

Tennessee Cotton Variety Test Results

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Chris Main (cmain@utk.edu) is an assistant professor and extension specialist for cotton and small grains in the Department of Plant Sciences. Dr. Main is located at the West Tennessee Research & Education Center, 605 Airways Blvd., Jackson TN 38301. Fred Allen (allenf@utk.edu) is a professor and coordinator of field crop variety testing in the Department of Plant Sciences at the University of Tennessee, Knoxville.

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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 2009 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, Crook Planting Company, and Lindamood Planting Company 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 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 Research & Education Center at Milan and 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 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 Fiber and Biopolymer Research Institute in Lubbock, TX.

County Standard Test demonstrations were conducted in 2009 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 10 counties each containing 18 cultivars. County standard tests of Liberty Link cultivars were planted in 3 locations with each location containing 8 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.

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- 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 2009.

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We appreciate the cooperation of county extension agents and producers who conducted the county variety demonstrations in 2009. 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 2009 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/Delta and Pine Land Co., 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
- United Agri-Products, 57 Germantown Court, Suite 200, Cordova, TN 38018

OFFICIAL VARIETY TRIALS

C. L. Main, T. D. Bush and M. B. Ross
West Tennessee Research & Education Center
The University of Tennessee
Jackson, TN

Official Variety Trials (OVTs) of cotton were conducted at six locations in Tennessee during 2009. Conventional varieties, and varieties with Liberty-Link (LL), Roundup-Ready (RR), or Roundup Ready Flex (RF) genes, were tested at all locations. There were 45 entries from seven seed companies and a line from the University of Arkansas cotton breeding program. All OVTs were planted between 23 April and 5 June 2009 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 listed in Table 1 below.

Between 120 and 130 days after planting (DAP), nodes above cracked boll (NACB) to the highest harvestable boll were counted in each plot. Plant data was not collected at Hale’s Point, Milan, or Ridgely locations due to late season rains that compromised physiological maturity measurements. 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 International Textile Center in Lubbock, TX.

Table OVT1 presents average yield and gin turnout data for 45 entries tested across six locations in 2009.

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

Table OVT8 presents Overall yield average and yield at each OVT location for all 45 varieties tested in 2009.

Table OVT9 presents average yield of all 45 varieties tested based on planting period, late April, mid-May, or June.

Table OVT10 presents the relative maturity and final plant height of the 45 OVT entries.

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

Table 1. OVT plot management details 2009.

Location	Planting Date	Soil Type	Tillage	Fertility	Irrigation	Harvest Date
Agricenter Int.	5/14/2009	Falaya silt loam	Conv.	80-60-90	Furrow	11/04/2009
Ames Plantation	4/25/2009	Memphis silt loam	No-Tillage	80-30-100	None	10/29/2009
Hales Point	6/5/2009	Robinsonville silt loam	Conv.	60-0-90-15B	None	11/23/2009
Milan	6/3/2009	Loring silt loam	No-Tillage	100-45-90	Sprinkler	10/31/2009
Ridgely	5/15/2009	Reelfoot silt loam	Conv.	80-40-80	None	11/18/2009
Jackson	4/23/2009	Lexington silt loam	No-Tillage	80-45-90	None	10/20/2009

Table OVT1. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial averaged across six test locations, listed by yield rank.

Yield Rank	Variety	Gin		Micronaire	Fiber		Fiber Uniformity %	Color Grade
		Turnout %	Lint Yield lb/ac		Length in	Strength g/tex		
1	ST 4288 B2RF	36.4	1089	3.7	1.18	30.7	82.6	31
2	09R621B2R2	39.5	1057	3.7	1.17	28.8	82.7	31
3	FM 1740 B2F	37.5	1045	3.6	1.15	29.3	82.2	31
4	09R303B2R2	37.5	1029	3.3	1.16	28.2	81.9	31
5	DP 0912 B2RF	38.2	1019	3.7	1.13	29.2	82.6	31
6	ST 5458 B2RF	36.2	1008	3.6	1.17	30.1	81.3	31
7	PHY 485 WRF	38.0	1007	3.6	1.16	30.4	83.2	41
8	DP 0949 B2RF	36.7	1007	3.5	1.16	29.0	82.1	31
9	PHY 375 WRF	36.9	1004	3.1	1.14	28.5	82.1	31
10	09R796B2R2	38.7	999	3.6	1.14	29.3	81.9	31
11	09R643B2R2	37.5	994	3.7	1.15	28.6	82.6	31
12	ARK 0102-48	36.1	982	3.9	1.27	33.2	84.0	41
13	DP 0924 B2RF	36.1	974	3.6	1.13	28.7	82.4	31
14	PHY 315 RF	38.5	971	3.4	1.14	28.6	81.7	31
15	PHX 5922 WRF	36.7	962	3.4	1.16	30.4	82.4	31
16	09R619B2R2	38.3	956	3.8	1.15	28.5	83.2	31
17	09R627B2R2	37.9	954	3.7	1.17	28.6	82.7	31
18	ST 5288 B2RF	36.5	951	3.6	1.17	29.5	81.7	31
19	PHY 440 W	36.8	948	3.5	1.16	29.9	82.9	41
20	AM 1550 B2RF	37.4	947	3.5	1.14	28.4	81.7	31
21	DP 0935 B2RF	36.7	946	3.4	1.13	28.8	81.9	31
22	PHY 367 WRF	36.9	943	3.2	1.16	29.9	81.8	41
23	BCSX 1035 LLB2	36.7	930	3.9	1.14	30.4	82.7	41
24	PHY 565 WRF	36.4	927	3.2	1.19	30.9	82.3	31
25	PHY 370 WR	37.5	922	3.5	1.11	28.9	82.8	31
26	DP 0920 B2RF	38.0	918	3.7	1.14	28.1	81.8	31
27	BCSX 1025 LLB2	35.9	897	3.3	1.22	31.3	82.3	41
28	ST 4554 B2RF	35.2	890	3.5	1.14	28.9	82.1	31
29	FM 1773 LLB2	34.3	888	3.5	1.22	31.0	82.4	41
30	ST 4498 B2RF	35.1	883	3.3	1.13	29.4	82.1	31
31	DP 141 B2RF	33.9	882	3.1	1.22	31.0	81.3	41
32	DG 2570 B2RF	36.4	863	3.5	1.14	29.6	82.1	31
33	DG 2520 B2RF	34.7	849	3.3	1.17	28.0	81.4	31
34	PHY 525 RF	37.1	844	3.2	1.22	30.6	81.9	31
35	BCSX 1010 B2F	33.0	842	3.4	1.17	29.5	81.8	31
36	BCSX 1015 LLB2	33.9	839	3.4	1.25	30.9	81.7	31
37	CG 3035 RF	37.0	835	3.4	1.15	29.2	82.1	31
38	CT 110	35.2	834	3.4	1.16	30.1	82.0	31
39	CG 4020 B2RF	33.9	812	3.4	1.17	28.5	81.7	31
40	DP 161 B2RF	33.2	809	3.3	1.19	30.2	82.2	31
41	CG 3520 B2RF	35.1	803	3.3	1.15	27.8	81.7	41
42	FM 1845 LLB2	34.0	800	3.6	1.21	31.0	82.6	41
43	CG 3020 B2RF	34.1	787	3.3	1.13	27.6	81.8	31
44	CG 3220 B2RF	34.8	759	3.5	1.16	29.1	82.0	31
45	CT 210	34.3	735	3.3	1.14	29.4	81.9	31
	Average	36.2	919	3.5	1.16	29.5	82.2	
	LSD	1.8	118	0.3	0.01	0.5	0.5	
	CV	8.8	22.7	16.8	2.0	3.1	1.0	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT2. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial Agricenter International, Memphis, TN, listed by yield rank.

Yield Rank	Variety	Gin			Fiber		Fiber Uniformity %	Color Grade
		Turnout %	Lint Yield lb/ac	Micronaire	Length in	Strength g/tex		
1	09R621B2R2	42.9	1354	4.5	1.16	28.4	82.7	31
2	ST 4288 B2RF	37.0	1256	4.4	1.17	29.6	82.0	31
3	09R303B2R2	38.9	1235	3.8	1.17	29.0	81.9	31
4	PHY 485 WRF	43.8	1232	4.3	1.14	30.1	82.4	41
5	DP 0935 B2RF	39.2	1226	4.1	1.12	29.1	81.5	31
6	DP 0924 B2RF	37.9	1199	4.1	1.13	28.7	81.7	31
7	09R796B2R2	41.3	1178	4.2	1.13	28.9	82.2	31
8	PHX 5922 WRF	38.8	1173	4.2	1.16	31.1	83.2	31
9	09R643B2R2	39.7	1145	4.3	1.14	28.7	82.2	31
10	PHY 565 WRF	39.6	1136	4.1	1.19	30.9	83.7	31
11	DP 0949 B2RF	39.0	1136	4.2	1.14	29.3	82.1	31
12	09R627B2R2	40.9	1135	4.3	1.17	28.8	82.6	31
13	ST 5458 B2RF	38.0	1121	4.1	1.16	29.9	81.2	31
14	09R619B2R2	40.3	1085	4.5	1.14	28.1	82.4	31
15	DP 0912 B2RF	37.7	1053	4.4	1.12	28.9	82.7	31
16	BCSX 1025 LLB2	37.5	1042	3.8	1.21	31.5	81.7	41
17	ST 5288 B2RF	40.2	1026	4.2	1.16	29.1	81.7	31
18	FM 1740 B2F	39.1	1026	4.1	1.13	29.4	81.5	31
19	PHY 440 W	39.1	1018	4.1	1.15	30.4	83.1	41
20	PHY 375 WRF	38.5	1017	3.7	1.14	28.7	82.6	41
21	ST 4554 B2RF	37.1	1006	4.3	1.13	29.5	82.5	31
22	DP 141 B2RF	35.2	997	3.6	1.20	31.2	81.4	31
23	FM 1773 LLB2	37.6	995	4.3	1.21	31.2	82.6	31
24	PHY 525 RF	40.1	987	4.0	1.20	31.8	83.6	31
25	PHY 315 RF	38.8	973	3.9	1.15	28.6	81.7	31
26	PHY 367 WRF	38.7	968	3.9	1.16	29.7	81.6	41
27	BCSX 1015 LLB2	36.9	966	4.0	1.24	31.5	81.7	31
28	BCSX 1010 B2F	35.0	966	4.1	1.20	30.5	82.1	31
29	ST 4498 B2RF	37.5	961	3.9	1.14	30.3	82.5	31
30	FM 1845 LLB2	35.1	950	4.2	1.23	31.6	82.9	41
31	DP 161 B2RF	35.9	948	3.9	1.18	30.3	82.1	31
32	ARK 0102-48	36.9	932	4.2	1.26	33.6	82.7	31
33	BCSX 1035 LLB2	38.9	926	4.5	1.14	30.4	82.9	41
34	DG 2570 B2RF	38.0	913	4.4	1.12	29.3	82.6	31
35	DP 0920 B2RF	38.2	913	4.2	1.14	27.8	81.6	31
36	PHY 370 WR	39.0	907	4.2	1.11	28.9	83.0	31
37	DG 2520 B2RF	37.1	902	4.3	1.15	26.5	80.6	41
38	AM 1550 B2RF	38.1	809	4.2	1.12	27.4	82.0	31
39	CT 210	36.0	747	4.1	1.14	29.5	81.9	31
40	CG 3035 RF	39.0	740	4.2	1.15	29.9	82.6	31
41	CG 3220 B2RF	36.3	732	4.1	1.14	29.0	81.2	31
42	CT 110	35.4	729	4.0	1.16	30.3	81.9	31
43	CG 4020 B2RF	34.5	720	4.0	1.15	28.2	80.7	31
44	CG 3020 B2RF	36.4	679	3.7	1.12	28.0	81.9	31
45	CG 3520 B2RF	36.7	665	3.7	1.14	28.1	81.9	41
	Average	38.1	996	4.1	1.16	29.6	82.1	
	LSD	1.1	94	0.2	0.02	0.8	0.7	
	CV	2.1	6.8	3.2	1.28	2.1	0.6	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT3. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial Ames Plantation, LaGrange, TN, listed by yield rank.

Yield Rank	Variety	Gin			Fiber		Fiber Uniformity %	Color Grade
		Turnout %	Lint Yield lb/ac	Micronaire	Length in	Strength g/tex		
1	ST 4288 B2RF	39.5	1340	4.2	1.17	29.9	81.8	31
2	09R621B2R2	41.9	1321	4.1	1.17	28.8	83.1	31
3	09R303B2R2	40.1	1271	3.9	1.15	28.4	81.8	31
4	DP 0935 B2RF	39.7	1243	3.6	1.13	29.0	81.7	31
5	ST 5458 B2RF	40.9	1207	4.5	1.15	29.0	81.2	41
6	09R643B2R2	41.3	1194	4.1	1.14	28.2	82.5	31
7	PHX 5922 WRF	39.5	1194	3.6	1.17	31.1	82.7	31
8	PHY 565 WRF	40.7	1169	3.5	1.17	30.7	81.5	31
9	09R796B2R2	40.7	1160	4.2	1.13	30.2	81.5	31
10	09R627B2R2	40.5	1122	4.0	1.16	28.1	82.0	31
11	DP 0912 B2RF	40.0	1118	4.2	1.12	29.1	82.3	31
12	DP 0924 B2RF	34.9	1107	4.0	1.13	28.4	82.2	41
13	09R619B2R2	40.7	1093	3.8	1.13	27.9	81.8	31
14	PHY 485 WRF	38.8	1089	4.2	1.15	30.1	82.4	41
15	BCSX 1025 LLB2	38.9	1084	4.1	1.18	31.5	82.1	41
16	PHY 315 RF	42.8	1071	3.7	1.12	29.6	81.0	31
17	DP 0949 B2RF	36.5	1062	3.7	1.17	30.2	81.5	31
18	FM 1740 B2F	40.4	1061	4.1	1.14	29.1	81.8	31
19	DP 141 B2RF	36.4	1034	3.1	1.22	30.9	80.6	41
20	ST 4554 B2RF	37.1	1005	4.1	1.14	28.7	81.8	31
21	PHY 440 W	38.5	1003	3.8	1.16	29.4	82.5	41
22	ST 4498 B2RF	38.9	998	3.9	1.13	30.0	81.9	31
23	PHY 375 WRF	37.5	992	3.1	1.18	29.7	82.7	31
24	PHY 525 RF	39.8	981	3.2	1.20	31.4	81.4	31
25	FM 1845 LLB2	36.2	977	4.2	1.20	30.2	82.5	31
26	ST 5288 B2RF	38.0	970	4.1	1.17	29.2	81.6	31
27	ARK 0102-48	38.2	965	4.6	1.27	33.2	84.0	41
28	DP 0920 B2RF	40.1	959	4.2	1.14	28.0	81.3	31
29	BCSX 1010 B2F	34.8	958	3.7	1.17	29.5	81.9	31
30	FM 1773 LLB2	36.1	955	3.9	1.21	30.2	81.2	41
31	PHY 370 WR	40.9	950	3.9	1.10	29.4	82.4	31
32	PHY 367 WRF	37.8	946	3.6	1.16	30.6	81.7	41
33	DP 161 B2RF	35.3	932	3.7	1.18	30.0	80.9	31
34	BCSX 1035 LLB2	38.9	924	4.2	1.15	32.1	82.8	31
35	DG 2570 B2RF	37.5	900	4.0	1.15	30.5	81.7	31
36	DG 2520 B2RF	36.1	879	3.5	1.18	29.4	80.8	31
37	BCSX 1015 LLB2	32.9	864	3.8	1.25	30.9	81.2	31
38	AM 1550 B2RF	37.9	804	3.8	1.12	28.1	81.2	31
39	CT 210	38.4	795	3.6	1.15	29.8	81.8	31
40	CG 3035 RF	41.0	778	3.8	1.16	30.2	81.4	31
41	CG 4020 B2RF	36.4	764	3.7	1.17	28.9	81.0	41
42	CT 110	37.1	764	3.4	1.16	30.6	81.3	41
43	CG 3220 B2RF	36.5	737	3.8	1.16	29.3	81.7	31
44	CG 3020 B2RF	36.7	685	3.7	1.14	27.6	81.3	41
45	CG 3520 B2RF	35.7	648	3.8	1.14	27.8	80.4	41
Average		38.4	1002	3.8	1.16	29.6	81.8	
LSD		1.9	107	0.2	0.02	1.1	0.9	
CV		3.5	7.6	4.6	1.48	2.6	0.8	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT4. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial Crook Planting Company, Hales Point,TN, listed by yield rank.

Yield Rank	Variety	Gin			Fiber		Fiber Uniformity %	Color Grade
		Turnout %	Lint Yield lb/ac	Micronaire	Length in	Strength g/tex		
1	ST 4288 B2RF	32.2	815	2.8	1.19	31.2	82.4	31
2	BCSX 1035 LLB2	32.6	805	3.2	1.14	30.4	82.1	31
3	ST 5288 B2RF	33.1	804	2.7	1.19	29.5	81.4	41
4	FM 1740 B2F	33.6	804	2.9	1.19	29.5	83.6	31
5	PHY 370 WR	34.2	770	2.8	1.14	28.6	82.8	31
6	AM 1550 B2RF	32.5	749	2.7	1.14	28.4	81.5	41
7	09R796B2R2	34.4	742	2.8	1.17	29.2	82.2	31
8	DP 0949 B2RF	34.3	739	2.6	1.19	28.6	83.0	31
9	ST 5458 B2RF	31.4	716	2.6	1.20	30.5	81.7	31
10	DG 2570 B2RF	32.0	704	2.7	1.15	29.4	81.6	31
11	PHY 375 WRF	33.1	704	2.5	1.14	27.8	82.3	31
12	ARK 0102-48	33.0	695	3.3	1.31	33.7	84.6	41
13	DP 0912 B2RF	32.9	689	2.8	1.15	29.3	82.8	31
14	PHY 440 W	32.7	688	2.8	1.20	30.8	83.9	41
15	CG 3020 B2RF	30.4	686	2.7	1.14	27.5	81.7	31
16	BCSX 1015 LLB2	30.9	677	2.6	1.27	30.9	82.1	41
17	PHY 315 RF	33.1	676	2.7	1.17	27.5	82.3	31
18	PHY 367 WRF	31.3	675	2.4	1.17	29.6	81.7	31
19	09R619B2R2	33.1	673	3.0	1.20	28.7	83.9	31
20	CG 4020 B2RF	30.9	672	2.6	1.21	28.7	83.2	31
21	DG 2520 B2RF	31.0	669	2.5	1.19	28.1	81.2	31
22	CT 110	31.2	655	2.7	1.21	29.8	82.3	31
23	PHY 485 WRF	31.7	634	2.7	1.19	31.0	84.3	41
24	ST 4498 B2RF	29.7	631	2.5	1.14	28.1	82.7	41
25	CG 3520 B2RF	30.8	620	2.8	1.15	27.5	82.4	31
26	CG 3220 B2RF	30.9	611	2.7	1.20	29.3	82.5	31
27	CG 3035 RF	31.9	608	2.5	1.18	28.9	81.8	31
28	09R303B2R2	31.7	607	2.5	1.19	28.1	81.3	31
29	ST 4554 B2RF	30.8	603	2.6	1.14	27.5	82.0	41
30	09R643B2R2	31.8	599	2.8	1.16	28.5	82.1	31
31	DP 0924 B2RF	30.9	588	2.6	1.12	28.0	81.9	31
32	BCSX 1010 B2F	30.5	585	2.8	1.17	29.0	81.7	31
33	DP 0920 B2RF	32.1	574	2.8	1.14	27.4	81.1	41
34	PHX 5922 WRF	31.9	561	2.5	1.18	29.2	82.1	31
35	BCSX 1025 LLB2	32.1	545	2.6	1.26	30.5	82.5	41
36	FM 1773 LLB2	30.9	540	2.6	1.26	31.1	82.7	41
37	09R627B2R2	31.1	524	2.7	1.20	28.3	82.5	31
38	FM 1845 LLB2	29.6	517	2.6	1.23	30.6	82.1	31
39	09R621B2R2	31.7	514	2.9	1.19	29.0	82.9	31
40	DP 141 B2RF	28.4	507	2.3	1.23	30.7	81.1	41
41	PHY 525 RF	32.8	486	2.3	1.23	29.2	81.1	31
42	DP 0935 B2RF	32.2	466	2.4	1.14	28.6	82.2	31
43	PHY 565 WRF	31.0	442	2.3	1.21	30.4	82.2	41
44	DP 161 B2RF	29.5	400	2.5	1.21	30.5	83.0	41
45	CT 210	29.3	375	2.5	1.15	27.9	82.0	31
	Average	31.7	630	2.6	1.18	29.2	82.3	
	LSD	1.3	118	0.2	0.02	0.7	0.7	
	CV	2.9	15.0	5.0	1.17	2.5	0.7	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT5. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial Research and Education Center at Milan, Milan, TN, listed by yield rank.

Yield Rank	Variety	Gin			Fiber		Fiber Uniformity %	Color Grade
		Turnout %	Lint Yield lb/ac	Micronaire	Length in	Strength g/tex		
1	PHY 485 WRF	42.1	1156	3.2	1.16	30.7	83.5	31
2	PHY 375 WRF	39.4	1091	2.8	1.15	28.8	82.4	31
3	AM 1550 B2RF	41.9	1068	2.9	1.14	28.3	82.7	31
4	DP 0924 B2RF	37.4	1063	3.2	1.11	29.7	83.2	31
5	ST 4288 B2RF	38.7	1044	3.3	1.16	31.9	82.8	31
6	DP 0912 B2RF	40.1	1043	3.1	1.12	29.6	82.0	31
7	ARK 0102-48	36.7	1021	3.1	1.28	33.4	84.6	31
8	FM 1740 B2F	37.3	1006	3.1	1.14	29.8	81.6	31
9	09R303B2R2	40.0	994	2.8	1.16	28.7	82.3	31
10	PHY 315 RF	40.7	987	2.9	1.13	27.8	82.1	31
11	09R621B2R2	39.1	982	3.1	1.17	29.7	83.5	31
12	PHY 367 WRF	39.8	981	2.8	1.16	31.1	82.8	31
13	PHY 440 W	38.8	960	3.1	1.16	30.2	83.2	31
14	09R796B2R2	41.2	955	2.9	1.14	29.5	82.2	31
15	DG 2570 B2RF	40.2	942	2.9	1.15	30.4	82.8	31
16	DP 0920 B2RF	43.3	941	3.2	1.14	28.9	82.5	31
17	CG 3520 B2RF	38.5	925	2.8	1.16	29.0	82.6	31
18	CG 3020 B2RF	34.9	916	2.8	1.12	27.6	82.3	31
19	PHY 565 WRF	37.6	909	2.7	1.19	31.5	82.8	31
20	CG 3220 B2RF	36.5	894	2.9	1.17	29.5	82.5	31
21	PHX 5922 WRF	37.7	885	2.8	1.15	30.5	82.0	31
22	CT 110	38.4	871	3.4	1.16	31.4	82.4	31
23	DP 0949 B2RF	35.6	867	2.8	1.13	28.9	81.4	31
24	ST 5458 B2RF	35.4	865	2.9	1.17	31.3	81.3	31
25	DG 2520 B2RF	35.7	860	2.8	1.18	28.4	82.1	31
26	09R643B2R2	36.5	859	3.0	1.16	28.4	84.0	31
27	PHY 370 WR	37.7	858	3.2	1.10	29.0	82.5	31
28	ST 5288 B2RF	35.9	854	3.1	1.18	30.5	82.3	31
29	PHY 525 RF	35.7	827	2.9	1.21	30.6	82.2	31
30	DP 141 B2RF	36.7	825	2.7	1.23	31.9	82.0	31
31	ST 4554 B2RF	37.5	816	2.7	1.14	29.1	81.8	31
32	CG 4020 B2RF	33.1	807	2.8	1.16	28.8	81.8	31
33	BCSX 1015 LLB2	36.8	805	2.9	1.25	30.5	80.8	31
34	09R627B2R2	36.0	801	3.4	1.16	29.3	83.5	31
35	BCSX 1010 B2F	31.7	798	2.8	1.15	30.2	81.9	31
36	CG 3035 RF	35.9	796	2.8	1.14	28.8	81.9	31
37	09R619B2R2	37.7	775	3.2	1.16	29.0	84.4	31
38	BCSX 1025 LLB2	37.4	767	2.7	1.23	31.2	82.7	31
39	DP 161 B2RF	34.7	767	2.8	1.18	30.8	82.7	31
40	CT 210	33.9	764	3.2	1.15	29.6	82.3	31
41	FM 1845 LLB2	36.1	755	3.2	1.18	30.5	82.5	31
42	DP 0935 B2RF	34.7	746	2.7	1.12	28.9	82.4	31
43	BCSX 1035 LLB2	37.3	731	3.1	1.14	29.9	83.0	31
44	ST 4498 B2RF	33.7	704	2.4	1.11	28.8	81.0	31
45	FM 1773 LLB2	32.4	681	2.7	1.20	30.4	82.4	31
	Average	37.3	888	2.9	1.16	29.8	82.4	
	LSD	3.7	154	0.2	0.02	1.0	0.9	
	CV	7.1	12.4	6.4	1.07	2.5	0.7	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT6. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial Lindamood Planting Company Ridgely, TN, listed by yield rank.

Yield Rank	Variety	Gin			Fiber		Fiber Uniformity %	Color Grade
		Turnout %	Lint Yield lb/ac	Micronaire	Length in	Strength g/tex		
1	FM 1740 B2F	34.9	1175	3.9	1.18	29.6	83.5	31
2	ARK 0102-48	34.9	1090	4.0	1.27	32.2	83.6	41
3	BCSX 1035 LLB2	34.6	1087	4.2	1.16	30.9	83.9	41
4	PHY 440 W	33.8	1062	3.7	1.18	29.4	82.4	41
5	DP 0912 B2RF	39.5	1012	3.5	1.16	30.1	83.2	31
6	AM 1550 B2RF	35.5	1012	3.7	1.19	30.2	82.2	31
7	DP 0920 B2RF	34.6	988	3.8	1.17	28.8	83.2	31
8	09R619B2R2	37.2	988	3.8	1.19	29.5	84.3	31
9	09R643B2R2	35.4	979	3.5	1.18	29.0	81.9	41
10	ST 5458 B2RF	33.5	968	3.4	1.20	30.4	82.0	41
11	09R621B2R2	41.7	961	3.5	1.21	29.4	82.6	31
12	09R796B2R2	35.2	935	3.5	1.16	29.0	82.2	31
13	09R627B2R2	38.9	935	3.6	1.21	28.8	83.3	31
14	FM 1773 LLB2	32.8	933	3.7	1.26	32.2	83.5	41
15	PHY 315 RF	35.6	930	3.2	1.17	29.7	82.1	41
16	09R303B2R2	34.9	930	3.2	1.18	28.5	82.9	31
17	PHY 375 WRF	33.9	923	3.2	1.14	28.1	82.0	31
18	ST 4498 B2RF	32.2	915	3.1	1.16	30.0	83.2	41
19	ST 5288 B2RF	34.6	914	3.5	1.20	30.4	82.6	41
20	ST 4288 B2RF	33.8	910	3.3	1.23	32.4	83.8	31
21	DP 0949 B2RF	34.7	901	3.3	1.17	28.5	83.1	31
22	PHY 367 WRF	34.6	899	3.2	1.17	29.6	82.3	41
23	CG 3035 RF	34.9	897	3.3	1.15	28.6	82.5	31
24	BCSX 1015 LLB2	31.2	878	3.5	1.28	31.1	82.8	31
25	DP 0924 B2RF	34.9	860	3.6	1.15	29.0	83.0	31
26	BCSX 1025 LLB2	34.2	850	3.4	1.25	32.1	83.6	31
27	PHY 370 WR	34.7	841	3.3	1.14	29.2	83.7	41
28	DP 0935 B2RF	34.9	836	3.5	1.15	29.5	83.3	41
29	PHY 485 WRF	33.9	819	3.4	1.19	30.1	83.2	41
30	CT 110	32.7	803	3.5	1.15	29.0	82.3	31
31	CG 3520 B2RF	32.5	796	3.4	1.18	27.7	82.1	41
32	DP 141 B2RF	31.7	769	3.3	1.25	31.0	82.1	31
33	DG 2570 B2RF	34.4	768	3.4	1.16	29.2	82.7	31
34	CG 3020 B2RF	30.2	766	3.5	1.15	28.2	82.7	41
35	PHX 5922 WRF	34.0	751	3.0	1.18	30.3	82.0	31
36	PHY 525 RF	35.8	748	3.3	1.26	30.9	82.6	31
37	ST 4554 B2RF	32.1	736	3.2	1.15	29.9	83.0	31
38	DG 2520 B2RF	31.8	730	3.4	1.19	28.6	82.7	41
39	CT 210	32.7	687	3.2	1.15	29.0	81.7	31
40	BCSX 1010 B2F	30.4	675	3.3	1.17	28.9	81.9	41
41	CG 4020 B2RF	31.9	673	3.4	1.18	29.0	82.1	41
42	FM 1845 LLB2	31.6	656	3.7	1.26	31.7	83.6	41
43	CG 3220 B2RF	31.2	653	3.6	1.17	29.4	82.2	41
44	DP 161 B2RF	29.8	646	3.2	1.21	30.3	82.4	41
45	PHY 565 WRF	30.8	645	3.3	1.22	31.2	82.6	41
	Average	34.0	865	3.4	1.19	29.8	82.7	
	LSD	2.5	139	0.2	0.02	1.2	0.8	
	CV	5.3	11.5	5.5	1.16	2.8	0.7	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT7. Lint yield, gin turnout, and fiber quality of 45 entries in the 2009 Tennessee Official Variety Trial West Tennessee Research and Education Center, Jackson, TN, listed by yield rank.

Yield Rank	Variety	Gin		Micronaire	Fiber	Fiber	Uniformity	Color Grade
		Turnout	Lint Yield		Length	Strength		
		%	lb/ac		in	g/tex	%	
1	DP 0949 B2RF	40.1	1335	4.2	1.15	28.6	81.9	41
2	PHY 375 WRF	39.2	1296	3.7	1.12	27.8	81.0	31
3	PHY 565 WRF	38.9	1259	3.7	1.16	30.5	81.2	41
4	AM 1550 B2RF	38.4	1241	3.5	1.12	28.0	80.7	41
5	CG 4020 B2RF	36.5	1232	3.7	1.16	27.6	81.5	41
6	FM 1773 LLB2	36.0	1222	4.2	1.19	30.7	82.3	41
7	PHX 5922 WRF	38.7	1208	4.1	1.13	30.0	82.5	41
8	09R621B2R2	40.0	1208	4.4	1.14	27.8	81.8	31
9	09R627B2R2	39.8	1204	4.4	1.14	28.1	82.5	31
10	PHY 370 WR	38.9	1203	3.8	1.10	28.3	82.5	31
11	DP 0912 B2RF	39.2	1199	4.4	1.11	28.4	82.6	31
12	FM 1740 B2F	39.7	1199	3.9	1.13	28.4	81.6	41
13	PHY 315 RF	39.9	1190	3.8	1.13	28.3	80.9	41
14	ARK 0102-48	37.0	1189	4.2	1.26	32.9	84.9	41
15	CG 3035 RF	39.1	1187	3.7	1.14	28.8	82.5	41
16	PHY 367 WRF	39.6	1187	3.6	1.14	29.1	80.8	41
17	09R643B2R2	40.4	1184	4.4	1.16	28.9	82.9	31
18	CT 110	36.6	1181	3.7	1.15	29.5	82.0	41
19	ST 4554 B2RF	36.4	1175	4.0	1.13	28.9	81.7	41
20	ST 5458 B2RF	38.0	1173	4.1	1.16	29.6	80.5	41
21	ST 4288 B2RF	37.1	1173	4.5	1.18	29.4	83.1	41
22	CG 3520 B2RF	36.7	1162	3.5	1.13	27.1	80.9	41
23	DP 0935 B2RF	39.8	1162	3.9	1.12	28.0	80.4	41
24	DP 141 B2RF	35.2	1159	3.6	1.18	30.2	80.6	41
25	DP 161 B2RF	34.0	1158	3.8	1.20	29.6	82.0	31
26	ST 5288 B2RF	37.7	1140	4.2	1.15	28.3	80.8	31
27	09R303B2R2	39.6	1138	3.7	1.12	26.5	81.0	31
28	DP 0920 B2RF	39.7	1134	4.0	1.13	27.7	81.3	41
29	09R619B2R2	41.1	1123	4.3	1.13	27.9	82.6	31
30	PHY 485 WRF	37.9	1114	4.1	1.15	30.4	83.5	41
31	BCSX 1035 LLB2	38.1	1106	4.4	1.12	28.7	81.8	41
32	BCSX 1025 LLB2	35.8	1091	3.6	1.20	30.9	81.2	41
33	ST 4498 B2RF	38.4	1086	3.9	1.11	29.0	81.3	41
34	BCSX 1010 B2F	35.6	1072	3.8	1.16	28.9	81.4	31
35	DG 2520 B2RF	36.7	1053	3.6	1.16	26.9	81.3	41
36	CT 210	35.4	1041	3.6	1.14	30.9	81.9	41
37	PHY 525 RF	38.8	1035	3.6	1.20	29.9	80.6	41
38	DP 0924 B2RF	40.6	1026	4.2	1.13	28.8	82.7	41
39	09R796B2R2	39.4	1024	4.2	1.11	29.0	81.2	41
40	CG 3020 B2RF	36.0	988	3.8	1.10	26.8	81.2	41
41	PHY 440 W	37.9	960	3.8	1.13	29.0	82.5	41
42	DG 2570 B2RF	36.6	951	3.9	1.13	28.7	81.4	41
43	FM 1845 LLB2	35.5	944	4.0	1.20	31.6	81.9	41
44	CG 3220 B2RF	37.3	926	3.8	1.14	28.4	81.9	41
45	BCSX 1015 LLB2	35.0	846	3.9	1.23	30.7	81.3	41
	Average	37.9	1131	3.9	1.15	28.9	81.7	
	LSD	1.2	159	0.1	0.02	0.9	1.0	
	CV	2.3	10.1	2.8	1.60	2.3	0.9	

Tennessee AgResearch data of Main et al. (2009). HVI data furnished by FBRI, Lubbock, TX.

Table OVT8. Lint yield of 45 entries in the 2009 Tennessee Official Variety Trial for all six test locations, listed by yield rank.

Rank	Variety	Overall	Ames	WTREC	Agricenter	Ridgely	Milan	Hales Point
		lb/ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac
1	ST 4288 B2RF	1089	1340	1173	1256	910	1044	815
2	09R621B2R2	1057	1321	1208	1354	961	982	514
3	FM 1740 B2F	1045	1061	1199	1026	1175	1006	804
4	09R303B2R2	1029	1271	1138	1235	930	994	607
5	DP 0912 B2RF	1019	1118	1199	1053	1012	1043	689
6	ST 5458 B2RF	1008	1207	1173	1121	968	865	716
7	PHY 485 WRF	1007	1089	1114	1232	819	1156	634
8	DP 0949 B2RF	1007	1062	1335	1136	901	867	739
9	PHY 375 WRF	1004	992	1296	1017	923	1091	704
10	09R796B2R2	999	1160	1024	1178	935	955	742
11	09R643B2R2	994	1194	1184	1145	979	859	599
12	ARK 0102-48	982	965	1189	932	1090	1021	695
13	DP 0924 B2RF	974	1107	1026	1199	860	1063	588
14	PHY 315 RF	971	1071	1190	973	930	987	676
15	PHX 5922 WRF	962	1194	1208	1173	751	885	561
16	09R619B2R2	956	1093	1123	1085	988	775	673
17	09R627B2R2	954	1122	1204	1135	935	801	524
18	ST 5288 B2RF	951	970	1140	1026	914	854	804
19	PHY 440 W	948	1003	960	1018	1062	960	688
20	AM 1550 B2RF	947	804	1241	809	1012	1068	749
21	DP 0935 B2RF	946	1243	1162	1226	836	746	466
22	PHY 367 WRF	943	946	1187	968	899	981	675
23	BCSX 1035 LLB2	930	924	1106	926	1087	731	805
24	PHY 565 WRF	927	1169	1259	1136	645	909	442
25	PHY 370 WR	922	950	1203	907	841	858	770
26	DP 0920 B2RF	918	959	1134	913	988	941	574
27	BCSX 1025 LLB2	897	1084	1091	1042	850	767	545
28	ST 4554 B2RF	890	1005	1175	1006	736	816	603
29	FM 1773 LLB2	888	955	1222	995	933	681	540
30	ST 4498 B2RF	883	998	1086	961	915	704	631
31	DP 141 B2RF	882	1034	1159	997	769	825	507
32	DG 2570 B2RF	863	900	951	913	768	942	704
33	DG 2520 B2RF	849	879	1053	902	730	860	669
34	PHY 525 RF	844	981	1035	987	748	827	486
35	BCSX 1010 B2F	842	958	1072	966	675	798	585
36	BCSX 1015 LLB2	839	864	846	966	878	805	677
37	CG 3035 RF	835	778	1187	740	897	796	608
38	CT 110	834	764	1181	729	803	871	655
39	CG 4020 B2RF	812	764	1232	720	673	807	672
40	DP 161 B2RF	809	932	1158	948	646	767	400
41	CG 3520 B2RF	803	648	1162	665	796	925	620
42	FM 1845 LLB2	800	977	944	950	656	755	517
43	CG 3020 B2RF	787	685	988	679	766	916	686
44	CG 3220 B2RF	759	737	926	732	653	894	611
45	CT 210	735	795	1041	747	687	764	375
	Average	919	1002	1131	996	865	888	630
	LSD	118	107	159	94	139	154	118

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

Table OVT9. Gin turnout and lint yield of 45 entries in the 2009 Tennessee Official Variety Trial for all six test locations separated by planting period, listed by yield rank.

Rank	Variety	April	April	Variety	mid-May	mid-May	Variety	June	June
		planted	planted		planted	planted		planted	planted
		Lint %	Lint lb/ac		Lint %	Lint lb/ac		Lint %	Lint lb/ac
1	09R621B2R2	40.9	1265	09R621B2R2	42.3	1158	ST 4288 B2RF	35.5	929
2	ST 4288 B2RF	38.3	1256	FM 1773 LLB2	37.0	1100	AM 1550 B2RF	37.2	908
3	PHY 565 WRF	39.8	1214	ST 4288 B2RF	35.4	1083	FM 1773 LLB2	35.4	905
4	09R303B2R2	39.8	1204	09R303B2R2	36.9	1082	PHY 375 WRF	36.2	897
5	DP 0949 B2RF	39.7	1202	09R643B2R2	37.5	1062	PHY 485 WRF	36.9	895
6	PHX 5922 WRF	39.1	1201	09R796B2R2	38.3	1057	DP 0920 B2RF	36.5	866
7	DP 141 B2RF	38.3	1199	ST 5458 B2RF	35.7	1045	ARK 0102-48	34.9	858
8	ST 5458 B2RF	39.4	1190	PHY 440 W	36.4	1040	09R796B2R2	37.8	848
9	09R643B2R2	40.8	1189	09R619B2R2	38.7	1037	PHY 315 RF	36.9	831
10	09R627B2R2	40.1	1163	09R627B2R2	39.9	1035	ST 5288 B2RF	34.5	829
11	DP 0920 B2RF	39.6	1159	DP 0920 B2RF	38.6	1033	PHY 367 WRF	35.6	828
12	PHY 375 WRF	38.3	1144	DP 0949 B2RF	37.0	1031	DP 0935 B2RF	34.2	825
13	PHY 315 RF	41.3	1130	DP 0935 B2RF	36.4	1030	PHY 440 W	35.7	824
14	FM 1773 LLB2	40.0	1130	PHY 485 WRF	38.8	1026	DP 0912 B2RF	36.1	823
15	09R619B2R2	40.9	1108	DP 141 B2RF	36.8	1018	PHY 370 WR	35.9	814
16	PHY 485 WRF	38.3	1101	ARK 0102-48	35.9	1011	DP 141 B2RF	34.9	803
17	DP 161 B2RF	35.8	1097	CG 3020 B2RF	36.7	1007	CG 3035 RF	32.6	801
18	09R796B2R2	40.0	1092	ST 5288 B2RF	37.4	970	09R303B2R2	35.8	801
19	ST 4554 B2RF	36.7	1090	PHY 375 WRF	36.2	970	ST 5458 B2RF	33.4	791
20	BCSX 1010 B2F	36.0	1088	BCSX 1010 B2F	35.2	964	CG 4020 B2RF	34.6	773
21	BCSX 1035 LLB2	37.3	1088	PHX 5922 WRF	36.4	962	CG 3020 B2RF	34.9	768
22	PHY 370 WR	39.9	1077	PHY 315 RF	37.2	952	DG 2570 B2RF	33.3	764
23	ARK 0102-48	37.6	1077	DP 0924 B2RF	36.4	950	CT 110	34.8	763
24	DP 0935 B2RF	37.8	1067	BCSX 1035 LLB2	35.8	946	DP 0924 B2RF	37.7	757
25	PHY 367 WRF	38.7	1066	ST 4498 B2RF	34.8	938	CG 3520 B2RF	33.7	752
26	ST 5288 B2RF	37.8	1055	PHY 367 WRF	36.6	934	09R621B2R2	35.4	748
27	DP 0924 B2RF	39.9	1047	BCSX 1025 LLB2	34.0	922	BCSX 1025 LLB2	33.8	741
28	FM 1740 B2F	34.6	1045	AM 1550 B2RF	36.8	911	DG 2520 B2RF	32.0	740
29	ST 4498 B2RF	38.7	1042	PHY 565 WRF	35.2	891	09R643B2R2	34.1	729
30	AM 1550 B2RF	38.1	1022	DP 161 B2RF	33.4	883	09R619B2R2	35.4	724
31	BCSX 1015 LLB2	35.2	1015	PHY 370 WR	36.9	874	PHX 5922 WRF	34.8	723
32	CG 3020 B2RF	38.5	1015	ST 4554 B2RF	34.6	871	ST 4554 B2RF	34.2	709
33	PHY 525 RF	39.3	1008	PHY 525 RF	37.9	868	CG 3220 B2RF	33.9	702
34	DG 2520 B2RF	36.4	998	DP 0912 B2RF	36.2	841	BCSX 1015 LLB2	31.1	692
35	CG 3220 B2RF	40.1	983	BCSX 1015 LLB2	32.7	820	PHY 565 WRF	34.3	675
36	PHY 440 W	38.2	982	CG 3220 B2RF	37.0	819	ST 4498 B2RF	31.7	668
37	CT 110	36.8	972	DG 2570 B2RF	34.4	816	DP 161 B2RF	32.5	666
38	DG 2570 B2RF	36.4	966	FM 1845 LLB2	33.3	803	09R627B2R2	33.6	663
39	FM 1845 LLB2	35.9	961	FM 1740 B2F	32.8	797	PHY 525 RF	34.2	656
40	DP 0912 B2RF	37.0	925	CT 110	34.0	766	BCSX 1035 LLB2	34.7	656
41	CT 210	36.9	918	CG 4020 B2RF	34.6	731	FM 1845 LLB2	32.8	636
42	CG 4020 B2RF	36.2	905	CG 3035 RF	33.3	723	BCSX 1010 B2F	31.6	610
43	BCSX 1025 LLB2	33.9	855	CT 210	34.4	717	DP 0949 B2RF	33.4	606
44	CG 3035 RF	36.3	836	DG 2520 B2RF	33.2	697	FM 1740 B2F	32.1	584
45	CG 3520 B2RF	36.9	831	CG 3520 B2RF	33.7	692	CT 210	31.6	570
	Average	38.2	1066	Average	36.0	931	Average	34.5	759
	LSD	1	143	LSD	2.7	140	LSD	3.6	180
	CV	2.0	13.7	CV	2.8	15.3	CV	4.0	24.1

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

Table OVT10. Plant height (inches), total number of nodes, nodes above cracked boll, and estimated DD60's remaining to maturity of 45 entries in the 2009 Tennessee Official Variety Trial, listed in alphabetical order.

Variety	Agricenter 9/28/2009			Ames Plantation 9/22/2009			West TN REC 9/21/2009			Average			
	Height	Nodes	NACB ¹	Height	Nodes	NACB ¹	Height	Nodes	NACB ¹	Height	Nodes	NACB ¹	DD60 ²
O9R303B2R2	47.8	24	5.8	41.7	24	6.8	44.8	26	4.9	44.8	25	5.8	289
O9R619B2R2	41.3	23	6.9	39.9	22	5.8	46.3	23	3.8	42.5	22	5.5	273
O9R621B2R2	53.0	20	4.1	40.5	21	6.9	51.0	23	5.8	48.2	21	5.6	279
O9R627B2R2	49.8	22	7.4	40.5	22	6.6	52.5	24	6.7	47.6	23	6.9	344
O9R643B2R2	50.8	22	5.4	39.9	22	7.0	48.8	24	6.2	46.5	23	6.2	309
O9R796B2R2	51.5	24	6.9	39.6	22	5.9	49.5	25	6.0	46.9	24	6.2	312
AM 1550 B2RF	47.5	23	5.7	41.6	22	6.5	44.3	24	4.7	44.5	23	5.6	281
ARK 0102-48	47.8	24	6.7	40.7	22	2.8	43.3	23	4.5	43.9	23	4.6	232
BCSX 1005LLB2	44.8	23	7.6	41.3	24	7.5	47.8	25	4.3	44.6	24	6.5	323
BCSX 1010B2F	50.0	23	5.6	38.5	23	6.9	50.5	25	5.2	46.3	24	5.9	293
BCSX 1015LLB2	46.5	23	5.6	40.8	25	7.5	46.3	25	4.6	44.5	24	5.9	294
BCSX 1025LLB2	48.0	24	7.9	41.7	23	7.5	45.3	25	5.1	45.0	24	6.8	340
BCSX 1035LLB2	45.0	23	5.1	43.4	23	6.4	44.5	25	3.9	44.3	23	5.1	256
CG 3020 B2RF	45.5	23	4.7	41.4	21	4.7	42.8	23	4.1	43.2	23	4.5	223
CG 3035 RF	48.3	22	5.3	46.1	23	7.1	46.5	23	5.1	47.0	23	5.8	290
CG 3220 B2RF	47.8	23	6.1	40.5	22	5.6	44.3	24	5.2	44.2	23	5.6	280
CG 3520 B2RF	47.5	23	4.5	42.8	22	4.8	43.8	23	4.2	44.7	23	4.5	223
CG 4020 B2RF	48.0	23	4.9	40.9	22	5.1	46.3	24	4.6	45.1	23	4.8	242
CT 110	49.8	25	5.4	40.5	24	7.8	42.5	25	5.0	44.3	25	6.0	302
CT 210	46.0	25	6.3	43.9	25	7.5	44.5	25	6.0	44.8	25	6.6	329
DG 2520 B2RF	45.3	24	5.7	42.4	22	5.1	46.0	24	3.8	44.6	23	4.8	242
DG 2570 B2RF	47.3	24	5.3	44.0	23	6.2	46.3	24	5.0	45.9	23	5.5	274
DP 0912 B2RF	48.3	23	6.5	45.1	22	7.4	45.3	24	4.8	46.2	23	6.2	310
DP 0920 B2RF	45.3	23	6.0	43.0	22	4.7	43.0	24	3.9	43.8	23	4.9	243
DP 0924 B2RF	48.3	24	7.2	41.9	22	6.6	49.3	24	4.7	46.5	23	6.1	307
DP 0935 B2RF	50.0	23	6.6	41.2	22	7.2	50.8	25	7.1	47.3	23	7.0	348
DP 0949 B2RF	51.3	23	6.4	41.5	22	6.8	52.5	24	4.1	48.4	23	5.8	288
DP 141 B2RF	55.5	25	7.6	42.6	22	7.2	50.5	25	6.5	49.5	24	7.1	354
DP 161 B2RF	51.3	24	6.2	42.4	24	7.4	52.5	26	5.4	48.7	25	6.3	316
FM 1740B2F	46.3	24	7.5	41.6	22	5.5	42.8	24	4.6	43.6	23	5.8	292
FM 1845LLB2	48.3	23	7.1	43.5	23	6.1	45.3	24	5.5	45.7	23	6.2	310
PHX 5922 WRF	48.0	23	6.0	41.0	23	6.3	50.5	25	6.0	46.5	24	6.1	303
PHY 315 RF	50.3	23	7.1	44.1	22	5.3	46.8	24	4.6	47.1	23	5.7	283
PHY 367 WRF	47.0	22	5.3	43.3	22	4.3	45.5	23	4.2	45.3	22	4.6	229
PHY 370 WR	52.5	24	6.9	40.9	22	5.8	48.5	25	4.3	47.3	24	5.7	283
PHY 375 WRF	49.3	23	5.2	40.9	23	5.6	46.3	25	4.5	45.5	23	5.1	253
PHY 440 W	48.5	23	5.1	43.1	22	5.6	46.5	24	4.7	46.0	23	5.1	255
PHY 485 WRF	49.5	22	6.0	40.7	21	5.0	49.8	23	4.6	46.7	22	5.2	260
PHY 525 WRF	48.8	25	6.8	41.5	24	8.6	50.0	25	6.5	46.8	25	7.3	364
PHY 565 WRF	49.8	24	6.4	41.2	25	7.6	50.5	26	5.7	47.2	25	6.6	328
ST 4288B2F	46.5	23	9.2	43.0	22	7.2	42.8	24	5.7	44.1	23	7.3	367
ST 4498B2RF	47.5	23	6.4	42.9	22	6.7	43.0	23	4.7	44.5	23	5.9	294
ST 4554B2RF	45.0	24	6.7	42.0	23	7.1	45.3	24	5.6	44.1	24	6.5	323
ST 5288B2F	50.0	24	9.3	39.0	23	7.9	48.3	25	6.8	45.8	24	8.0	398
ST 5458B2RF	47.5	19	6.1	37.4	23	7.0	47.3	24	4.8	44.1	22	5.9	297
Average	48.3	23	6.3	41.7	23	6.3	46.9	24	5.0	45.6	23	5.9	294

¹NACB = nodes above highest 1st position cracked boll to the highest harvestable boll.

² 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 OVT11. Lint yield of varieties common to Tennessee OVT's from 2, 3, or 4 year averages, listed by yield rank.

Rank	Variety	2 Year		3 Year		4 Year		
		Average	Rank	Average	Rank	Average	Rank	
		lb/ac		lb/ac		lb/ac		
1	FM 1740 B2F	1272	1	PHY 375 WRF	1189	1	PHY 370 WR	1151
2	PHY 375 WRF	1270	2	FM 1740 B2F	1178	2	PHY 485 WRF	1136
3	ST 5458 B2RF	1253	3	ST 5458 B2RF	1153	3	ST 4554 B2RF	1082
4	PHY 370 WR	1206	4	PHY 485 WRF	1118	4	DG 2520 B2RF	1004
5	PHY 485 WRF	1196	5	PHY 370 WR	1112	5	CG 3520 B2RF	994
6	DP 0935 B2RF	1176	6	PHY 315 RF	1102	6	CG 3020 B2RF	990
7	PHY 315 RF	1166	7	AM 1550 B2RF	1082	7	CG 4020 B2RF	989
8	AM 1550 B2RF	1160	8	ST 4498 B2RF	1066			
9	DP 0924 B2RF	1154	9	ST 4554 B2RF	1045			
10	ST 4498 B2RF	1129	10	DP 141 B2RF	1017			
11	DG 2570 B2RF	1125	11	DP 161 B2RF	986			
12	ST 4554 B2RF	1103	12	CG 3035 RF	979			
13	DP 141 B2RF	1092	13	DG 2520 B2RF	972			
14	CG 3220 B2RF	1056	14	CG 3220 B2RF	967			
15	DP 161 B2RF	1051	15	CG 3520 B2RF	961			
16	DG 2520 B2RF	1037	16	CG 4020 B2RF	957			
17	CG 3520 B2RF	1030	17	CG 3020 B2RF	955			
18	CG 3020 B2RF	1028						
19	CG 4020 B2RF	1027						
20	CG 3035 RF	1021						
Average		1128		1049		1049		

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

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 2009 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 10 counties each containing 18 cultivars. County standard tests of Liberty Link cultivars were planted in 3 locations with each location containing 8 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

Table CST1. Results of Roundup Ready Flex cotton variety test, all locations average, 2009.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1740 B2F	38.5	1121	4.1	1.12	28.6	81.8	31	4	54.80
2	DP 0912 B2RF	37.1	1112	4.4	1.10	28.9	82.0	31	4	54.00
3	ST 4288 B2F	37.3	1074	4.4	1.14	29.4	81.7	41	4	53.40
4	DP 0920 B2RF	39.8	1069	4.2	1.13	28.3	82.0	31	4	54.80
5	PHY 375 WRF	38.6	1063	3.8	1.12	28.3	81.6	41	4	53.55
6	ST 5288 B2F	38.3	1018	4.3	1.13	28.2	81.5	31	5	53.35
7	DG 2570 B2RF	38.5	995	4.0	1.13	29.5	81.5	31	3	56.20
8	ST 5458 B2RF	37.3	977	4.1	1.13	30.3	80.7	31	5	53.75
9	PHY 315 RF	37.8	969	3.9	1.11	28.5	81.3	31	4	54.80
10	DP 0949 B2RF	38.7	958	4.0	1.15	29.4	81.5	31	4	54.90
11	DP 0935 B2RF	39.0	940	4.1	1.10	28.4	81.2	31	4	54.15
12	PHY 485 WRF	37.4	934	4.0	1.14	30.9	82.6	31	5	54.25
13	DP 0924 B2RF	37.0	909	4.1	1.12	28.1	82.1	31	4	54.80
14	DG 2520 B2RF	35.3	901	3.9	1.14	27.8	81.2	31	4	54.90
15	CG 3220 B2RF	36.7	897	3.9	1.14	29.5	81.3	31	4	55.15
16	AM 1550 B2RF	37.2	884	3.7	1.11	27.9	81.2	31	4	54.80
17	CG 4020 B2RF	37.1	874	3.7	1.14	28.0	81.1	31	4	54.90
18	CG 3520 B2RF	35.1	842	3.7	1.15	28.0	81.8	31	4	54.90
	Mean	37.6	974	4.0	1.13	28.8	81.6	31	4	54.52
	LSD	1.9	110	0.3	0.02	1.0	0.7		1	
	CV	5.3	12.1	6.7	2.3	4.1	1.1		10.6	

Table CST2. Results of Liberty Link cotton variety test, all locations average, 2009¹.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1735 LLB2	34.9	884	3.8	1.19	31.3	82.4	41	4	54.00
2	PHY 375 WRF	37.4	802	3.7	1.14	28.3	81.5	41	4	53.55
3	BCSX 1035 LLB2	35.4	767	4.0	1.19	31.7	81.2	41	4	54.00
4	FM 1773 LLB2	34.4	693	3.9	1.21	32.5	82.4	41	5	51.95
5	BCSX 1015 LLB2	35.6	692	4.2	1.17	30.9	82.3	41	3	54.40
6	FM 1845 LLB2	35.1	687	4.0	1.16	30.4	82.2	41	4	53.80
7	PHY 485 WRF	36.0	659	4.0	1.15	31.4	83.4	41	4	54.20
8	BCSX 1025 LLB2	34.0	598	3.6	1.24	31.8	82.2	41	5	51.80
	Mean	35.4	723	3.9	1.18	31.0	82.2	41	4	53.46
	LSD	ns	104	ns	ns	1.1	ns		1	
	CV	4.2	8.4	19.3	4.6	4.6	1.2		11.8	

¹All varieties treated with 2 applications Ignite 280.

Table CST3. Results of Roundup Ready Flex cotton variety test, **Carroll County, 2009.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1740 B2F	37.6	1340	4.2	1.10	28.7	82.1	31-2	3	55.45
2	PHY 315 RF	37.2	1320	4.0	1.14	29.4	82.1	31-2	3	56.05
3	PHY 375 WRF	36.1	1302	3.9	1.12	28.3	81.1	31-1	3	55.95
4	DG 2570 B2RF	36.3	1285	4.2	1.14	26.8	81.1	21-2	3	56.50
5	ST 5458 B2RF	36.3	1284	4.1	1.15	31.2	81.9	31-3	4	55.35
6	ST 5288 B2F	39.0	1281	4.4	1.17	30.4	83.3	31-1	4	55.20
7	DP 0920 B2RF	36.6	1275	4.5	1.12	27.6	81.2	31-1	3	55.80
8	DP 0935 B2RF	36.2	1248	4.3	1.08	28.0	81.5	31-1	3	55.30
9	DP 0912 B2RF	34.5	1198	4.4	1.10	29.1	82.4	31-1	3	55.30
10	CG 3220 B2RF	34.7	1171	3.9	1.17	30.0	82.0	21-2	3	56.75
11	DP 0924 B2RF	34.1	1124	4.3	1.14	29.0	83.0	31-1	4	54.95
12	DP 0949 B2RF	35.7	1081	3.9	1.15	30.0	82.4	31-1	4	55.15
13	AM 1550 B2RF	36.3	1017	4.0	1.12	27.4	81.1	31-1	3	55.95
14	ST 4288 B2F	36.0	1013	4.5	1.16	30.0	83.2	31-1	3	56.35
15	DG 2520 B2RF	34.0	1009	3.7	1.16	28.0	80.8	31-2	3	56.05
16	CG 3520 B2RF	30.8	966	3.7	1.16	28.5	83.2	31-1	3	56.25
17	PHY 485 WRF	33.3	920	3.6	1.16	32.4	83.5	31-2	4	55.50
18	CG 4020 B2RF	34.4	920	3.9	1.14	27.1	81.1	31-1	3	56.05
Mean		35.5	1153	4.1	1.14	29.0	82.1		3	55.77

Table CST4. Results of Roundup Ready Flex cotton variety test, **Dyer County, 2009.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1740 B2F	36.8	1162	3.8	1.16	28.5	83.0	31-2	4	55.10
2	DP 0912 B2RF	36.6	1134	3.9	1.16	28.3	81.8	31-2	4	54.90
3	PHY 375 WRF	36.6	992	3.2	1.15	29.6	81.9	31-2	4	51.60
4	DP 0920 B2RF	37.1	960	3.7	1.17	29.2	83.3	31-2	4	55.10
5	ST 4288 B2F	34.4	895	3.2	1.18	30.7	80.3	31-2	4	51.80
6	ST 5288 B2F	35.4	862	3.1	1.18	30.6	81.6	41-1	6	45.50
7	CG 4020 B2RF	33.9	842	3.1	1.17	28.7	82.2	31-1	4	51.35
8	DG 2520 B2RF	32.8	821	4.6	1.09	29.1	81.9	31-1	4	54.00
9	PHY 315 RF	38.5	793	3.5	1.12	28.7	80.4	31-1	4	54.65
10	ST 5458 B2RF	36.0	755	3.1	1.17	32.1	80.6	31-3	4	51.80
11	DP 0935 B2RF	37.0	749	2.9	1.13	29.3	80.6	31-2	4	48.05
12	PHY 485 WRF	34.7	747	3.3	1.17	31.6	84.1	31-2	5	52.45
13	DP 0949 B2RF	35.3	708	2.9	1.19	30.2	81.1	31-3	5	47.10
14	DG 2570 B2RF	36.1	651	3.0	1.17	31.1	81.6	31-2	4	51.80
15	CG 3520 B2RF	33.6	593	2.9	1.18	28.3	81.2	31-2	4	48.15
16	DP 0924 B2RF	33.9	519	4.3	1.15	29.0	82.8	31-1	4	54.95
17	AM 1550 B2RF	33.7	468	3.0	1.13	28.8	80.8	31-3	4	51.25
18	CG 3220 B2RF	33.5	421	3.0	1.17	31.8	81.4	31-2	4	51.80
Mean		35.3	782	3.4	1.16	29.8	81.7		4	51.74

Table CST5. Results of Roundup Ready Flex cotton variety test, **Fayette County, 2009.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1740 B2F	39.2	1196	4.1	1.11	27.9	81.4	41-4	4	53.55
2	DP 0912 B2RF	39.3	1033	4.8	1.07	28.8	81.4	41-4	4	52.00
3	DP 0920 B2RF	39.8	965	4.2	1.09	26.6	80.5	42-2	4	50.65
4	PHY 485 WRF	37.5	935	4.4	1.11	28.3	80.9	51-3	5	49.00
5	ST 5288 B2F	37.7	922	4.3	1.11	28.2	81.1	51-3	5	49.00
6	PHY 375 WRF	37.8	921	3.9	1.09	27.8	80.4	41-4	4	53.05
7	ST 4288 B2F	33.6	857	4.2	1.13	28.4	79.5	42-1	4	51.15
8	PHY 315 RF	37.6	815	3.7	1.09	28.7	80.4	51-3	5	48.95
9	DG 2570 B2RF	35.7	814	4.1	1.12	29.0	80.6	42-1	4	51.15
10	CG 3520 B2RF	32.3	801	3.5	1.11	26.6	79.8	42-2	5	49.00
11	DG 2520 B2RF	35.7	764	4.0	1.17	28.3	82.4	41-4	4	53.55
12	DP 0935 B2RF	40.8	720	4.2	1.07	28.3	79.2	42-2	4	49.20
13	DP 0949 B2RF	36.7	713	4.2	1.15	28.8	81.9	42-1	4	51.15
14	ST 5458 B2RF	35.6	652	3.9	1.10	26.1	79.2	42-2	5	48.25
15	AM 1550 B2RF	35.7	647	3.3	1.08	26.7	78.8	42-2	4	48.00
16	CG 3220 B2RF	36.8	638	3.7	1.14	27.7	80.9	42-2	4	51.15
17	DP 0924 B2RF	33.5	593	3.7	1.08	27.1	80.3	42-2	5	49.00
18	CG 4020 B2RF	36.4	577	3.8	1.14	28.1	80.7	42-2	4	51.15
Mean		36.8	809	4.0	1.11	27.9	80.5		4	50.50

Table CST6. Results of Roundup Ready Flex cotton variety test, **Gibson County, Mason Hall, TN, 2009.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DP 0912 B2RF	37.8	839	4.5	1.08	28.1	82.2	21-2	4	54.45
2	PHY 315 RF	41.3	825	3.9	1.10	28.1	81.8	31-2	3	55.45
3	PHY 375 WRF	40.2	801	3.7	1.11	27.3	82.1	31-2	4	54.80
4	ST 4288 B2F	37.7	787	4.2	1.15	29.3	82.6	31-4	4	55.10
5	FM 1740 B2F	37.9	780	4.2	1.12	27.6	81.9	31-1	4	54.80
6	ST 5458 B2RF	37.4	737	4.3	1.15	30.2	80.5	32-2	4	52.40
7	PHY 485 WRF	38.4	719	4.2	1.11	29.8	82.7	31-4	5	53.95
8	DG 2570 B2RF	38.0	714	4.0	1.13	30.0	82.7	31-3	3	56.40
9	AM 1550 B2RF	39.7	692	3.9	1.13	27.6	82.0	31-3	3	55.95
10	ST 5288 B2F	38.3	691	4.0	1.11	26.9	80.9	41-1	5	51.45
11	DP 0949 B2RF	38.2	687	4.1	1.14	29.0	81.7	31-3	4	54.90
12	CG 3220 B2RF	36.4	660	3.9	1.15	30.2	82.0	31-1	4	55.15
13	DP 0920 B2RF	39.1	657	4.5	1.13	28.7	82.7	31-2	4	54.85
14	DP 0924 B2RF	37.8	653	4.0	1.12	27.8	82.7	31-3	4	55.00
15	CG 4020 B2RF	37.6	640	3.9	1.16	27.6	81.8	31-3	4	54.90
16	DG 2520 B2RF	35.6	630	3.6	1.11	28.7	80.2	31-1	4	54.65
17	CG 3520 B2RF	36.8	592	3.8	1.16	27.7	82.2	41-1	5	51.50
18	DP 0935 B2RF	36.9	567	3.9	1.11	29.1	82.3	31-3	4	54.80
Mean		38.1	704	4.0	1.13	28.5	81.9		4	54.47

Table CST7. Results of Roundup Ready Flex cotton variety test, **Gibson County**, Three-Way, TN, 2009.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	ST 4288 B2F	37.5	1070	4.4	1.12	29.7	82.5	31-1	4	55.10
2	FM 1740 B2F	38.0	1034	3.9	1.10	27.1	81.2	31-2	5	53.05
3	DP 0949 B2RF	39.5	1013	3.5	1.13	29.1	80.6	31-2	5	53.35
4	DP 0920 B2RF	37.7	974	3.8	1.13	28.9	81.6	31-2	5	53.50
5	ST 5458 B2RF	37.6	967	4.5	1.12	30.4	81.6	41-1	6	48.70
6	ST 5288 B2F	38.2	956	4.2	1.11	26.9	81.5	41-1	6	48.60
7	PHY 375 WRF	40.2	956	3.7	1.10	28.6	82.3	31-2	4	54.15
8	DP 0924 B2RF	36.4	949	4.0	1.13	29.3	82.8	31-2	5	53.70
9	DP 0912 B2RF	37.8	938	4.1	1.09	27.3	81.8	31-2	5	53.05
10	DG 2520 B2RF	39.6	914	3.7	1.09	26.2	81.4	41-1	4	53.05
11	DG 2570 B2RF	38.2	912	3.7	1.13	30.4	82.2	31-1	5	53.75
12	PHY 315 RF	39.6	902	3.9	1.11	28.2	81.4	31-2	5	53.50
13	CG 3520 B2RF	37.4	900	3.9	1.12	28.1	81.6	31-2	4	54.80
14	PHY 485 WRF	36.4	897	3.6	1.14	31.6	82.2	41-1	6	48.90
15	DP 0935 B2RF	39.2	896	4.1	1.10	27.6	82.0	31-1	4	54.15
16	AM 1550 B2RF	34.9	823	3.5	1.09	28.0	81.9	31-1	4	54.00
17	CG 3220 B2RF	35.8	811	3.5	1.15	30.6	81.3	41-1	4	53.85
18	CG 4020 B2RF	36.2	754	3.0	1.13	28.1	80.3	31-1	5	49.95
Mean		37.8	926	3.8	1.12	28.7	81.7		5	52.73

Table CST8. Results of Roundup Ready Flex cotton variety test, **Haywood County**, 2009.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	ST 4288 B2F	40.6	1449	5.0	1.13	28.4	82.3	31-2	4	52.45
2	DP 0912 B2RF	38.8	1433	4.3	1.11	29.9	81.9	31-1	4	54.90
3	DG 2570 B2RF	40.8	1302	4.4	1.08	28.9	80.5	31-2	3	55.30
4	DP 0949 B2RF	42.4	1265	4.6	1.13	29.1	81.6	31-1	3	55.80
5	ST 5458 B2RF	40.1	1252	4.6	1.12	30.6	81.4	31-2	4	55.10
6	DP 0935 B2RF	40.5	1247	4.4	1.07	27.4	80.5	31-1	3	53.40
7	AM 1550 B2RF	40.6	1235	4.1	1.08	26.8	80.1	31-2	3	55.45
8	PHY 485 WRF	42.7	1209	4.2	1.13	33.0	80.6	41-1	5	51.90
9	DP 0924 B2RF	40.0	1206	4.6	1.07	24.9	80.9	41-1	4	50.65
10	DP 0920 B2RF	38.9	1203	4.6	1.09	27.7	81.4	41-1	3	53.35
11	FM 1740 B2F	40.1	1198	4.3	1.09	27.6	80.6	41-1	3	53.35
12	CG 4020 B2RF	43.5	1194	4.1	1.09	27.0	81.0	41-1	3	53.50
13	CG 3220 B2RF	39.8	1156	4.2	1.10	26.4	80.7	31-2	3	55.45
14	ST 5288 B2F	39.6	1152	5.0	1.10	27.1	81.5	41-1	4	50.70
15	PHY 375 WRF	35.6	1120	3.8	1.13	28.5	82.1	31-2	3	55.95
16	DG 2520 B2RF	32.3	945	4.0	1.14	26.9	81.0	31-2	4	54.90
17	CG 3520 B2RF	33.8	866	4.0	1.14	26.6	82.0	41-1	4	53.55
18	PHY 315 RF	29.6	850	3.9	1.12	29.2	81.4	31-2	4	54.80
Mean		38.9	1182	4.3	1.11	28.1	81.2		4	53.92

Table CST9. Results of Roundup Ready Flex cotton variety test, **Lake County, 2009.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	ST 4288 B2F	41.8	1574	4.7	1.16	29.4	81.4	31-2	4	54.75
2	CG 3220 B2RF	37.2	1282	4.3	1.15	29.7	79.9	41-3	5	51.60
3	PHY 315 RF	38.5	1276	4.0	1.13	27.5	81.0	31-1	4	54.80
4	DP 0912 B2RF	35.7	1222	4.6	1.12	26.8	82.0	41-1	4	53.40
5	PHY 375 WRF	38.9	1207	4.1	1.15	27.6	81.7	41-1	4	53.55
6	ST 5458 B2RF	35.9	1207	4.2	1.15	29.3	78.9	32-2	5	49.20
7	FM 1740 B2F	38.4	1175	4.5	1.13	31.2	82.0	41-1	3	54.25
8	DG 2570 B2RF	38.9	1148	4.2	1.16	28.5	82.6	31-3	3	56.25
9	ST 5288 B2F	37.5	1118	4.4	1.14	26.6	81.1	41-2	5	53.45
10	AM 1550 B2RF	37.1	1099	3.9	1.12	28.9	81.6	31-2	5	53.50
11	DP 0920 B2RF	38.5	1080	4.2	1.14	26.6	81.6	31-2	4	54.90
12	DP 0949 B2RF	38.6	1065	4.0	1.19	29.6	81.7	31-2	4	55.15
13	DG 2520 B2RF	35.5	1048	4.0	1.17	27.5	80.9	41-1	4	53.55
14	DP 0935 B2RF	39.0	1015	4.8	1.13	28.1	82.0	31-3	3	55.80
15	CG 3520 B2RF	34.9	993	3.9	1.17	28.1	80.7	41-1	4	53.55
16	DP 0924 B2RF	35.1	988	3.9	1.14	27.9	81.8	31-3	3	56.05
17	PHY 485 WRF	35.3	973	4.0	1.17	30.4	83.4	31-4	5	54.05
18	CG 4020 B2RF	35.2	942	3.6	1.16	27.5	80.5	41-1	4	53.40
Mean		37.3	1134	4.2	1.15	28.4	81.4		4	53.96

Table CST10. Results of Liberty Link cotton variety test, **Lake County, 2009¹.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	PHY 375 WRF*	37.7	792	4.1	1.14	29.6	82.7	31-2	4	55.35
2	FM 1735 LLB2	36.0	769	3.7	1.28	32.8	82.7	31-2	4	55.55
3	BCSX 1035 LLB2	38.6	708	4.7	1.14	32.2	83.5	31-1	3	56.65
4	FM 1845 LLB2	36.2	676	4.4	1.18	32.6	81.7	31-2	3	56.35
5	FM 1773 LLB2	35.6	654	4.5	1.19	31.6	83.1	41-1	4	54.05
6	BCSX 1015 LLB2	38.7	622	4.1	1.13	31.0	82.1	41-1	4	54.00
7	BCSX 1025 LLB2	37.3	512	3.6	1.20	33.5	82.5	31-2	5	54.10
Mean		37.2	676	4.2	1.18	31.9	82.6		4	54.84

¹All varieties treated with 2 applications Ignite 280.

Table CST11. Results of Liberty Link cotton variety test, **Lauderdale County, 2009¹**.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1735 LLB2	32.3	885	2.8	1.26	32.4	82.8	41-1	5	45.40
2	BCSX 1035 LLB2	31.0	791	3.0	1.30	32.6	80.9	41-1	5	48.40
3	PHY 375 WRF*	31.1	715	2.8	1.18	29.1	82.6	31-2	4	48.35
4	PHY 375 WRF	33.4	691	2.9	1.15	28.9	80.7	31-3	4	48.15
5	BCSX 1015 LLB2	33.8	674	3.6	1.17	31.1	83.1	41-1	4	54.05
6	FM 1773 LLB2	32.1	602	3.3	1.25	32.6	83.3	41-1	5	50.25
7	FM 1845 LLB2	32.4	561	3.3	1.17	31.1	82.4	31-2	4	53.45
8	PHY 485 WRF	32.7	558	3.3	1.18	32.1	83.9	41-1	5	50.35
9	BCSX 1025 LLB2	29.9	530	2.8	1.23	31.7	82.0	41-1	6	42.30
Mean		32.1	667	3.1	1.21	31.3	82.4		5	48.97

¹All varieties treated with 2 applications Ignite 280.

* Treated with glyphosate only.

Table CST12. Results of Roundup Ready Flex cotton variety test, **Lincoln County, 2009***.

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	ST 4288 B2F	40.0	1256							
2	FM 1740 B2F	41.8	1219							
3	PHY 485 WRF	39.2	1212							
4	DP 0912 B2RF	40.6	1208							
5	PHY 375 WRF	43.2	1176							
6	DP 0920 B2RF	41.1	1129							
7	PHY 315 RF	41.8	1086							
8	DP 0935 B2RF	41.7	1068							
9	CG 4020 B2RF	39.3	1066							
10	CG 3220 B2RF	40.5	1061							
11	DG 2570 B2RF	41.1	1059							
12	ST 5458 B2RF	40.1	1050							
13	DP 0949 B2RF	41.6	1028							
14	ST 5288 B2F	41.4	1024							
15	CG 3520 B2RF	39.3	995							
16	DG 2520 B2RF	38.6	984							
17	AM 1550 B2RF	39.7	913							
18	DP 0924 B2RF	39.7	893							
Mean		40.6	1079							

* Fiber data not available for Lincoln County site due to late harvest.

Table CST13. Results of Roundup Ready Flex cotton variety test, **Madison County, 2009.**

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	DG 2570 B2RF	40.3	1192	4.3	1.08	30.0	79.8	31-1	3	55.55
2	ST 5288 B2F	38.5	1188	4.6	1.12	28.5	81.4	31-1	5	53.35
3	AM 1550 B2RF	38.6	1178	4.1	1.12	28.5	82.4	21-2	3	56.40
4	DP 0912 B2RF	38.6	1152	4.6	1.09	32.1	82.0	31-1	4	54.45
5	DP 0920 B2RF	38.7	1150	4.5	1.14	30.1	83.3	31-2	4	55.20
6	ST 4288 B2F	36.1	1104	4.8	1.13	29.6	82.1	31-3	4	54.90
7	PHY 375 WRF	41.5	1103	4.0	1.11	28.6	81.6	31-2	5	53.50
8	PHY 485 WRF	38.9	1102	4.4	1.13	30.9	83.2	41-1	5	51.95
9	CG 3220 B2RF	38.4	1096	4.1	1.11	28.8	80.6	31-1	3	55.95
10	DP 0949 B2RF	40.3	1095	4.3	1.09	28.9	80.7	31-1	3	55.30
11	FM 1740 B2F	39.0	1083	4.1	1.14	29.3	81.6	31-1	4	54.90
12	DP 0924 B2RF	38.5	1077	4.4	1.09	29.6	82.8	31-1	5	53.35
13	DP 0935 B2RF	40.4	1057	4.2	1.07	29.4	80.6	31-1	4	52.80
14	ST 5458 B2RF	39.1	1048	4.3	1.13	32.7	81.6	31-2	5	53.80
15	CG 3520 B2RF	37.3	1036	3.9	1.14	29.6	82.8	41-1	5	51.95
16	PHY 315 RF	39.0	1029	4.0	1.11	28.2	80.4	31-2	4	54.80
17	DG 2520 B2RF	36.4	941	3.7	1.12	26.9	80.8	31-1	3	55.95
18	CG 4020 B2RF	36.9	882	3.8	1.14	29.1	80.9	31-2	3	56.05
Mean		38.7	1084	4.2	1.11	29.5	81.6		4	54

Table CST14. Results of Liberty Link cotton variety test, **Madison County, 2009**¹.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	FM 1735 LLB2	36.3	997	4.5	1.17	30.5	82.2	41-1	4	53.85
2	PHY 375 WRF	41.0	923	4.1	1.12	26.4	81.2	41-2	3	53.95
3	FM 1845 LLB2	36.8	825	4.3	1.12	28.4	81.1	41-2	3	53.80
4	FM 1773 LLB2	35.6	823	4.7	1.17	31.3	81.3	41-2	4	53.85
5	PHY 485 WRF	37.5	813	4.5	1.12	29.7	82.5	41-4	4	53.85
6	BCSX 1035 LLB2	36.7	801	4.7	1.09	29.8	81.1	41-2	3	53.60
7	BCSX 1015 LLB2	34.4	781	4.3	1.19	29.3	80.2	41-1	3	53.80
8	BCSX 1025 LLB2	34.9	753	4.2	1.20	30.8	81.9	41-1	5	51.95
Mean		36.7	840	4.4	1.15	29.5	81.4		4	53.58

¹All varieties treated with 2 applications Ignite 280.

Table CST15. Results of Roundup Ready Flex cotton variety test, Tipton County, 2009.

Rank	Variety	Turnout (%)	Lint Yield (lb./acre)	Mic	Length (inches)	Strength (g/tex)	Uniformity (%)	HVI Color	Leaf Grade	Loan Value (¢/lb.)
1	PHY 375 WRF	41.0	1168	4.0	1.11	28.5	81.6	31-2	4	54.80
2	FM 1740 B2F	39.6	1118	3.9	1.12	29.1	82.2	31-2	4	54.80
3	CG 4020 B2RF	39.5	1112	3.7	1.14	29.2	81.8	41-1	4	53.55
4	DP 0924 B2RF	43.8	1070	4.1	1.12	28.6	81.9	31-2	4	54.80
5	DP 0920 B2RF	41.9	1062	4.2	1.14	28.9	82.6	31-2	4	55.10
6	DP 0912 B2RF	34.6	1059	4.4	1.12	29.7	82.8	41-1	4	53.85
7	DG 2520 B2RF	35.4	1038	3.5	1.17	29.0	81.3	31-2	4	54.75
8	DP 0949 B2RF	41.6	994	4.2	1.15	30.1	82.0	31-1	4	55.15
9	ST 5288 B2F	40.8	989	4.6	1.13	28.9	81.5	41-1	4	53.40
10	DP 0935 B2RF	40.7	960	4.1	1.13	28.6	82.0	31-2	4	54.80
11	DG 2570 B2RF	42.3	933	3.7	1.12	30.5	82.1	31-1	3	56.40
12	ST 4288 B2F	38.2	920	4.7	1.11	29.1	81.6	41-1	4	53.40
13	PHY 315 RF	38.9	908	4.2	1.11	28.8	82.4	31-2	4	54.80
14	PHY 485 WRF	39.6	906	4.3	1.13	30.2	82.8	41-1	5	51.75
15	ST 5458 B2RF	38.0	887	4.1	1.11	30.3	80.9	31-2	4	55.05
16	CG 3220 B2RF	37.7	835	4.1	1.15	30.4	82.5	31-2	3	56.50
17	CG 3520 B2RF	38.6	835	3.8	1.16	28.3	82.9	41-1	4	53.75
18	AM 1550 B2RF	38.1	793	3.9	1.14	28.8	82.2	31-2	4	54.90
	Mean	39.5	977	4.1	1.13	29.3	82.1		4	54.53

Table CST16. Cooperator data for County Standardized Trials, 2009.

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	corn	80-90-90	30"	5/21/2009	10/20/2009	11/16/2009
Dyer	CST 1	Jimmy Moody Tim Campbell	R	Commerce Silt Loam	cotton	80-0-40	38"	5/20/2009	10/13/2009	11/13/2009
Fayette	CST 1	Joesph McNabb Jeff Via	N	Memphis Silt Loam	soybean	80-40-80	38"	4/24/2009	9/1/2009	9/29/2009
Gibson	CST 1	Tommy & Brent Griggs Philip Shelby	N	Loring Silt loam	corn	85-0-120	38"	5/20/2009	10/17/2009	11/4/2009
Gibson	CST 1	Jason Luckey Philip Shelby	N	Collins Silt Loam	cotton	80-0-90	38"	5/23/2009	10/21/2009	11/21/2009
Haywood	CST 1	Hunter Hooper Tracey Sullivan	N	Gernada Silt Loam	cotton	102-35-90	38"	5/22/2009	10/23/2009	11/9/2009
Lake	CST 1	Tony Bargery Greg Allen	N	Reelfoot Silt Loam	cotton	100-0-100	38"	5/20/2009	10/25/2009	1/18/2009
Lake	CST 2	John Lindamood Greg Allen	N	Worthen Silt Loam	cotton	95-0-75	38"	5/21/2009	10/25/2009	11/15/2009
Lauderdale	CST 2	Leslie Crook James Griffin	C	Robinsonville Silt Loam	cotton	60-0-90	38"	6/5/2009	11/5/2009	11/23/2009
Lincoln	CST 1	JBH Farms David Qualls Matt Griggs	N	Armour Silt Loam	cotton	90-30-80	38"	5/20/2009	10/28/2009	12/16/2009
Madison	CST 1	Bill Wyatt Richard Buntin	N	Calhoun-Calloway Silt Loam	cotton	80-40-80	38"	5/21/2009	10/1/2009	10/23/2009
Madison	CST 2	Steve Bailey Bill Wyatt	N	Memphis Silt Loam	cotton	80-varP&K	38"	4/25/2009	10/1/2009	10/26/2009
Tipton	CST 1	David Templeton Booker Leigh	N	Adler Silt Loam	corn	80-20-20	38"	5/22/2009	11/1/2009	11/20/2009

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 ¹ %	1996 crop ² 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: ¹ (USDA, 1999). ² (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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