

# **Tennessee Cotton Variety Test Results**

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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 2010 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). 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 while no-tillage methods were used at the West Tennessee Research and Education Center, Milan Research and Education Center, Hollingsworth Farms, Lindamood Planting Company and Ames Plantation. Seed were planted on raised beds at the Agricenter International and in flat seedbeds at the other locations. Varieties were planted in 2-row plots with row widths of 38 inches. 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 Agricenter International. 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 ginning. 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 Fiber and Biopolymer Research Institute in Lubbock, TX.

County Standard Trial demonstrations were conducted to evaluate commercial cultivar performance in multiple large plot environments. County standard testing included Roundup Ready Flex cultivars. County standard tests were planted in 14 counties each containing 21 cultivars. County standard tests of Liberty Link cultivars were planted in 4 locations with each location containing 7 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 SAS Proc MIXED with locations as replications.

## ACKNOWLEDGMENTS

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We gratefully acknowledge donations of agricultural chemicals used in conducting this research from Bayer CropScience, Dow AgroSciences, DuPont, FMC Corp., Monsanto, Syngenta Crop Protection, Inc., and Valent USA Corp.

We appreciate logistical support and cooperation provided by the following Branch Station administrators:

- Dr. Rick Carlisle, Research Director, Ames Plantation
- Dr. Blake A. Brown, Director, Research and Education Center at Milan
- Dr. Robert M. Hayes, Director, West Tennessee Research and Education Center

We thank Dr. Bruce Kirksey, director of research and his farm crew at the Agricenter International in Memphis, for his collaboration in conducting trials at that location in 2010.

We thank George and Jerimah Hollingsworth, and John Lindamood for their cooperation and support in conducting cotton variety testing on their farms in 2010.

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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 2010. We also appreciate the technical cooperation of FBRI 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 2010 University of Tennessee cotton variety tests and demonstrations were provided by:

- American Cotton Breeders, Inc. 5210 88th Street, Lubbock, TX 79424
- Arkansas Ag. Experiment Station, P.O. Box 48, Keiser, AR 72351
- Bayer CropScience, 311 Poplar View Lane West, Collierville TN 38017
- Croplan Genetics, 8700 Trail Lake Dr., Suite 100, Memphis, TN 38125
- Monsanto, P.O. Box 157, Scott MS 38772
- Phytogen Seed Co., P.O. Box 27, Leland MS 38756
- Seed Source Genetics, 5159 FM 3354, Bishop, TX 78343
- Crop Production Services, 3005 Rocky Mountain Ave., Loveland, CO 80538

## OFFICIAL VARIETY TRIALS

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Official Variety Trials (OVTs) of cotton were conducted at six locations in Tennessee during 2010. Conventional varieties, and varieties with Liberty-Link (LL), or Roundup Ready Flex (RF) genes, were tested at all locations. There were 48 entries from seven seed companies and a line from the University of Arkansas cotton breeding program. All OVTs were planted between 5 May and 26 May 2010 in 2-row plots arranged in a RCB design with four replications at each location. The row spacing was 38 inches at all locations. Planting dates, soil types, tillage and other details are listed in Table 1 below.

Between 120 and 130 days after planting (DAP), plant height, nodes, 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 140 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 Fiber and Biopolymer Research Institute in Lubbock, TX.

**Table OVT1** Average yield and gin turnout data for 45 entries tested across six locations in 2010.

**Table OVT2 – OVT7** Lint yield, gin turnout, and fiber data from the six different OVT locations.

**Table OVT8** Overall yield average and yield at each OVT location for all 48 varieties tested in 2010.

**Table OVT10** Relative maturity, nodes, and final plant height of the 48 OVT entries.

**Table OVT11** presents two, and three year averages for varieties common to all years.

**Table 1.** OVT plot management details 2010.

Location	Planting Date	Soil Type	Tillage	Fertility	Irrigation	Harvest Date
Agricenter Int.	5/26/2010	Falaya Silt Loam	Conv.	80-30-90	Furrow	10/6/2010
Ames Plantation	5/10/2010	Memphis Silt Loam	No-Tillage	80-30-100	None	10/30/2010
Chic	5/20/2010	Commerce Silt Loam	No-Tillage	80- var P&K	None	10/11/2010
Milan	5/25/2010	Collins Silt Loam	No-Tillage	80-40-80	None	10/14/2010
Ridgely	5/12/2010	Reelfoot Silt Loam	No-Tillage	80- var P&K	None	10/2/2010
Jackson	5/6/2010	Lexington Silt Loam	No-Tillage	80-45-90	None	9/16/2010

**Table OVT1.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial averaged over all six locations, listed by yield rank.

Yield		Fiber						
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 375 WRF	39.5	1499	4.7	1.14	30.3	83.3	41-1
2	PHY 499 WRF	40.0	1494	4.8	1.14	32.5	83.5	31-3
3	DG 2570 B2RF	38.7	1489	4.7	1.13	31.0	83.1	31-2
4	DP 1028 B2RF	38.9	1447	4.8	1.15	29.9	83.2	21-2
5	10R052B2R2	39.3	1427	4.8	1.15	29.9	83.4	31-1
6	DP 0912 B2RF	37.1	1417	4.9	1.12	30.4	83.5	31-1
7	AMx 001 B2RF	38.7	1406	4.8	1.14	31.7	83.3	31-1
8	PHY 367 WRF	37.3	1395	4.4	1.15	31.5	82.5	31-1
9	ST 5458B2RF	36.3	1393	4.7	1.15	31.0	82.5	31-1
10	DP 1034 B2RF	38.0	1386	4.6	1.15	30.3	83.3	31-1
11	BCSX 1150B2F	35.0	1382	4.6	1.19	34.3	83.9	21-2
12	DP 1137 B2RF	38.4	1380	4.8	1.14	29.3	83.0	31-3
13	DP 1032 B2RF	38.7	1373	4.6	1.16	30.8	82.6	31-1
14	FM 1740B2F	38.4	1367	4.6	1.14	30.9	82.6	31-1
15	BCSX 1160B2F	35.7	1360	4.5	1.13	30.3	81.9	31-2
16	AM 1550 B2F	38.7	1357	4.6	1.11	28.9	82.4	31-3
17	DP 1133 B2RF	38.1	1346	4.9	1.17	32.7	84.3	31-3
18	DP 0920 B2RF	36.9	1346	4.7	1.14	29.3	82.5	31-2
19	DP 0935 B2RF	37.8	1340	4.6	1.12	29.8	82.7	21-2
20	FM 1773LLB2	37.0	1335	4.7	1.19	32.1	82.8	31-2
21	PHY 519 WRF	36.6	1327	4.6	1.14	31.8	82.8	31-2
22	BCSX 1010B2F	36.2	1325	4.4	1.15	29.8	82.2	21-2
23	DG 2450 B2RF	36.5	1319	4.4	1.15	29.4	83.3	31-1
24	ST 5288B2F	37.2	1314	4.9	1.14	29.5	82.4	31-3
25	PHY 440 W	37.4	1310	4.6	1.15	31.7	84.0	41-3
26	BCSX 1030B2F	36.3	1308	4.3	1.15	30.0	82.7	41-1
27	NG 4012 B2RF	37.0	1298	4.2	1.15	31.6	82.5	32-1
28	DP 0924 B2RF	35.4	1296	4.8	1.12	30.3	83.1	31-1
29	ST 4288B2F	35.2	1294	4.6	1.16	30.1	83.0	41-1
30	CG 3220 B2RF	36.8	1267	4.5	1.14	30.2	83.2	31-2
31	PHY 569 WRF	35.7	1266	4.6	1.15	32.8	84.1	31-1
32	PHY 565 WRF	35.6	1257	4.5	1.17	33.3	83.9	32-1
33	NG 3331 B2RF	36.1	1248	5.0	1.13	31.7	83.9	31-1
34	PHY 485 WRF	36.6	1248	4.7	1.13	32.1	83.3	31-4
35	PHY 315 RF	37.6	1247	4.4	1.13	29.9	82.2	31-1
36	CG 3035 RF	38.4	1245	4.7	1.12	30.8	83.5	31-1
37	CG 4020 B2RF	36.5	1239	4.4	1.15	29.2	82.4	31-1
38	FM 1735LLB2	35.9	1235	4.4	1.13	30.5	82.8	31-1
39	SSG HQ 110 CT	37.6	1227	4.6	1.16	31.9	83.4	31-1
40	BCSX 1040B2F	33.0	1223	4.4	1.24	32.7	84.3	31-4
41	CG 3520 B2RF	36.6	1219	4.3	1.16	29.5	82.9	31-1
42	SSG HQ 210 CT	35.7	1216	4.6	1.14	31.5	82.6	31-4
43	FM 1845LLB2	35.9	1211	4.8	1.20	33.5	84.3	31-4
44	CG 3020 B2RF	34.8	1186	4.2	1.12	29.0	83.2	31-3
45	ARK 0102-48	35.7	1175	4.7	1.28	36.2	85.1	31-2
46	NG 4010 B2RF	34.2	1168	4.4	1.16	32.4	82.7	31-1
47	ARK 9803-23-04	35.8	1166	4.5	1.20	33.6	84.0	31-1
48	NG F015 B2RF	34.2	1156	4.6	1.14	31.8	83.2	31-2
<b>Average</b>		<b>36.9</b>	<b>1311</b>	<b>4.6</b>	<b>1.15</b>	<b>31.1</b>	<b>83.1</b>	
<b>LSD (0.05)</b>		<b>1.3</b>	<b>88</b>	<b>0.2</b>	<b>0.02</b>	<b>0.8</b>	<b>1.0</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table OVT2.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial conducted at Agricenter International, Memphis, TN listed by yield rank.

Yield			Fiber					
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 375 WRF	39.7	1390	4.5	1.13	30.3	83.1	21-2
2	PHY 367 WRF	36.5	1305	4.2	1.13	31.8	82.0	31-1
3	DP 1028 B2RF	39.8	1264	4.9	1.14	29.9	83.4	21-2
4	10R052B2R2	40.0	1254	4.8	1.16	29.5	83.2	21-2
5	FM 1740B2F	36.5	1253	4.3	1.11	30.0	82.2	31-1
6	DP 1034 B2RF	38.9	1249	4.6	1.15	30.6	83.6	21-2
7	DP 1133 B2RF	37.4	1243	4.8	1.18	33.5	84.2	21-2
8	DG 2570 B2RF	38.2	1241	4.6	1.10	30.5	82.9	21-1
9	DP 1032 B2RF	38.5	1235	4.6	1.13	31.1	81.9	21-2
10	DP 1137 B2RF	39.3	1226	4.8	1.12	29.9	81.7	21-2
11	ST 5288B2F	40.4	1221	4.7	1.12	28.8	82.0	41-1
12	BCSX 1030B2F	37.4	1217	4.2	1.11	29.5	81.8	21-2
13	BCSX 1150B2F	33.0	1185	4.3	1.21	35.8	84.0	31-3
14	PHY 440 W	35.9	1169	4.6	1.14	31.9	84.2	21-2
15	PHY 499 WRF	38.6	1166	4.5	1.11	32.2	82.3	31-1
16	BCSX 1010B2F	36.1	1163	4.0	1.16	30.7	82.1	21-1
17	AM 1550 B2F	37.3	1158	4.5	1.12	28.6	83.0	21-2
18	DP 0912 B2RF	34.8	1149	4.6	1.11	30.5	83.0	21-2
19	ST 5458B2RF	35.7	1143	4.7	1.14	31.6	82.2	31-1
20	DP 0924 B2RF	35.7	1139	4.4	1.12	30.3	83.6	31-2
21	BCSX 1160B2F	34.5	1127	4.1	1.11	31.2	80.8	21-1
22	NG F015 B2RF	34.4	1125	4.7	1.13	32.9	83.2	31-1
23	NG 4012 B2RF	34.7	1122	4.1	1.14	32.3	82.6	21-2
24	AMx 001 B2RF	37.0	1115	4.5	1.11	32.7	82.7	21-2
25	PHY 519 WRF	37.2	1096	4.3	1.10	30.5	81.9	31-1
26	ST 4288B2F	32.7	1092	4.4	1.13	29.3	82.3	31-1
27	DG 2450 B2RF	35.3	1087	4.2	1.17	29.9	83.4	31-1
28	CG 3220 B2RF	36.2	1083	4.3	1.14	30.6	83.0	21-2
29	CG 4020 B2RF	34.6	1074	4.1	1.16	29.1	81.5	31-1
30	CG 3520 B2RF	33.5	1055	4.2	1.15	29.5	82.0	31-1
31	PHY 485 WRF	35.5	1053	5.0	1.10	32.0	83.0	31-3
32	FM 1735LLB2	32.9	1050	4.3	1.10	29.8	81.8	21-2
33	DP 0935 B2RF	36.7	1048	4.4	1.11	29.4	82.4	21-1
34	NG 3331 B2RF	35.3	1046	5.0	1.09	30.5	82.8	31-1
35	FM 1773LLB2	32.9	1037	4.6	1.18	33.0	82.7	21-2
36	DP 0920 B2RF	34.9	1025	4.5	1.13	30.8	82.3	31-1
37	SSG HQ 110 CT	33.8	1014	4.1	1.16	33.6	82.8	21-2
38	NG 4010 B2RF	34.4	997	4.2	1.14	33.0	82.6	21-2
39	ARK 9803-23-04	34.5	992	4.3	1.20	34.7	84.2	31-1
40	BCSX 1040B2F	31.3	980	4.2	1.25	33.0	84.3	31-2
41	PHY 569 WRF	34.2	975	4.4	1.13	32.4	84.4	21-2
42	CG 3020 B2RF	32.2	968	4.0	1.12	29.9	83.5	31-1
43	FM 1845LLB2	33.6	947	4.5	1.20	33.6	83.5	31-1
44	PHY 565 WRF	33.6	931	4.4	1.15	33.8	83.9	31-1
45	PHY 315 RF	35.1	926	3.8	1.11	29.2	80.7	21-2
46	CG 3035 RF	35.9	912	3.9	1.12	31.2	83.4	31-1
47	ARK 0102-48	35.8	828	4.1	1.29	37.2	84.5	31-1
48	SSG HQ 210 CT	31.7	796	3.8	1.12	32.2	81.5	21-2
<b>Average</b>		<b>35.7</b>	<b>919</b>	<b>4.4</b>	<b>1.14</b>	<b>31.3</b>	<b>82.8</b>	
<b>LSD (0.05)</b>		<b>1.8</b>	<b>121</b>	<b>0.3</b>	<b>0.03</b>	<b>1.6</b>	<b>1.7</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.



**Table OVT3.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial conducted at Ames Plantation, LaGrange, TN listed by yield rank.

Yield			Fiber					
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 499 WRF	41.5	1147	4.6	1.12	32.0	83.5	31-1
2	PHY 375 WRF	40.0	1099	4.5	1.11	29.4	81.9	31-1
3	DP 1032 B2RF	40.1	1086	4.6	1.14	29.8	81.8	31-1
4	DP 1028 B2RF	39.7	1077	4.7	1.12	28.9	81.8	31-1
5	DP 1034 B2RF	38.3	1049	4.4	1.14	30.6	82.5	31-1
6	BCSX 1010B2F	38.5	1044	4.3	1.14	29.1	80.9	31-1
7	DG 2570 B2RF	37.7	1043	4.6	1.11	30.7	82.6	21-2
8	DP 1137 B2RF	40.2	1039	4.6	1.12	28.3	82.3	31-1
9	DP 0935 B2RF	40.2	1038	4.5	1.10	29.8	81.7	21-2
10	ST 5458B2RF	36.8	1035	4.7	1.14	31.5	81.8	31-1
11	PHY 569 WRF	37.4	1022	4.6	1.13	33.0	83.7	41-3
12	BCSX 1150B2F	35.0	1013	4.4	1.19	34.3	83.4	31-1
13	PHY 367 WRF	37.6	1003	4.2	1.15	30.4	82.0	31-1
14	AM 1550 B2F	38.1	1002	4.5	1.08	28.4	81.2	31-4
15	DP 1133 B2RF	40.6	999	4.9	1.15	33.1	83.7	31-2
16	PHY 565 WRF	37.1	999	4.3	1.14	32.3	83.1	31-1
17	BCSX 1160B2F	36.7	998	4.2	1.11	29.5	81.0	21-2
18	10R052B2R2	38.0	996	4.7	1.15	29.5	82.2	31-1
19	ST 5288B2F	37.1	980	5.0	1.14	29.5	82.1	31-2
20	PHY 519 WRF	36.5	964	4.6	1.13	31.6	82.3	31-1
21	BCSX 1030B2F	39.4	958	4.0	1.11	29.6	82.0	31-1
22	DP 0912 B2RF	40.1	949	4.8	1.10	30.9	83.4	31-1
23	AMx 001 B2RF	39.7	947	4.7	1.10	30.2	82.3	31-1
24	FM 1740B2F	39.1	945	4.5	1.11	30.3	81.8	31-2
25	PHY 485 WRF	36.5	905	4.6	1.12	31.6	82.5	31-2
26	DG 2450 B2RF	36.0	894	4.2	1.15	28.6	82.4	21-2
27	FM 1773LLB2	35.1	864	4.7	1.16	30.1	81.7	21-2
28	DP 0924 B2RF	36.0	852	4.6	1.10	30.0	81.4	31-1
29	DP 0920 B2RF	38.4	831	4.4	1.14	29.3	82.3	31-1
30	FM 1845LLB2	36.4	809	4.6	1.19	33.0	83.5	31-2
31	CG 3220 B2RF	37.8	805	4.2	1.11	29.6	81.5	21-2
32	CG 3020 B2RF	35.0	804	3.9	1.08	27.6	82.5	31-2
33	NG 4012 B2RF	37.2	804	4.0	1.11	28.2	81.2	31-1
34	PHY 440 W	37.9	800	4.4	1.13	30.6	83.6	41-3
35	NG 3331 B2RF	37.6	769	4.9	1.11	30.4	83.3	31-3
36	SSG HQ 210 CT	35.2	769	5.0	1.12	30.1	81.8	31-1
37	CG 3035 RF	39.3	768	4.7	1.10	29.9	82.6	31-1
38	ST 4288B2F	34.0	765	4.4	1.15	30.8	82.5	31-2
39	CG 4020 B2RF	36.7	760	4.1	1.13	27.6	82.2	31-1
40	PHY 315 RF	39.4	757	4.6	1.12	28.7	82.6	31-1
41	NG 4010 B2RF	35.3	748	4.3	1.14	31.0	81.4	31-1
42	FM 1735LLB2	35.3	742	4.3	1.10	29.8	82.1	31-1
43	ARK 0102-48	35.1	736	4.9	1.27	36.6	85.2	31-2
44	BCSX 1040B2F	33.6	733	4.3	1.20	32.4	84.0	41-1
45	CG 3520 B2RF	36.3	733	4.0	1.13	28.3	82.1	31-2
46	SSG HQ 110 CT	37.9	721	4.4	1.14	30.9	82.6	31-1
47	NG F015 B2RF	35.8	654	4.4	1.11	30.3	83.1	31-1
48	ARK 9803-23-04	36.6	636	4.4	1.21	33.1	84.1	21-2
<b>Average</b>		<b>37.5</b>	<b>898</b>	<b>4.5</b>	<b>1.13</b>	<b>30.4</b>	<b>82.4</b>	
<b>LSD (0.05)</b>		<b>1.1</b>	<b>150</b>	<b>0.3</b>	<b>0.03</b>	<b>1.7</b>	<b>1.4</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table OVT4.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial conducted at Hollingsworth Farms, Chic, TN listed by yield rank.

Yield		Fiber						
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 375 WRF	42.1	1730	5.1	1.13	30.5	82.6	31-2
2	AMx 001 B2RF	39.0	1694	5.0	1.13	31.4	83.5	31-2
3	10R052B2R2	42.2	1651	5.1	1.12	29.3	82.8	31-2
4	DP 0935 B2RF	42.0	1650	5.0	1.11	29.2	82.9	31-1
5	DP 1034 B2RF	41.2	1646	4.8	1.14	29.3	83.2	31-1
6	DP 1133 B2RF	39.5	1632	5.1	1.17	32.4	83.7	31-2
7	DP 1028 B2RF	40.4	1629	5.0	1.15	30.0	83.8	31-2
8	PHY 499 WRF	41.0	1628	5.1	1.15	32.5	83.4	31-2
9	BCSX 1160B2F	35.0	1622	4.8	1.12	30.3	81.7	31-1
10	DP 0912 B2RF	35.7	1601	5.3	1.13	30.0	83.6	31-2
11	DG 2570 B2RF	38.4	1600	4.9	1.12	31.1	82.3	31-1
12	DP 0920 B2RF	39.4	1594	5.1	1.12	28.9	82.3	31-2
13	DP 1137 B2RF	40.8	1551	4.9	1.14	29.0	82.8	31-1
14	ST 5458B2RF	37.2	1548	5.0	1.12	30.5	83.3	31-1
15	BCSX 1010B2F	36.1	1506	4.7	1.17	30.2	82.6	31-1
16	BCSX 1030B2F	37.7	1506	4.6	1.14	28.6	82.7	31-1
17	BCSX 1150B2F	33.7	1505	4.9	1.20	35.1	83.8	41-3
18	DP 1032 B2RF	39.8	1501	4.9	1.14	30.6	83.0	41-1
19	AM 1550 B2F	41.3	1499	4.8	1.10	28.7	81.9	31-1
20	ST 5288B2F	37.8	1492	5.3	1.12	28.6	81.6	31-2
21	FM 1773LLB2	34.9	1463	4.9	1.19	31.7	82.7	41-1
22	DP 0924 B2RF	37.1	1452	5.2	1.11	30.2	83.3	31-2
23	CG 3035 RF	40.6	1451	5.1	1.12	32.5	83.0	31-1
24	PHY 367 WRF	37.5	1441	4.7	1.18	31.5	83.0	31-1
25	SSG HQ 110 CT	40.7	1437	4.9	1.19	32.2	84.3	31-2
26	DG 2450 B2RF	36.2	1436	4.9	1.13	28.3	82.9	31-2
27	PHY 440 W	35.6	1434	4.7	1.16	31.8	84.1	41-1
28	ST 4288B2F	34.6	1432	4.8	1.18	30.5	83.4	41-1
29	FM 1735LLB2	34.3	1398	4.7	1.12	29.8	83.3	41-1
30	PHY 315 RF	38.0	1383	4.9	1.12	29.3	81.4	31-2
31	PHY 569 WRF	34.2	1368	4.7	1.14	33.0	83.5	31-2
32	NG 4012 B2RF	36.4	1356	4.3	1.17	32.3	82.5	41-1
33	SSG HQ 210 CT	37.1	1354	4.9	1.15	32.9	83.1	41-1
34	FM 1740B2F	37.9	1336	4.9	1.14	31.7	83.1	31-2
35	CG 4020 B2RF	36.9	1333	4.8	1.14	28.7	82.3	31-2
36	FM 1845LLB2	33.7	1330	5.0	1.23	34.9	84.9	41-1
37	NG 3331 B2RF	37.2	1312	5.4	1.12	31.8	84.1	41-1
38	BCSX 1040B2F	32.6	1289	4.5	1.24	32.1	83.8	41-2
39	PHY 485 WRF	35.7	1289	4.8	1.13	31.9	83.2	31-2
40	PHY 565 WRF	35.2	1271	4.6	1.20	34.0	84.1	41-1
41	CG 3220 B2RF	37.4	1257	4.5	1.13	30.1	82.5	31-2
42	ARK 9803-23-04	35.6	1230	5.0	1.21	33.3	83.6	31-2
43	PHY 519 WRF	33.7	1214	5.0	1.12	31.4	82.7	31-2
44	NG 4010 B2RF	34.8	1201	4.6	1.17	33.4	83.1	41-1
45	CG 3520 B2RF	34.5	1193	4.6	1.15	29.8	82.9	31-1
46	ARK 0102-48	34.9	1186	5.1	1.28	35.9	84.8	31-2
47	CG 3020 B2RF	35.8	1186	4.5	1.11	28.9	83.3	41-1
48	NG F015 B2RF	33.9	1138	5.0	1.16	33.0	83.5	31-2
<b>Average</b>		<b>37.2</b>	<b>1437</b>	<b>4.9</b>	<b>1.15</b>	<b>31.1</b>	<b>83.1</b>	
<b>LSD (0.05)</b>		<b>2.1</b>	<b>176</b>	<b>0.3</b>	<b>0.04</b>	<b>2.2</b>	<b>1.7</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table OVT5.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial conducted at the Research and Education Center at Milan, TN listed by yield rank.

Yield		Fiber						
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 375 WRF	40.0	1796	4.5	1.19	30.7	84.5	31-2
2	DG 2570 B2RF	40.0	1765	4.8	1.15	31.0	83.8	21-2
3	PHY 499 WRF	40.3	1756	4.8	1.19	31.9	84.5	41-1
4	DP 0912 B2RF	38.6	1711	4.9	1.14	30.8	84.3	31-2
5	FM 1740B2F	39.2	1655	4.3	1.18	31.9	83.4	31-1
6	ST 5458B2RF	36.0	1641	4.7	1.20	31.7	83.1	31-2
7	DP 1034 B2RF	38.0	1601	4.3	1.18	30.8	83.1	51-3
8	FM 1773LLB2	38.1	1597	4.6	1.23	32.2	83.2	31-2
9	DP 1028 B2RF	37.9	1594	4.6	1.18	30.1	84.5	31-1
10	DP 1032 B2RF	38.5	1584	4.5	1.21	32.0	83.9	31-1
11	PHY 367 WRF	34.9	1581	4.3	1.18	33.0	81.9	31-2
12	DP 1137 B2RF	37.6	1567	4.6	1.18	30.4	84.2	31-1
13	CG 3035 RF	39.5	1554	4.8	1.14	30.8	83.7	21-2
14	AMx 001 B2RF	36.0	1545	4.7	1.16	31.1	83.7	41-1
15	PHY 440 W	37.1	1536	4.4	1.19	32.5	84.6	41-1
16	PHY 315 RF	36.0	1521	4.3	1.17	30.2	82.7	41-1
17	PHY 485 WRF	36.0	1509	4.6	1.16	33.0	84.4	41-1
18	NG 4012 B2RF	35.0	1497	4.0	1.18	32.4	82.3	31-1
19	ST 4288B2F	33.1	1488	4.6	1.19	31.2	83.7	31-2
20	BCSX 1030B2F	35.3	1466	4.2	1.16	30.2	82.9	31-1
21	BCSX 1150B2F	31.1	1466	4.6	1.23	34.3	85.2	41-1
22	DP 0920 B2RF	37.4	1461	4.8	1.18	29.4	83.3	31-1
23	AM 1550 B2F	34.6	1449	4.5	1.14	29.4	83.2	31-1
24	NG 3331 B2RF	34.2	1420	4.9	1.15	32.5	84.1	41-1
25	SSG HQ 110 CT	36.5	1415	4.5	1.19	32.2	84.6	31-2
26	CG 3520 B2RF	35.8	1413	4.5	1.18	30.6	84.1	31-1
27	ARK 9803-23-04	34.4	1409	4.5	1.23	34.4	84.2	31-1
28	CG 4020 B2RF	34.4	1407	4.2	1.19	30.1	83.5	31-1
29	DP 0924 B2RF	32.7	1403	4.7	1.15	30.7	83.5	31-2
30	10R052B2R2	36.6	1401	4.7	1.19	30.2	85.3	31-1
31	ARK 0102-48	37.3	1379	4.8	1.30	37.7	85.9	41-1
32	PHY 519 WRF	34.1	1379	4.4	1.18	32.5	83.9	31-2
33	CG 3220 B2RF	33.7	1370	4.6	1.18	31.1	84.4	31-1
34	BCSX 1010B2F	33.8	1359	4.2	1.17	29.8	82.6	31-1
35	NG 4010 B2RF	32.6	1347	4.2	1.21	33.2	83.9	31-1
36	DP 0935 B2RF	33.6	1346	4.6	1.18	30.8	83.4	21-2
37	ST 5288B2F	34.4	1345	4.6	1.18	29.2	82.9	41-1
38	PHY 569 WRF	35.2	1341	4.5	1.18	33.2	84.5	31-1
39	PHY 565 WRF	32.4	1339	4.4	1.21	33.7	84.2	41-1
40	BCSX 1040B2F	30.8	1335	4.2	1.27	33.4	84.3	41-1
41	NG F015 B2RF	32.4	1317	4.5	1.20	32.4	83.8	31-2
42	DG 2450 B2RF	33.0	1315	4.2	1.19	29.7	84.5	31-1
43	FM 1735LLB2	34.7	1312	4.2	1.17	31.9	83.2	31-2
44	BCSX 1160B2F	32.2	1304	4.2	1.17	31.3	82.0	21-2
45	CG 3020 B2RF	33.3	1276	4.2	1.13	29.4	83.2	31-1
46	FM 1845LLB2	34.4	1230	4.5	1.24	33.2	84.6	31-2
47	DP 1133 B2RF	35.8	1222	4.5	1.20	32.0	85.1	31-1
48	SSG HQ 210 CT	30.7	1187	4.6	1.18	33.4	83.9	31-1
<b>Average</b>		<b>35.4</b>	<b>1456</b>	<b>4.5</b>	<b>1.18</b>	<b>31.6</b>	<b>83.8</b>	
<b>LSD (0.05)</b>		<b>2.7</b>	<b>166</b>	<b>0.2</b>	<b>0.04</b>	<b>1.4</b>	<b>1.8</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table OVT6.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial conducted at Lindamood Planting Company, Ridgely, TN listed by yield rank.

Yield			Fiber					
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	BCSX 1150B2F	40.0	1741	4.7	1.17	33.0	83.4	41-3
2	PHY 499 WRF	40.7	1726	4.8	1.14	32.1	82.6	31-2
3	AMx 001 B2RF	40.5	1690	5.0	1.13	30.8	83.3	31-2
4	DP 0912 B2RF	38.2	1670	5.0	1.12	30.5	82.9	41-2
5	PHY 519 WRF	39.1	1657	4.6	1.13	31.6	82.6	41-1
6	PHY 375 WRF	38.6	1626	4.8	1.14	30.5	83.4	31-1
7	DG 2570 B2RF	37.7	1617	4.7	1.17	31.0	82.5	31-1
8	10R052B2R2	39.3	1568	5.0	1.15	30.5	83.7	31-2
9	DP 0935 B2RF	38.8	1561	4.6	1.11	29.3	82.6	31-1
10	DP 0920 B2RF	35.9	1552	4.7	1.13	28.9	81.5	31-2
11	DP 1133 B2RF	40.7	1549	5.1	1.15	33.6	84.4	31-2
12	BCSX 1160B2F	37.1	1546	4.7	1.14	29.7	83.9	21-2
13	DP 1028 B2RF	34.0	1535	5.0	1.15	29.8	82.6	31-2
14	SSG HQ 210 CT	37.0	1535	4.7	1.14	30.5	82.3	31-2
15	PHY 440 W	40.6	1531	4.8	1.14	32.1	83.5	31-2
16	DG 2450 B2RF	40.4	1530	4.4	1.14	29.7	82.8	41-1
17	ST 4288B2F	38.9	1527	4.9	1.16	29.9	83.3	31-1
18	AM 1550 B2F	40.0	1518	4.6	1.08	27.7	81.4	31-2
19	CG 3220 B2RF	38.7	1513	4.7	1.14	29.8	82.7	31-2
20	ST 5458B2RF	35.3	1513	4.6	1.14	29.7	82.0	31-2
21	CG 3520 B2RF	41.8	1508	4.4	1.17	29.3	82.9	41-1
22	SSG HQ 110 CT	40.4	1502	5.1	1.15	31.5	82.9	31-2
23	PHY 315 RF	41.1	1491	4.5	1.13	30.5	81.9	41-1
24	BCSX 1040B2F	33.8	1486	4.7	1.24	32.1	83.7	41-1
25	PHY 485 WRF	39.8	1480	4.7	1.14	32.4	83.0	41-1
26	FM 1773LLB2	38.6	1475	4.8	1.19	32.6	82.9	31-2
27	PHY 367 WRF	38.7	1466	4.5	1.15	30.9	82.7	31-2
28	DP 1034 B2RF	36.0	1465	4.6	1.15	29.0	83.6	31-2
29	CG 3035 RF	39.3	1461	4.8	1.10	28.6	83.1	31-1
30	NG 4012 B2RF	39.3	1429	4.5	1.14	30.7	83.1	31-2
31	BCSX 1010B2F	35.7	1388	4.6	1.13	28.8	81.3	31-1
32	DP 1137 B2RF	35.4	1383	5.0	1.13	28.9	84.0	31-2
33	ST 5288B2F	36.4	1364	4.9	1.16	30.1	83.0	41-1
34	PHY 565 WRF	35.6	1363	4.6	1.15	32.6	83.9	31-2
35	FM 1740B2F	35.7	1355	4.8	1.16	31.1	82.5	31-1
36	FM 1845LLB2	36.4	1341	5.2	1.20	33.4	85.1	31-2
37	NG 3331 B2RF	31.6	1339	5.0	1.15	32.2	84.0	31-4
38	DP 0924 B2RF	32.6	1337	5.0	1.11	29.4	82.8	41-1
39	ARK 0102-48	34.8	1326	4.8	1.27	34.8	84.7	41-1
40	CG 4020 B2RF	38.2	1326	4.4	1.14	28.9	81.2	41-1
41	BCSX 1030B2F	31.9	1306	4.6	1.18	30.4	83.5	31-2
42	NG F015 B2RF	32.9	1297	4.8	1.15	30.4	83.2	41-1
43	FM 1735LLB2	39.3	1295	4.6	1.14	30.9	83.0	41-1
44	PHY 569 WRF	35.9	1291	4.9	1.16	32.3	83.8	31-3
45	DP 1032 B2RF	36.8	1280	4.7	1.18	29.9	81.8	31-2
46	CG 3020 B2RF	34.5	1271	4.1	1.10	28.1	82.3	41-1
47	NG 4010 B2RF	35.8	1214	4.5	1.17	31.3	82.7	41-1
48	ARK 9803-23-04	34.4	1142	4.6	1.21	34.8	83.6	31-2
<b>Average</b>		<b>37.4</b>	<b>1460</b>	<b>4.7</b>	<b>1.15</b>	<b>30.7</b>	<b>83.0</b>	
<b>LSD (0.05)</b>		<b>3.2</b>	<b>201</b>	<b>0.5</b>	<b>0.06</b>	<b>2.7</b>	<b>1.6</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table OVT7.** Lint yield, gin turnout, and fiber quality of 48 entries in the 2010 Tennessee Official Variety Trial conducted at the West Tennessee Research and Education Center, Jackson, TN listed by yield rank.

Yield		Fiber						
Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	DG 2570 B2RF	39.6	1694	4.8	1.14	31.8	84.8	21-2
2	DP 0920 B2RF	39.9	1667	4.9	1.13	28.7	83.4	31-1
3	DP 0935 B2RF	41.7	1656	4.9	1.14	30.4	83.5	21-2
4	PHY 499 WRF	42.1	1654	4.9	1.15	34.3	84.7	31-1
5	DP 0912 B2RF	38.3	1652	5.0	1.15	30.2	84.0	31-2
6	PHY 367 WRF	38.5	1650	4.7	1.15	31.6	83.7	21-2
7	PHY 375 WRF	39.7	1638	4.6	1.15	30.6	84.2	31-1
8	DP 0924 B2RF	38.7	1615	5.0	1.13	31.6	84.1	31-2
9	AMx 001 B2RF	40.3	1613	4.7	1.22	34.4	84.4	31-1
10	BCSX 1150B2F	35.2	1612	4.8	1.17	33.6	83.9	32-2
11	DP 1032 B2RF	40.8	1609	4.7	1.18	31.3	83.5	31-1
12	DP 1034 B2RF	40.6	1602	4.9	1.16	31.7	84.1	31-1
13	PHY 440 W	37.5	1598	4.7	1.14	31.4	84.1	31-2
14	10R052B2R2	41.2	1595	4.7	1.17	30.4	83.6	31-1
15	BCSX 1160B2F	37.9	1595	4.9	1.11	29.7	81.8	21-4
16	AM 1550 B2F	39.4	1587	4.8	1.14	30.5	84.0	21-2
17	CG 3035 RF	41.4	1581	4.9	1.17	31.6	85.0	21-2
18	FM 1740B2F	39.1	1578	4.7	1.16	30.8	82.7	31-1
19	ARK 9803-23-04	37.2	1576	4.4	1.16	31.6	84.3	31-1
20	DP 1028 B2RF	42.5	1576	4.9	1.15	30.7	83.0	21-2
21	NG 3331 B2RF	38.7	1576	4.8	1.16	33.0	85.0	41-3
22	ST 5458B2RF	38.9	1562	4.8	1.16	30.9	82.8	31-3
23	CG 3220 B2RF	38.2	1551	4.7	1.17	30.3	85.0	21-2
24	PHY 315 RF	38.0	1540	4.6	1.16	31.4	83.8	31-1
25	BCSX 1030B2F	38.3	1534	4.4	1.19	31.6	83.6	31-1
26	ST 4288B2F	35.9	1516	4.8	1.14	29.3	82.7	31-2
27	DP 1133 B2RF	41.0	1515	4.8	1.16	31.7	84.8	31-1
28	DG 2450 B2RF	36.9	1512	4.9	1.15	30.5	84.1	21-2
29	FM 1735LLB2	35.4	1503	4.6	1.13	30.7	83.4	31-2
30	SSG HQ 110 CT	37.2	1492	4.9	1.13	31.3	83.2	31-1
31	PHY 565 WRF	37.1	1483	4.7	1.17	33.8	84.6	31-3
32	PHY 569 WRF	36.7	1481	4.9	1.17	33.0	84.6	31-3
33	PHY 519 WRF	38.1	1462	4.6	1.17	33.4	83.4	31-3
34	DP 1137 B2RF	40.1	1444	5.0	1.14	29.6	83.4	21-2
35	CG 4020 B2RF	36.9	1432	4.9	1.15	31.0	83.8	31-1
36	BCSX 1040B2F	34.8	1425	4.6	1.24	33.1	85.8	41-1
37	BCSX 1010B2F	37.8	1414	4.6	1.16	30.2	83.7	21-2
38	FM 1773LLB2	35.3	1405	4.7	1.21	33.3	83.6	31-1
39	FM 1845LLB2	36.1	1405	5.1	1.17	33.0	84.1	31-1
40	CG 3020 B2RF	35.3	1395	4.6	1.16	30.5	84.4	31-1
41	SSG HQ 210 CT	36.2	1395	4.8	1.15	29.7	83.4	31-2
42	NG 4012 B2RF	37.5	1393	4.6	1.19	33.8	83.3	31-1
43	ST 5288B2F	37.5	1383	5.1	1.14	30.9	83.0	41-1
44	NG 4010 B2RF	36.5	1352	4.5	1.16	32.9	82.7	31-3
45	ARK 0102-48	35.6	1324	4.7	1.26	35.0	85.6	31-2
46	CG 3520 B2RF	35.5	1305	4.5	1.18	29.5	83.7	31-1
47	PHY 485 WRF	35.8	1272	4.9	1.13	32.0	83.6	41-3
48	NG F015 B2RF	35.9	1248	4.6	1.13	31.7	82.8	31-3
<b>Average</b>		<b>38.1</b>	<b>1514</b>	<b>4.7</b>	<b>1.16</b>	<b>31.5</b>	<b>83.8</b>	
<b>LSD (0.05)</b>		<b>1.1</b>	<b>222</b>	<b>0.5</b>	<b>0.07</b>	<b>3.1</b>	<b>1.9</b>	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table OVT8.** Plant height (inches), total number of nodes, height to node ratio, nodes above cracked boll, and estimated DD60's remaining to maturity of 48 entries in the 2010 Tennessee Official Variety Trial, listed in alphabetical order.

Yield Rank	Variety	Height in	Nodes no.	Height:Node ratio	NACB <sup>1</sup> no.	DD60 <sup>2</sup> units
1	10R052B2R2	42.9	16.5	2.6	4.7	233.0
2	AM 1550 B2F	37.6	17.6	2.1	4.7	236.0
3	AMx 001 B2RF	41.8	17.5	2.4	6.1	304.0
4	ARK 0102-48	37.6	17.6	2.1	4.9	244.0
5	ARK 9803-23-04	42.4	17.8	2.4	5.2	260.0
6	BCSX 1010B2F	39.1	16.9	2.3	5.6	279.0
7	BCSX 1030B2F	38.5	16.2	2.4	4.1	204.0
8	BCSX 1040B2F	39.9	16.4	2.4	3.8	191.0
9	BCSX 1150B2F	39.6	16.5	2.4	4.3	216.0
10	BCSX 1160B2F	41.1	17.5	2.3	5.3	266.0
11	CG 3020 B2RF	37.2	16.8	2.2	4.1	203.0
12	CG 3035 RF	40.3	17.7	2.3	4.5	224.0
13	CG 3220 B2RF	39.6	17.3	2.3	4.7	233.0
14	CG 3520 B2RF	38.6	17.0	2.3	4.1	203.0
15	CG 4020 B2RF	38.9	17.4	2.2	4.5	224.0
16	DG 2450 B2RF	38.7	16.8	2.3	4.9	243.0
17	DG 2570 B2RF	41.3	17.3	2.4	4.2	209.0
18	DP 0912 B2RF	38.5	17.6	2.2	6.1	306.0
19	DP 0920 B2RF	38.4	17.3	2.2	4.9	243.0
20	DP 0924 B2RF	38.4	17.4	2.2	5.8	290.0
21	DP 0935 B2RF	39.4	17.6	2.2	6.4	318.0
22	DP 1028 B2RF	40.7	16.4	2.5	4.8	240.0
23	DP 1032 B2RF	40.1	16.9	2.4	4.8	242.0
24	DP 1034 B2RF	40.3	16.4	2.5	5.1	255.0
25	DP 1133 B2RF	40.4	17.5	2.3	5.6	280.0
26	DP 1137 B2RF	42.5	16.3	2.6	4.7	235.0
27	FM 1735LLB2	41.3	17.9	2.3	3.7	184.0
28	FM 1740B2F	36.0	16.4	2.2	4.8	238.0
29	FM 1773LLB2	38.7	17.4	2.2	4.1	204.0
30	FM 1845LLB2	38.2	17.8	2.1	7.2	362.0
31	NG 3331 B2RF	38.8	18.2	2.1	5.8	288.0
32	NG 4010 B2RF	41.8	18.5	2.3	4.6	228.0
33	NG 4012 B2RF	42.7	18.8	2.3	4.5	223.0
34	NG F015 B2RF	38.7	17.7	2.2	4.8	241.0
35	PHY 315 RF	41.5	16.8	2.5	4.5	223.0
36	PHY 367 WRF	38.0	16.6	2.3	5.2	260.0
37	PHY 375 WRF	40.6	17.3	2.4	4.6	231.0
38	PHY 440 W	39.0	16.6	2.3	4.0	201.0
39	PHY 485 WRF	42.8	17.0	2.5	3.8	190.0
40	PHY 499 WRF	43.0	17.3	2.5	5.2	261.0
41	PHY 519 WRF	43.7	17.2	2.5	4.3	216.0
42	PHY 565 WRF	42.8	18.0	2.4	5.6	279.0
43	PHY 569 WRF	40.4	17.8	2.3	5.7	286.0
44	SSG HQ 110 CT	39.4	18.4	2.1	5.4	269.0
45	SSG HQ 210 CT	36.9	18.2	2.0	5.8	289.0
46	ST 4288B2F	37.7	16.7	2.3	4.6	231.0
47	ST 5288B2F	38.4	17.4	2.2	4.7	234.0
48	ST 5458B2RF	37.6	17.0	2.2	5.9	294.0
<b>Average</b>		<b>39.8</b>	<b>17.3</b>	<b>2.3</b>	<b>4.9</b>	<b>246.1</b>

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

<sup>2</sup>DD60 = degree-days, base 60 F. DD60 to maturity = NACB x (50 DD60/node to open highest harvestable boll).

Tennessee AgResearch data of Main et al. (2009).

**Table OVT9.** Gin turnout and lint yield of varieties common to Tennessee OVT's from 2, and 3 year averages, listed by yield rank.

Rank	Variety	Gin Turnout %	2 Year Average lb/ac	Rank	Variety	Gin Turnout %	3 Year Average lb/ac
1	PHY 375 WRF	38.2	1251	1	PHY 375 WRF	38.3	1351
2	DP 0912 B2RF	37.6	1218	2	FM 1740B2F	38.2	1306
3	FM 1740B2F	37.9	1206	3	ST 5458 B2F	36.7	1302
4	ST 5458 B2F	36.2	1201	4	DG 2570 B2RF	37.7	1254
5	ST 4288B2F	35.8	1192	5	DP 0935 B2RF	37.7	1234
6	DG 2570 B2RF	37.5	1176	6	AM 1550 B2RF	38.0	1229
7	PHY 367 WRF	37.1	1169	7	PHY 485 WRF	37.1	1214
8	AM 1550 B2RF	38.0	1152	8	PHY 315 RF	37.9	1195
9	DP 0935 B2RF	37.2	1143	9	CG 3220 B2RF	36.5	1131
10	DP 0924 B2RF	35.7	1135	10	CG 4020 B2RF	35.5	1102
11	ST 5288B2F	36.8	1132	11	CG 3035 RF	37.7	1100
12	DP 0920 B2RF	37.4	1132	12	CG 3020 B2RF	34.7	1084
13	PHY 440 W	37.1	1129				
14	PHY 485 WRF	37.3	1127				
15	PHY 569 WRF	36.2	1114				
16	PHY 315 RF	38.0	1109				
17	PHY 565 WRF	36.0	1092				
18	ARK 0102-48	35.9	1079				
19	CG 3035 RF	37.7	1040				
20	SSG HQ 110 CT	36.4	1030				
21	CG 4020 B2RF	35.2	1025				
22	CG 3220 B2RF	35.8	1013				
23	CG 3020 B2RF	34.4	986				
24	SSG HQ 210 CT	35.0	975				
	<b>AVERAGE</b>	<b>36.7</b>	<b>1118</b>			<b>37.2</b>	<b>1208</b>
	<b>LSD (0.05)</b>	<b>0.9</b>	<b>62</b>			<b>0.7</b>	<b>51</b>

Tennessee AgResearch data of Main et al. (2010).

## **COUNTY STANDARD TEST DEMONSTRATIONS**

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County Standard Trial demonstrations were conducted to evaluate commercial cultivar performance in multiple large plot environments. County standard testing included Roundup Ready Flex cultivars. County standard tests were planted in 14 counties each containing 21 cultivars. County standard tests of Liberty Link cultivars were planted in 4 locations with each location containing 7 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 SAS Proc MIXED with locations as replications.



**Table CST1.** Results of Roundup Ready Flex cotton variety test, all locations average, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 0920 B2RF	40.0	1037	4.7	1.10	28.5	81.5	31-1	3	55.10
2	ST 5458B2RF	38.2	1036	4.8	1.10	31.0	81.2	31-1	4	54.15
3	PHY 367 WRF	38.8	1036	4.4	1.11	31.2	82.0	31-1	4	54.15
4	AM 1550 B2RF	39.0	1033	4.4	1.08	28.0	81.2	31-1	3	55.10
5	PHY 375 WRF	40.0	1031	4.6	1.09	29.2	81.6	31-1	3	55.35
6	DP 0912 B2RF	38.2	1031	4.9	1.06	29.1	81.6	31-1	4	52.75
7	DP 0935 B2RF	40.2	1028	4.7	1.07	29.3	81.3	31-1	3	53.50
8	CG 3220 B2RF	38.6	1025	4.6	1.09	29.5	81.3	31-1	3	55.35
9	DG 2570 B2RF	39.0	1015	4.6	1.09	30.7	82.2	31-1	3	55.55
10	DP 1028 B2RF	41.0	1014	4.7	1.10	29.5	82.1	31-1	3	55.35
11	ST 4288B2F	36.2	982	4.6	1.11	30.1	81.6	31-1	4	54.15
12	DP 0924 B2RF	38.2	954	4.7	1.08	29.9	81.6	31-1	4	54.15
13	DP 1034 B2RF	40.1	949	4.6	1.11	29.6	81.8	31-1	3	55.35
14	ST 5288B2F	38.6	944	4.7	1.10	28.8	81.2	41-1	5	51.10
15	NG 4012 B2RF	37.7	922	4.2	1.11	31.3	81.3	31-1	3	55.50
16	FM 1740 B2F	38.0	919	4.5	1.09	30.0	81.3	31-1	3	55.35
17	DG 2450 B2RF	37.5	915	4.3	1.11	28.9	81.4	31-1	3	55.70
18	CG 4020 B2RF	38.0	913	4.4	1.11	29.3	81.4	31-1	3	55.70
19	PHY 485 WRF	37.1	908	4.6	1.09	31.6	82.4	31-1	5	53.30
20	PHY 565 WRF	38.1	905	4.5	1.12	32.8	82.5	31-1	4	54.35
21	NG 4010 B2RF	36.4	824	4.2	1.12	32.4	82.0	31-1	3	55.50
	<b>Mean</b>	<b>38.6</b>	<b>980</b>	<b>4.6</b>	<b>1.10</b>	<b>29.9</b>	<b>81.6</b>		<b>3</b>	<b>54.55</b>
	<b>LSD</b>	<b>0.9</b>	<b>86</b>	<b>0.1</b>	<b>0.01</b>	<b>0.7</b>	<b>0.5</b>			

**Table CST2.** Results of Liberty Link cotton variety test, all locations average, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	BCSX 1145LLB2	39.9	1290	5.1	1.10	30.9	82.3	31-1	5	50.70
2	BCSX 1035LLB2	36.8	1195	5.0	1.12	30.4	81.9	31-1	4	53.02
3	BCSX 1015LLB2	36.5	1154	4.7	1.18	32.1	81.7	31-1	3	54.83
4	FM 1773LLB2	35.4	1130	5.0	1.17	31.4	82.9	31-1	3	53.87
5	FM 1735LLB2	34.9	1120	4.8	1.11	30.5	81.9	31-1	3	54.55
6	BCSX 1025LLB2	38.0	1101	4.9	1.16	32.5	81.9	31-1	3	55.58
7	FM 1845LLB2	36.2	1061	5.1	1.18	32.7	83.4	31-1	4	53.42
	<b>Mean</b>	<b>36.8</b>	<b>1150</b>	<b>4.9</b>	<b>1.14</b>	<b>31.5</b>	<b>82.3</b>		<b>4</b>	<b>53.71</b>
	<b>LSD</b>	<b>1.8</b>	<b>98</b>	<b>ns</b>	<b>0.06</b>	<b>ns</b>	<b>ns</b>			

**Table CST3.** Results of Roundup Ready Flex cotton variety test, Carroll County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	ST 4288B2F	36.8	1130	4.5	1.11	30.1	81.9	21-2	4	55.25
2	ST 5458B2RF	37.7	1026	4.8	1.10	33.2	80.3	21-2	3	55.90
3	CG 3220 B2RF	37.9	935	4.7	1.14	29.5	82.2	21-1	2	56.45
4	DP 1034 B2RF	40.2	925	4.6	1.10	27.9	81.6	21-1	2	56.00
5	PHY 565 WRF	36.5	897	4.6	1.13	34.8	83.8	21-2	3	56.85
6	PHY 375 WRF	41.7	884	4.6	1.07	28.1	81.2	21-2	3	53.85
7	AM 1550 B2RF	37.9	847	4.2	1.04	27.1	80.0	21-1	2	56.60
8	DG 2570 B2RF	39.6	822	4.3	1.07	31.2	80.6	21-1	2	56.45
9	DP 0912 B2RF	40.2	821	4.6	1.05	27.9	81.6	31-2	3	53.50
10	DP 0920 B2RF	39.1	794	4.5	1.08	29.6	80.1	31-1	3	55.55
11	DP 1028 B2RF	40.7	786	4.5	1.06	28.3	80.6	21-1	2	56.45
12	DP 0924 B2RF	36.3	743	4.7	1.08	29.1	80.4	31-1	4	54.35
13	DP 0935 B2RF	39.6	706	4.7	1.01	28.3	79.7	21-1	2	56.45
14	CG 4020 B2RF	36.5	670	4.4	1.08	27.7	81.1	21-1	2	56.45
15	FM 1740 B2F	39.0	659	4.2	1.04	28.3	80.8	21-2	3	52.25
16	NG 4010 B2RF	34.7	655	3.7	1.11	32.9	80.9	31-1	3	55.70
17	NG 4012 B2RF	38.2	646	3.6	1.09	31.2	79.5	31-1	3	55.55
18	ST 5288B2F	37.8	638	4.4	1.05	28.2	79.4	31-1	4	53.60
19	DG 2450 B2RF	38.2	621	4.2	1.14	32.6	83.1	21-2	3	57.05
20	PHY 367 WRF	37.7	604	4.2	1.08	31.1	82.3	21-2	3	56.05
21	PHY 485 WRF	37.9	547	4.6	1.06	31.9	82.6	31-1	4	53.40
<b>Mean</b>		<b>38.3</b>	<b>790</b>	<b>4.4</b>	<b>1.08</b>	<b>29.9</b>	<b>81.1</b>		<b>3</b>	<b>55.52</b>

**Table CST4.** Results of Roundup Ready Flex cotton variety test, Crockett County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	PHY 375 WRF	40.0	954	5.2	1.08	28.8	83.3	31-1	3	53.55
2	AM 1550 B2RF	39.1	947	4.4	1.15	28.4	83.5	31-1	3	55.85
3	CG 3220 B2RF	38.4	928	5.0	1.15	29.6	83.7	31-1	3	53.65
4	PHY 367 WRF	39.7	922	5.2	1.07	31.5	81.4	31-1	3	53.35
5	DP 0920 B2RF	40.0	902	4.9	1.12	29.4	81.8	41-1	4	53.30
6	DP 0912 B2RF	38.4	873	5.5	1.08	29.6	82.8	31-2	4	51.30
7	DP 0935 B2RF	40.5	870	5.2	1.10	30.6	82.1	21-2	3	53.70
8	ST 4288B2F	36.1	846	5.3	1.13	30.0	82.1	31-1	4	51.10
9	CG 4020 B2RF	38.7	837	4.4	1.15	30.9	82.8	31-1	4	54.55
10	DG 2570 B2RF	37.8	830	5.3	1.13	30.8	84.3	31-1	3	52.60
11	FM 1740 B2F	37.8	822	4.9	1.08	31.3	81.9	21-2	3	55.90
12	ST 5458B2RF	38.3	816	5.5	1.10	31.3	82.1	31-2	4	51.10
13	DP 0924 B2RF	38.3	799	4.9	1.12	31.0	83.2	41-1	5	51.50
14	ST 5288B2F	38.0	741	5.6	1.12	29.0	82.1	41-1	6	45.65
15	NG 4012 B2RF	37.7	740	4.7	1.13	33.1	83.1	31-2	4	54.55
16	DP 1034 B2RF	41.2	710	5.0	1.15	29.7	83.0	31-1	2	53.75
17	DP 1028 B2RF	42.2	696	5.0	1.16	30.5	83.8	21-2	3	54.00
18	PHY 565 WRF	39.3	685	5.1	1.13	32.4	83.7	31-2	4	52.45
19	PHY 485 WRF	36.4	681	5.1	1.06	33.2	82.3	31-1	4	52.15
20	DG 2450 B2RF	36.5	660	4.8	1.12	29.1	82.3	31-1	3	55.55
21	NG 4010 B2RF	37.1	652	4.4	1.18	35.0	84.1	31-2	4	54.65
<b>Mean</b>		<b>38.7</b>	<b>813</b>	<b>5.1</b>	<b>1.12</b>	<b>30.5</b>	<b>82.8</b>		<b>4</b>	<b>52.98</b>

**Table CST5.** Results of Roundup Ready Flex cotton variety test, Dyer County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 1034 B2RF	41.9	994	4.6	1.06	28.2	81.2	31-3	3	55.55
2	DP 0924 B2RF	43.1	977	4.6	1.08	27.1	81.3	31-2	4	54.35
3	CG 3220 B2RF	38.2	938	4.8	1.04	28.8	79.6	41-1	4	53.30
4	ST 4288B2F	38.9	899	4.4	1.06	30.6	81.8	31-2	4	54.35
5	DP 0912 B2RF	38.6	882	4.8	1.01	27.5	80.9	31-2	4	54.35
6	PHY 375 WRF	40.5	877	4.8	1.05	27.9	80.6	41-1	4	53.30
7	DP 1028 B2RF	41.2	871	4.8	1.08	27.8	82.0	31-1	3	55.55
8	ST 5458B2RF	36.1	865	4.4	1.07	28.1	80.5	31-2	4	54.35
9	PHY 565 WRF	37.3	864	4.4	1.08	30.6	81.8	41-1	4	53.30
10	PHY 485 WRF	40.1	863	4.6	1.05	29.0	82.7	41-3	6	49.10
11	DG 2450 B2RF	38.8	828	4.5	1.05	26.8	80.0	31-1	3	55.55
12	DP 0935 B2RF	40.5	800	4.6	1.04	28.0	80.9	31-1	3	55.55
13	PHY 367 WRF	37.5	787	4.2	1.08	30.6	81.6	31-2	4	54.50
14	DP 0920 B2RF	39.3	784	4.8	1.06	27.7	81.5	31-1	3	55.55
15	DG 2570 B2RF	40.0	783	4.6	1.06	28.9	81.9	31-1	3	55.55
16	AM 1550 B2RF	39.0	774	4.6	1.05	26.9	80.7	31-1	3	55.55
17	ST 5288B2F	38.2	760	4.0	1.10	28.3	81.3	31-2	3	55.70
18	NG 4012 B2RF	38.0	739	4.9	1.02	28.4	80.2	31-1	3	55.55
19	FM 1740 B2F	37.6	718	4.0	1.05	27.7	79.6	31-1	3	55.70
20	NG 4010 B2RF	35.7	682	4.3	1.07	29.5	81.1	31-2	3	55.55
21	CG 4020 B2RF	37.7	658	4.4	1.15	30.9	82.8	31-1	4	54.55
	<b>Mean</b>	<b>39.0</b>	<b>834</b>	<b>4.5</b>	<b>1.06</b>	<b>28.4</b>	<b>81.1</b>		<b>4</b>	<b>54.61</b>

**Table CST6.** Results of Roundup Ready Flex cotton variety test, Mark McNabb producer, Fayette County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	PHY 485 WRF	37.3	1448	4.6	1.11	30.1	81.9	31-2	5	53.50
2	DP 1028 B2RF	42.7	1432	4.8	1.11	29.1	83.5	21-1	2	56.75
3	NG 4012 B2RF	39.5	1418	4.5	1.12	30.6	83.0	31-1	4	54.55
4	DP 0935 B2RF	40.6	1414	4.9	1.09	28.6	81.7	21-2	3	55.90
5	ST 5458B2RF	39.4	1398	5.0	1.10	29.6	81.4	31-2	4	52.15
6	PHY 367 WRF	40.6	1359	4.4	1.11	29.4	82.7	31-1	4	54.55
7	PHY 375 WRF	40.6	1356	4.5	1.11	28.6	81.7	31-2	4	54.35
8	DP 0920 B2RF	41.5	1340	4.8	1.08	27.6	80.8	31-1	3	55.55
9	PHY 565 WRF	37.8	1287	4.6	1.11	30.2	81.8	31-1	4	54.35
10	AM 1550 B2RF	39.0	1283	4.3	1.12	28.7	81.2	31-1	4	54.35
11	ST 4288B2F	37.0	1202	4.5	1.14	29.5	81.7	31-2	5	53.50
12	DG 2450 B2RF	40.9	1180	4.3	1.12	30.4	81.5	31-1	3	55.55
13	ST 5288B2F	39.3	1090	4.9	1.11	28.7	81.8	31-2	5	53.50
14	DP 0912 B2RF	39.6	1068	4.8	1.05	28.6	81.7	31-2	4	54.35
15	DP 0924 B2RF	39.7	1064	4.4	1.08	30.6	81.0	31-1	4	54.35
16	FM 1740 B2F	38.5	1043	4.6	1.11	28.8	81.8	31-2	4	54.35
17	CG 3220 B2RF	38.6	1020	4.5	1.09	28.9	81.9	21-2	3	55.90
18	DG 2570 B2RF	40.9	999	4.4	1.13	29.2	82.1	21-1	3	55.90
19	DP 1034 B2RF	40.9	913	4.7	1.12	29.6	81.4	31-1	3	55.55
20	CG 4020 B2RF	38.8	852	4.5	1.10	30.2	81.4	31-1	3	55.55
21	NG 4010 B2RF	38.8	705	4.2	1.13	29.3	82.3	31-2	3	55.70
<b>Mean</b>		<b>39.7</b>	<b>1208</b>	<b>4.6</b>	<b>1.11</b>	<b>29.4</b>	<b>81.8</b>		<b>4</b>	<b>54.73</b>

**Table CST7.** Results of Roundup Ready Flex cotton variety test, Joseph McNabb producer, Fayette County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	PHY 367 WRF	39.7	1375	4.5	1.11	31.4	81.7	21-2	3	55.90
2	CG 3220 B2RF	40.5	1316	4.6	1.09	29.2	81.2	21-1	3	55.90
3	DP 0912 B2RF	37.3	1228	5.0	1.12	30.6	82.8	31-1	3	53.55
4	DG 2570 B2RF	39.8	1192	4.8	1.11	30.8	83.1	31-1	3	55.75
5	ST 5458B2RF	39.3	1181	4.8	1.11	31.3	82.3	21-2	3	55.90
6	FM 1740 B2F	38.1	1144	4.7	1.12	31.5	83.0	21-2	3	56.10
7	ST 5288B2F	39.7	1138	4.8	1.11	30.4	81.8	31-1	4	54.35
8	PHY 375 WRF	39.8	1122	4.6	1.15	30.5	82.6	21-2	3	56.10
9	DG 2450 B2RF	37.9	1119	4.5	1.10	29.6	81.4	21-2	3	55.90
10	DP 0935 B2RF	41.5	1108	4.8	1.10	28.5	82.2	31-1	3	55.55
11	AM 1550 B2RF	38.9	1095	4.5	1.10	28.3	81.5	21-2	2	56.45
12	NG 4012 B2RF	37.3	1094	4.2	1.14	31.2	82.2	31-1	4	54.50
13	ST 4288B2F	34.8	1062	4.4	1.11	31.9	82.1	31-1	4	54.35
14	NG 4010 B2RF	38.5	989	4.3	1.13	31.0	81.7	31-1	3	55.55
15	DP 0920 B2RF	41.5	924	4.9	1.10	28.5	80.9	31-1	3	55.55
16	DP 1028 B2RF	39.6	924	4.7	1.14	30.8	82.2	31-1	3	55.55
17	PHY 565 WRF	36.9	905	4.4	1.12	33.7	82.3	31-2	4	54.35
18	DP 1034 B2RF	39.7	902	4.6	1.11	28.6	81.7	31-1	3	55.55
19	DP 0924 B2RF	37.9	829	4.6	1.10	32.3	81.7	31-1	3	55.55
20	CG 4020 B2RF	35.9	802	4.5	1.12	33.3	82.9	31-1	3	55.75
21	PHY 485 WRF	37.3	735	4.5	1.09	32.6	81.8	21-2	3	55.90
	<b>Mean</b>	<b>38.7</b>	<b>1072</b>	<b>4.6</b>	<b>1.11</b>	<b>30.7</b>	<b>82.1</b>		<b>3</b>	<b>55.41</b>

**Table CST8.** Results of Liberty Link cotton variety test, Joseph McNabb producer, Fayette County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	BCSX 1145LLB2	39.2	1243	4.6	1.17	31.9	84.3	31-2	2	54.05
2	BCSX 1035LLB2	36.5	1217	5.0	1.09	32.1	82.9	31-1	3	51.30
3	BCSX 1025LLB2	36.9	1116	4.3	1.16	27.2	82.4	31-1	2	53.30
4	BCSX 1015LLB2	36.0	1086	4.7	1.14	27.9	81.1	31-2	3	53.30
5	FM 1773LLB2	35.0	1048	4.6	1.18	31.6	83.3	31-1	2	53.95
6	FM 1845LLB2	35.3	1013	4.5	1.15	30.8	83.7	21-1	3	54.05
7	FM 1735LLB2	34.1	997	4.2	1.10	33.5	83.1	31-1	3	53.65
	<b>Mean</b>	<b>36.1</b>	<b>1103</b>	<b>4.6</b>	<b>1.14</b>	<b>30.7</b>	<b>83.0</b>		<b>3</b>	<b>53.37</b>

**Table CST9.** Results of Roundup Ready Flex cotton variety test, Craig Massey producer, Fayette County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 0920 B2RF	40.9	1133	4.6	1.20	29.6	82.9	31-1	5	54.05
2	ST 5458B2RF	35.5	1002	4.6	1.19	32.8	83.5	41-1	6	49.40
3	CG 3220 B2RF	35.3	942	4.3	1.18	29.5	83.4	31-1	5	54.05
4	DP 0924 B2RF	36.2	917	4.6	1.15	30.0	83.2	31-2	8	50.10
5	PHY 375 WRF	39.2	904	4.8	1.14	29.6	83.1	31-2	5	54.05
6	AM 1550 B2RF	35.8	892	4.5	1.13	28.9	83.4	21-2	4	55.20
7	DG 2570 B2RF	36.7	884	4.7	1.16	31.1	83.6	21-2	3	57.00
8	PHY 367 WRF	34.6	869	4.3	1.19	31.8	82.9	31-1	5	54.25
9	DG 2450 B2RF	36.4	864	4.6	1.18	29.8	83.2	31-1	3	56.25
10	DP 1034 B2RF	36.1	863	4.5	1.20	30.8	83.3	21-1	3	56.90
11	DP 0912 B2RF	34.7	855	4.7	1.10	30.5	81.9	31-2	6	49.80
12	DP 1028 B2RF	37.3	850	4.8	1.17	29.8	84.1	21-2	4	55.65
13	PHY 565 WRF	40.7	844	4.4	1.18	32.4	84.1	31-1	6	50.40
14	FM 1740 B2F	34.4	821	4.3	1.16	31.2	82.7	31-1	4	55.35
15	DP 0935 B2RF	35.2	814	4.6	1.15	30.3	83.7	21-2	2	57.40
16	NG 4012 B2RF	35.1	805	4.6	1.17	31.7	83.2	31-1	4	55.35
17	ST 4288B2F	33.3	794	4.5	1.20	30.5	84.0	31-2	6	50.40
18	PHY 485 WRF	34.7	781	4.9	1.16	30.8	84.2	31-1	6	50.40
19	ST 5288B2F	36.5	779	4.6	1.16	29.5	83.7	41-1	7	49.20
20	CG 4020 B2RF	35.6	761	4.5	1.15	28.7	81.6	21-1	4	55.10
21	NG 4010 B2RF	34.0	725	4.7	1.18	32.6	83.9	31-1	3	56.55
	<b>Mean</b>	<b>36.2</b>	<b>869</b>	<b>4.6</b>	<b>1.17</b>	<b>30.5</b>	<b>83.3</b>		<b>5</b>	<b>53.52</b>

**Table CST10.** Results of Roundup Ready Flex cotton variety test, Tommy Griggs producer, Gibson County, TN, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	PHY 367 WRF	40.2	1233	4.9	1.13	32.0	82.2	31-1	3	55.55
2	DG 2450 B2RF	37.4	1199	4.3	1.10	29.7	81.2	31-2	3	55.55
3	DP 0912 B2RF	39.6	1188	5.4	1.03	29.2	81.7	31-1	3	52.30
4	DP 0935 B2RF	42.8	1172	5.3	1.06	30.1	81.6	21-2	2	53.20
5	PHY 375 WRF	40.7	1114	5.2	1.12	31.4	82.8	31-1	3	53.55
6	DP 1034 B2RF	42.4	1062	4.9	1.09	29.1	82.6	21-2	2	56.65
7	AM 1550 B2RF	39.9	1010	5.2	1.07	28.6	81.9	21-1	2	54.25
8	DP 0920 B2RF	39.3	1009	5.3	1.12	30.9	81.9	31-1	3	52.30
9	DG 2570 B2RF	38.5	1005	5.1	1.13	33.3	82.8	31-1	2	53.75
10	ST 4288B2F	36.3	976	5.1	1.11	31.0	81.9	31-1	3	53.35
11	FM 1740 B2F	37.6	972	4.9	1.08	32.1	82.0	21-2	3	55.90
12	ST 5458B2RF	38.1	970	5.5	1.11	33.5	81.2	31-1	3	52.30
13	CG 3220 B2RF	39.4	954	5.1	1.09	31.4	82.0	21-1	2	54.25
14	PHY 485 WRF	37.9	942	5.1	1.07	31.3	83.2	42-1	4	49.05
15	DP 1028 B2RF	44.1	934	5.1	1.12	30.4	82.8	21-2	2	54.45
16	CG 4020 B2RF	38.5	892	4.9	1.14	30.1	82.5	31-1	3	55.75
17	NG 4010 B2RF	36.3	873	4.9	1.14	34.7	84.0	21-2	2	56.75
18	NG 4012 B2RF	37.8	867	4.6	1.12	32.8	82.0	31-1	3	55.55
19	PHY 565 WRF	36.4	854	4.9	1.17	35.0	83.5	31-1	3	55.85
20	ST 5288B2F	38.7	821	5.4	1.10	30.0	81.6	31-1	4	51.10
21	DP 0924 B2RF	38.0	763	5.5	1.07	29.7	81.9	21-2	2	53.20
	<b>Mean</b>	<b>39.1</b>	<b>1002</b>	<b>5.1</b>	<b>1.11</b>	<b>31.3</b>	<b>82.3</b>		<b>3</b>	<b>54.07</b>



**Table CST11.** Results of Roundup Ready Flex cotton variety test, Jason Lucky producer, Gibson County, TN, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 1028 B2RF	37.3	1275	4.8	1.08	29.7	81.1	31-1	3	55.55
2	PHY 367 WRF	34.6	1247	4.5	1.13	32.2	82.7	31-1	4	54.55
3	DG 2570 B2RF	36.7	1207	4.6	1.08	29.9	82.0	31-1	3	55.55
4	DP 0935 B2RF	35.2	1204	4.8	1.06	29.3	81.2	31-1	3	55.55
5	CG 4020 B2RF	35.6	1190	4.3	1.08	27.1	80.1	31-1	4	54.35
6	DP 0920 B2RF	40.9	1190	5.0	1.11	28.6	81.5	31-1	4	52.15
7	AM 1550 B2RF	35.8	1169	4.9	1.09	28.5	82.3	21-2	3	55.90
8	ST 5458B2RF	35.5	1150	5.0	1.12	31.9	82.0	41-1	6	46.70
9	PHY 375 WRF	39.2	1135	4.6	1.11	30.4	81.3	31-2	4	54.35
10	NG 4012 B2RF	35.1	1117	4.1	1.10	31.3	80.4	31-2	4	54.50
11	CG 3220 B2RF	35.3	1090	4.9	1.09	29.2	82.4	31-1	3	55.55
12	DP 0912 B2RF	34.7	1082	4.8	1.09	30.0	81.4	31-2	5	53.50
13	FM 1740 B2F	34.4	1081	4.6	1.11	31.5	81.7	31-2	4	54.35
14	ST 4288B2F	33.3	1078	4.6	1.12	31.6	81.5	31-4	5	53.50
15	DP 0924 B2RF	36.2	1062	4.8	1.07	29.9	81.9	31-2	5	53.50
16	NG 4010 B2RF	34.0	1030	4.4	1.10	33.4	81.3	41-3	5	51.30
17	DP 1034 B2RF	36.1	1024	4.7	1.16	31.1	81.7	31-1	3	55.55
19	ST 5288B2F	36.5	991	4.9	1.09	30.2	82.1	41-1	6	48.90
20	PHY 485 WRF	34.7	962	4.6	1.09	32.5	81.9	41-4	7	47.10
21	DG 2450 B2RF	36.4	905	4.4	1.12	29.8	81.6	31-2	4	54.35
22	PHY 565 WRF	40.7	879	4.6	1.12	33.5	82.6	31-2	4	54.55
	<b>Mean</b>	<b>35.9</b>	<b>1109</b>	<b>4.7</b>	<b>1.10</b>	<b>30.4</b>	<b>81.6</b>		<b>4</b>	<b>53.34</b>

**Table CST12.** Results of Roundup Ready Flex cotton variety test, Hardeman County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	AM 1550 B2RF	39.9	1665	4.8	1.06	27.8	80.6	21-1	2	56.45
2	DP 1028 B2RF	41.7	1585	4.8	1.10	28.6	81.2	21-1	3	55.90
3	CG 4020 B2RF	37.3	1539	4.7	1.10	27.6	80.9	21-2	2	56.45
4	PHY 375 WRF	40.3	1529	4.6	1.06	28.2	80.6	31-1	3	55.55
5	DP 0912 B2RF	39.6	1519	5.0	1.08	28.3	82.1	31-2	4	52.15
6	CG 3220 B2RF	40.0	1503	4.7	1.08	29.1	81.5	31-1	3	55.55
7	DG 2570 B2RF	38.8	1439	4.9	1.08	29.2	82.3	21-2	3	55.90
8	ST 5458B2RF	38.4	1424	4.9	1.13	29.8	82.2	31-2	4	54.35
9	DP 0920 B2RF	36.9	1359	4.8	1.12	27.8	82.1	31-1	3	55.55
10	NG 4012 B2RF	38.0	1355	4.3	1.13	29.5	80.3	31-1	3	55.55
11	PHY 565 WRF	40.4	1342	4.8	1.14	30.7	82.6	31-2	5	53.70
12	DP 1034 B2RF	42.7	1325	4.6	1.11	29.5	80.9	21-2	3	55.90
13	DP 0935 B2RF	40.1	1324	4.8	1.10	28.9	81.7	31-1	3	55.55
14	PHY 367 WRF	39.9	1304	4.5	1.11	30.2	81.2	31-1	4	54.35
15	DP 0924 B2RF	35.2	1301	4.9	1.11	28.7	82.2	41-1	4	53.30
16	ST 4288B2F	36.8	1276	4.8	1.11	29.1	81.8	31-1	3	55.55
17	FM 1740 B2F	38.9	1251	4.8	1.09	29.8	81.7	31-1	4	54.35
19	ST 5288B2F	37.7	1219	4.8	1.11	27.2	81.4	31-2	5	53.50
20	PHY 485 WRF	36.3	1190	4.7	1.12	32.2	83.5	41-1	6	49.20
21	DG 2450 B2RF	36.7	1158	4.2	1.11	29.1	81.1	31-1	4	54.50
22	NG 4010 B2RF	36.8	1107	4.5	1.12	31.1	82.3	21-2	3	55.90
<b>Mean</b>		<b>38.8</b>	<b>1380</b>	<b>4.7</b>	<b>1.10</b>	<b>29.1</b>	<b>81.6</b>		<b>4</b>	<b>54.67</b>

**Table CST13.** Results of Liberty Link cotton variety test, Haywood County, 2010.

<b>Rank</b>	<b>Variety</b>	<b>Gin Turnout (%)</b>	<b>Lint Yield (lb./acre)</b>	<b>Mic</b>	<b>Length (inches)</b>	<b>Strength (g/tex)</b>	<b>Uniformity (%)</b>	<b>HVI Color</b>	<b>Leaf Grade</b>	<b>Loan Value (¢/lb.)</b>
1	BCSX 1145LLB2	40.4	1026	4.8	1.12	32.4	84.5	31-1	2	54.10
2	FM 1735LLB2	36.6	965	4.8	1.07	31.6	81.5	21-1	3	52.45
3	FM 1773LLB2	37.0	901	5.1	1.07	35.7	82.1	21-1	3	50.25
4	BCSX 1035LLB2	36.0	882	5.0	1.11	32.4	83.1	31-2	3	51.30
5	BCSX 1015LLB2	35.0	881	4.1	1.14	28.5	82.4	31-1	2	53.45
6	BCSX 1025LLB2	37.5	872	4.6	1.16	32.6	83.3	31-1	3	53.95
7	FM 1845LLB2	35.3	829	4.9	1.16	33.3	84.3	31-1	3	54.05
	<b>Mean</b>	<b>36.8</b>	<b>908</b>	<b>4.8</b>	<b>1.12</b>	<b>32.4</b>	<b>83.0</b>		<b>3</b>	<b>52.79</b>

**Table CST14.** Results of Roundup Ready Flex cotton variety test, Lake County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DG 2570 B2RF	39.0	1191	4.0	1.08	30.6	81.6	31-1	2	55.90
2	DP 0912 B2RF	38.5	1178	4.6	1.10	28.8	82.7	41-1	4	53.50
3	ST 5288B2F	38.4	1170	4.3	1.11	28.9	81.3	41-1	5	51.30
4	DP 1034 B2RF	38.5	1158	4.2	1.14	31.4	82.2	31-1	2	55.90
5	PHY 565 WRF	36.8	1155	4.4	1.12	33.5	82.3	31-2	4	54.35
6	DP 1028 B2RF	40.5	1153	4.6	1.11	29.4	81.8	31-1	3	55.55
7	PHY 367 WRF	38.3	1106	4.2	1.13	31.9	82.1	31-1	3	55.70
8	DP 0920 B2RF	38.5	1091	4.4	1.11	28.0	82.0	31-2	3	55.55
9	PHY 375 WRF	38.4	1088	3.9	1.10	28.1	80.5	41-1	3	53.95
10	DG 2450 B2RF	37.1	1082	4.1	1.09	27.7	80.8	31-1	3	55.70
11	DP 0935 B2RF	37.7	1080	4.7	1.07	29.8	80.9	31-1	3	55.55
12	DP 0924 B2RF	37.0	1064	4.5	1.07	29.2	81.5	41-1	3	53.80
13	PHY 485 WRF	35.8	1054	4.5	1.11	31.8	82.7	41-1	5	51.50
14	ST 5458B2RF	37.3	1049	4.8	1.11	31.4	81.2	31-2	4	54.35
15	CG 3220 B2RF	37.9	1008	4.1	1.08	29.0	80.4	31-2	2	55.90
16	AM 1550 B2RF	37.0	1007	3.7	1.05	27.4	80.1	31-1	3	55.70
17	CG 4020 B2RF	35.5	991	3.6	1.11	28.8	80.1	31-2	3	55.55
19	ST 4288B2F	34.6	982	4.4	1.09	29.4	81.2	31-1	3	55.55
20	FM 1740 B2F	37.6	979	4.4	1.11	30.1	81.3	31-2	3	55.55
21	NG 4012 B2RF	35.6	943	3.6	1.11	31.0	80.8	31-1	3	55.55
22	NG 4010 B2RF	32.4	897	3.3	1.12	32.1	80.6	31-2	3	53.75
<b>Mean</b>		<b>37.5</b>	<b>1077</b>	<b>4.3</b>	<b>1.10</b>	<b>29.8</b>	<b>81.4</b>		<b>3</b>	<b>54.82</b>

**Table CST15.** Results of Liberty Link cotton variety test, Lake County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	BCSX 1015LLB2	39.0	1451	4.6	1.22	30.5	83.0	31-2	3	53.95
2	BCSX 1035LLB2	37.0	1414	5.1	1.12	32.1	83.2	31-1	3	51.70
3	BCSX 1025LLB2	39.4	1381	5.1	1.16	29.2	81.8	31-1	3	51.10
4	FM 1773LLB2	34.0	1345	5.3	1.18	32.1	82.6	31-1	3	50.70
5	FM 1735LLB2	33.6	1265	4.9	1.13	27.8	83.8	31-1	3	53.55
6	FM 1845LLB2	36.3	1259	5.2	1.17	30.5	83.5	31-2	3	51.85
<b>Mean</b>		<b>36.6</b>	<b>1352</b>	<b>5.0</b>	<b>1.16</b>	<b>30.4</b>	<b>83.0</b>		<b>3</b>	<b>52.14</b>

**Table CST16.** Results of Roundup Ready Flex cotton variety test, Lauderdale County, 20101.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	AM 1550 B2RF	40.7	1066	4.2	1.05	27.8	80.6	31-1	3	55.70
2	DP 0912 B2RF	38.4	1003	4.9	1.05	28.9	81.5	31-2	4	54.35
3	DP 0924 B2RF	38.4	978	4.8	1.04	28.7	81.3	31-2	3	55.55
4	PHY 367 WRF	38.3	961	4.3	1.11	30.5	81.9	31-2	4	54.35
5	ST 5288B2F	40.1	949	4.4	1.06	27.5	80.6	41-1	6	48.90
6	CG 3220 B2RF	39.6	921	4.6	1.05	27.4	79.9	31-1	3	55.55
7	PHY 375 WRF	40.0	905	4.7	1.07	28.5	81.8	31-2	3	55.55
8	DP 0935 B2RF	41.1	900	4.8	1.05	28.3	80.3	21-2	3	55.90
9	ST 5458B2RF	39.3	895	4.4	1.07	30.3	80.7	31-4	4	54.35
10	DG 2450 B2RF	39.5	894	4.3	1.07	26.7	81.1	31-1	3	55.55
11	DP 0920 B2RF	39.1	881	4.5	1.07	27.9	81.6	31-3	2	55.75
12	ST 4288B2F	36.7	872	4.4	1.10	29.9	80.7	31-2	5	53.50
13	DP 1034 B2RF	39.9	847	4.5	1.11	29.4	81.5	31-1	2	55.75
14	DG 2570 B2RF	40.3	840	4.3	1.06	30.7	81.8	21-4	2	56.45
15	DP 1028 B2RF	40.9	821	4.6	1.07	29.0	82.0	21-4	3	55.90
16	FM 1740 B2F	38.7	816	4.6	1.05	27.6	80.1	21-1	3	55.90
17	PHY 485 WRF	38.0	799	4.5	1.08	31.6	83.0	41-3	5	51.50
19	PHY 565 WRF	38.3	724	4.4	1.08	31.3	81.5	41-1	4	53.30
20	CG 4020 B2RF	37.8	719	4.3	1.09	27.6	81.4	31-1	3	55.55
21	NG 4012 B2RF	38.3	710	4.2	1.08	30.6	81.7	31-1	4	54.50
22	NG 4010 B2RF	35.9	603	4.3	1.09	32.7	81.6	31-1	3	55.55
<b>Mean</b>		<b>39.2</b>	<b>875</b>	<b>4.5</b>	<b>1.07</b>	<b>29.0</b>	<b>81.3</b>		<b>3</b>	<b>54.69</b>

**Table CST17.** Results of Liberty Link cotton variety test, Lauderdale County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	BCSX 1145LLB2	40.1	1379	5.6	1.15	32.6	83.0	31-1	3	50.70
2	BCSX 1035LLB2	37.6	1267	4.6	1.16	32.6	84.0	31-1	3	54.05
3	FM 1735LLB2	35.4	1254	4.8	1.10	32.9	83.0	31-1	3	53.50
4	FM 1773LLB2	35.6	1224	5.0	1.17	33.2	84.0	31-1	3	51.85
5	BCSX 1015LLB2	35.9	1198	4.9	1.22	33.6	84.0	41-1	3	54.05
6	FM 1845LLB2	37.8	1144	5.0	1.17	34.2	84.0	31-1	3	51.85
7	BCSX 1025LLB2	38.1	1035	4.7	1.25	32.8	84.0	31-1	3	54.05
<b>Mean</b>		<b>37.2</b>	<b>1214</b>	<b>4.9</b>	<b>1.17</b>	<b>33.1</b>	<b>83.7</b>		<b>3</b>	<b>52.86</b>

**Table CST18.** Results of Roundup Ready Flex cotton variety test, Lincoln County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	ST 4288B2F	39.4	566	3.9	1.08	28.8	80.5	41-1	5	51.45
2	DG 2450 B2RF	37.7	557	3.5	1.09	26.7	79.3	41-3	4	52.55
3	DP 0912 B2RF	36.1	556	4.2	1.03	28.2	80.3	41-2	4	53.45
4	DP 1028 B2RF	41.2	533	4.2	1.06	28.7	81.7	31-4	3	55.70
5	DG 2570 B2RF	39.6	524	3.9	1.05	30.0	80.3	31-4	3	55.70
6	PHY 367 WRF	38.5	493	3.7	1.09	31.5	81.5	41-1	4	53.45
7	ST 5458B2RF	40.9	490	3.9	1.07	30.0	80.0	41-3	5	51.45
8	NG 4010 B2RF	36.3	489	3.6	1.12	33.6	81.5	41-3	4	53.30
9	DP 1034 B2RF	39.4	481	4.2	1.08	29.4	82.0	41-1	3	53.95
10	PHY 485 WRF	36.9	480	4.0	1.10	30.7	81.6	41-4	6	49.05
11	PHY 375 WRF	38.9	473	3.7	1.04	27.8	80.6	41-1	4	53.45
12	CG 4020 B2RF	38.6	470	3.7	1.12	27.8	81.3	41-1	4	53.45
13	FM 1740 B2F	38.2	467	3.9	1.08	30.9	81.1	41-1	4	53.45
14	DP 0920 B2RF	41.4	461	3.9	1.05	27.8	80.7	41-1	4	53.45
15	CG 3220 B2RF	39.1	459	3.7	1.02	28.6	79.4	41-1	3	53.20
16	DP 0935 B2RF	39.1	456	4.0	1.02	29.4	80.5	41-1	3	53.95
17	ST 5288B2F	39.8	445	3.8	1.08	27.7	79.9	41-1	6	49.05
19	PHY 565 WRF	39.7	438	4.0	1.09	31.6	81.6	41-4	5	51.45
20	DP 0924 B2RF	38.3	438	4.2	1.02	29.1	80.1	41-1	4	53.45
21	NG 4012 B2RF	37.6	391	2.9	1.07	30.2	80.3	31-2	4	47.90
22	AM 1550 B2RF	38.2	314	3.7	1.02	26.2	80.7	31-4	3	55.70
<b>Mean</b>		<b>38.8</b>	<b>483</b>	<b>3.8</b>	<b>1.07</b>	<b>29.4</b>	<b>80.7</b>		<b>4</b>	<b>52.64</b>

**Table CST19.** Results of Roundup Ready Flex cotton variety test, Madison County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 0920 B2RF	40.6	1574	4.7	1.14	28.4	81.9	31-1	3	55.55
2	DP 0924 B2RF	39.5	1504	4.3	1.09	30.4	81.2	41-1	6	48.90
3	DP 0912 B2RF	38.5	1408	4.7	1.09	30.9	81.9	31-2	4	54.35
4	PHY 485 WRF	37.7	1387	4.2	1.12	31.5	81.5	41-1	6	49.05
5	ST 5288B2F	37.3	1378	4.2	1.10	29.2	80.2	31-1	4	54.50
6	CG 3220 B2RF	36.5	1374	3.7	1.13	33.0	80.5	31-1	3	55.70
7	PHY 367 WRF	39.1	1372	4.1	1.14	31.0	82.4	31-1	3	55.70
8	DG 2450 B2RF	37.4	1355	4.2	1.13	30.5	81.5	31-1	3	55.70
9	ST 5458B2RF	37.3	1347	4.6	1.11	31.5	80.6	21-2	4	54.75
10	CG 4020 B2RF	39.2	1341	4.4	1.14	30.3	81.3	31-1	3	55.55
11	DP 1028 B2RF	39.0	1326	4.2	1.14	31.8	81.4	21-2	2	56.60
12	FM 1740 B2F	36.7	1324	4.0	1.11	32.4	81.4	31-1	3	55.70
13	ST 4288B2F	35.9	1323	4.4	1.10	29.0	80.0	21-2	3	55.90
14	PHY 375 WRF	39.4	1321	4.1	1.11	29.7	81.3	31-1	3	55.70
15	DP 0935 B2RF	37.8	1319	3.8	1.11	31.1	81.5	21-1	3	56.05
16	AM 1550 B2RF	36.7	1314	4.3	1.13	30.5	81.9	21-2	3	55.90
17	DP 1034 B2RF	38.4	1308	4.4	1.13	30.8	80.9	21-1	3	55.90
19	NG 4012 B2RF	35.3	1248	3.8	1.15	34.2	80.6	31-1	3	55.70
20	PHY 565 WRF	36.9	1188	4.1	1.15	34.0	81.9	31-1	4	54.50
21	DG 2570 B2RF	35.1	1135	3.8	1.11	32.8	82.0	21-2	3	56.05
22	NG 4010 B2RF	34.8	1116	3.7	1.15	34.3	82.1	31-1	3	55.70
<b>Mean</b>		<b>37.7</b>	<b>1342</b>	<b>4.2</b>	<b>1.12</b>	<b>31.2</b>	<b>81.3</b>		<b>3</b>	<b>54.89</b>

**Table CST20.** Results of Roundup Ready Flex cotton variety test, Shelby County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 0935 B2RF	41.6	1196	4.7	1.06	29.0	81.1	21-1	3	55.90
2	DG 2570 B2RF	40.4	1192	4.6	1.09	29.8	82.3	21-1	3	55.90
3	ST 5288B2F	40.3	1133	4.9	1.07	28.5	81.1	31-1	4	54.35
4	CG 4020 B2RF	41.4	1113	4.1	1.09	28.6	80.3	21-1	3	56.05
5	DP 0920 B2RF	42.0	1093	4.7	1.08	27.9	80.6	21-1	3	55.90
6	DP 1028 B2RF	42.4	1041	4.8	1.07	28.8	81.7	21-1	3	55.90
7	AM 1550 B2RF	38.8	1041	4.2	1.06	28.2	79.7	21-1	3	56.05
8	NG 4010 B2RF	39.9	992	4.2	1.10	31.9	81.9	21-1	3	56.05
9	ST 5458B2RF	40.8	947	4.7	1.08	30.5	79.3	21-2	3	55.15
10	CG 3220 B2RF	41.3	940	4.6	1.08	29.9	81.2	2-Nov	2	56.45
11	DP 0924 B2RF	39.7	939	4.9	1.06	30.1	82.8	31-1	3	55.75
12	DG 2450 B2RF	37.2	909	4.3	1.09	27.0	80.5	21-2	3	55.90
13	ST 4288B2F	37.0	896	4.4	1.08	28.3	81.4	21-1	3	55.90
14	PHY 485 WRF	38.2	835	4.5	1.08	31.4	81.8	31-4	6	49.80
15	NG 4012 B2RF	39.4	824	4.3	1.11	31.8	81.3	21-2	3	55.90
16	PHY 367 WRF	40.0	804	4.3	1.12	33.6	81.6	21-2	4	54.75
17	PHY 375 WRF	41.9	784	4.7	1.11	30.5	82.3	21-1	4	54.75
19	DP 0912 B2RF	40.9	772	4.9	1.04	29.1	81.2	21-1	3	55.90
20	PHY 565 WRF	38.7	765	4.4	1.13	34.0	81.9	31-3	5	53.50
21	DP 1034 B2RF	41.2	700	4.9	1.08	29.2	81.9	21-4	2	56.45
22	FM 1740 B2F	39.7	667	4.6	1.05	27.6	80.1	21-1	3	55.90
<b>Mean</b>		<b>40.2</b>	<b>946</b>	<b>4.6</b>	<b>1.08</b>	<b>29.9</b>	<b>81.3</b>		<b>3</b>	<b>55.32</b>



**Table CST21.** Results of Roundup Ready Flex cotton variety test, Tipton County, 2010.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DG 2570 B2RF	39.7	1183	5.1	1.11	31.9	84.0	21-1	2	54.55
2	PHY 367 WRF	39.9	1099	4.9	1.13	30.1	82.0	31-1	3	55.55
3	AM 1550 B2RF	39.8	1065	5.0	1.08	27.6	81.8	21-2	3	53.70
4	DP 0935 B2RF	40.1	1054	4.9	1.09	29.9	82.1	21-2	3	55.90
5	CG 3220 B2RF	37.3	1045	4.9	1.12	29.3	82.9	21-2	3	56.10
6	DP 0912 B2RF	36.5	1023	5.2	1.05	30.2	80.4	31-1	3	53.35
7	DP 1034 B2RF	40.0	1023	4.9	1.14	30.3	82.8	21-2	2	56.65
8	PHY 375 WRF	38.8	1023	5.0	1.11	30.5	82.4	31-1	3	53.35
9	FM 1740 B2F	39.2	1016	5.1	1.12	30.8	82.2	31-1	3	53.35
10	DP 0920 B2RF	39.0	1012	5.1	1.13	28.8	83.0	31-1	3	53.55
11	ST 5458B2RF	37.8	984	5.2	1.13	32.1	82.6	31-1	4	52.35
12	DP 1028 B2RF	39.9	976	5.0	1.14	29.6	83.9	31-1	2	53.85
13	NG 4012 B2RF	37.7	931	4.6	1.16	32.7	83.4	31-1	3	55.75
14	DP 0924 B2RF	38.4	927	5.2	1.09	32.9	82.4	31-2	6	47.60
15	PHY 485 WRF	35.5	922	5.1	1.10	33.0	83.6	41-1	7	45.20
16	ST 5288B2F	37.0	905	5.2	1.13	28.9	82.4	41-1	6	46.70
17	CG 4020 B2RF	36.8	854	4.8	1.12	29.4	81.3	21-2	3	55.90
19	NG 4010 B2RF	35.7	847	4.8	1.15	31.9	83.1	31-1	3	55.75
20	ST 4288B2F	35.5	824	4.9	1.15	32.1	84.0	31-2	4	54.65
21	PHY 565 WRF	36.7	752	4.8	1.17	34.2	84.1	31-2	4	54.65
22	DG 2450 B2RF	**	**	**	**	**	**	**	**	**
<b>Mean</b>		<b>38.1</b>	<b>973</b>	<b>5.0</b>	<b>1.12</b>	<b>30.8</b>	<b>82.7</b>		<b>4</b>	<b>53.42</b>

\*\* DG 2450 B2RF excluded from analysis due to damage from Ignite application.

**Table CST22.** Cooperator data for County Standardized Trials, 2010.

County	Test	Producer Agent	Tillage Type	Soil Type	Previous Crop	Fertilizer	Row Spacing	Planting Date	Defoliation date	Harvest Date	
Carroll	CST 1	David Renfro Steve Burgess	N	Dexter Silt Loam	cotton	80-90-90	30"	5/18/2010	9/21/2010	10/8/2010	
Crockett	CST 1	Henry Fincher Richard Buntin	R	Adler Silt Loam	corn	100-50-90	38"	5/25/2010	9/28/2010	10/12/2010	
Dyer	CST 1	John Gregory Campbell	Tim	N	Memphis Silt Loam	soybean	100-50-150	38"	5/11/2010	9/10/2010	9/20/2010
Fayette	CST 1	Joesph McNabb Jeff Via	N	Memphis Silt Loam	corn	80-40-80	38"	5/7/2010	9/12/2010	9/22/2010	
Fayette	CST 2	Joesph McNabb Jeff Via	N	Grenada Silt Loam	corn	80-40-81	38"	5/7/2010	9/12/2010	9/22/2010	
Fayette	CST 1	Mark McNabb Jeff Via	N	Grenada Silt Loam	corn	80-40-82	38"	5/7/2010	9/12/2010	9/22/2010	
Gibson	CST 1	Tommy & Brent Griggs Philip Shelby	N	Loring Silt loam	corn	85-0-120	38"	5/10/2010	9/18/2010	10/1/2010	
Gibson	CST 1	Jason Luckey Philip Shelby	N	Collins Silt Loam	cotton	80-30-90	38"	5/13/2010	9/12/2010	9/28/2010	
Haywood	CST 2	Chuck Lonan	N	Memphis Silt Loam	cotton	80-30-90	38"	5/21/2010	9/23/2010	10/5/2010	
Hardeman	CST 1	Gerr Mitchell Bob Vickers	R	Lexington Silt Loam	corn	80-30-80	38"	5/8/2010	9/10/2010	9/29/2010	
Lake	CST 1	Tony Bargery Greg Allen	N	Reelfoot Silt Loam	cotton	64-0-60	38"	5/6/2010	9/5/2010	9/21/2010	
Lake	CST 2	John Lindamood Greg Allen	N	Tiptonville Silt Loam	cotton	75-0-80	38"	4/22/2010	9/18/2010	10/14/2010	
Lauderdale	CST 1	Leslie Crook James Griffin	C	Alder-Grenada Silt Loam	cotton	64-60-60	38"	5/13/2010	8/31/2010	9/14/2010	
Lauderdale	CST 2	Hollingsworth Farms	N	Commerce Silt Loam	soybean	80-var P&K	38"	5/19/2010	9/28/201	10/12/2010	
Lincoln	CST 1	JBH Farms David Qualls	N	Dickson-Taft Silt Loam	cotton	100-50-90	38"	5/11/2010	9/17/2010	10/5/2010	
Madison	CST 1	Matt Griggs Bill Wyatt	N	Calloway Silt Loam	corn	75-var P&K	38"	5/6/2010	9/4/2010	9/22/2010	
Shelby	CST 1	Ray Sneed Muller	Becky	R	Memphis Silt Loam	corn	100-30-80	38"	5/13/2010	8/31/2010	9/10/2010
Tipton	CST 1	Glenn Hopkins Michael Morris	N	DeKoven	soybean	80-20-20	38"	5/24/2010	9/26/2010	10/15/2010	

**Table CST23.** Gin turnout and lint yield of varieties common to Tennessee CST's from 2, and 3 year averages, listed by yield rank.

Rank	Variety	2009-2010		Rank	Variety	2008-2010	
		Gin Turnout %	Average lb/ac			Gin Turnout %	Average lb/ac
1	DP 0912 B2RF	38.5	1072	1	PHY 375 WRF	38.5	1109
2	DP 0920 B2RF	39.0	1053	2	FM 1740B2F	37.9	1085
3	PHY 375 WRF	38.7	1047	3	DG 2570 B2RF	38.6	1084
4	ST 4288B2F	36.7	1028	4	DP 0935 B2RF	39.5	1066
5	FM 1740B2F	37.9	1020	5	CG 3220 B2RF	38.1	1045
6	ST 5458B2RF	38.1	1007	6	AM 1550 B2RF	38.4	1019
7	DG 2570 B2RF	38.5	1005	7	CG 4020 B2RF	38.0	974
8	DP 0935 B2RF	39.8	984				
9	ST 5288B2F	37.9	981				
10	AM 1550 B2RF	38.4	959				
11	DP 0924 B2RF	37.6	932				
12	PHY 485 WRF	37.6	921				
13	CG 4020 B2RF	37.7	894				
	<b>AVERAGE</b>	<b>38.2</b>	<b>993</b>			<b>38.4</b>	<b>1055</b>
	<b>LSD (0.05)</b>	0.9	62			0.8	63

Tennessee AgResearch data of Main et al. (2010).

## **FACT VARIETY TRIALS**

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FACT Variety Trials (OVTs) of cotton were conducted at three locations in Tennessee during 2010. Conventional varieties, and varieties with Liberty-Link (LL), or Roundup Ready Flex (RF) genes, were tested at all locations. There were 15 entries from three seed companies. All FACT Variety trials were planted between 5 May and 26 May 2010 in 2-row plots arranged in a RCB design with four replications at each location. The row spacing was 38 inches at all locations. Planting dates, soil types, tillage and other details are listed in Table 1 on page 6.

Between 120 and 130 days after planting (DAP), plant height, nodes, 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 140 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 Fiber and Biopolymer Research Institute in Lubbock, TX.

**Table FACT1.** Lint yield, gin turnout, and fiber quality of 15 entries in the 2010 FACT Variety Trial averaged across three locations, listed by yield rank.

Yield Rank	Variety	Gin		Micronaire	Fiber Length	Fiber		
		Turnout	Lint Yield			Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 499 WRF	41.0	1536	4.8	1.13	30.8	83.7	31-1
2	PHY 375 WRF	40.1	1522	4.8	1.13	30.5	83.3	21-2
3	10R052B2R2	42.4	1492	5.0	1.13	30.4	83.7	31-1
4	DP 1133 B2RF	41.7	1491	4.9	1.13	31.0	83.7	31-1
5	10R050B2R2	40.1	1454	4.8	1.14	31.3	83.0	21-2
6	10R020B2R2	39.2	1448	4.8	1.14	30.0	84.2	21-1
7	DP 0912 B2RF	37.4	1442	4.9	1.13	29.5	82.9	31-1
8	10R051B2R2	40.0	1429	4.8	1.15	30.5	83.3	21-1
9	DP 1137 B2RF	39.7	1425	4.9	1.12	29.6	83.3	21-2
10	DP 1028 B2RF	39.3	1404	4.8	1.14	29.8	83.9	21-1
11	10R047B2R2	39.3	1395	4.8	1.16	30.0	83.6	21-2
12	10R040B2R2	39.6	1386	4.8	1.14	29.8	83.5	31-1
13	ST 4288B2F	36.9	1380	4.9	1.13	30.4	83.4	31-1
14	DP 1034 B2RF	39.7	1379	4.8	1.16	29.9	83.3	21-1
15	10R015B2R2	38.0	1298	4.8	1.14	29.9	83.2	21-2
<b>Average</b>		<b>39.6</b>	<b>1432</b>	<b>4.8</b>	<b>1.14</b>	<b>30.2</b>	<b>83.5</b>	
<b>LSD</b>		0.4	82	ns	ns	ns	ns	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table FACT2.** Lint yield, gin turnout, and fiber quality of 15 entries in the 2010 FACT Variety Trial at Ames Plantation, LaGrange, TN, listed by yield rank.

Yield Rank	Variety	Gin		Micronaire	Fiber Length	Fiber		
		Turnout %	Lint Yield lb/ac			Strength g/tex	Uniformity %	Color Grade
1	10R047B2R2	38.9	1277	4.7	1.16	30.0	81.9	21-2
2	PHY 499 WRF	40.0	1249	4.3	1.13	33.1	83.8	31-1
3	10R040B2R2	39.2	1232	4.6	1.15	29.9	82.9	31-1
4	10R051B2R2	39.0	1224	4.5	1.16	29.6	83.7	21-1
5	DP 1028 B2RF	39.1	1202	4.5	1.15	29.7	83.3	21-1
6	DP 1133 B2RF	41.3	1175	4.8	1.16	33.1	84.4	31-1
7	DP 1137 B2RF	39.4	1165	4.7	1.12	29.1	82.8	21-2
8	10R052B2R2	41.7	1142	4.8	1.13	28.6	82.8	31-1
9	DP 1034 B2RF	39.5	1085	4.4	1.17	29.4	83.0	21-1
10	DP 0912 B2RF	37.3	1078	4.6	1.14	30.1	82.5	31-1
11	PHY 375 WRF	38.6	1064	4.3	1.11	30.1	81.9	21-2
12	10R015B2R2	38.2	1045	4.6	1.15	30.2	83.4	21-2
13	10R020B2R2	36.2	1033	4.5	1.12	28.7	82.8	21-1
14	10R050B2R2	37.1	974	4.4	1.17	31.8	81.7	21-2
15	ST 4288B2F	34.2	891	4.5	1.15	30.5	82.9	31-1
<b>Average</b>		<b>38.6</b>	<b>1122</b>	<b>4.5</b>	<b>1.14</b>	<b>30.2</b>	<b>82.9</b>	
<b>LSD</b>		0.4	82	ns	0.03	1.5	ns	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table FACT3.** Lint yield, gin turnout, and fiber quality of 15 entries in the 2010 FACT Variety Trial at Hollinsworth Farms, Chic, TN, listed by yield rank.

Yield Rank	Variety	Gin		Micronaire	Fiber Length	Fiber		
		Turnout %	Lint Yield lb/ac			Strength g/tex	Uniformity %	Color Grade
1	10R050B2R2	43.5	1870	4.9	1.18	32.4	82.7	41-1
2	10R052B2R2	43.6	1853	5.1	1.17	31.1	84.1	41-1
3	PHY 375 WRF	41.5	1829	4.9	1.18	31.7	84.3	31-1
4	10R020B2R2	42.9	1823	4.9	1.15	30.6	84.0	31-1
5	ST 4288B2F	40.3	1808	5.0	1.14	30.0	83.5	41-1
6	PHY 499 WRF	41.7	1794	5.0	1.17	33.1	84.3	31-1
7	DP 1133 B2RF	42.2	1787	5.1	1.13	30.4	83.5	41-1
8	DP 1137 B2RF	39.2	1682	4.9	1.17	29.7	84.1	31-1
9	DP 0912 B2RF	36.8	1675	5.0	1.14	30.1	82.2	41-1
10	10R051B2R2	39.7	1669	4.9	1.19	30.7	84.0	31-2
11	10R015B2R2	37.2	1546	5.0	1.16	30.0	84.3	31-1
12	DP 1034 B2RF	38.9	1501	4.8	1.19	30.5	84.1	31-1
13	10R047B2R2	38.8	1498	4.6	1.18	29.8	84.3	31-2
14	DP 1028 B2RF	36.7	1478	4.8	1.16	31.0	84.3	31-2
15	10R040B2R2	39.6	1465	4.8	1.18	30.2	84.1	41-1
<b>Average</b>		<b>40.2</b>	<b>1685</b>	<b>4.9</b>	<b>1.16</b>	<b>30.7</b>	<b>83.8</b>	
<b>LSD</b>		0.4	82	ns	ns	ns	ns	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

**Table FACT4.** Lint yield, gin turnout, and fiber quality of 15 entries in the 2010 FACT Variety Trial at West Tennessee Research and Education Center, Jackson, TN, listed by yield rank.

Yield Rank	Variety	Gin		Micronaire	Fiber Length	Fiber		
		Turnout	Lint Yield			Strength	Uniformity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 375 WRF	40.0	1673	5.1	1.12	30.2	83.4	51-1
2	DP 0912 B2RF	38.2	1572	5.0	1.13	29.0	83.5	51-3
3	PHY 499 WRF	41.4	1564	4.9	1.12	28.6	83.4	51-4
4	DP 1034 B2RF	40.6	1549	5.0	1.14	29.9	83.1	51-3
5	DP 1028 B2RF	41.9	1531	4.9	1.12	29.3	84.0	41-2
6	10R050B2R2	39.6	1520	5.0	1.12	30.6	83.8	51-1
7	DP 1133 B2RF	41.6	1510	4.9	1.13	30.3	83.3	51-1
8	10R020B2R2	38.5	1490	4.8	1.16	30.3	84.9	51-1
9	10R052B2R2	42.0	1481	5.0	1.11	30.9	83.8	41-4
10	10R040B2R2	40.1	1462	4.8	1.12	29.6	83.5	51-1
11	ST 4288B2F	36.3	1441	5.0	1.13	30.7	83.6	51-1
12	DP 1137 B2RF	40.5	1427	4.9	1.11	29.7	83.0	41-2
13	10R047B2R2	40.3	1411	4.9	1.15	30.2	84.1	51-3
14	10R051B2R2	41.1	1393	5.0	1.13	30.9	82.8	41-2
15	10R015B2R2	38.6	1303	4.8	1.14	29.8	82.6	41-4
<b>Average</b>		<b>40.0</b>	<b>1489</b>	<b>4.9</b>	<b>1.13</b>	<b>30.0</b>	<b>83.5</b>	
<b>LSD</b>		0.4	82	ns	ns	ns	ns	

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.



**Table FACT5.** Plant height (inches), total number of nodes, height to node ratio, nodes above cracked boll, and estimated DD60's remaining to maturity of 15 entries in the 2010 FACT Variety Trials, listed in alphabetical order.

Yield Rank	Variety	Height	Nodes	Height:Node	NACB <sup>1</sup>	DD60 <sup>2</sup>
		in	no.	ratio	no.	units
1	DP 1133 B2RF	40.2	16.2	2.5	2.3	114
2	DP 1137 B2RF	39.8	16.1	2.5	3.8	190
3	10R015B2R2	36.3	14.7	2.5	2.0	101
4	10R020B2R2	42.5	18.5	2.3	2.2	109
5	10R040B2R2	42.1	17.2	2.5	4.8	238
6	10R047B2R2	38.8	16.4	2.4	4.9	243
7	10R050B2R2	42.0	18.0	2.3	5.3	264
8	10R051B2R2	38.9	16.0	2.4	2.7	134
9	10R052B2R2	41.1	15.5	2.6	3.5	173
10	DP 0912 B2RF	38.8	16.7	2.3	3.7	183
11	DP 1028 B2RF	40.5	15.4	2.6	3.9	193
12	DP 1034 B2RF	42.4	15.7	2.7	2.7	135
13	PHY 375 WRF	39.9	16.9	2.4	3.3	164
14	PHY 499 WRF	40.7	18.0	2.3	5.0	248
15	ST 4288B2F	35.9	16.7	2.2	4.5	225
<b>Average</b>		<b>40.0</b>	<b>16.5</b>	<b>2.4</b>	<b>3.6</b>	<b>181</b>
<b>LSD</b>		<b>3.2</b>	<b>1.3</b>	<b>0.2</b>	<b>0.6</b>	<b>32</b>

Tennessee AgResearch data of Main et al. (2010). HVI data furnished by FBRI, Lubbock, TX.

## 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 (32nds)	Length (Inches)	Length (32nds)	Length (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 (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> %	1996 crop <sup>2</sup> 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.

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