         | 4             | 48.15                    |
| 4                 | Delta & Pine Land | 445 BG/RR | 39.5           | 725                      | 3.7        | 1.07               | 29.2                | 80.1                   | 42-1         | 4             | 51.35                    |
| 5                 | Stoneville        | 4554 B2RF | 36.6           | 712                      | 3.8        | 1.07               | 27.5                | 80.9                   | 43-1         | 4             | 49.05                    |
| 6                 | Stoneville        | 4427 B2RF | 37.3           | 705                      | 3.6        | 1.06               | 26.1                | 79.5                   | 43-1         | 5             | 47.08                    |
| 7                 | Croplan Genetics  | 3520 B2RF | 36.4           | 644                      | 3.4        | 1.08               | 24.2                | 79.7                   | 42-2         | 4             | 46.16                    |
| 8                 | Americot          | 1532 B2RF | 36.3           | 641                      | 3.5        | 1.08               | 24.2                | 80.2                   | 42-1         | 4             | 47.32                    |
| 9                 | Dyna-Gro          | 2242 B2RF | 35.7           | 635                      | 3.4        | 1.08               | 24.1                | 79.7                   | 42-1         | 4             | 46.14                    |
| 10                | Dyna-Gro          | 2100 B2RF | 34.7           | 604                      | 3.2        | 1.05               | 24.0                | 79.0                   | 43-1         | 4             | 45.84                    |
| 11                | Croplan Genetics  | 4020 B2RF | 35.4           | 572                      | 3.5        | 1.08               | 24.1                | 79.7                   | 42-1         | 4             | 47.14                    |
| 12                | Delta & Pine Land | 117 B2RF  | 37.9           | 560                      | 3.6        | 1.08               | 27.3                | 80.5                   | 42-1         | 5             | 44.26                    |
| <b>Mean</b>       |                   |           | <b>37.2</b>    | <b>673</b>               | <b>3.6</b> | <b>1.07</b>        | <b>25.9</b>         | <b>80.0</b>            |              | <b>4</b>      | <b>47.57</b>             |
| <b>LSD (0.05)</b> |                   |           | 1.4            | 56                       | 0.1        | 0.01               | 0.9                 | 0.6                    |              | 0.38          | 2.37                     |
| <b>CV</b>         |                   |           | 7.06           | 35.08                    | 12.10      | 3.43               | 9.31                | 1.40                   |              | 19.20         | 10.03                    |

**Table CST2.** Results of early-mid season cotton variety test, 15 locations, 2007

| Rank              | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|                   |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1                 | Stoneville        | 5327 B2RF | 36.9           | 728                      | 3.8        | 1.06               | 28.3                | 80.4                   | 32-1         | 5             | 48.20                    |
| 2                 | Stoneville        | 5283 RF   | 37.9           | 726                      | 3.8        | 1.07               | 28.3                | 80.3                   | 32-2         | 5             | 48.06                    |
| 3                 | Delta & Pine Land | 454 BG/RR | 38.9           | 723                      | 3.5        | 1.02               | 25.8                | 79.6                   | 42-1         | 5             | 43.66                    |
| 4                 | Dyna-Gro          | 2490 B2RF | 35.8           | 689                      | 3.2        | 1.04               | 24.7                | 79.6                   | 42-1         | 5             | 44.76                    |
| 5                 | Delta & Pine Land | 164 B2RF  | 36.6           | 676                      | 3.7        | 1.09               | 26.4                | 79.8                   | 42-1         | 4             | 50.67                    |
| 6                 | Dyna-Gro          | 2520 B2RF | 36.7           | 676                      | 3.5        | 1.08               | 24.5                | 79.3                   | 43-2         | 4             | 48.14                    |
| 7                 | Croplan Genetics  | 3020 B2RF | 34.5           | 670                      | 3.3        | 1.05               | 24.7                | 80.0                   | 42-1         | 4             | 46.51                    |
| 8                 | Delta & Pine Land | 455 BG/RR | 38.2           | 661                      | 3.7        | 1.08               | 26.2                | 80.5                   | 43-1         | 4             | 48.91                    |
| 9                 | Croplan Genetics  | 3220 B2RF | 37.0           | 658                      | 3.5        | 1.05               | 27.8                | 78.9                   | 42-2         | 4             | 47.62                    |
| 10                | Phytogen          | 425 RF    | 36.3           | 639                      | 3.9        | 1.07               | 27.9                | 81.1                   | 41-2         | 5             | 44.94                    |
| 11                | Phytogen          | 485 WRF   | 36.3           | 626                      | 3.9        | 1.06               | 27.2                | 80.5                   | 41-2         | 5             | 42.67                    |
| 12                | Delta & Pine Land | 143 B2RF  | 34.6           | 584                      | 3.5        | 1.11               | 26.5                | 78.9                   | 42-1         | 5             | 45.03                    |
| <b>Mean</b>       |                   |           | <b>36.6</b>    | <b>671</b>               | <b>3.6</b> | <b>1.07</b>        | <b>26.5</b>         | <b>79.9</b>            |              | <b>5</b>      | <b>46.45</b>             |
| <b>LSD (0.05)</b> |                   |           | 1.4            | 61                       | 0.2        | 0.01               | 0.9                 | 0.6                    |              | 0.45          | 3.88                     |
| <b>CV</b>         |                   |           | 7.21           | 35.52                    | 12.88      | 3.96               | 9.17                | 1.55                   |              | 24.72         | 14.60                    |

**Table CST3.** Results of Liberty Link cotton variety test, 6 locations, 2007

| Rank              | Company  | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------------|----------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|                   |          |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1                 | FiberMax | 1600 LL   | 34.0           | 645                      | 3.7        | 1.11               | 27.8                | 80.6                   | 41-2         | 4             | 51.43                    |
| 2                 | FiberMax | 1735 LLB2 | 29.9           | 586                      | 3.4        | 1.11               | 29.0                | 80.3                   | 41-1         | 4             | 49.58                    |
| 3                 | FiberMax | 955 LL    | 29.7           | 527                      | 3.6        | 1.07               | 30.8                | 80.9                   | 41-1         | 4             | 50.96                    |
| 4                 | FiberMax | 958 LL    | 30.4           | 500                      | 3.7        | 1.10               | 29.9                | 80.7                   | 42-1         | 4             | 52.90                    |
| 5                 | FiberMax | 966 LL    | 30.1           | 469                      | 3.7        | 1.09               | 30.2                | 80.8                   | 41-1         | 4             | 52.75                    |
| <b>Mean</b>       |          |           | <b>30.8</b>    | <b>545</b>               | <b>3.6</b> | <b>1.10</b>        | <b>29.5</b>         | <b>80.7</b>            |              | <b>4</b>      | <b>51.55</b>             |
| <b>LSD (0.05)</b> |          |           | 3.3            | 108                      | 0.1        | 0.22               | 2.3                 | 0.9                    |              | 0.39          | 1.92                     |
| <b>CV</b>         |          |           | 11.16          | 36.46                    | 17.49      | 3.72               | 9.36                | 0.97                   |              | 16.57         | 7.24                     |

**Table CST4.** Results of early season cotton variety test, Carroll County, 2006

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Delta & Pine Land | 444 BG/RR | 37.9           | 669                 | 3.0        | 1.07               | 25.2                | 80.3           | 32-2         | 5             | 44.90            |
| 2           | Americot          | B2RF      | 34.9           | 588                 | 3.5        | 1.06               | 22.9                | 77.6           | 42-1         | 5             | 46.05            |
| 3           | Phytogen          | 310 R     | 37.5           | 574                 | 3.5        | 0.99               | 22.4                | 79.2           | 43-1         | 5             | 42.50            |
| 4           | Phytogen          | 370 WR    | 37.4           | 564                 | 3.8        | 0.99               | 24.9                | 78.6           | 43-1         | 4             | 44.65            |
| 5           | Stoneville        | 4554 B2RF | 34.4           | 557                 | 3.4        | 1.05               | 27.1                | 79.4           | 43-1         | 5             | 43.60            |
| 6           | Delta & Pine Land | 445 BG/RR | 36.2           | 550                 | 3.3        | 1.06               | 26.3                | 80.1           | 32-1         | 4             | 49.40            |
| 7           | Stoneville        | 4427 B2RF | 34.6           | 516                 | 3.3        | 1.04               | 23.8                | 77.9           | 43-2         | 5             | 42.20            |
| 8           | Dyna-Gro          | 2242 B2RF | 31.5           | 410                 | 3.0        | 1.05               | 21.2                | 77.9           | 43-1         | 5             | 39.25            |
| 9           | Dyna-Gro          | 2100 B2RF | 31.6           | 393                 | 2.9        | 1.04               | 22.9                | 81.4           | 43-1         | 4             | 38.60            |
| 10          | Croplan Genetics  | 3520 B2RF | 34.6           | 362                 | 3.1        | 1.04               | 21.0                | 78.3           | 43-1         | 5             | 39.25            |
| 11          | Delta & Pine Land | 117 B2RF  | 35.7           | 348                 | 3.4        | 1.07               | 25.5                | 78.5           | 43-2         | 6             | 42.45            |
| 12          | Croplan Genetics  | 4020 B2RF | 31.7           | 308                 | 3.1        | 1.02               | 21.3                | 76.7           | 43-2         | 5             | 39.15            |
| <b>Mean</b> |                   |           | <b>34.8</b>    | <b>487</b>          | <b>3.3</b> | <b>1.04</b>        | <b>23.7</b>         | <b>78.8</b>    |              | <b>5</b>      | <b>42.67</b>     |

|                         |               |                      |                             |
|-------------------------|---------------|----------------------|-----------------------------|
| <b>Agent</b>            | Steve Burgess | <b>Soil Type</b>     | Dexter Silt Loam            |
| <b>Producer</b>         | David Renfro  | <b>Tillage</b>       | No-Till                     |
| <b>Planting Date</b>    | 5/1/2007      | <b>Previous Crop</b> | Corn                        |
| <b>Defoliation Date</b> | 9/30/2007     | <b>Fertilizer</b>    | 40-100-90 + 65 N side dress |
| <b>Harvest Date</b>     | 10/15/2007    | <b>Row Spacing</b>   | 30"                         |

**Table CST5.** Results of early-mid season cotton variety test, Carroll County, 2006

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Delta & Pine Land | 454 BG/RR | 39.3           | 778                 | 3.4        | 1.02               | 24.6                | 79.6           | 42-1         | 5             | 45.25            |
| 2           | Delta & Pine Land | 455 BG/RR | 36.8           | 658                 | 3.3        | 1.02               | 25.8                | 78.7           | 32-1         | 3             | 48.25            |
| 3           | Delta & Pine Land | 164 B2RF  | 33.1           | 646                 | 3.6        | 1.06               | 24.3                | 79.7           | 32-2         | 3             | 51.00            |
| 4           | Stoneville        | 5283 RF   | 39.7           | 633                 | 3.8        | 1.04               | 22.9                | 81.4           | 42-1         | 4             | 48.00            |
| 5           | Stoneville        | 5327 B2RF | 35.6           | 629                 | 3.7        | 1.05               | 27.4                | 79.6           | 32-2         | 4             | 51.50            |
| 6           | Croplan Genetics  | 3020 B2RF | 34.6           | 620                 | 3.5        | 1.07               | 25.9                | 79.8           | 32-2         | 4             | 51.30            |
| 7           | Delta & Pine Land | 143 B2RF  | 34.1           | 577                 | 3.3        | 1.09               | 25.1                | 79.0           | 42-1         | 5             | 45.75            |
| 8           | Dyna-Gro          | 2490 B2RF | 34.8           | 547                 | 3.2        | 1.02               | 24.2                | 79.5           | 32-2         | 5             | 43.55            |
| 9           | Dyna-Gro          | 2520 B2RF | 34.9           | 536                 | 3.4        | 1.06               | 22.9                | 78.6           | 32-2         | 3             | 48.25            |
| 10          | Phytogen          | 425 RF    | 34.7           | 529                 | 3.8        | 1.03               | 24.8                | 80.1           | 43-1         | 4             | 46.50            |
| 11          | Phytogen          | 485WRF    | 34.0           | 477                 | 3.6        | 1.05               | 24.1                | 78.1           | 43-2         | 5             | 44.10            |
| 12          | Croplan Genetics  | 3220 B2RF | 34.0           | 410                 | 3.2        | 1.06               | 22.4                | 80.1           | 42-1         | 4             | 44.45            |
| <b>Mean</b> |                   |           | <b>35.5</b>    | <b>587</b>          | <b>3.5</b> | <b>1.05</b>        | <b>24.5</b>         | <b>79.5</b>    |              | <b>4</b>      | <b>47.51</b>     |

|                         |               |                      |                             |
|-------------------------|---------------|----------------------|-----------------------------|
| <b>Agent</b>            | Steve Burgess | <b>Soil Type</b>     | Dexter Silt Loam            |
| <b>Producer</b>         | David Renfro  | <b>Tillage</b>       | No-Till                     |
| <b>Planting Date</b>    | 5/1/2007      | <b>Previous Crop</b> | Corn                        |
| <b>Defoliation Date</b> | 9/30/2007     | <b>Fertilizer</b>    | 40-100-90 + 65 N side dress |
| <b>Harvest Date</b>     | 10/15/2007    | <b>Row Spacing</b>   | 30"                         |

**Table CST6.** Results of early season cotton variety test, Crockett County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Delta & Pine Land | 444 BG/RR | 39.0           | 878                 | 3.4        | 1.09               | 28.3                | 80.4           | 43-1         | 3             | 46.30            |
| 2           | Phytogen          | 310 R     | 39.4           | 863                 | 3.8        | 1.04               | 26.4                | 80.8           | 43-1         | 4             | 47.30            |
| 3           | Phytogen          | 370 WR    | 36.5           | 853                 | 3.4        | 1.05               | 25.3                | 80.9           | 32-2         | 4             | 48.60            |
| 4           | Delta & Pine Land | 445 BG/RR | 38.4           | 773                 | 3.7        | 1.09               | 30.3                | 81.5           | 32-2         | 4             | 53.00            |
| 5           | Stoneville        | 4427 B2RF | 36.7           | 715                 | 3.4        | 1.07               | 25.6                | 81.1           | 42-1         | 5             | 46.40            |
| 6           | Stoneville        | 4554 B2RF | 36.4           | 695                 | 3.5        | 1.06               | 27.5                | 81.2           | 43-1         | 4             | 47.45            |
| 7           | Americot          | 1532 B2RF | 34.4           | 662                 | 2.8        | 1.12               | 23.9                | 79.9           | 43-1         | 4             | 39.80            |
| 8           | Delta & Pine Land | 117 B2RF  | 37.7           | 604                 | 3.8        | 1.12               | 29.0                | 80.2           | 43-1         | 5             | 46.70            |
| 9           | Croplan Genetics  | 3520 B2RF | 35.7           | 594                 | 3.4        | 1.10               | 24.1                | 79.5           | 43-2         | 4             | 44.70            |
| 10          | Dyna-Gro          | 2242 B2RF | 33.9           | 531                 | 3.1        | 1.08               | 25.0                | 79.5           | 53-1         | 5             | 41.35            |
| 11          | Dyna-Gro          | 2100 B2RF | 31.9           | 502                 | 3.0        | 1.03               | 23.9                | 79.4           | 32-2         | 3             | 45.25            |
| 12          | Croplan Genetics  | 4020 B2RF | 36.1           | 502                 | 3.3        | 1.11               | 24.3                | 78.8           | 43-1         | 3             | 44.65            |
| <b>Mean</b> |                   |           | <b>36.3</b>    | <b>681</b>          | <b>3.4</b> | <b>1.08</b>        | <b>26.1</b>         | <b>80.3</b>    |              | <b>4</b>      | <b>45.96</b>     |

|                         |                |                      |                   |
|-------------------------|----------------|----------------------|-------------------|
| <b>Agent</b>            | Richard Buntin | <b>Soil Type</b>     | Gernada Silt Loam |
| <b>Producer</b>         | Dwayne Dove    | <b>Tillage</b>       | No-Till           |
| <b>Planting Date</b>    | 5/1/2007       | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 9/3/2007       | <b>Fertilizer</b>    | 100-50-90         |
| <b>Harvest Date</b>     | 9/11/2007      | <b>Row Spacing</b>   | 38"               |

**Table CST7.** Results of early-mid season cotton variety test, Crockett County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Stoneville        | 5327 B2RF | 37.3           | 983                 | 3.8        | 1.05               | 29.0                | 80.8           | 43-1         | 5             | 46.30            |
| 2           | Stoneville        | 5283 RF   | 37.7           | 924                 | 4.1        | 1.09               | 31.2                | 81.6           | 42-2         | 5             | 49.70            |
| 3           | Croplan Genetics  | 3220 B2RF | 38.0           | 878                 | 4.3        | 1.08               | 28.5                | 81.9           | 32-2         | 4             | 52.55            |
| 4           | Phytogen          | 425 RF    | 36.0           | 802                 | 4.0        | 1.05               | 30.3                | 81.8           | 52-1         | 7             | 44.60            |
| 5           | Phytogen          | 485WRF    | 35.0           | 770                 | 4.2        | 1.08               | 30.1                | 81.7           | 52-1         | 8             | 12.95            |
| 6           | Dyna-Gro          | 2490 B2RF | 33.5           | 750                 | 3.3        | 1.03               | 26.4                | 80.6           | 42-2         | 6             | 44.55            |
| 7           | Dyna-Gro          | 2520 B2RF | 35.5           | 722                 | 3.5        | 1.07               | 24.8                | 79.3           | 42-2         | 5             | 46.90            |
| 8           | Croplan Genetics  | 3020 B2RF | 32.2           | 616                 | 3.3        | 1.03               | 24.5                | 79.6           | 42-1         | 4             | 46.65            |
| 9           | Delta & Pine Land | 454 BG/RR | 37.7           | 602                 | 3.6        | 0.98               | 25.8                | 78.5           | 42-2         | 7             | 43.35            |
| 10          | Delta & Pine Land | 164 B2RF  | 34.7           | 583                 | 3.7        | 1.07               | 25.8                | 80.1           | 42-1         | 4             | 50.25            |
| 11          | Delta & Pine Land | 455 BG/RR | 39.4           | 578                 | 3.6        | 1.01               | 25.7                | 78.9           | 43-1         | 5             | 44.50            |
| 12          | Delta & Pine Land | 143 B2RF  | 33.9           | 451                 | 3.4        | 1.06               | 25.1                | 78.6           | 42-2         | 6             | 43.45            |
| <b>Mean</b> |                   |           | <b>35.9</b>    | <b>722</b>          | <b>3.7</b> | <b>1.05</b>        | <b>27.3</b>         | <b>80.3</b>    |              | <b>6</b>      | <b>43.59</b>     |

|                         |                |                      |                      |
|-------------------------|----------------|----------------------|----------------------|
| <b>Agent</b>            | Richard Buntin | <b>Soil Type</b>     | Adler Silt Loam      |
| <b>Producer</b>         | Bubba Fincher  | <b>Tillage</b>       | No-Till              |
| <b>Planting Date</b>    | 5/8/2007       | <b>Previous Crop</b> | Cotton               |
| <b>Defoliation Date</b> | 9/14/2007      | <b>Fertilizer</b>    | 100-50-90-15S-32N-1B |
| <b>Harvest Date</b>     | 9/21/2007      | <b>Row Spacing</b>   | 38"                  |

**Table CST8.** Results of Liberty Link cotton variety test, Crockett County, 2007

| Rank        | Company  | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI   | Leaf     | Loan             |
|-------------|----------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|-------|----------|------------------|
|             |          |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) | Color | Grade    | Value<br>(¢/lb.) |
| 1           | FiberMax | 1735 LLB2 | 32.0           | 650                 | 4.7        | 1.08               | 32.4                | 82.2           | 31-2  | 4        | 55.55            |
| 2           | FiberMax | 955 LLB2  | 30.4           | 620                 | 4.8        | 1.10               | 29.4                | 81.6           | 41-3  | 4        | 53.90            |
| 3           | FiberMax | 1600 LL   | 36.0           | 578                 | 4.3        | 1.06               | 30.1                | 80.6           | 41-1  | 4        | 52.75            |
| 4           | FiberMax | 958 LL    | 32.5           | 569                 | 4.3        | 1.07               | 28.2                | 80.5           | 41-4  | 5        | 50.25            |
| 5           | FiberMax | 966 LL    | 32.0           | 352                 | 4.5        | 1.03               | 29.5                | 80.2           | 41-3  | 4        | 50.85            |
| <b>Mean</b> |          |           | <b>32.6</b>    | <b>554</b>          | <b>4.5</b> | <b>1.07</b>        | <b>29.9</b>         | <b>81.0</b>    |       | <b>4</b> | <b>51.94</b>     |

|                         |                |                      |                    |
|-------------------------|----------------|----------------------|--------------------|
| <b>Agent</b>            | Richard Buntin | <b>Soil Type</b>     | Adler Silt Loam    |
| <b>Producer</b>         | Kevin Earnhart | <b>Tillage</b>       | No-Till            |
| <b>Planting Date</b>    | 5/12/2007      | <b>Previous Crop</b> | Cotton             |
| <b>Defoliation Date</b> | 9/27/2007      | <b>Fertilizer</b>    | 90-50-120-24S-0.5B |
| <b>Harvest Date</b>     | 10/8/2007      | <b>Row Spacing</b>   | 38"                |

**Table CST9.** Results of early season cotton variety test, Dyer County, 2007

| Rank        | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(c/lb.) |
|-------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | Phytogen          | 310 R     | 38.4           | 1550                     | 4.5        | 1.08               | 31.4                | 82.0                   | 41-3         | 4             | 54.35                    |
| 2           | Croplan Genetics  | 3520 B2RF | 36.3           | 1484                     | 4.3        | 1.11               | 26.4                | 81.4                   | 42-1         | 4             | 51.35                    |
| 3           | Stoneville        | 4554 B2RF | 35.8           | 1449                     | 4.7        | 1.11               | 29.7                | 80.8                   | 42-1         | 4             | 51.60                    |
| 4           | Delta & Pine Land | 445 BG/RR | 39.8           | 1436                     | 4.2        | 1.10               | 31.9                | 82.1                   | 31-4         | 3             | 57.95                    |
| 5           | Phytogen          | 370 WR    | 36.9           | 1403                     | 4.5        | 1.11               | 32.7                | 82.6                   | 42-1         | 5             | 49.85                    |
| 6           | Stoneville        | 4427 B2RF | 38.1           | 1373                     | 3.9        | 1.10               | 28.3                | 80.4                   | 41-3         | 5             | 51.50                    |
| 7           | Dyna-Gro          | 2242 B2RF | 35.5           | 1361                     | 3.7        | 1.13               | 25.5                | 79.6                   | 42-1         | 4             | 51.55                    |
| 8           | Croplan Genetics  | 4020 B2RF | 35.6           | 1320                     | 4.3        | 1.14               | 27.6                | 81.2                   | 32-2         | 4             | 53.05                    |
| 9           | Americot          | 1532 B2RF | 34.8           | 1241                     | 3.9        | 1.13               | 26.2                | 81.1                   | 42-1         | 4             | 51.55                    |
| 10          | Delta & Pine Land | 117 B2RF  | 35.6           | 1210                     | 3.7        | 1.13               | 30.1                | 79.3                   | 42-1         | 5             | 49.00                    |
| 11          | Dyna-Gro          | 2100 B2RF | 34.3           | 1190                     | 3.9        | 1.09               | 26.2                | 81.8                   | 41-3         | 4             | 54.10                    |
| 12          | Delta & Pine Land | 444 BG/RR | 35.7           | 1139                     | 4.1        | 1.10               | 29.3                | 82.3                   | 42-1         | 4             | 51.15                    |
| <b>Mean</b> |                   |           | <b>36.4</b>    | <b>1346</b>              | <b>4.1</b> | <b>1.11</b>        | <b>28.8</b>         | <b>81.2</b>            |              | <b>4</b>      | <b>52.25</b>             |

|                         |              |                      |                  |
|-------------------------|--------------|----------------------|------------------|
| <b>Agent</b>            | Tim Campbell | <b>Soil Type</b>     | Falaya Silt Loam |
| <b>Producer</b>         | Davis Bros.  | <b>Tillage</b>       | No-Till          |
| <b>Planting Date</b>    | 5/7/2007     | <b>Previous Crop</b> | Corn             |
| <b>Defoliation Date</b> | 9/26/2007    | <b>Fertilizer</b>    | 120-30-90        |
| <b>Harvest Date</b>     | 10/12/2007   | <b>Row Spacing</b>   | 38"              |

**Table CST10.** Results of early-mid season cotton variety test, Dyer County, 2007

| Rank        | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(c/lb.) |
|-------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | Stoneville        | 5327 B2RF | 38.1           | 1509                     | 4.5        | 1.11               | 30.2                | 81.9                   | 42-1         | 5             | 49.40                    |
| 2           | Dyna-Gro          | 2490 B2RF | 34.0           | 1403                     | 3.5        | 1.08               | 27.0                | 80.7                   | 41-3         | 5             | 51.30                    |
| 3           | Stoneville        | 5283 RF   | 34.0           | 1339                     | 4.2        | 1.13               | 30.8                | 81.9                   | 42-1         | 5             | 49.80                    |
| 4           | Dyna-Gro          | 2520 B2RF | 35.8           | 1328                     | 4.1        | 1.12               | 27.2                | 79.9                   | 41-3         | 3             | 55.40                    |
| 5           | Croplan Genetics  | 3020 B2RF | 35.7           | 1316                     | 4.4        | 1.08               | 25.6                | 80.4                   | 42-1         | 3             | 51.45                    |
| 6           | Phytogen          | 485WRF    | 36.8           | 1286                     | 4.5        | 1.13               | 28.6                | 81.9                   | 42-2         | 5             | 49.15                    |
| 7           | Delta & Pine Land | 164 B2RF  | 36.8           | 1277                     | 4.3        | 1.16               | 30.8                | 83.0                   | 41-3         | 4             | 55.25                    |
| 8           | Croplan Genetics  | 3220 B2RF | 35.4           | 1263                     | 4.2        | 1.15               | 30.9                | 81.9                   | 32-2         | 3             | 54.65                    |
| 9           | Delta & Pine Land | 455 BG/RR | 39.7           | 1256                     | 4.1        | 1.05               | 31.2                | 79.9                   | 32-2         | 4             | 51.95                    |
| 10          | Delta & Pine Land | 143 B2RF  | 34.7           | 1197                     | 3.7        | 1.15               | 27.0                | 79.0                   | 42-1         | 5             | 48.75                    |
| 11          | Phytogen          | 425 RF    | 33.0           | 1141                     | 4.3        | 1.15               | 32.5                | 82.8                   | 42-2         | 5             | 49.85                    |
| 12          | Delta & Pine Land | 454 BG/RR | 36.1           | 1138                     | 4.0        | 1.08               | 29.2                | 81.1                   | 41-3         | 5             | 51.50                    |
| <b>Mean</b> |                   |           | <b>35.8</b>    | <b>1288</b>              | <b>4.2</b> | <b>1.12</b>        | <b>29.3</b>         | <b>81.2</b>            |              | <b>4</b>      | <b>51.54</b>             |

|                         |              |                      |                  |
|-------------------------|--------------|----------------------|------------------|
| <b>Agent</b>            | Tim Campbell | <b>Soil Type</b>     | Falaya Silt Loam |
| <b>Producer</b>         | Davis Bros.  | <b>Tillage</b>       | No-Till          |
| <b>Planting Date</b>    | 5/7/2007     | <b>Previous Crop</b> | Corn             |
| <b>Defoliation Date</b> | 9/26/2007    | <b>Fertilizer</b>    | 120-30-90        |
| <b>Harvest Date</b>     | 10/12/2007   | <b>Row Spacing</b>   | 38"              |



**Table CST11.** Results of Liberty Link cotton variety test, Dyer County, 2007

| Rank        | Company  | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|----------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |          |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | FiberMax | 955 LLB2  | 32.4           | 633                      | 4.3        | 1.08               | 29.9                | 80.6                   | 42-1         | 4             | 51.20                    |
| 2           | FiberMax | 1600 LL   | 34.1           | 619                      | 4.3        | 1.06               | 27.8                | 81.3                   | 41-2         | 4             | 52.50                    |
| 3           | FiberMax | 958 LL    | 35.6           | 597                      | 4.0        | 1.09               | 27.9                | 80.1                   | 41-3         | 4             | 54.10                    |
| 4           | FiberMax | 966 LL    | 34.8           | 589                      | 4.2        | 1.05               | 32.7                | 81.9                   | 41-3         | 4             | 53.15                    |
| 5           | FiberMax | 1735 LLB2 | 32.0           | 484                      | 4.1        | 1.05               | 27.8                | 79.7                   | 41-3         | 4             | 52.70                    |
| <b>Mean</b> |          |           | <b>33.8</b>    | <b>584</b>               | <b>4.2</b> | <b>1.07</b>        | <b>29.2</b>         | <b>80.7</b>            |              | <b>4</b>      | <b>53.11</b>             |

|                         |                   |                      |                  |
|-------------------------|-------------------|----------------------|------------------|
| <b>Agent</b>            | Tim Campbell      | <b>Soil Type</b>     | Routon Silt Loam |
| <b>Producer</b>         | Malcom Birchfield | <b>Tillage</b>       | No-Till          |
| <b>Planting Date</b>    | 5/7/2007          | <b>Previous Crop</b> | Cotton           |
| <b>Defoliation Date</b> | 10/5/2007         | <b>Fertilizer</b>    | 90-30-90         |
| <b>Harvest Date</b>     | 10/17/2007        | <b>Row Spacing</b>   | 38"              |

**Table CST12.** Results of early season cotton variety test, Fayette County, 2007

| Rank        | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 117 B2RF  | 41.5           | 754                      | 3.7        | 1.00               | 23.1                | 79.3                   | 42-2         | 5             | 44.85                    |
| 2           | Phytogen          | 370 WR    | 44.0           | 733                      | 4.3        | 1.04               | 26.9                | 80.4                   | 42-1         | 4             | 49.35                    |
| 3           | Stoneville        | 4554 B2RF | 40.5           | 721                      | 3.9        | 1.03               | 25.6                | 80.4                   | 43-2         | 4             | 47.30                    |
| 4           | Delta & Pine Land | 444 BG/RR | 42.1           | 698                      | 3.9        | 1.03               | 26.4                | 80.5                   | 42-1         | 4             | 49.55                    |
| 5           | Americot          | 1532 B2RF | 41.1           | 696                      | 4.1        | 1.04               | 25.3                | 80.9                   | 42-2         | 5             | 47.35                    |
| 6           | Phytogen          | 310 R     | 42.8           | 689                      | 4.1        | 1.02               | 26.9                | 80.5                   | 42-1         | 4             | 49.55                    |
| 7           | Croplan Genetics  | 4020 B2RF | 39.3           | 672                      | 3.9        | 1.02               | 27.7                | 80.1                   | 42-1         | 5             | 48.15                    |
| 8           | Delta & Pine Land | 445 BG/RR | 42.1           | 667                      | 4.2        | 1.05               | 28.4                | 81.8                   | 42-1         | 4             | 50.25                    |
| 9           | Stoneville        | 4427 B2RF | 39.1           | 664                      | 3.8        | 1.05               | 24.6                | 79.9                   | 42-2         | 5             | 47.70                    |
| 10          | Dyna-Gro          | 2242 B2RF | 39.7           | 650                      | 3.7        | 1.06               | 24.8                | 80.0                   | 42-1         | 5             | 47.70                    |
| 11          | Croplan Genetics  | 3520 B2RF | 39.7           | 649                      | 3.7        | 1.01               | 24.2                | 79.0                   | 42-1         | 4             | 46.35                    |
| 12          | Dyna-Gro          | 2100 B2RF | 37.6           | 604                      | 3.6        | 1.04               | 24.0                | 78.9                   | 42-1         | 4             | 47.45                    |
| <b>Mean</b> |                   |           | <b>40.8</b>    | <b>683</b>               | <b>3.9</b> | <b>1.03</b>        | <b>25.7</b>         | <b>80.1</b>            |              | <b>4</b>      | <b>47.96</b>             |

|                         |              |                      |                   |
|-------------------------|--------------|----------------------|-------------------|
| <b>Agent</b>            | Jeff Via     | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | McNabb Bros. | <b>Tillage</b>       | Conventional      |
| <b>Planting Date</b>    | 5/11/2007    | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 8/31/2007    | <b>Fertilizer</b>    | 90-60-80          |
| <b>Harvest Date</b>     | 9/19/2007    | <b>Row Spacing</b>   | 38"               |

**Table CST13.** Results of early-mid season cotton variety test, Fayette County, 2007

| Rank        | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | Dyna-Gro          | 2520 B2RF | 43.2           | 735                      | 4.2        | 1.05               | 25.2                | 80.6                   | 42-1         | 4             | 49.45                    |
| 2           | Delta & Pine Land | 454 BG/RR | 41.3           | 719                      | 4.1        | 0.98               | 25.7                | 79.9                   | 42-1         | 4             | 48.15                    |
| 3           | Delta & Pine Land | 164 B2RF  | 39.5           | 670                      | 4.0        | 1.05               | 25.7                | 80.0                   | 42-1         | 5             | 48.50                    |
| 4           | Dyna-Gro          | 2490 B2RF | 40.2           | 666                      | 3.6        | 1.05               | 24.2                | 79.3                   | 42-1         | 5             | 46.40                    |
| 5           | Delta & Pine Land | 455 BG/RR | 41.5           | 653                      | 3.9        | 1.00               | 25.6                | 78.8                   | 32-2         | 4             | 48.30                    |
| 6           | Stoneville        | 5283 RF   | 38.6           | 645                      | 3.6        | 1.02               | 25.7                | 79.5                   | 42-1         | 4             | 49.35                    |
| 7           | Stoneville        | 5327 B2RF | 37.9           | 627                      | 3.7        | 1.03               | 26.2                | 79.6                   | 42-1         | 5             | 48.15                    |
| 8           | Croplan Genetics  | 3220 B2RF | 39.3           | 626                      | 4.1        | 1.02               | 25.8                | 81.8                   | 42-2         | 4             | 49.55                    |
| 9           | Phytogen          | 425 RF    | 39.3           | 624                      | 4.1        | 1.01               | 26.2                | 80.6                   | 43-2         | 5             | 45.15                    |
| 10          | Phytogen          | 485WRF    | 38.6           | 614                      | 4.0        | 1.03               | 26.9                | 80.0                   | 52-1         | 5             | 47.15                    |
| 11          | Croplan Genetics  | 3020 B2RF | 38.9           | 608                      | 3.7        | 1.06               | 23.0                | 79.4                   | 42-1         | 4             | 48.10                    |
| 12          | Delta & Pine Land | 143 B2RF  | 38.1           | 595                      | 3.7        | 1.07               | 24.6                | 79.5                   | 42-1         | 4             | 49.45                    |
| <b>Mean</b> |                   |           | <b>39.7</b>    | <b>649</b>               | <b>3.9</b> | <b>1.03</b>        | <b>25.4</b>         | <b>79.9</b>            |              | <b>4</b>      | <b>48.02</b>             |

|                         |              |                      |                   |
|-------------------------|--------------|----------------------|-------------------|
| <b>Agent</b>            | Jeff Via     | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | McNabb Bros. | <b>Tillage</b>       | Conventional      |
| <b>Planting Date</b>    | 5/11/2007    | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 8/31/2007    | <b>Fertilizer</b>    | 90-60-80          |
| <b>Harvest Date</b>     | 9/19/2007    | <b>Row Spacing</b>   | 38"               |

**Table CST14.** Results of early season cotton variety test, Fayette County, 2007

| Rank        | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | Phytogen          | 370 WR    | 42.3           | 937                      | 4.1        | 1.07               | 29.9                | 81.6                   | 32-2         | 4             | 51.75                    |
| 2           | Delta & Pine Land | 444 BG/RR | 41.8           | 916                      | 3.4        | 1.11               | 29.6                | 82.3                   | 41-3         | 4             | 52.90                    |
| 3           | Phytogen          | 310 R     | 39.7           | 901                      | 3.7        | 1.09               | 30.1                | 81.2                   | 32-2         | 4             | 53.00                    |
| 4           | Delta & Pine Land | 445 BG/RR | 40.3           | 851                      | 3.4        | 1.12               | 31.8                | 81.6                   | 41-3         | 5             | 50.20                    |
| 5           | Croplan Genetics  | 4020 B2RF | 37.7           | 661                      | 3.3        | 1.09               | 24.8                | 79.3                   | 42-1         | 3             | 48.15                    |
| 6           | Stoneville        | 4427 B2RF | 37.0           | 644                      | 3.5        | 1.06               | 27.5                | 80.1                   | 42-1         | 6             | 46.75                    |
| 7           | Croplan Genetics  | 3520 B2RF | 36.0           | 640                      | 3.2        | 1.09               | 24.8                | 79.3                   | 42-1         | 4             | 45.95                    |
| 8           | Stoneville        | 4554 B2RF | 39.0           | 639                      | 3.8        | 1.05               | 26.8                | 80.4                   | 32-2         | 4             | 51.50                    |
| 9           | Dyna-Gro          | 2100 B2RF | 34.5           | 609                      | 2.9        | 1.05               | 24.9                | 80.4                   | 32-2         | 4             | 43.55                    |
| 10          | Dyna-Gro          | 2242 B2RF | 36.6           | 593                      | 3.3        | 1.07               | 23.7                | 80.7                   | 32-2         | 4             | 48.10                    |
| 11          | Americot          | 1532 B2RF | 36.4           | 546                      | 3.2        | 1.08               | 25.8                | 79.7                   | 32-2         | 4             | 48.95                    |
| 12          | Delta & Pine Land | 117 B2RF  | 37.6           | 501                      | 3.4        | 1.10               | 29.6                | 79.8                   | 42-2         | 6             | 45.45                    |
| <b>Mean</b> |                   |           | <b>38.2</b>    | <b>703</b>               | <b>3.4</b> | <b>1.08</b>        | <b>27.4</b>         | <b>80.5</b>            |              | <b>4</b>      | <b>48.85</b>             |

|                         |               |                      |                   |
|-------------------------|---------------|----------------------|-------------------|
| <b>Agent</b>            | Jeff Via      | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | Conrad Powers | <b>Tillage</b>       | No-Till           |
| <b>Planting Date</b>    | 5/2/2007      | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 9/3/2007      | <b>Fertilizer</b>    | 80-40-60-.05B     |
| <b>Harvest Date</b>     | 9/24/2007     | <b>Row Spacing</b>   | 38"               |

**Table CST15.** Results of early-mid season cotton variety test, Fayette County, 2007

| Rank        | Company           | Variety   | Gin            |                          |            | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|--------------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Lint Yield<br>(lb./acre) | Mic        |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 143 B2RF  | 37.3           | 839                      | 3.6        | 1.19               | 30.1                | 79.7                   | 41-3         | 5             | 51.90                    |
| 2           | Delta & Pine Land | 164 B2RF  | 37.5           | 814                      | 3.9        | 1.14               | 31.4                | 80.7                   | 31-3         | 3             | 58.80                    |
| 3           | Delta & Pine Land | 455 BG/RR | 41.7           | 791                      | 3.2        | 1.11               | 29.7                | 80.1                   | 32-1         | 4             | 49.65                    |
| 4           | Croplan Genetics  | 3020 B2RF | 36.0           | 783                      | 3.1        | 1.08               | 27.1                | 81.1                   | 32-2         | 4             | 48.95                    |
| 5           | Stoneville        | 5283 RF   | 40.0           | 779                      | 3.9        | 1.07               | 31.6                | 81.5                   | 32-2         | 4             | 51.95                    |
| 6           | Delta & Pine Land | 454 BG/RR | 40.3           | 764                      | 3.1        | 1.05               | 27.3                | 80.2                   | 42-1         | 5             | 44.70                    |
| 7           | Dyna-Gro          | 2520 B2RF | 39.1           | 757                      | 3.6        | 1.10               | 27.4                | 81.2                   | 32-1         | 4             | 52.55                    |
| 8           | Stoneville        | 5327 B2RF | 39.5           | 729                      | 4.0        | 1.08               | 32.8                | 81.9                   | 32-2         | 5             | 50.70                    |
| 9           | Dyna-Gro          | 2490 B2RF | 35.0           | 699                      | 3.1        | 1.04               | 26.7                | 81.3                   | 31-4         | 5             | 46.30                    |
| 10          | Croplan Genetics  | 3220 B2RF | 35.9           | 585                      | 3.2        | 1.08               | 24.6                | 79.9                   | 32-2         | 4             | 48.15                    |
| 11          | Phytogen          | 425 RF    | 37.4           | 560                      | 3.7        | 1.07               | 28.4                | 79.9                   | 43-2         | 5             | 46.30                    |
| 12          | Phytogen          | 485WRF    | 37.1           | 539                      | 3.5        | 1.08               | 26.3                | 80.5                   | 42-1         | 5             | 49.05                    |
| <b>Mean</b> |                   |           | <b>38.1</b>    | <b>720</b>               | <b>3.5</b> | <b>1.09</b>        | <b>28.6</b>         | <b>80.7</b>            |              | <b>4</b>      | <b>49.74</b>             |

|                         |               |                      |                   |
|-------------------------|---------------|----------------------|-------------------|
| <b>Agent</b>            | Jeff Via      | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | Conrad Powers | <b>Tillage</b>       | No-Till           |
| <b>Planting Date</b>    | 5/2/2007      | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 9/3/2007      | <b>Fertilizer</b>    | 80-40-60-.05B     |
| <b>Harvest Date</b>     | 9/24/2007     | <b>Row Spacing</b>   | 38"               |

**Table CST16.** Results of early season cotton variety test, Gibson County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Delta & Pine Land | 444 BG/RR | 40.1           | 763                 | 3.2        | 1.06               | 25.1                | 80.6           | 42-1         | 4             | 45.65            |
| 2           | Delta & Pine Land | 445 BG/RR | 38.1           | 652                 | 3.6        | 1.06               | 27.9                | 79.6           | 43-1         | 4             | 47.45            |
| 3           | Stoneville        | 4554 B2RF | 36.6           | 619                 | 3.7        | 1.05               | 26.5                | 79.6           | 43-2         | 4             | 47.65            |
| 4           | Stoneville        | 4427 B2RF | 38.0           | 610                 | 3.3        | 1.08               | 23.8                | 79.9           | 53-1         | 4             | 43.35            |
| 5           | Phytogen          | 310 R     | 38.5           | 604                 | 3.5        | 1.01               | 22.8                | 78.9           | 42-2         | 4             | 46.05            |
| 6           | Croplan Genetics  | 3520 B2RF | 37.2           | 603                 | 3.3        | 1.09               | 22.8                | 79.2           | 53-1         | 4             | 42.50            |
| 7           | Phytogen          | 370 WR    | 38.6           | 591                 | 3.7        | 1.01               | 24.0                | 78.6           | 53-1         | 5             | 42.05            |
| 8           | Dyna-Gro          | 2242 B2RF | 35.3           | 532                 | 3.2        | 1.07               | 21.2                | 77.2           | 43-2         | 3             | 41.00            |
| 9           | Croplan Genetics  | 4020 B2RF | 36.0           | 510                 | 3.5        | 1.07               | 22.3                | 77.3           | 43-2         | 4             | 44.65            |
| 10          | Dyna-Gro          | 2100 B2RF | 34.5           | 496                 | 3.1        | 1.03               | 21.4                | 79.9           | 42-2         | 4             | 43.20            |
| 11          | Americot          | 1532 B2RF | 33.6           | 485                 | 3.3        | 1.06               | 22.0                | 79.8           | 53-1         | 5             | 41.50            |
| 12          | Delta & Pine Land | 117 B2RF  | 36.6           | 450                 | 3.2        | 1.06               | 23.4                | 77.9           | 63-2         | 7             | 16.65            |
| <b>Mean</b> |                   |           | <b>36.9</b>    | <b>576</b>          | <b>3.4</b> | <b>1.05</b>        | <b>23.6</b>         | <b>79.0</b>    |              | <b>4</b>      | <b>41.81</b>     |

|                         |               |                      |                         |
|-------------------------|---------------|----------------------|-------------------------|
| <b>Agent</b>            | Philip Shelby | <b>Soil Type</b>     | Calloway-Falaya-Collins |
| <b>Producer</b>         | Jason Luckey  | <b>Tillage</b>       | No-Till                 |
| <b>Planting Date</b>    | 4/30/2007     | <b>Previous Crop</b> | Cotton                  |
| <b>Defoliation Date</b> | 9/14/2007     | <b>Fertilizer</b>    | 80-30-90                |
| <b>Harvest Date</b>     | 10/1/2007     | <b>Row Spacing</b>   | 38"                     |

**Table CST17.** Results of early-mid season cotton variety test, Gibson County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Stoneville        | 5327 B2RF | 38.1           | 521                 | 3.6        | 1.05               | 26.2                | 79.3           | 53-1         | 5             | 44.80            |
| 2           | Stoneville        | 5283 RF   | 36.7           | 485                 | 3.4        | 1.06               | 23.5                | 79.4           | 53-1         | 5             | 41.60            |
| 3           | Dyna-Gro          | 2520 B2RF | 35.5           | 467                 | 3.2        | 1.05               | 21.3                | 77.6           | 43-2         | 4             | 40.60            |
| 4           | Delta & Pine Land | 454 BG/RR | 34.9           | 461                 | 3.2        | 1.03               | 22.7                | 78.2           | 52-2         | 6             | 39.50            |
| 5           | Dyna-Gro          | 2490 B2RF | 34.0           | 453                 | 2.9        | 1.02               | 21.6                | 78.5           | 43-2         | 4             | 37.55            |
| 6           | Phytogen          | 425 RF    | 36.0           | 433                 | 3.5        | 1.08               | 25.8                | 81.3           | 53-1         | 5             | 45.75            |
| 7           | Phytogen          | 485WRF    | 37.6           | 430                 | 3.8        | 1.03               | 25.1                | 79.8           | 53-1         | 5             | 44.30            |
| 8           | Croplan Genetics  | 3020 B2RF | 31.7           | 421                 | 2.8        | 1.05               | 21.3                | 79.4           | 53-1         | 4             | 36.10            |
| 9           | Croplan Genetics  | 3220 B2RF | 39.7           | 409                 | 3.6        | 1.07               | 24.1                | 79.4           | 53-1         | 4             | 44.30            |
| 10          | Delta & Pine Land | 455 BG/RR | 35.0           | 375                 | 3.3        | 1.04               | 24.1                | 78.1           | 53-1         | 5             | 41.00            |
| 11          | Delta & Pine Land | 164 B2RF  | 34.6           | 340                 | 3.3        | 1.08               | 23.0                | 77.8           | 53-2         | 5             | 41.60            |
| 12          | Delta & Pine Land | 143 B2RF  | 31.3           | 331                 | 3.2        | 1.06               | 22.4                | 75.7           | 53-2         | 6             | 37.80            |
| <b>Mean</b> |                   |           | <b>35.4</b>    | <b>427</b>          | <b>3.3</b> | <b>1.05</b>        | <b>23.4</b>         | <b>78.7</b>    |              | <b>5</b>      | <b>40.92</b>     |

|                         |               |                      |                         |
|-------------------------|---------------|----------------------|-------------------------|
| <b>Agent</b>            | Philip Shelby | <b>Soil Type</b>     | Calloway-Falaya-Collins |
| <b>Producer</b>         | Jason Luckey  | <b>Tillage</b>       | No-Till                 |
| <b>Planting Date</b>    | 4/30/2007     | <b>Previous Crop</b> | Cotton                  |
| <b>Defoliation Date</b> | 9/14/2007     | <b>Fertilizer</b>    | 80-30-90                |
| <b>Harvest Date</b>     | 10/1/2007     | <b>Row Spacing</b>   | 38"                     |

**Table CST18.** Results of Liberty Link cotton variety test, Gibson County, 2007

| Rank        | Company  | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|----------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |          |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | FiberMax | 1735 LLB2 | 26.2           | 547                 | 3.1        | 1.10               | 29.2                | 80.5                   | 41-4         | 5             | 47.70                    |
| 2           | FiberMax | 1600 LL   | 29.5           | 541                 | 3.2        | 1.10               | 28.9                | 80.3                   | 42-1         | 4             | 47.35                    |
| 3           | FiberMax | 966 LL    | 29.3           | 437                 | 3.0        | 1.04               | 24.5                | 80.4                   | 42-2         | 5             | 43.55                    |
| 4           | FiberMax | 955 LLB2  | 25.5           | 402                 | 3.0        | 1.05               | 23.5                | 78.3                   | 42-1         | 5             | 42.70                    |
| 5           | FiberMax | 958 LL    | 27.8           | 337                 | 2.8        | 1.08               | 24.9                | 79.6                   | 42-2         | 5             | 41.30                    |
| <b>Mean</b> |          |           | <b>27.7</b>    | <b>453</b>          | <b>3.0</b> | <b>1.07</b>        | <b>26.2</b>         | <b>79.8</b>            |              | <b>5</b>      | <b>43.73</b>             |

|                         |               |                      |                  |
|-------------------------|---------------|----------------------|------------------|
| <b>Agent</b>            | Philip Shelby | <b>Soil Type</b>     | Routon Silt Loam |
| <b>Producer</b>         | REC at Milan  | <b>Tillage</b>       | No-Till          |
| <b>Planting Date</b>    | 5/11/2007     | <b>Previous Crop</b> | Cotton           |
| <b>Defoliation Date</b> | 9/15/2007     | <b>Fertilizer</b>    | 100-50-90        |
| <b>Harvest Date</b>     | 9/26/2007     | <b>Row Spacing</b>   | 40"              |

**Table CST19.** Results of early season cotton variety test, Hardeman County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Phytogen          | 370 WR    | 38.9           | 775                 | 3.8        | 1.01               | 24.2                | 80.2           | 42-2         | 3             | 47.40            |
| 2           | Delta & Pine Land | 445 BG/RR | 41.1           | 768                 | 3.7        | 1.03               | 27.4                | 80.6           | 41-4         | 4             | 50.80            |
| 3           | Delta & Pine Land | 444 BG/RR | 41.4           | 761                 | 3.5        | 1.03               | 26.3                | 80.3           | 41-4         | 3             | 51.15            |
| 4           | Phytogen          | 310 R     | 38.8           | 754                 | 3.7        | 1.01               | 24.1                | 80.8           | 42-2         | 4             | 46.95            |
| 5           | Stoneville        | 4427 B2RF | 38.2           | 691                 | 3.4        | 1.02               | 25.9                | 79.5           | 52-1         | 4             | 45.90            |
| 6           | Stoneville        | 4554 B2RF | 37.2           | 659                 | 3.9        | 1.04               | 25.7                | 80.3           | 42-2         | 4             | 49.55            |
| 7           | Dyna-Gro          | 2242 B2RF | 37.8           | 658                 | 3.5        | 1.07               | 24.1                | 80.2           | 52-1         | 4             | 46.65            |
| 8           | Croplan Genetics  | 3520 B2RF | 36.8           | 647                 | 3.5        | 1.06               | 24.1                | 80.2           | 52-1         | 4             | 46.65            |
| 9           | Americot          | 1532 B2RF | 38.5           | 640                 | 3.6        | 1.06               | 24.3                | 79.3           | 52-1         | 4             | 46.05            |
| 10          | Dyna-Gro          | 2100 B2RF | 35.3           | 621                 | 3.3        | 1.04               | 24.5                | 79.5           | 52-1         | 4             | 45.10            |
| 11          | Croplan Genetics  | 4020 B2RF | 36.6           | 593                 | 3.3        | 1.05               | 23.1                | 78.2           | 42-2         | 4             | 45.90            |
| 12          | Delta & Pine Land | 117 B2RF  | 37.4           | 584                 | 3.6        | 1.06               | 27.3                | 80.0           | 42-2         | 5             | 48.30            |
| <b>Mean</b> |                   |           | <b>38.2</b>    | <b>679</b>          | <b>3.6</b> | <b>1.04</b>        | <b>25.1</b>         | <b>79.9</b>    |              | <b>4</b>      | <b>47.53</b>     |

|                         |              |                      |                         |
|-------------------------|--------------|----------------------|-------------------------|
| <b>Agent</b>            | Bob Vickers  | <b>Soil Type</b>     | Lexington Silt Loam     |
| <b>Producer</b>         | Gem Mitchell | <b>Tillage</b>       | No-Till                 |
| <b>Planting Date</b>    | 5/7/2007     | <b>Previous Crop</b> | Cotton                  |
| <b>Defoliation Date</b> | 10/8/2007    | <b>Fertilizer</b>    | 40-50-80 40N side dress |
| <b>Harvest Date</b>     | 10/21/2007   | <b>Row Spacing</b>   | 38"                     |

**Table CST20.** Results of early-mid season cotton variety test, Hardeman County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Croplan Genetics  | 3220 B2RF | 37.6           | 809                 | 3.5        | 1.05               | 27.4                | 79.1           | 42-1         | 3             | 49.85            |
| 2           | Stoneville        | 5327 B2RF | 37.6           | 804                 | 3.4        | 1.05               | 26.9                | 80.4           | 42-2         | 4             | 48.15            |
| 3           | Dyna-Gro          | 2490 B2RF | 36.0           | 792                 | 3.0        | 1.02               | 23.5                | 78.8           | 42-2         | 4             | 43.85            |
| 4           | Stoneville        | 5283 RF   | 38.9           | 783                 | 3.4        | 1.06               | 28.2                | 79.2           | 52-1         | 4             | 45.45            |
| 5           | Croplan Genetics  | 3020 B2RF | 37.4           | 765                 | 3.3        | 1.03               | 24.0                | 79.6           | 42-2         | 3             | 46.45            |
| 6           | Delta & Pine Land | 164 B2RF  | 38.6           | 758                 | 3.5        | 1.05               | 24.2                | 77.6           | 42-2         | 4             | 48.05            |
| 7           | Phytogen          | 485WRF    | 37.5           | 757                 | 3.6        | 1.06               | 27.4                | 80.7           | 52-1         | 5             | 47.05            |
| 8           | Dyna-Gro          | 2520 B2RF | 37.5           | 730                 | 3.5        | 1.05               | 23.1                | 78.8           | 42-1         | 3             | 48.30            |
| 9           | Phytogen          | 425 RF    | 35.5           | 692                 | 3.6        | 1.07               | 27.8                | 81.4           | 52-1         | 3             | 48.50            |
| 10          | Delta & Pine Land | 455 BG/RR | 39.8           | 687                 | 3.3        | 1.02               | 27.5                | 77.6           | 42-1         | 4             | 46.75            |
| 11          | Delta & Pine Land | 454 BG/RR | 38.7           | 682                 | 3.3        | 0.99               | 23.4                | 78.3           | 41-4         | 4             | 45.30            |
| 12          | Delta & Pine Land | 143 B2RF  | 36.6           | 633                 | 3.2        | 1.06               | 26.1                | 78.3           | 42-2         | 5             | 44.00            |
| <b>Mean</b> |                   |           | <b>37.6</b>    | <b>741</b>          | <b>3.4</b> | <b>1.04</b>        | <b>25.8</b>         | <b>79.2</b>    |              | <b>4</b>      | <b>46.53</b>     |

|                         |              |                      |                         |
|-------------------------|--------------|----------------------|-------------------------|
| <b>Agent</b>            | Bob Vickers  | <b>Soil Type</b>     | Lexington Silt Loam     |
| <b>Producer</b>         | Gem Mitchell | <b>Tillage</b>       | No-Till                 |
| <b>Planting Date</b>    | 5/7/2007     | <b>Previous Crop</b> | Cotton                  |
| <b>Defoliation Date</b> | 10/8/2007    | <b>Fertilizer</b>    | 40-50-80 40N side dress |
| <b>Harvest Date</b>     | 10/21/2007   | <b>Row Spacing</b>   | 38"                     |

**Table CST21.** Results of early season cotton variety test, Haywood County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               | Value<br>(¢/lb.) |
| 1           | Delta & Pine Land | 444 BG/RR | 40.2           | 544                 | 4.0        | 1.02               | 24.9                | 77.5                   | 52-1         | 3             | 47.05            |
| 2           | Stoneville        | 4554 B2RF | 36.7           | 483                 | 4.7        | 1.01               | 28.5                | 80.6                   | 53-1         | 4             | 44.60            |
| 3           | Delta & Pine Land | 445 BG/RR | 39.2           | 454                 | 4.2        | 1.00               | 27.9                | 79.9                   | 52-1         | 4             | 46.85            |
| 4           | Phytogen          | 370 WR    | 38.0           | 443                 | 4.5        | 1.01               | 25.1                | 77.8                   | 53-1         | 4             | 43.10            |
| 5           | Phytogen          | 310 R     | 38.9           | 433                 | 4.6        | 0.98               | 25.7                | 79.2                   | 53-1         | 4             | 43.90            |
| 6           | Stoneville        | 4427 B2RF | 37.6           | 429                 | 4.2        | 1.04               | 23.6                | 78.9                   | 62-1         | 5             | 43.70            |
| 7           | Croplan Genetics  | 3520 B2RF | 36.5           | 398                 | 4.1        | 1.03               | 23.9                | 78.0                   | 53-2         | 5             | 43.10            |
| 8           | Croplan Genetics  | 4020 B2RF | 36.2           | 367                 | 4.2        | 1.02               | 23.1                | 78.5                   | 53-1         | 4             | 43.65            |
| 9           | Dyna-Gro          | 2242 B2RF | 35.7           | 358                 | 4.2        | 1.04               | 22.5                | 79.9                   | 53-2         | 5             | 43.55            |
| 10          | Dyna-Gro          | 2100 B2RF | 33.9           | 346                 | 4.0        | 1.00               | 22.6                | 79.0                   | 53-1         | 4             | 42.50            |
| 11          | Delta & Pine Land | 117 B2RF  | 37.2           | 346                 | 4.3        | 1.01               | 25.2                | 79.3                   | 52-1         | 5             | 44.55            |
| 12          | Americot          | 1532 B2RF | 35.5           | 321                 | 4.2        | 1.04               | 24.3                | 78.4                   | 52-1         | 4             | 46.00            |
| <b>Mean</b> |                   |           | <b>37.1</b>    | <b>410</b>          | <b>4.3</b> | <b>1.02</b>        | <b>24.8</b>         | <b>78.9</b>            |              | <b>4</b>      | <b>44.38</b>     |

|                         |                 |                      |                  |
|-------------------------|-----------------|----------------------|------------------|
| <b>Agent</b>            | Tracey Sullivan | <b>Soil Type</b>     | Loring Silt Laom |
| <b>Producer</b>         | Taylor Sullivan | <b>Tillage</b>       | No-Till          |
| <b>Planting Date</b>    | 5/14/2007       | <b>Previous Crop</b> | Cotton           |
| <b>Defoliation Date</b> | 10/15/2007      | <b>Fertilizer</b>    | 80-50-90-1B      |
| <b>Harvest Date</b>     | 11/2/2007       | <b>Row Spacing</b>   | 38"              |

**Table CST22.** Results of early-mid season cotton variety test, Haywood County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               | Value<br>(¢/lb.) |
| 1           | Stoneville        | 5283 RF   | 37.7           | 551                 | 4.1        | 1.01               | 25.9                | 79.0                   | 63-1         | 5             | 42.00            |
| 2           | Stoneville        | 5327 B2RF | 37.7           | 519                 | 4.0        | 1.05               | 26.1                | 79.9                   | 63-1         | 5             | 44.45            |
| 3           | Croplan Genetics  | 3220 B2RF | 38.4           | 517                 | 4.1        | 1.04               | 25.2                | 80.0                   | 53-2         | 4             | 45.00            |
| 4           | Phytogen          | 485WRF    | 36.7           | 453                 | 4.1        | 1.02               | 27.3                | 78.8                   | 63-1         | 5             | 43.15            |
| 5           | Phytogen          | 425 RF    | 35.8           | 424                 | 4.1        | 1.01               | 25.4                | 80.3                   | 63-1         | 5             | 41.80            |
| 6           | Dyna-Gro          | 2490 B2RF | 34.5           | 423                 | 3.3        | 1.02               | 24.8                | 78.6                   | 52-1         | 5             | 43.65            |
| 7           | Delta & Pine Land | 454 BG/RR | 37.1           | 413                 | 4.0        | 0.98               | 25.4                | 78.3                   | 52-2         | 5             | 44.40            |
| 8           | Delta & Pine Land | 164 B2RF  | 36.0           | 387                 | 3.9        | 1.04               | 23.6                | 77.7                   | 52-2         | 5             | 45.15            |
| 9           | Delta & Pine Land | 455 BG/RR | 38.1           | 359                 | 4.0        | 1.02               | 27.3                | 78.0                   | 52-1         | 4             | 47.30            |
| 10          | Dyna-Gro          | 2520 B2RF | 36.2           | 342                 | 3.6        | 1.03               | 22.5                | 77.5                   | 53-1         | 4             | 43.35            |
| 11          | Croplan Genetics  | 3020 B2RF | 33.8           | 322                 | 3.4        | 1.00               | 23.3                | 77.5                   | 53-2         | 4             | 40.30            |
| 12          | Delta & Pine Land | 143 B2RF  | 33.9           | 293                 | 3.7        | 1.06               | 24.1                | 78.1                   | 53-2         | 5             | 43.60            |
| <b>Mean</b> |                   |           | <b>36.3</b>    | <b>417</b>          | <b>3.9</b> | <b>1.02</b>        | <b>25.1</b>         | <b>78.6</b>            |              | <b>5</b>      | <b>43.83</b>     |

|                         |                 |                      |                   |
|-------------------------|-----------------|----------------------|-------------------|
| <b>Agent</b>            | Tracey Sullivan | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | Taylor Sullivan | <b>Tillage</b>       | No-Till           |
| <b>Planting Date</b>    | 5/14/2007       | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 10/15/2007      | <b>Fertilizer</b>    | 80-50-90-1B       |
| <b>Harvest Date</b>     | 11/2/2007       | <b>Row Spacing</b>   | 38"               |

**Table CST23.** Results of early season cotton variety test, Lake County, 2007

| Rank        | Company           | Variety   | Gin         |                       | Length     | Strength    | Uni-        | HVI         | Leaf | Loan     |              |
|-------------|-------------------|-----------|-------------|-----------------------|------------|-------------|-------------|-------------|------|----------|--------------|
|             |                   |           | Turnout (%) | Lint Yield (lb./acre) |            |             |             |             |      |          |              |
| 1           | Stoneville        | 4554 B2RF | 35.8        | 646                   | 3.7        | 1.08        | 26.3        | 80.9        | 42-2 | 4        | 51.15        |
| 2           | Delta & Pine Land | 444 BG/RR | 37.7        | 637                   | 3.4        | 1.06        | 25.9        | 80.5        | 41-3 | 4        | 50.60        |
| 3           | Stoneville        | 4427 B2RF | 35.9        | 616                   | 3.4        | 1.06        | 24.9        | 78.1        | 52-1 | 4        | 44.55        |
| 4           | Phytogen          | 310 R     | 37.6        | 609                   | 3.4        | 1.05        | 26.4        | 80.3        | 42-2 | 4        | 48.15        |
| 5           | Phytogen          | 370 WR    | 35.8        | 555                   | 3.4        | 1.02        | 23.0        | 79.6        | 42-2 | 4        | 45.90        |
| 6           | Delta & Pine Land | 445 BG/RR | 37.7        | 544                   | 3.6        | 1.10        | 29.4        | 81.6        | 42-1 | 4        | 50.95        |
| 7           | Americot          | 1532 B2RF | 35.2        | 517                   | 3.4        | 1.07        | 23.1        | 79.2        | 42-2 | 4        | 46.00        |
| 8           | Dyna-Gro          | 2242 B2RF | 34.6        | 495                   | 3.1        | 1.12        | 24.2        | 80.2        | 52-1 | 4        | 43.45        |
| 9           | Dyna-Gro          | 2100 B2RF | 31.6        | 429                   | 2.8        | 1.06        | 22.6        | 80.2        | 42-1 | 3        | 41.95        |
| 10          | Croplan Genetics  | 3520 B2RF | 32.2        | 411                   | 3.0        | 1.10        | 23.2        | 79.7        | 52-1 | 4        | 43.15        |
| 11          | Delta & Pine Land | 117 B2RF  | 35.8        | 377                   | 3.6        | 1.07        | 27.7        | 79.2        | 42-2 | 4        | 49.45        |
| 12          | Croplan Genetics  | 4020 B2RF | 34.9        | 377                   | 3.2        | 1.08        | 23.4        | 80.5        | 42-2 | 3        | 46.30        |
| <b>Mean</b> |                   |           | <b>35.4</b> | <b>518</b>            | <b>3.3</b> | <b>1.07</b> | <b>25.0</b> | <b>80.0</b> |      | <b>4</b> | <b>46.80</b> |

|                         |              |                      |                           |
|-------------------------|--------------|----------------------|---------------------------|
| <b>Agent</b>            | Greg Allen   | <b>Soil Type</b>     | Tiptonville Silt Loam     |
| <b>Producer</b>         | Tony Bargery | <b>Tillage</b>       | No-Till with para-plow    |
| <b>Planting Date</b>    | 5/3/2007     | <b>Previous Crop</b> | Cotton                    |
| <b>Defoliation Date</b> | 9/21/2007    | <b>Fertilizer</b>    | 0-0-100 + 100N side dress |
| <b>Harvest Date</b>     | 10/2/2007    | <b>Row Spacing</b>   | 38"                       |

**Table CST24.** Results of early-mid season cotton variety test, Lake County, 2007

| Rank        | Company           | Variety   | Gin         |                       | Length     | Strength    | Uni-        | HVI         | Leaf | Loan     |              |
|-------------|-------------------|-----------|-------------|-----------------------|------------|-------------|-------------|-------------|------|----------|--------------|
|             |                   |           | Turnout (%) | Lint Yield (lb./acre) |            |             |             |             |      |          |              |
| 1           | Stoneville        | 5283 RF   | 40.0        | 1127                  | 3.7        | 1.09        | 29.5        | 80.7        | 52-1 | 6        | 46.15        |
| 2           | Stoneville        | 5327 B2RF | 38.4        | 1093                  | 3.9        | 1.10        | 29.9        | 81.0        | 42-2 | 7        | 46.05        |
| 3           | Phytogen          | 485WRF    | 37.9        | 1034                  | 4.1        | 1.10        | 29.2        | 82.2        | 52-1 | 8        | 12.70        |
| 4           | Croplan Genetics  | 3220 B2RF | 37.9        | 1030                  | 3.6        | 1.11        | 28.2        | 81.4        | 42-1 | 5        | 49.15        |
| 5           | Dyna-Gro          | 2520 B2RF | 37.7        | 1024                  | 3.5        | 1.14        | 27.4        | 81.6        | 42-1 | 5        | 49.15        |
| 6           | Phytogen          | 425 RF    | 36.5        | 1011                  | 3.9        | 1.10        | 29.6        | 81.9        | 52-1 | 8        | 12.95        |
| 7           | Delta & Pine Land | 164 B2RF  | 39.1        | 987                   | 3.9        | 1.15        | 29.3        | 81.4        | 42-1 | 4        | 51.55        |
| 8           | Dyna-Gro          | 2490 B2RF | 36.2        | 985                   | 3.1        | 1.08        | 25.8        | 80.5        | 42-2 | 6        | 43.50        |
| 9           | Croplan Genetics  | 3020 B2RF | 33.8        | 937                   | 3.1        | 1.07        | 26.6        | 81.6        | 42-1 | 5        | 44.70        |
| 10          | Delta & Pine Land | 454 BG/RR | 38.1        | 856                   | 3.3        | 1.07        | 28.4        | 80.6        | 42-2 | 8        | 10.60        |
| 11          | Delta & Pine Land | 455 BG/RR | 37.3        | 855                   | 3.4        | 1.08        | 29.5        | 79.4        | 42-1 | 6        | 44.85        |
| 12          | Delta & Pine Land | 143 B2RF  | 36.0        | 774                   | 3.3        | 1.12        | 28.7        | 80.6        | 52-1 | 8        | 10.60        |
| <b>Mean</b> |                   |           | <b>37.4</b> | <b>976</b>            | <b>3.6</b> | <b>1.10</b> | <b>28.5</b> | <b>81.1</b> |      | <b>6</b> | <b>34.16</b> |

|                         |                |                      |                                |
|-------------------------|----------------|----------------------|--------------------------------|
| <b>Agent</b>            | Greg Allen     | <b>Soil Type</b>     | Tiptonville Silt Loam          |
| <b>Producer</b>         | John Lindamood | <b>Tillage</b>       | No-Till                        |
| <b>Planting Date</b>    | 5/2/2007       | <b>Previous Crop</b> | Cotton                         |
| <b>Defoliation Date</b> | 9/10/2007      | <b>Fertilizer</b>    | 26-0-74-20S-.5B+10N side dress |
| <b>Harvest Date</b>     | 9/24/2007      | <b>Row Spacing</b>   | 38"                            |



**Table CST25.** Results of Liberty Link cotton variety test, Lake County, 2007

| Rank        | Company  | Variety   | Gin         |                       | Length     | Strength    | Uni-        | HVI         | Leaf | Loan     |              |
|-------------|----------|-----------|-------------|-----------------------|------------|-------------|-------------|-------------|------|----------|--------------|
|             |          |           | Turnout (%) | Lint Yield (lb./acre) |            |             |             |             |      |          |              |
| 1           | FiberMax | 1735 LLB2 | 32.0        | 470                   | 4.1        | 1.06        | 27.9        | 80.6        | 41-1 | 3        | 53.40        |
| 2           | FiberMax | 955 LLB2  | 31.0        | 412                   | 4.0        | 1.10        | 26.1        | 81.0        | 41-4 | 4        | 54.10        |
| 3           | FiberMax | 1600 LL   | 31.3        | 402                   | 3.9        | 1.10        | 27.8        | 80.0        | 41-2 | 3        | 54.75        |
| 4           | FiberMax | 958 LL    | 31.5        | 362                   | 3.6        | 1.08        | 27.8        | 80.4        | 42-2 | 4        | 50.95        |
| 5           | FiberMax | 966 LL    | 30.0        | 352                   | 4.0        | 1.07        | 32.7        | 81.3        | 42-2 | 4        | 50.70        |
| <b>Mean</b> |          |           | <b>31.2</b> | <b>399</b>            | <b>3.9</b> | <b>1.08</b> | <b>28.5</b> | <b>80.7</b> |      | <b>4</b> | <b>52.63</b> |

|                         |                |                      |                                |
|-------------------------|----------------|----------------------|--------------------------------|
| <b>Agent</b>            | Greg Allen     | <b>Soil Type</b>     | Worthen Silt Loam              |
| <b>Producer</b>         | John Lindamood | <b>Tillage</b>       | No-Till                        |
| <b>Planting Date</b>    | 5/8/2007       | <b>Previous Crop</b> | Cotton                         |
| <b>Defoliation Date</b> | 9/16/2007      | <b>Fertilizer</b>    | 26-0-74-20S-.5B+70N side dress |
| <b>Harvest Date</b>     | 10/1/2007      | <b>Row Spacing</b>   | 38"                            |

**Table CST26.** Results of early season cotton variety test, Lauderdale County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Phytogen          | 310 R     | 42.8           | 976                 | 3.5        | 1.06               | 29.1                | 81.0                   | 32-2         | 4             | 51.30                    |
| 2           | Phytogen          | 370 WR    | 39.5           | 903                 | 3.5        | 1.09               | 29.3                | 81.2                   | 32-2         | 4             | 52.55                    |
| 3           | Americot          | 1532 B2RF | 38.8           | 862                 | 3.3        | 1.13               | 26.0                | 80.2                   | 42-1         | 4             | 49.45                    |
| 4           | Stoneville        | 4427 B2RF | 36.9           | 823                 | 3.3        | 1.09               | 26.6                | 80.3                   | 42-2         | 5             | 47.15                    |
| 5           | Stoneville        | 4554 B2RF | 35.1           | 771                 | 3.1        | 1.11               | 29.4                | 80.1                   | 42-1         | 5             | 45.55                    |
| 6           | Delta & Pine Land | 444 BG/RR | 37.0           | 765                 | 3.1        | 1.09               | 28.1                | 81.5                   | 32-2         | 4             | 48.95                    |
| 7           | Delta & Pine Land | 445 BG/RR | 38.1           | 720                 | 3.4        | 1.11               | 29.5                | 81.7                   | 31-3         | 4             | 54.10                    |
| 8           | Dyna-Gro          | 2100 B2RF | 34.4           | 715                 | 2.8        | 1.09               | 26.0                | 81.0                   | 32-2         | 4             | 45.60                    |
| 9           | Dyna-Gro          | 2242 B2RF | 35.2           | 673                 | 3.3        | 1.12               | 26.9                | 81.4                   | 42-1         | 5             | 47.25                    |
| 10          | Croplan Genetics  | 4020 B2RF | 35.4           | 646                 | 3.1        | 1.12               | 25.3                | 79.9                   | 32-2         | 4             | 48.60                    |
| 11          | Croplan Genetics  | 3520 B2RF | 35.8           | 624                 | 3.2        | 1.12               | 27.1                | 80.4                   | 42-1         | 5             | 45.55                    |
| 12          | Delta & Pine Land | 117 B2RF  | 36.2           | 428                 | 3.2        | 1.13               | 29.6                | 80.9                   | 42-2         | 7             | 42.25                    |
| <b>Mean</b> |                   |           | <b>37.1</b>    | <b>742</b>          | <b>3.2</b> | <b>1.11</b>        | <b>27.7</b>         | <b>80.8</b>            |              | <b>5</b>      | <b>48.19</b>             |

|                         |              |                      |                                |
|-------------------------|--------------|----------------------|--------------------------------|
| <b>Agent</b>            | Jerry Parker | <b>Soil Type</b>     | Robinsonville Sandy Loam       |
| <b>Producer</b>         | Leslie Crook | <b>Tillage</b>       | Conventional Beds              |
| <b>Planting Date</b>    | 5/7/2007     | <b>Previous Crop</b> | Cotton                         |
| <b>Defoliation Date</b> | 9/7/2007     | <b>Fertilizer</b>    | 30-0-90-15S-.5B+64N Side dress |
| <b>Harvest Date</b>     | 9/20/2007    | <b>Row Spacing</b>   | 38"                            |

**Table CST27.** Results of early-mid season cotton variety test, Lauderdale County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 454 BG/RR | 40.0           | 944                 | 3.3        | 1.10               | 29.8                | 81.9                   | 41-4         | 6             | 47.15                    |
| 2           | Stoneville        | 5327 B2RF | 37.5           | 878                 | 3.3        | 1.09               | 28.4                | 80.6                   | 32-2         | 5             | 48.15                    |
| 3           | Dyna-Gro          | 2490 B2RF | 36.2           | 839                 | 2.7        | 1.09               | 25.4                | 81.3                   | 31-4         | 4             | 47.35                    |
| 4           | Stoneville        | 5283 RF   | 37.4           | 837                 | 3.3        | 1.12               | 30.4                | 80.8                   | 42-1         | 5             | 47.50                    |
| 5           | Dyna-Gro          | 2520 B2RF | 39.2           | 834                 | 2.9        | 1.12               | 24.8                | 78.8                   | 32-1         | 3             | 45.65                    |
| 6           | Croplan Genetics  | 3020 B2RF | 34.6           | 821                 | 2.9        | 1.12               | 27.7                | 82.2                   | 42-1         | 4             | 44.40                    |
| 7           | Delta & Pine Land | 455 BG/RR | 37.0           | 807                 | 3.0        | 1.09               | 29.8                | 79.6                   | 32-1         | 4             | 49.20                    |
| 8           | Delta & Pine Land | 164 B2RF  | 35.6           | 781                 | 3.4        | 1.16               | 27.9                | 80.8                   | 31-4         | 4             | 54.00                    |
| 9           | Delta & Pine Land | 143 B2RF  | 34.6           | 724                 | 3.1        | 1.16               | 28.2                | 79.4                   | 31-4         | 5             | 49.55                    |
| 10          | Phytogen          | 485WRF    | 36.7           | 702                 | 3.3        | 1.12               | 27.6                | 81.5                   | 42-1         | 5             | 47.25                    |
| 11          | Phytogen          | 425 RF    | 34.1           | 653                 | 3.4        | 1.12               | 28.5                | 81.4                   | 42-2         | 5             | 47.25                    |
| 12          | Croplan Genetics  | 3220 B2RF | 34.8           | 651                 | 3.0        | 1.13               | 26.2                | 80.1                   | 32-2         | 3             | 50.40                    |
| <b>Mean</b> |                   |           | <b>36.5</b>    | <b>789</b>          | <b>3.1</b> | <b>1.12</b>        | <b>27.9</b>         | <b>80.7</b>            |              | <b>4</b>      | <b>48.25</b>             |

|                         |              |                      |                                |
|-------------------------|--------------|----------------------|--------------------------------|
| <b>Agent</b>            | Jerry Parker | <b>Soil Type</b>     | Robinsonville Silt Loam        |
| <b>Producer</b>         | Leslie Crook | <b>Tillage</b>       | Conventional Beds              |
| <b>Planting Date</b>    | 5/7/2007     | <b>Previous Crop</b> | Cotton                         |
| <b>Defoliation Date</b> | 9/7/2007     | <b>Fertilizer</b>    | 30-0-90-15S-.5B+64N Side dress |
| <b>Harvest Date</b>     | 9/20/2007    | <b>Row Spacing</b>   | 38"                            |

**Table CST28.** Results of Liberty Link cotton variety test, Lauderdale County, 2007

| Rank        | Company  | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|----------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |          |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | FiberMax | 1600 LL   | 30.8           | 701                 | 3.4        | 1.13               | 33.5                | 81.3                   | 31-2         | 4             | 54.30                    |
| 2           | FiberMax | 1735 LLB2 | 29.6           | 660                 | 3.1        | 1.12               | 31.1                | 80.6                   | 41-1         | 4             | 51.40                    |
| 3           | FiberMax | 958 LL    | 27.9           | 494                 | 3.0        | 1.14               | 31.9                | 80.4                   | 41-3         | 5             | 48.50                    |
| 4           | FiberMax | 966 LL    | 28.8           | 429                 | 3.1        | 1.09               | 31.6                | 80.1                   | 31-4         | 4             | 51.95                    |
| 5           | FiberMax | 955 LLB2  | 29.2           | 421                 | 3.3        | 1.16               | 27.9                | 80.7                   | 32-2         | 4             | 51.15                    |
| <b>Mean</b> |          |           | <b>29.3</b>    | <b>541</b>          | <b>3.2</b> | <b>1.13</b>        | <b>31.2</b>         | <b>80.6</b>            |              | <b>4</b>      | <b>50.75</b>             |

|                         |              |                      |                                |
|-------------------------|--------------|----------------------|--------------------------------|
| <b>Agent</b>            | Jerry Parker | <b>Soil Type</b>     | Robinsonville Silt Loam        |
| <b>Producer</b>         | Leslie Crook | <b>Tillage</b>       | Conventional Beds              |
| <b>Planting Date</b>    | 5/9/2007     | <b>Previous Crop</b> | Cotton                         |
| <b>Defoliation Date</b> | 9/7/2007     | <b>Fertilizer</b>    | 30-0-90-15S-.5B+64N Side dress |
| <b>Harvest Date</b>     | 9/19/2007    | <b>Row Spacing</b>   | 38"                            |

**Table CST29.** Results of early season cotton variety test, Lincoln County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Stoneville        | 4554 B2RF | 38.3           | 901                 | 4.2        | 1.08               | 28.9                | 80.3                   | 31-1         | 4             | 55.50                    |
| 2           | Stoneville        | 4427 B2RF | 35.6           | 812                 | 3.8        | 1.05               | 28.1                | 79.2                   | 31-1         | 5             | 51.00                    |
| 3           | Delta & Pine Land | 444 BG/RR | 37.5           | 790                 | 3.3        | 1.04               | 27.5                | 78.9                   | 31-2         | 3             | 49.95                    |
| 4           | Phytogen          | 310 R     | 39.1           | 767                 | 4.0        | 1.04               | 27.2                | 79.7                   | 31-1         | 4             | 51.70                    |
| 5           | Delta & Pine Land | 445 BG/RR | 36.2           | 699                 | 3.7        | 1.07               | 30.0                | 79.8                   | 31-1         | 4             | 54.00                    |
| 6           | Americot          | 1532 B2RF | 35.5           | 688                 | 3.6        | 1.09               | 25.9                | 78.2                   | 31-1         | 4             | 54.60                    |
| 7           | Phytogen          | 370 WR    | 38.0           | 686                 | 4.2        | 1.07               | 29.4                | 81.2                   | 31-2         | 5             | 51.60                    |
| 8           | Dyna-Gro          | 2242 B2RF | 33.5           | 681                 | 3.1        | 1.08               | 24.1                | 78.9                   | 31-1         | 5             | 47.75                    |
| 9           | Croplan Genetics  | 3520 B2RF | 34.5           | 678                 | 3.1        | 1.11               | 22.6                | 78.5                   | 31-1         | 4             | 50.20                    |
| 10          | Croplan Genetics  | 4020 B2RF | 34.4           | 605                 | 3.1        | 1.08               | 22.3                | 77.0                   | 31-1         | 4             | 48.90                    |
| 11          | Delta & Pine Land | 117 B2RF  | 37.8           | 597                 | 3.5        | 1.09               | 27.2                | 78.1                   | 41-1         | 6             | 48.30                    |
| 12          | Dyna-Gro          | 2100 B2RF | 33.5           | 596                 | 3.0        | 1.06               | 22.6                | 78.8                   | 31-1         | 4             | 47.80                    |
| <b>Mean</b> |                   |           | <b>36.2</b>    | <b>708</b>          | <b>3.6</b> | <b>1.07</b>        | <b>26.3</b>         | <b>79.1</b>            |              | <b>4</b>      | <b>50.94</b>             |

|                         |              |                      |                          |
|-------------------------|--------------|----------------------|--------------------------|
| <b>Agent</b>            | David Qualls | <b>Soil Type</b>     | Silt Loam                |
| <b>Producer</b>         | JBH farms    | <b>Tillage</b>       | No-Till                  |
| <b>Planting Date</b>    | 5/2/2007     | <b>Previous Crop</b> | Cotton                   |
| <b>Defoliation Date</b> | 10/10/2007   | <b>Fertilizer</b>    | 30-50-100+98N Side dress |
| <b>Harvest Date</b>     | 10/20/2007   | <b>Row Spacing</b>   | 38"                      |

**Table CST30.** Results of early-mid season cotton variety test, Lincoln County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 455 BG/RR | 38.3           | 809                 | 3.2        | 1.03               | 28.7                | 78.5                   | 21-4         | 4             | 47.65                    |
| 2           | Delta & Pine Land | 454 BG/RR | 37.9           | 791                 | 3.0        | 1.03               | 25.5                | 78.5                   | 31-2         | 5             | 45.90                    |
| 3           | Delta & Pine Land | 164 B2RF  | 36.1           | 756                 | 4.0        | 1.10               | 28.4                | 78.5                   | 31-1         | 4             | 54.90                    |
| 4           | Croplan Genetics  | 3020 B2RF | 34.0           | 725                 | 3.0        | 1.04               | 22.8                | 79.1                   | 21-2         | 4             | 46.10                    |
| 5           | Delta & Pine Land | 143 B2RF  | 34.7           | 708                 | 4.0        | 1.14               | 27.9                | 79.5                   | 31-2         | 5             | 54.15                    |
| 6           | Croplan Genetics  | 3220 B2RF | 33.6           | 644                 | 3.2        | 1.06               | 25.3                | 79.5                   | 31-1         | 3             | 50.60                    |
| 7           | Stoneville        | 5327 B2RF | 37.1           | 639                 | 3.6        | 1.04               | 28.2                | 79.1                   | 31-1         | 4             | 50.90                    |
| 8           | Dyna-Gro          | 2520 B2RF | 33.0           | 624                 | 2.9        | 1.04               | 22.2                | 76.7                   | 31-1         | 4             | 41.75                    |
| 9           | Stoneville        | 5283 RF   | 36.8           | 602                 | 3.8        | 1.04               | 29.9                | 79.8                   | 31-3         | 3             | 52.90                    |
| 10          | Dyna-Gro          | 2490 B2RF | 33.2           | 564                 | 2.5        | 1.03               | 22.2                | 76.9                   | 31-1         | 5             | 37.90                    |
| 11          | Phytogen          | 425 RF    | 34.6           | 527                 | 3.8        | 1.06               | 26.6                | 79.8                   | 31-4         | 5             | 51.60                    |
| 12          | Phytogen          | 485WRF    | 35.6           | 494                 | 3.7        | 1.03               | 27.2                | 79.2                   | 31-4         | 5             | 49.70                    |
| <b>Mean</b> |                   |           | <b>35.4</b>    | <b>657</b>          | <b>3.4</b> | <b>1.05</b>        | <b>26.2</b>         | <b>78.8</b>            |              | <b>4</b>      | <b>48.76</b>             |

|                         |              |                      |                          |
|-------------------------|--------------|----------------------|--------------------------|
| <b>Agent</b>            | David Qualls | <b>Soil Type</b>     | Silt Loam                |
| <b>Producer</b>         | JBH farms    | <b>Tillage</b>       | No-Till                  |
| <b>Planting Date</b>    | 5/2/2007     | <b>Previous Crop</b> | Cotton                   |
| <b>Defoliation Date</b> | 10/10/2007   | <b>Fertilizer</b>    | 30-50-100+98N Side dress |
| <b>Harvest Date</b>     | 10/20/2007   | <b>Row Spacing</b>   | 38"                      |

**Table CST31.** Results of early season cotton variety test, Madison County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Phytogen          | 310 R     | 40.0           | 625                 | 4.0        | 1.01               | 24.4                | 80.6           | 42-1         | 3             | 47.40            |
| 2           | Phytogen          | 370 WR    | 37.7           | 565                 | 4.3        | 1.02               | 25.9                | 80.1           | 42-1         | 3             | 49.65            |
| 3           | Delta & Pine Land | 444 BG/RR | 38.1           | 523                 | 3.6        | 1.01               | 24.6                | 79.3           | 32-2         | 3             | 48.00            |
| 4           | Delta & Pine Land | 445 BG/RR | 37.8           | 517                 | 4.4        | 1.04               | 30.7                | 81.1           | 32-1         | 3             | 51.20            |
| 5           | Stoneville        | 4554 B2RF | 37.2           | 500                 | 4.2        | 1.03               | 27.0                | 81.2           | 42-1         | 3             | 49.85            |
| 6           | Americot          | 1532 B2RF | 36.9           | 498                 | 3.7        | 1.05               | 22.1                | 79.9           | 43-1         | 2             | 46.15            |
| 7           | Stoneville        | 4427 B2RF | 34.4           | 461                 | 3.7        | 1.04               | 23.9                | 80.3           | 42-2         | 4             | 48.25            |
| 8           | Delta & Pine Land | 117 B2RF  | 39.5           | 406                 | 3.9        | 1.04               | 27.0                | 79.5           | 42-1         | 4             | 49.55            |
| 9           | Croplan Genetics  | 4020 B2RF | 35.9           | 373                 | 3.9        | 1.07               | 22.9                | 80.8           | 42-1         | 2             | 49.35            |
| 10          | Croplan Genetics  | 3520 B2RF | 35.4           | 370                 | 3.7        | 1.08               | 23.8                | 81.0           | 42-2         | 3             | 50.35            |
| 11          | Dyna-Gro          | 2100 B2RF | 32.2           | 351                 | 3.5        | 1.02               | 23.8                | 81.6           | 43-2         | 3             | 46.35            |
| 12          | Dyna-Gro          | 2242 B2RF | 31.5           | 337                 | 3.8        | 1.06               | 22.7                | 80.6           | 43-2         | 3             | 46.60            |
| <b>Mean</b> |                   |           | <b>36.4</b>    | <b>461</b>          | <b>3.9</b> | <b>1.04</b>        | <b>24.9</b>         | <b>80.5</b>    |              | <b>3</b>      | <b>48.56</b>     |

|                         |            |                      |                          |
|-------------------------|------------|----------------------|--------------------------|
| <b>Agent</b>            | Bill Wyatt | <b>Soil Type</b>     | Memphis-Loring Silt Loam |
| <b>Producer</b>         | Mark Smith | <b>Tillage</b>       | No-Till                  |
| <b>Planting Date</b>    | 5/7/2007   | <b>Previous Crop</b> | Cotton                   |
| <b>Defoliation Date</b> | 9/19/2007  | <b>Fertilizer</b>    | 80-60-90                 |
| <b>Harvest Date</b>     | 10/4/2007  | <b>Row Spacing</b>   | 38"                      |

**Table CST32.** Results of early-mid season cotton variety test, Madison County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | Stoneville        | 5283 RF   | 36.6           | 479                 | 3.9        | 1.04               | 27.1                | 80.1           | 43-1         | 4             | 47.30            |
| 2           | Stoneville        | 5327 B2RF | 35.8           | 448                 | 4.0        | 1.04               | 28.2                | 81.0           | 43-1         | 3             | 47.85            |
| 3           | Delta & Pine Land | 454 BG/RR | 39.1           | 443                 | 3.7        | 0.96               | 23.3                | 79.1           | 42-1         | 4             | 46.00            |
| 4           | Delta & Pine Land | 164 B2RF  | 36.2           | 415                 | 3.8        | 1.07               | 24.1                | 79.1           | 42-1         | 3             | 48.75            |
| 5           | Phytogen          | 425 RF    | 36.0           | 401                 | 4.5        | 1.03               | 26.9                | 81.4           | 43-1         | 3             | 47.65            |
| 6           | Croplan Genetics  | 3220 B2RF | 38.6           | 392                 | 3.9        | 1.07               | 23.8                | 81.0           | 43-1         | 2             | 46.85            |
| 7           | Dyna-Gro          | 2490 B2RF | 35.0           | 378                 | 3.6        | 1.01               | 24.6                | 79.6           | 42-1         | 3             | 47.85            |
| 8           | Phytogen          | 485WRF    | 34.4           | 366                 | 4.1        | 1.03               | 26.7                | 81.6           | 43-2         | 4             | 47.30            |
| 9           | Dyna-Gro          | 2520 B2RF | 34.4           | 334                 | 3.5        | 1.06               | 22.3                | 79.9           | 42-1         | 2             | 48.70            |
| 10          | Delta & Pine Land | 143 B2RF  | 35.8           | 315                 | 3.5        | 1.10               | 25.1                | 79.7           | 42-1         | 4             | 50.15            |
| 11          | Delta & Pine Land | 455 BG/RR | 35.4           | 315                 | 3.9        | 1.04               | 25.9                | 78.5           | 43-1         | 2             | 47.25            |
| 12          | Croplan Genetics  | 3020 B2RF | 32.3           | 314                 | 3.4        | 1.03               | 22.9                | 79.3           | 43-1         | 3             | 43.60            |
| <b>Mean</b> |                   |           | <b>35.8</b>    | <b>383</b>          | <b>3.8</b> | <b>1.04</b>        | <b>25.1</b>         | <b>80.0</b>    |              | <b>3</b>      | <b>47.45</b>     |

|                         |            |                      |                          |
|-------------------------|------------|----------------------|--------------------------|
| <b>Agent</b>            | Bill Wyatt | <b>Soil Type</b>     | Memphis-Loring Silt Loam |
| <b>Producer</b>         | Mark Smith | <b>Tillage</b>       | No-Till                  |
| <b>Planting Date</b>    | 5/7/2007   | <b>Previous Crop</b> | Cotton                   |
| <b>Defoliation Date</b> | 9/19/2007  | <b>Fertilizer</b>    | 80-60-90                 |
| <b>Harvest Date</b>     | 10/4/2007  | <b>Row Spacing</b>   | 38"                      |

**Table CST33.** Results of early season cotton variety test, Shelby County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Dyna-Gro          | 2100 B2RF | 44.7           | 861                 | 3.2        | 1.09               | 24.8                | 80.3                   | 21-3         | 4             | 51.05                    |
| 2           | Stoneville        | 4427 B2RF | 42.6           | 803                 | 3.8        | 1.10               | 28.6                | 80.5                   | 22-1         | 5             | 51.55                    |
| 3           | Dyna-Gro          | 2242 B2RF | 39.4           | 773                 | 3.6        | 1.12               | 25.9                | 80.3                   | 22-1         | 4             | 54.70                    |
| 4           | Croplan Genetics  | 3520 B2RF | 43.7           | 769                 | 3.3        | 1.10               | 25.4                | 79.8                   | 22-1         | 4             | 51.45                    |
| 5           | Delta & Pine Land | 445 BG/RR | 49.4           | 735                 | 3.5        | 1.11               | 30.2                | 81.4                   | 22-1         | 4             | 54.95                    |
| 6           | Delta & Pine Land | 444 BG/RR | 39.5           | 706                 | 3.6        | 1.08               | 27.5                | 81.5                   | 21-3         | 3             | 57.65                    |
| 7           | Phytogen          | 370 WR    | 38.3           | 655                 | 3.5        | 1.06               | 25.2                | 78.9                   | 22-1         | 4             | 51.20                    |
| 8           | Phytogen          | 310 R     | 34.2           | 618                 | 3.5        | 1.08               | 25.2                | 80.2                   | 22-1         | 4             | 53.35                    |
| 9           | Americot          | 1532 B2RF | 35.1           | 617                 | 3.0        | 1.11               | 22.7                | 79.8                   | 11-3         | 3             | 53.55                    |
| 10          | Delta & Pine Land | 117 B2RF  | 43.2           | 615                 | 3.5        | 1.11               | 29.2                | 80.2                   | 22-1         | 5             | 51.70                    |
| 11          | Stoneville        | 4554 B2RF | 34.5           | 609                 | 3.6        | 1.11               | 29.0                | 80.9                   | 22-1         | 5             | 51.70                    |
| 12          | Croplan Genetics  | 4020 B2RF | 27.7           | 414                 | 3.6        | 1.10               | 24.5                | 79.4                   | 22-1         | 3             | 53.60                    |
| <b>Mean</b> |                   |           | <b>39.4</b>    | <b>681</b>          | <b>3.5</b> | <b>1.10</b>        | <b>26.5</b>         | <b>80.3</b>            |              | <b>4</b>      | <b>53.04</b>             |

|                         |              |                      |                         |
|-------------------------|--------------|----------------------|-------------------------|
| <b>Agent</b>            | Becky Muller | <b>Soil Type</b>     | Memphis Silt Loam       |
| <b>Producer</b>         | Sneed Bros.  | <b>Tillage</b>       | Conventional            |
| <b>Planting Date</b>    | 4/26/2007    | <b>Previous Crop</b> | Cotton                  |
| <b>Defoliation Date</b> | 8/24/2007    | <b>Fertilizer</b>    | 50-30-80+50N Side dress |
| <b>Harvest Date</b>     | 9/4/2007     | <b>Row Spacing</b>   | 30"                     |

**Table CST34.** Results of early-mid season cotton variety test, Shelby County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 454 BG/RR | 45.5           | 727                 | 3.4        | 1.04               | 25.6                | 80.3                   | 21-3         | 4             | 49.75                    |
| 2           | Dyna-Gro          | 2490 B2RF | 41.1           | 705                 | 3.2        | 1.06               | 24.2                | 80.4                   | 11-4         | 5             | 46.95                    |
| 3           | Phytogen          | 425 RF    | 44.0           | 700                 | 4.1        | 1.08               | 27.4                | 81.7                   | 22-1         | 5             | 51.55                    |
| 4           | Delta & Pine Land | 164 B2RF  | 37.5           | 661                 | 3.5        | 1.05               | 24.3                | 79.7                   | 21-3         | 4             | 52.25                    |
| 5           | Stoneville        | 5283 RF   | 38.6           | 650                 | 3.6        | 1.09               | 28.3                | 79.6                   | 22-1         | 4             | 54.15                    |
| 6           | Croplan Genetics  | 3020 B2RF | 34.4           | 612                 | 3.3        | 1.07               | 24.5                | 81.6                   | 11-3         | 3             | 52.45                    |
| 7           | Croplan Genetics  | 3220 B2RF | 40.0           | 608                 | 3.7        | 1.07               | 25.7                | 79.0                   | 12-1         | 3             | 53.00                    |
| 8           | Dyna-Gro          | 2520 B2RF | 37.1           | 596                 | 3.1        | 1.10               | 24.4                | 79.6                   | 11-3         | 3             | 52.75                    |
| 9           | Phytogen          | 485WRF    | 35.7           | 515                 | 3.8        | 1.07               | 25.4                | 80.7                   | 22-1         | 5             | 49.80                    |
| 10          | Delta & Pine Land | 455 BG/RR | 37.5           | 486                 | 3.4        | 1.09               | 29.5                | 79.6                   | 12-1         | 2             | 53.65                    |
| 11          | Delta & Pine Land | 143 B2RF  | 31.4           | 421                 | 3.0        | 1.10               | 27.9                | 78.7                   | 21-3         | 5             | 49.35                    |
| 12          | Stoneville        | 5327 B2RF | 22.6           | 386                 | 3.1        | 1.08               | 27.8                | 79.5                   | 22-1         | 5             | 47.75                    |
| <b>Mean</b> |                   |           | <b>37.1</b>    | <b>589</b>          | <b>3.4</b> | <b>1.08</b>        | <b>26.3</b>         | <b>80.0</b>            |              | <b>4</b>      | <b>51.24</b>             |

|                         |              |                      |                         |
|-------------------------|--------------|----------------------|-------------------------|
| <b>Agent</b>            | Becky Muller | <b>Soil Type</b>     | Memphis Silt Loam       |
| <b>Producer</b>         | Sneed Bros.  | <b>Tillage</b>       | Conventional            |
| <b>Planting Date</b>    | 4/26/2007    | <b>Previous Crop</b> | Cotton                  |
| <b>Defoliation Date</b> | 8/24/2007    | <b>Fertilizer</b>    | 50-30-80+50N Side dress |
| <b>Harvest Date</b>     | 9/4/2007     | <b>Row Spacing</b>   | 30"                     |

**Table CST35.** Results of early season cotton variety test, Tipton County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 444 BG/RR | 38.3           | 737                 | 3.7        | 1.04               | 25.4                | 79.9                   | 42-2         | 5             | 47.35                    |
| 2           | Phytogen          | 310 R     | 40.3           | 643                 | 4.2        | 1.00               | 25.2                | 80.4                   | 52-1         | 4             | 46.05                    |
| 3           | Stoneville        | 4427 B2RF | 37.4           | 625                 | 3.7        | 1.05               | 25.4                | 79.9                   | 52-1         | 5             | 46.45                    |
| 4           | Delta & Pine Land | 445 BG/RR | 39.5           | 600                 | 4.2        | 1.02               | 25.5                | 79.4                   | 43-2         | 3             | 47.25                    |
| 5           | Dyna-Gro          | 2242 B2RF | 40.4           | 595                 | 3.6        | 1.06               | 23.4                | 79.5                   | 52-2         | 5             | 45.50                    |
| 6           | Phytogen          | 370 WR    | 39.6           | 585                 | 4.2        | 1.00               | 24.1                | 78.2                   | 52-1         | 4             | 44.85                    |
| 7           | Stoneville        | 4554 B2RF | 35.7           | 582                 | 3.7        | 1.07               | 26.5                | 80.9                   | 52-1         | 4             | 48.15                    |
| 8           | Croplan Genetics  | 3520 B2RF | 37.1           | 542                 | 3.7        | 1.08               | 24.2                | 79.4                   | 53-1         | 4             | 44.85                    |
| 9           | Dyna-Gro          | 2100 B2RF | 36.0           | 527                 | 3.6        | 1.07               | 23.8                | 80.2                   | 52-1         | 4             | 46.65                    |
| 10          | Americot          | 1532 B2RF | 37.8           | 502                 | 3.8        | 1.07               | 23.8                | 79.8                   | 52-2         | 5             | 45.95                    |
| 11          | Delta & Pine Land | 117 B2RF  | 39.4           | 495                 | 4.0        | 1.06               | 26.4                | 80.4                   | 52-1         | 5             | 47.25                    |
| 12          | Croplan Genetics  | 4020 B2RF | 37.6           | 468                 | 3.7        | 1.06               | 23.4                | 77.5                   | 53-1         | 4             | 44.15                    |
| <b>Mean</b> |                   |           | <b>38.3</b>    | <b>575</b>          | <b>3.8</b> | <b>1.05</b>        | <b>24.8</b>         | <b>79.6</b>            |              | <b>4</b>      | <b>46.20</b>             |

|                         |               |                      |                   |
|-------------------------|---------------|----------------------|-------------------|
| <b>Agent</b>            | Daniel Jacobs | <b>Soil Type</b>     | Gernada Silt Loam |
| <b>Producer</b>         | Glenn Hopkins | <b>Tillage</b>       | No-Till           |
| <b>Planting Date</b>    | 5/2/2007      | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 9/13/2007     | <b>Fertilizer</b>    | 80-30-90          |
| <b>Harvest Date</b>     | 9/27/2007     | <b>Row Spacing</b>   | 38"               |

**Table CST36.** Results of early-mid season cotton variety test, Tipton County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Stoneville        | 5327 B2RF | 37.7           | 639                 | 4.4        | 1.02               | 27.6                | 80.1                   | 52-1         | 4             | 47.80                    |
| 2           | Stoneville        | 5283 RF   | 37.9           | 636                 | 4.2        | 1.03               | 28.2                | 80.6                   | 52-2         | 5             | 47.15                    |
| 3           | Delta & Pine Land | 164 B2RF  | 34.1           | 578                 | 4.4        | 1.05               | 25.8                | 79.4                   | 51-3         | 5             | 47.80                    |
| 4           | Dyna-Gro          | 2490 B2RF | 37.7           | 576                 | 3.7        | 0.99               | 24.1                | 79.7                   | 52-1         | 5             | 44.70                    |
| 5           | Dyna-Gro          | 2520 B2RF | 35.8           | 544                 | 4.4        | 1.05               | 25.6                | 79.5                   | 52-1         | 5             | 47.05                    |
| 6           | Croplan Genetics  | 3020 B2RF | 33.7           | 521                 | 4.0        | 1.00               | 24.0                | 79.2                   | 42-2         | 4             | 46.35                    |
| 7           | Delta & Pine Land | 143 B2RF  | 35.0           | 512                 | 4.5        | 1.09               | 28.9                | 79.8                   | 52-1         | 5             | 47.40                    |
| 8           | Croplan Genetics  | 3220 B2RF | 36.4           | 509                 | 4.5        | 1.05               | 28.4                | 81.2                   | 53-2         | 4             | 46.20                    |
| 9           | Phytogen          | 425 RF    | 36.3           | 487                 | 4.5        | 1.04               | 29.6                | 81.2                   | 53-2         | 5             | 45.15                    |
| 10          | Phytogen          | 485WRF    | 35.0           | 476                 | 4.4        | 1.03               | 27.7                | 81.3                   | 53-2         | 5             | 44.90                    |
| <b>Mean</b> |                   |           | <b>35.9</b>    | <b>548</b>          | <b>4.3</b> | <b>1.04</b>        | <b>27.0</b>         | <b>80.2</b>            |              | <b>5</b>      | <b>46.30</b>             |

|                         |                 |                      |                   |
|-------------------------|-----------------|----------------------|-------------------|
| <b>Agent</b>            | Daniel Jacobs   | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | David Templeton | <b>Tillage</b>       | No-Till           |
| <b>Planting Date</b>    | 5/14/2007       | <b>Previous Crop</b> | Soybeans          |
| <b>Defoliation Date</b> | 10/16/2007      | <b>Fertilizer</b>    | 40-0-110          |
| <b>Harvest Date</b>     | 10/30/2007      | <b>Row Spacing</b>   | 38"               |

**Table CST37.** Results of additional cotton variety test, Tipton County, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Stoneville        | 4427 B2RF | 39.0           | 668                 | 4.4        | 1.00               | 26.3                | 78.8                   | 42-1         | 4             | 47.60                    |
| 2           | Stoneville        | 5327 B2RF | 44.1           | 646                 | 4.5        | 1.01               | 28.2                | 80.0                   | 42-1         | 4             | 48.20                    |
| 3           | Stoneville        | 5283 RF   | 39.4           | 570                 | 4.5        | 1.04               | 30.4                | 80.3                   | 42-2         | 5             | 48.20                    |
| 4           | Delta & Pine Land | 164 B2RF  | 36.8           | 539                 | 4.4        | 1.08               | 27.1                | 80.3                   | 42-1         | 3             | 51.45                    |
| 5           | Phytogen          | 485WRF    | 36.0           | 518                 | 4.8        | 1.01               | 28.7                | 79.8                   | 42-1         | 3             | 48.65                    |
| 6           | Delta & Pine Land | 143 B2RF  | 32.2           | 384                 | 4.2        | 1.07               | 26.9                | 78.7                   | 32-2         | 4             | 50.90                    |
| <b>Mean</b> |                   |           | <b>37.9</b>    | <b>554</b>          | <b>4.5</b> | <b>1.04</b>        | <b>27.9</b>         | <b>79.7</b>            |              | <b>4</b>      | <b>49.48</b>             |

|                         |                |                      |                   |
|-------------------------|----------------|----------------------|-------------------|
| <b>Agent</b>            | Daniel Jacobs  | <b>Soil Type</b>     | Memphis Silt Loam |
| <b>Producer</b>         | David McDaniel | <b>Tillage</b>       | Conventional Beds |
| <b>Planting Date</b>    | 5/9/2007       | <b>Previous Crop</b> | Cotton            |
| <b>Defoliation Date</b> | 9/28/2007      | <b>Fertilizer</b>    | 80-30-90          |
| <b>Harvest Date</b>     | 10/17/2007     | <b>Row Spacing</b>   | 38"               |



**Table CST38.** Results of early season cotton variety test, West TN Research and Education Center, Jackson, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 444 BG/RR | 38.3           | 1014                | 2.9        | 1.11               | 27.2                | 80.1                   | 11-3         | 3             | 51.75                    |
| 2           | Phytogen          | 310 R     | 39.3           | 966                 | 3.2        | 1.07               | 27.5                | 80.2                   | 12-2         | 3             | 49.80                    |
| 3           | Delta & Pine Land | 445 BG/RR | 38.0           | 906                 | 3.0        | 1.09               | 31.5                | 81.0                   | 22-1         | 3             | 51.85                    |
| 4           | Croplan Genetics  | 3520 B2RF | 35.1           | 889                 | 2.9        | 1.13               | 24.9                | 81.1                   | 12-2         | 4             | 46.95                    |
| 5           | Dyna-Gro          | 2242 B2RF | 35.6           | 872                 | 2.9        | 1.12               | 26.6                | 80.3                   | 12-1         | 4             | 47.75                    |
| 6           | Phytogen          | 370 WR    | 37.4           | 856                 | 3.2        | 1.07               | 27.3                | 81.0                   | 12-2         | 3             | 49.80                    |
| 7           | Stoneville        | 4554 B2RF | 35.4           | 849                 | 3.1        | 1.10               | 28.4                | 80.6                   | 12-1         | 4             | 50.55                    |
| 8           | Stoneville        | 4427 B2RF | 35.2           | 825                 | 3.0        | 1.12               | 29.0                | 79.9                   | 22-1         | 5             | 48.10                    |
| 9           | Dyna-Gro          | 2100 B2RF | 34.1           | 825                 | 2.7        | 1.10               | 26.4                | 80.7                   | 11-4         | 4             | 48.50                    |
| 10          | Croplan Genetics  | 4020 B2RF | 35.3           | 762                 | 2.9        | 1.13               | 25.8                | 80.1                   | 12-1         | 3             | 48.80                    |
| 11          | Americot          | 1532 B2RF | 35.5           | 749                 | 2.8        | 1.11               | 24.2                | 78.0                   | 12-1         | 3             | 46.80                    |
| 12          | Delta & Pine Land | 117 B2RF  | 37.2           | 689                 | 3.2        | 1.13               | 29.4                | 79.4                   | 22-2         | 5             | 47.50                    |
| <b>Mean</b> |                   |           | <b>36.4</b>    | <b>850</b>          | <b>3.0</b> | <b>1.11</b>        | <b>27.4</b>         | <b>80.2</b>            |              | <b>4</b>      | <b>49.01</b>             |

|                         |            |                      |                           |
|-------------------------|------------|----------------------|---------------------------|
| <b>Agent</b>            | Tracy Bush | <b>Soil Type</b>     | Dexter-Calloway Silt Loam |
| <b>Producer</b>         | Bob Hayes  | <b>Tillage</b>       | No-Till                   |
| <b>Planting Date</b>    | 4/23/2005  | <b>Previous Crop</b> | Corn                      |
| <b>Defoliation Date</b> | 8/20/2007  | <b>Fertilizer</b>    | 0-45-60+85N Side dress    |
| <b>Harvest Date</b>     | 9/5/2007   | <b>Row Spacing</b>   | 38"                       |

**Table CST39.** Results of early-mid season cotton variety test, West TN Research and Education Center, Jackson, 2007

| Rank        | Company           | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-<br>formity<br>(%) | HVI<br>Color | Leaf<br>Grade | Loan<br>Value<br>(¢/lb.) |
|-------------|-------------------|-----------|----------------|---------------------|------------|--------------------|---------------------|------------------------|--------------|---------------|--------------------------|
|             |                   |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     |                        |              |               |                          |
| 1           | Delta & Pine Land | 454 BG/RR | 38.9           | 811                 | 3.5        | 1.05               | 24.2                | 80.0                   | 22-1         | 5             | 49.10                    |
| 2           | Croplan Genetics  | 3020 B2RF | 34.5           | 669                 | 2.8        | 1.09               | 27.0                | 80.3                   | 11-3         | 3             | 50.70                    |
| 3           | Delta & Pine Land | 455 BG/RR | 36.9           | 625                 | 2.8        | 1.07               | 28.3                | 78.5                   | 12-2         | 3             | 45.85                    |
| 4           | Delta & Pine Land | 164 B2RF  | 34.2           | 621                 | 2.8        | 1.14               | 26.6                | 80.6                   | 11-4         | 3             | 51.95                    |
| 5           | Stoneville        | 5327 B2RF | 36.2           | 595                 | 3.2        | 1.13               | 30.5                | 81.2                   | 12-2         | 4             | 51.55                    |
| 6           | Phytogen          | 425 RF    | 34.7           | 593                 | 3.4        | 1.10               | 29.1                | 81.2                   | 22-2         | 5             | 49.45                    |
| 7           | Delta & Pine Land | 143 B2RF  | 34.2           | 590                 | 2.8        | 1.14               | 26.9                | 78.7                   | 22-1         | 5             | 44.30                    |
| 8           | Phytogen          | 485WRF    | 36.2           | 586                 | 3.1        | 1.12               | 28.0                | 80.5                   | 23-1         | 5             | 46.00                    |
| 9           | Stoneville        | 5283 RF   | 36.8           | 584                 | 3.2        | 1.11               | 30.1                | 79.5                   | 22-1         | 5             | 48.35                    |
| 10          | Dyna-Gro          | 2520 B2RF | 35.3           | 568                 | 3.0        | 1.14               | 26.5                | 80.6                   | 12-1         | 3             | 52.30                    |
| 11          | Dyna-Gro          | 2490 B2RF | 35.7           | 555                 | 2.8        | 1.08               | 26.1                | 79.0                   | 21-3         | 5             | 46.00                    |
| 12          | Croplan Genetics  | 3220 B2RF | 34.9           | 535                 | 2.9        | 1.15               | 27.0                | 80.5                   | 12-2         | 3             | 48.95                    |
| <b>Mean</b> |                   |           | <b>35.7</b>    | <b>611</b>          | <b>3.0</b> | <b>1.11</b>        | <b>27.5</b>         | <b>80.1</b>            |              | <b>4</b>      | <b>48.67</b>             |

|                         |            |                      |                           |
|-------------------------|------------|----------------------|---------------------------|
| <b>Agent</b>            | Tracy Bush | <b>Soil Type</b>     | Dexter-Calloway Silt Loam |
| <b>Producer</b>         | Bob Hayes  | <b>Tillage</b>       | No-Till                   |
| <b>Planting Date</b>    | 4/23/2005  | <b>Previous Crop</b> | Corn                      |
| <b>Defoliation Date</b> | 8/20/2007  | <b>Fertilizer</b>    | 0-45-60+85N Side dress    |
| <b>Harvest Date</b>     | 9/5/2007   | <b>Row Spacing</b>   | 38"                       |

**Table CST40.** Results of Liberty Link cotton variety test, West TN Research and Education Center, Jackson, 2007

| Rank        | Company  | Variety   | Gin            | Lint                | Mic        | Length<br>(inches) | Strength<br>(g/tex) | Uni-           | HVI<br>Color | Leaf<br>Grade | Loan             |
|-------------|----------|-----------|----------------|---------------------|------------|--------------------|---------------------|----------------|--------------|---------------|------------------|
|             |          |           | Turnout<br>(%) | Yield<br>(lb./acre) |            |                    |                     | formity<br>(%) |              |               | Value<br>(¢/lb.) |
| 1           | FiberMax | 1600 LL   | 42.2           | 1026                | 3.0        | 1.14               | 31.0                | 80.8           | 11-1         | 3             | 55.75            |
| 2           | FiberMax | 1735 LLB2 | 27.7           | 707                 | 3.1        | 1.14               | 32.8                | 81.4           | 21-1         | 3             | 55.75            |
| 3           | FiberMax | 955 LLB2  | 29.4           | 674                 | 3.0        | 1.18               | 29.9                | 81.2           | 21-3         | 3             | 55.55            |
| 4           | FiberMax | 966 LL    | 25.9           | 655                 | 3.0        | 1.12               | 33.7                | 81.7           | 21-1         | 3             | 55.55            |
| 5           | FiberMax | 958 LL    | 26.9           | 639                 | 2.9        | 1.18               | 33.4                | 80.5           | 11-2         | 3             | 52.40            |
| <b>Mean</b> |          |           | <b>30.4</b>    | <b>740</b>          | <b>3.0</b> | <b>1.15</b>        | <b>32.2</b>         | <b>81.1</b>    |              | <b>3</b>      | <b>54.81</b>     |

|                         |            |                      |                           |
|-------------------------|------------|----------------------|---------------------------|
| <b>Agent</b>            | Tracy Bush | <b>Soil Type</b>     | Dexter-Calloway Silt Loam |
| <b>Producer</b>         | Bob Hayes  | <b>Tillage</b>       | No-Till                   |
| <b>Planting Date</b>    | 4/23/2005  | <b>Previous Crop</b> | Corn                      |
| <b>Defoliation Date</b> | 8/20/2007  | <b>Fertilizer</b>    | 0-45-60+85N Side dress    |
| <b>Harvest Date</b>     | 9/5/2007   | <b>Row Spacing</b>   | 38"                       |

## GLOSSARY OF TERMS

**Bt cotton:** A variety containing genes from the bacterium, *Bacillus thuringiensis*, that confer resistance to certain lepidopterous insect pests such as tobacco budworm. Abbreviated **B** or **BG** in a variety name. **BII** or **B2** indicates that the variety carries a second *Bt* gene.

**CCC:** Commodity Credit Corporation, an entity administered by the Farm Services Agency of the USDA.

**Color:** See *HVI Color Grade*.

**Conventional tillage:** Systems in which the entire surface layer of soil is mixed or inverted by plowing, power tilling, or multiple disking before planting. Conventional tillage systems may also involve inter-row cultivation after planting.

**CST:** County Standard Test of cotton.

**CV:** Coefficient of variation. It is a statistical estimate of experimental variability, calculated as the standard deviation divided by the mean, and expressed as a percentage. A relatively low CV indicates greater experimental precision.

**DAP:** Days after planting.

**Earliness:** A measure of how rapidly a cotton crop reaches maturity. Relative earliness of varieties can be measured by the heat units needed to mature the highest harvestable boll. Earliness is under genetic control but is strongly influenced by crop management.

**Gin turnout:** Weight of lint as a percent of seedcotton weight, which is composed of lint, seed, trash, and excess moisture.

**Heat Units:** A measure of thermal time used to describe crop growth and development. Also abbreviated as **GDD** (growing degree days) or **DD60s** (degree-days above a threshold of 60 F).

**HVI:** High Volume Instrument measurement of fiber length, strength, Micronaire, length uniformity, trash, and color.

**HVI Color Grade:** Cotton color grade is a function of white reflectance (Rd) and yellowness (+b) of the lint sample. The HVI color code identifies the quadrant of the Nickerson-Hunter cotton colorimeter diagram in which Rd and +b values intersect (USDA, 1999). Color may be affected by moisture and temperature after boll opening, during harvest, ginning or storage.

**HNR:** Height-to-node ratio of the main stem, a measure of vegetative vigor.

**Leaf Grade:** The classer's leaf grade is a visual estimate of the amount of cotton plant leaf particles in a sample of lint. There are seven leaf grades represented by physical standards, plus a below grade designation. See *Trash*.

**Length:** Average fiber length of the longer one-half of the fibers sampled, in hundredths of an inch. Fiber length is under strong genetic control, but may be reduced by environmental stress, nutrient deficiency, or fiber breakage. Staple expresses fiber length in 32nds of an inch.

| Length<br>(32nds) | Length<br>(Inches) | Length<br>(32nds) | Length<br>(Inches) |
|-------------------|--------------------|-------------------|--------------------|
| 24                | 0.79 & shorter     | 36                | 1.11 – 1.13        |
| 26                | 0.80 – 0.85        | 37                | 1.14 – 1.17        |
| 28                | 0.86 – 0.89        | 38                | 1.18 – 1.20        |
| 29                | 0.90 – 0.92        | 39                | 1.21 – 1.23        |
| 30                | 0.93 – 0.95        | 40                | 1.24 – 1.26        |
| 31                | 0.96 – 0.98        | 41                | 1.27 – 1.29        |
| 32                | 0.99 – 1.01        | 42                | 1.30 – 1.32        |
| 33                | 1.02 – 1.04        | 43                | 1.33 – 1.35        |
| 34                | 1.05 – 1.07        | 44 & +            | 1.36 & +           |
| 35                | 1.08 – 1.10        |                   |                    |

Source: USDA (1999)

**Lint yield:** Weight of lint harvested per unit ground area.

**Liberty Link:** Designation in a variety name that indicates resistance to glufosinate herbicide.

**LSD:** Least significant difference. It is a statistical estimate of the smallest difference between two means that are significantly different at a fixed *P*-value (usually 0.05).

**Micronaire:** A measure of fiber fineness or maturity. An airflow instrument measures the air permeability of a given mass of cotton lint compressed to a fixed volume. Low "mike" values indicate finer or less mature fibers. Mike is strongly influenced by boll load, leaf retention and environmental conditions (especially moisture supply) during boll maturation. Abbreviated **Mike** or **Mic**. No decimal point is used by the USDA (1999) in reporting micronaire values, while others report values in tenths of units.

| Market Value        | HVI Micronaire |
|---------------------|----------------|
| Low discount range  | 34 and below   |
| Base range          | 35 – 36        |
| Premium range       | 37 – 42        |
| Base range          | 43 – 49        |
| High discount range | 50 and above   |

Source: USDA (1999)

**NACB:** Nodes above cracked boll. A measure of plant maturity measured by the number of nodes from the highest first-position cracked boll to the node of the highest harvestable boll.

**NAWF:** Nodes above white flower. A measure of the number of main-stem nodes above the uppermost white flower at first position, indicating relative crop maturity. An average NAWF count of 5 is used as a reference point of physiological cutout or last effective boll population.

**No-till:** A system in which a crop is planted directly into a seedbed not tilled since the previous crop, and only the immediate seed zone is disturbed during planting. Other surface residues are not moved, and weed control is accomplished primarily with herbicides.

**OVT:** Official variety trial. A replicated small-plot test conducted at several locations to evaluate the adaptation of the most promising commercial cultivars for Tennessee.

**P-value:** Observed significance level in an analysis of variance. It estimates the probability of error in concluding that differences truly exist among treatments (varieties).

**RCB:** Randomized complete block. An experimental design in which all treatments (varieties) are randomly assigned to plots in separate blocks (replications) in the field.

**Rd and +b:** Measures of white reflectance (%) and of yellow pigmentation (Hunter's scale), respectively, in a sample of lint. Lower Rd values indicate grayer samples, while higher +b values indicate yellower samples. Field weathering can decrease reflectance, while excess moisture in storage can cause yellowing.

**Roundup Ready®:** A variety containing genes that confer resistance to glyphosate herbicide that may be sprayed topically until the fifth true leaf reaches the size of a quarter. Subsequent glyphosate applications must be directed towards the base of the plant. Usually abbreviated **R** or **RR** in a variety name.

**Roundup Ready Flex®:** A variety containing genes that confer resistance to glyphosate herbicide that may be sprayed topically beyond the fifth true leaf stage. Usually abbreviated **F** or **RF** in a variety name.

**Seedcotton:** Lint plus seed, trash and excess moisture.

**Staple:** A traditional term applied to lengths of fiber that require spinning or twisting in the manufacture of yarn. Staple also refers to the average length of the bulk fibers measured in 32nds of one inch. Cotton fiber considered with regard to its length.

short staple : less than 25 mm (<0.98 inches)  
medium staple : 25 to 30 mm (0.98–1.18 inches)  
long staple : 30 to 37 mm (1.18-1.46 inches)  
extra long staple : 37mm and above (>1.46 inches)

**Strength:** Force required to break a bundle of fibers one tex unit in size. A tex is the weight in grams of 1,000 meters of fiber. HVI clamp jaw spacing is  $\frac{1}{8}$  inch. Fiber strength is under strong genetic control, but may be reduced by nutrient deficiency or stress.

| Strength category | HVI Strength<br>(grams per tex) |
|-------------------|---------------------------------|
| Very strong       | 31 and above                    |
| Strong            | 29 – 30                         |
| Intermediate      | 26 – 28                         |
| Weak              | 24 – 25                         |
| Very weak         | 23 and below                    |

Source: USDA (1999)

**Transgenic variety:** A variety containing genes from dissimilar species or other foreign sources that confer desirable traits such as insect or herbicide resistance.

**Trash:** Percentage of the sample surface area covered by non-lint materials, as determined by a video scanner. Typical sources of trash include leaf fragments and bark. HVI trash measurement is correlated to a hand classer's leaf grade:

| Classer's leaf grade | HVI Trash Measurement        |                                   |
|----------------------|------------------------------|-----------------------------------|
|                      | 4-year avg <sup>1</sup><br>% | 1996 crop <sup>2</sup><br>reading |
| 1                    | 0.12                         | 01                                |
| 2                    | 0.20                         | 02                                |
| 3                    | 0.33                         | 03                                |
| 4                    | 0.50                         | 05                                |
| 5                    | 0.68                         | 06                                |
| 6                    | 0.92                         | 08                                |
| 7                    | 1.21                         | 10                                |
| 8                    | --                           | 13                                |

Sources: <sup>1</sup> (USDA, 1999). <sup>2</sup> (USDA, 1997).

**Uniformity:** Length uniformity is the ratio between the mean length and the upper-half mean length of the fibers, expressed as a percentage. Also referred to as the length uniformity index.

| Uniformity group | Length uniformity index |
|------------------|-------------------------|
| Very high        | 86 and above            |
| High             | 83 – 85                 |
| Intermediate     | 80 – 82                 |
| Low              | 77 – 79                 |
| Very low         | 76 and below            |

Source: USDA (1999)

**Widestrike:** A variety containing a pair of genes from the bacterium, *Bacillus thuringiensis*, that confer resistance to certain lepidopterous insect pests such as tobacco budworm. Sometimes abbreviated **W** in a variety name.

## REFERENCES CITED

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