

Tennessee Cotton Variety Test Results

2008

**Edited by
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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 2008 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, and Crook 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 Crook Planting Company, 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 2008 to evaluate commercial cultivar performance in multiple large plot environments. County standard testing included Roundup Ready and Roundup Ready Flex cultivars. County standard tests of early season cultivars were planted in 15 counties each containing up to 25 cultivars. County standard tests of Liberty Link cultivars were planted in 4 locations with each location containing 5 cultivars. Each cultivar was planted in only one plot at each location and was maintained using the individual grower's production practices. Seedcotton harvested from each plot was weighed and sampled at picking. Samples were weighed, air dried, and ginned at the West Tennessee Research and Education Center as described above. A sub sample of lint of each entry was analyzed by HVI and hand-classing procedures at the USDA Cotton Classing Office in Memphis, TN. Statistical analysis was not possible for each location but overall yield and fiber quality data were analyzed using Proc MIXED using locations as replications.

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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

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We appreciate the cooperation of county extension agents and producers who conducted the county variety demonstrations in 2008. 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 2008 University of Tennessee cotton variety tests and demonstrations were provided by:

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

OFFICIAL VARIETY TRIALS

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Official Variety Trials (OVTs) of cotton were conducted in Tennessee in 2008. Conventional varieties, and varieties with Liberty-Link (LL), Roundup-Ready (RR), or Roundup Ready Flex (RF) genes, were tested at five locations. There were 42 entries from six seed companies and a line from the University of Arkansas cotton breeding program. All OVTs were planted between 1 May and 2 June 2008 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 location due to lodging of plants to prevent unnecessary lint losses. 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 42 entries tested across five locations in 2008. The highest yielding entries were PHY 375 WRF, PHY 370 WR, ST 5458 B2RF, and FM 1740 B2RF . Micronaire and Staple were mostly in the premium grade range, While strength and uniformity was mainly in the base range.

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

Table OVT7 shows the relative maturity and final plant height of the 42 **OVT** entries.

Table 1. OVT plot management details 2008.

Location	Planting Date	Soil Type	Tillage	Fertility	Irrigation	Harvest Date
Agricenter Int.	5/19/2008	Falaya silt loam	Conv.	100-60-90	Furrow	10/23/2008
Ames Plantation	5/13/2008	Memphis silt loam	No-Tillage	80-30-100	None	10/28/2008
Hales Point	5/5/2008	Robinsonville silt loam	Reduced-Till	30-0-90-15B	None	10/20/2008
Milan	6/2/2008	Loring silt loam	No-Tillage	110-45-90	Sprinkler	10/31/2008
Jackson	5/1/2008	Lexington silt loam	No-Tillage	80-45-90	None	9/17/2008

Table OVT1. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial averaged across five test locations, listed by yield rank.

Yield Rank	Variety	Gin Turnout %	Lint Yield lb/ac	Micronaire	Fiber Length in	Fiber Strength g/tex	Uni-formity %	Color Grade
1	PHY 375 WRF	38.5	1590	4.2	1.12	29.3	82.1	41
2	PHY 370 WR	38.0	1547	4.5	1.10	29.9	82.3	41
3	ST 5458 B2RF	37.8	1546	4.6	1.14	30.9	81.5	41
4	FM 1740 B2F	39.1	1545	4.4	1.12	29.8	82.4	31
5	BCSX0727B2F	37.1	1497	4.7	1.13	29.3	81.6	41
6	BCSX0721B2F	38.9	1469	4.5	1.15	29.6	82.1	41
7	DP 444 BG/RR	38.3	1467	4.1	1.11	29.4	82.4	41
8	NG 3331 B2RF	36.5	1453	4.6	1.11	30.7	83.1	41
9	DP 0935 B2RF	38.9	1451	4.3	1.12	29.9	81.6	31
10	DG 2570 B2RF	38.0	1440	4.4	1.12	29.8	82.2	31
11	ST 4427 B2RF	36.6	1439	4.2	1.13	30.1	82.2	41
12	ST 5327 B2RF	37.6	1426	4.3	1.12	30.7	82.3	41
13	ST 4498 B2RF	37.0	1425	4.2	1.13	31.2	82.7	31
14	PHY 485 WRF	36.7	1422	4.6	1.13	31.2	82.9	41
15	AM 1550 B2RF	38.0	1415	4.4	1.10	28.2	81.5	31
16	CG 3220 B2RF	38.1	1414	4.4	1.13	29.1	81.9	31
17	DG 2400 RF	38.7	1409	4.4	1.13	29.8	82.6	31
18	PHY 315 RF	37.7	1400	4.2	1.13	29.1	81.1	41
19	NG 4370 B2RF	36.3	1396	4.4	1.13	30.1	82.7	41
20	NG 4377 B2RF	36.9	1391	4.4	1.11	29.2	82.5	41
21	DP 0924 B2RF	37.0	1371	4.5	1.11	29.8	82.4	41
22	AM 1532 B2RF	36.6	1362	4.1	1.17	28.7	82.2	31
23	DP 121 RF	38.0	1360	4.6	1.14	31.0	82.7	41
24	DP 143 B2RF	35.8	1360	3.8	1.21	30.2	80.6	41
25	ST 4554 B2RF	37.1	1359	4.4	1.13	30.5	82.3	41
26	BCSX0102LLB2	35.4	1346	4.3	1.22	33.0	83.3	31
27	DP 141 B2RF	34.9	1344	4.1	1.19	30.6	81.4	41
28	BCSX0704B2F	35.2	1344	4.5	1.17	30.6	81.8	31
29	DP 161 B2RF	35.0	1342	4.2	1.19	31.7	82.5	41
30	BCSX0888LLB2	36.6	1338	4.5	1.13	31.2	82.0	31
31	BCSX0187LLB2	37.2	1336	4.5	1.12	29.7	81.7	31
32	PHY 425 RF	36.1	1333	4.7	1.14	30.8	83.2	41
33	FM 1735 LLB2	36.3	1321	4.3	1.14	31.2	82.4	41
34	CG 3020 B2RF	35.3	1318	4.0	1.12	28.6	82.1	31
35	BCSX0614B2F	34.3	1317	4.2	1.17	30.6	81.9	31
36	DP 164 B2RF	35.1	1315	4.1	1.18	30.9	81.8	31
37	CG 3520 B2RF	36.1	1303	4.1	1.15	28.9	81.8	41
38	CG 4020 B2RF	36.3	1286	4.1	1.16	28.7	82.1	31
39	DG 2520 B2RF	35.7	1264	4.1	1.15	28.7	81.8	31
40	DG 2490 B2RF	35.2	1255	3.7	1.09	28.3	81.9	41
41	CG 3035 RF	37.9	1245	4.5	1.12	30.0	82.2	31
42	ARK9803-23-04	36.8	1240	4.5	1.18	31.8	82.7	31
Average		36.9	1386	4.3	1.14	30.1	82.1	
LSD		0.7	66	0.2	0.04	0.7	0.6	
CV		5.4	17.5	11.1	3.09	2.8	1.0	17.5

Tennessee AgResearch data of Main et al. (2008). HVI data furnished by FBRI, Lubbock, TX.

Table OVT2. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial Agriscienter International, Memphis, TN, listed by yield rank.

Yield Rank	Variety	Gin turnout %	Lint Yield lb/ac	Micronaire	Fiber Length in	Fiber Strength g/tex	Uni-formity %	Color Grade
1	BCSX0721B2F	39.2	1879	5.0	1.15	29.4	81.9	41
2	PHY 370 WR	37.2	1863	4.7	1.11	30.3	82.4	41
3	DP 121 RF	38.6	1806	4.8	1.16	31.1	82.7	41
4	DG 2400 RF	37.5	1805	4.7	1.13	29.4	82.9	31
5	DP 0935 B2RF	39.0	1799	4.7	1.12	29.1	81.3	31
6	PHY 375 WRF	39.4	1784	4.5	1.12	29.4	82.2	41
7	DP 444 BG/RR	38.5	1780	4.4	1.12	29.7	82.7	41
8	ST 5327 B2RF	37.2	1780	4.7	1.13	31.2	82.4	41
9	AM 1550 B2RF	37.6	1774	4.7	1.12	28.8	82.2	31
10	PHY 425 RF	38.0	1774	5.1	1.12	30.2	82.4	31
11	BCSX0614B2F	35.7	1763	4.6	1.18	30.5	82.0	41
12	BCSX0727B2F	33.8	1715	5.0	1.13	29.0	81.9	41
13	ST 5458 B2RF	37.1	1708	4.9	1.14	30.9	81.2	41
14	PHY 485 WRF	38.0	1704	5.0	1.14	31.1	83.0	41
15	CG 3220 B2RF	37.6	1694	4.8	1.13	29.2	82.3	31
16	BCSX0187LLB2	37.9	1693	4.8	1.10	29.3	81.6	41
17	DP 161 B2RF	34.6	1686	4.6	1.20	32.1	82.4	41
18	FM 1740 B2F	39.4	1679	4.8	1.13	30.2	82.6	31
19	DP 143 B2RF	35.6	1676	3.9	1.24	30.3	80.6	41
20	ST 4427 B2RF	36.7	1661	4.7	1.12	30.3	82.2	41
21	NG 4377 B2RF	36.9	1644	4.7	1.14	29.8	82.4	41
22	NG 4370 B2RF	37.0	1640	4.8	1.13	30.2	82.9	41
23	BCSX0888LLB2	37.3	1634	5.0	1.15	30.7	82.2	31
24	NG 3331 B2RF	36.0	1626	5.0	1.13	31.7	82.9	41
25	BCSX0102LLB2	35.0	1613	4.5	1.23	34.1	84.4	41
26	CG 3035 RF	36.8	1607	5.0	1.12	29.6	81.6	31
27	ST 4498 B2RF	36.4	1600	4.6	1.12	31.6	82.7	41
28	DP 0924 B2RF	36.2	1597	4.8	1.11	29.7	82.6	41
29	CG 3520 B2RF	36.9	1588	4.5	1.14	29.2	82.0	41
30	ST 4554 B2RF	35.8	1586	4.9	1.14	31.0	82.5	41
31	PHY 315 RF	37.9	1578	4.5	1.13	29.4	81.4	41
32	DP 164 B2RF	34.4	1570	4.5	1.19	32.1	82.7	31
33	AM 1532 B2RF	36.4	1569	4.5	1.17	29.1	82.6	41
34	CG 3020 B2RF	37.0	1566	4.4	1.13	28.3	82.4	41
35	DP 141 B2RF	33.4	1508	4.5	1.19	31.2	80.3	41
36	DG 2570 B2RF	37.4	1504	4.8	1.12	29.6	81.9	31
37	FM 1735 LLB2	36.2	1503	4.7	1.15	32.4	83.1	41
38	ARK9803-23-04	35.8	1490	5.0	1.20	32.4	83.7	41
39	DG 2490 B2RF	34.8	1466	4.1	1.15	28.8	82.2	41
40	BCSX0704B2F	34.8	1435	4.5	1.21	31.9	82.3	41
41	DG 2520 B2RF	35.5	1430	4.5	1.16	28.6	81.7	31
42	CG 4020 B2RF	35.3	1261	4.7	1.14	28.6	82.1	41
Average		36.7	1644	4.6	1.12	29.6	80.4	
LSD		2.4	160	0.3	0.04	1.6	1.2	
CV		4.7	6.9	2.6	1.51	2.5	0.7	8.2

Tennessee AgResearch data of Main et al. (2008). HVI data furnished by FBRI, Lubbock, TX.

Table OVT3. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial Ames Plantation, LaGrange, TN, listed by yield rank.

Yield Rank	Variety	Gin	Lint	Micronaire	Fiber Length	Fiber	Uni-	Color
		Turnout %	Yield lb/ac			Strength g/tex	formity %	Grade
1	ST 5458 B2RF	38.9	1373	4.7	1.09	30.4	80.7	41
2	PHY 315 RF	39.5	1367	4.3	1.11	29.8	80.0	41
3	DG 2570 B2RF	39.4	1348	4.7	1.11	29.9	81.9	31
4	PHY 375 WRF	39.4	1340	4.6	1.09	29.4	81.7	41
5	CG 3220 B2RF	39.3	1338	4.4	1.11	29.3	80.2	31
6	FM 1740 B2F	39.7	1334	4.6	1.10	29.9	81.8	41
7	BCSX0727B2F	38.1	1330	4.7	1.11	29.9	81.2	41
8	DG 2400 RF	41.1	1310	4.5	1.12	30.2	81.8	41
9	DP 0935 B2RF	40.1	1290	4.6	1.11	30.8	81.3	31
10	ST 4427 B2RF	38.3	1276	4.5	1.11	29.7	82.4	41
11	AM 1550 B2RF	39.2	1276	4.7	1.07	27.8	79.8	31
12	BCSX0704B2F	36.5	1265	4.7	1.14	29.5	80.8	41
13	DP 444 BG/RR	38.6	1260	4.2	1.09	28.9	82.3	41
14	FM 1735 LLB2	37.7	1250	4.5	1.10	30.7	81.1	41
15	NG 4370 B2RF	37.8	1243	4.7	1.12	30.5	82.2	41
16	PHY 425 RF	36.2	1238	4.9	1.12	31.3	83.6	41
17	PHY 370 WR	39.0	1236	4.7	1.07	30.5	82.0	41
18	DG 2520 B2RF	38.5	1235	4.5	1.12	28.6	81.0	31
19	ST 5327 B2RF	38.8	1233	4.6	1.11	30.3	81.5	41
20	DP 143 B2RF	37.3	1228	3.9	1.16	30.3	80.3	41
21	NG 4377 B2RF	38.3	1216	4.6	1.09	29.3	82.6	41
22	ST 4554 B2RF	38.5	1214	4.6	1.10	30.2	81.9	41
23	CG 3035 RF	40.8	1212	4.7	1.10	31.3	81.5	31
24	DP 0924 B2RF	37.9	1203	4.8	1.08	30.0	82.2	41
25	NG 3331 B2RF	37.6	1203	4.8	1.10	30.8	82.9	41
26	PHY 485 WRF	37.7	1186	4.7	1.11	31.5	82.6	41
27	DG 2490 B2RF	36.7	1185	3.9	1.09	28.8	82.0	41
28	CG 3520 B2RF	36.4	1181	4.3	1.14	29.2	81.6	41
29	ST 4498 B2RF	38.0	1176	4.4	1.12	31.6	82.1	31
30	BCSX0888LLB2	37.8	1156	4.6	1.13	32.1	81.8	41
31	BCSX0102LLB2	37.4	1154	4.4	1.20	33.5	82.5	41
32	AM 1532 B2RF	38.2	1149	4.6	1.15	28.9	81.7	31
33	CG 4020 B2RF	37.7	1145	4.2	1.15	28.9	81.1	31
34	BCSX0187LLB2	37.8	1137	4.4	1.10	29.9	80.8	31
35	BCSX0721B2F	39.0	1132	4.3	1.13	30.3	81.8	41
36	DP 161 B2RF	35.6	1130	4.5	1.18	31.5	81.9	41
37	DP 141 B2RF	37.1	1115	4.4	1.16	30.5	80.7	41
38	DP 121 RF	38.2	1113	4.9	1.10	31.3	82.6	41
39	CG 3020 B2RF	36.2	1099	4.3	1.15	29.6	81.2	41
40	ARK9803-23-04	37.2	1069	4.4	1.17	32.4	82.2	41
41	BCSX0614B2F	35.0	1060	4.1	1.15	32.1	80.2	31
42	DP 164 B2RF	36.4	1036	4.3	1.15	31.0	80.6	31
Average		38.0	1215	4.4	1.09	29.6	79.7	
LSD		0.9	141	0.5	0.04	1.6	1.4	
CV		1.7	8.3	5.0	0.09	2.6	0.8	9.8

Tennessee AgResearch data of Main et al. (2008). HVI data furnished by FBRI, Lubbock, TX.

Table OVT4. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial Crook Planting Company, Hales Point, TN, listed by yield rank.

Yield Rank	Variety	Gin Turnout %	Lint Yield lb/ac	Micronaire	Fiber Length in	Fiber Strength g/tex	Uni-formity %	Color Grade
1	FM 1740 B2F	38.1	1824	4.3	1.18	29.3	83.1	41
2	ST 5458 B2RF	35.3	1769	4.0	1.19	31.2	81.5	41
3	BCSX0721B2F	37.2	1760	4.0	1.18	29.4	82.0	41
4	BCSX0727B2F	35.7	1718	4.0	1.19	29.9	81.1	51
5	PHY 375 WRF	35.0	1700	3.7	1.18	30.6	82.4	41
6	ST 4498 B2RF	34.8	1651	3.9	1.16	31.0	82.3	41
7	DP 0935 B2RF	37.0	1586	3.9	1.17	31.0	82.2	41
8	PHY 370 WR	34.9	1582	4.0	1.14	30.0	82.1	41
9	NG 3331 B2RF	33.7	1569	4.2	1.17	30.1	83.1	51
10	BCSX0888LLB2	34.0	1565	4.3	1.17	31.0	82.1	31
11	ST 4554 B2RF	34.7	1518	4.1	1.17	30.2	82.1	41
12	CG 4020 B2RF	34.1	1511	3.8	1.22	28.5	82.2	41
13	DP 444 BG/RR	35.5	1505	3.8	1.17	29.8	82.6	41
14	PHY 485 WRF	33.0	1502	4.0	1.19	30.4	82.6	41
15	BCSX0704B2F	32.5	1485	4.1	1.21	32.2	82.3	41
16	AM 1532 B2RF	34.4	1484	3.7	1.22	29.1	81.4	41
17	FM 1735 LLB2	33.3	1479	4.1	1.16	30.4	82.6	41
18	ST 4427 B2RF	33.8	1478	3.7	1.18	29.9	81.6	51
19	NG 4370 B2RF	33.0	1474	3.8	1.18	29.0	82.9	41
20	DP 141 B2RF	32.1	1470	3.5	1.25	30.5	82.4	51
21	DP 0924 B2RF	34.6	1454	3.9	1.16	29.3	82.7	41
22	DP 164 B2RF	32.9	1450	3.5	1.24	30.4	81.4	41
23	CG 3020 B2RF	31.8	1433	3.7	1.17	27.8	82.6	41
24	DG 2570 B2RF	35.6	1428	4.2	1.16	29.5	82.7	41
25	ST 5327 B2RF	34.4	1410	3.9	1.13	30.7	81.5	41
26	NG 4377 B2RF	33.2	1403	3.8	1.15	28.6	81.7	41
27	CG 3220 B2RF	36.4	1402	4.1	1.18	29.2	82.2	41
28	DP 161 B2RF	31.8	1385	3.6	1.25	30.8	82.6	41
29	AM 1550 B2RF	35.2	1372	4.0	1.16	27.8	82.3	41
30	BCSX0614B2F	31.0	1366	3.5	1.22	29.1	81.5	41
31	DP 143 B2RF	33.0	1358	3.4	1.25	29.9	81.2	41
32	BCSX0187LLB2	34.7	1334	4.2	1.18	29.9	81.9	41
33	DG 2520 B2RF	31.5	1324	3.7	1.22	29.0	81.6	41
34	CG 3520 B2RF	32.9	1311	3.9	1.18	28.5	81.6	41
35	BCSX0102LLB2	32.7	1311	4.0	1.26	31.7	82.9	41
36	PHY 315 RF	33.6	1249	3.8	1.19	28.8	81.2	41
37	DG 2490 B2RF	33.0	1239	3.4	1.12	27.8	80.8	41
38	PHY 425 RF	32.6	1141	4.1	1.20	29.8	83.2	51
39	DG 2400 RF	34.8	1091	3.8	1.15	29.6	82.2	41
40	ARK9803-23-04	34.7	1079	4.3	1.25	31.0	83.2	41
41	DP 121 RF	33.6	1051	4.2	1.21	30.3	82.9	41
42	CG 3035 RF	33.4	1018	3.9	1.19	28.9	82.2	41
Average		34.0	1434	3.8	1.16	29.1	80.3	
LSD		1.2	151	0.3	0.03	1.3	1.5	
CV		2.5	7.6	3.5	1.30	2.2	0.9	8.1

Tennessee AgResearch data of Main et al. (2008). HVI data furnished by FBRI, Lubbock, TX.

Table OVT5. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial Research and Education Center at Milan, Milan, TN, listed by yield rank.

Yield Rank	Variety	Gin Turnout %	Lint Yield lb/ac	Micronaire	Fiber Length in	Fiber Strength g/tex	Uni-formity %	Color Grade
1	PHY 375 WRF	39.1	1381	3.5	1.13	28.2	82.7	31
2	PHY 370 WR	39.8	1374	4.2	1.10	29.1	82.6	31
3	DG 2570 B2RF	38.6	1285	3.9	1.15	29.8	83.3	21
4	ST 4427 B2RF	37.7	1261	3.6	1.13	29.9	82.6	41
5	FM 1740 B2F	39.3	1240	3.9	1.14	29.9	82.8	21
6	BCSX0704B2F	37.5	1237	4.2	1.18	30.1	82.0	31
7	ST 5458 B2RF	39.7	1236	4.1	1.16	31.7	82.3	31
8	DG 2400 RF	39.8	1224	4.2	1.14	29.4	83.2	21
9	DP 444 BG/RR	39.8	1223	3.8	1.12	29.9	82.9	31
10	ST 4498 B2RF	38.1	1215	3.6	1.14	30.5	82.7	31
11	BCSX0102LLB2	35.6	1206	3.8	1.22	31.6	83.4	31
12	ST 5327 B2RF	39.0	1192	3.7	1.14	30.3	83.3	31
13	BCSX0727B2F	39.5	1183	4.3	1.13	28.6	82.3	31
14	PHY 315 RF	39.2	1176	3.7	1.13	28.3	82.4	31
15	NG 3331 B2RF	36.9	1150	3.9	1.10	29.9	83.5	31
16	PHY 485 WRF	38.2	1144	4.2	1.14	31.4	83.3	31
17	DP 0935 B2RF	39.7	1120	3.8	1.11	28.7	82.1	21
18	NG 4377 B2RF	38.0	1118	3.8	1.11	28.8	83.4	31
19	DP 0924 B2RF	38.4	1111	4.0	1.12	30.2	82.1	31
20	DP 121 RF	40.1	1110	4.3	1.14	30.9	82.8	31
21	AM 1532 B2RF	36.4	1108	3.5	1.17	28.5	83.2	31
22	DG 2490 B2RF	35.7	1105	3.2	1.11	27.8	82.5	41
23	CG 3220 B2RF	38.9	1101	4.0	1.12	29.1	82.5	31
24	FM 1735 LLB2	37.6	1096	3.6	1.17	32.1	82.8	31
25	ST 4554 B2RF	38.2	1071	3.7	1.15	30.3	82.3	31
26	CG 3520 B2RF	36.9	1068	3.6	1.15	28.8	82.0	31
27	CG 3020 B2RF	35.0	1065	3.5	1.12	29.3	82.5	31
28	PHY 425 RF	36.4	1062	4.2	1.15	31.0	83.7	41
29	NG 4370 B2RF	37.1	1049	3.8	1.12	29.9	82.8	31
30	BCSX0721B2F	39.2	1044	4.4	1.19	29.7	82.7	41
31	CG 4020 B2RF	36.9	1041	3.6	1.17	29.4	82.8	31
32	AM 1550 B2RF	36.7	1028	3.8	1.11	28.6	82.0	31
33	DP 164 B2RF	36.2	1026	3.9	1.17	30.0	81.7	21
34	ARK9803-23-04	37.6	1022	4.0	1.19	32.2	83.3	31
35	DP 141 B2RF	35.9	1020	3.5	1.20	31.1	82.4	31
36	DP 161 B2RF	36.6	1019	3.8	1.20	32.6	83.3	31
37	BCSX0187LLB2	38.0	1010	4.1	1.12	29.9	82.0	31
38	BCSX0614B2F	34.1	1005	3.7	1.19	30.5	83.0	21
39	CG 3035 RF	39.7	975	4.0	1.15	29.7	83.3	21
40	DG 2520 B2RF	35.9	970	3.5	1.17	28.7	82.8	31
41	DP 143 B2RF	35.6	937	3.4	1.21	30.9	81.3	31
42	BCSX0888LLB2	37.5	907	3.9	1.12	30.5	81.9	31
Average		37.7	1117	3.7	1.12	29.3	80.8	
LSD		1.1	119	0.4	0.03	1.2	1.5	
CV		2.0	7.6	8.6	1.48	2.1	0.9	12.8

Tennessee AgResearch data of Main et al. (2008). HVI data furnished by FBRI, Lubbock, TX.

Table OVT6. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial West Tennessee Research and Education Center, Jackson, TN, listed by yield rank.

Yield Rank	Variety	Gin Turnout %	Lint Yield lb/ac	Micronaire	Fiber Length in	Fiber Strength g/tex	Uni-formity %	Color Grade
1	PHY 375 WRF	39.5	1746	4.8	1.09	29.2	81.6	31
2	DP 121 RF	39.5	1723	5.1	1.11	31.5	82.5	31
3	NG 3331 B2RF	38.6	1717	5.3	1.08	31.1	83.1	31
4	PHY 370 WR	39.4	1681	5.0	1.07	29.7	82.5	31
5	FM 1740 B2F	39.0	1648	4.7	1.08	29.7	81.8	21
6	ST 5458 B2RF	38.0	1645	5.1	1.11	30.4	81.8	31
7	DG 2570 B2RF	39.3	1637	4.7	1.08	30.3	81.5	31
8	PHY 315 RF	38.4	1631	4.8	1.09	29.4	80.5	31
9	AM 1550 B2RF	41.3	1623	4.6	1.07	28.2	81.4	21
10	DG 2400 RF	40.5	1615	4.9	1.11	30.7	82.9	31
11	DP 141 B2RF	36.3	1607	4.6	1.15	29.8	81.3	31
12	DP 143 B2RF	37.6	1603	4.3	1.17	29.6	79.9	31
13	PHY 485 WRF	36.9	1575	4.9	1.10	31.4	83.1	31
14	NG 4370 B2RF	36.8	1573	4.8	1.10	30.9	83.0	31
15	NG 4377 B2RF	38.1	1573	5.1	1.09	29.8	82.5	31
16	DP 444 BG/RR	39.1	1564	4.4	1.06	28.7	81.4	21
17	ARK9803-23-04	38.9	1541	4.8	1.12	31.4	81.4	31
18	BCSX0727B2F	38.2	1541	5.3	1.12	29.2	81.8	31
19	CG 3220 B2RF	38.5	1536	5.0	1.10	28.7	82.3	31
20	BCSX0721B2F	39.8	1528	5.1	1.11	29.1	82.0	31
21	ST 4427 B2RF	36.7	1520	4.5	1.11	30.5	82.5	31
22	ST 5327 B2RF	38.5	1516	4.6	1.12	31.1	82.7	31
23	BCSX0187LLB2	37.9	1506	5.0	1.12	29.7	82.2	31
24	AM 1532 B2RF	37.9	1498	4.5	1.13	28.2	82.0	21
25	DP 161 B2RF	36.4	1492	4.8	1.14	31.6	82.3	31
26	DP 164 B2RF	35.9	1490	4.6	1.16	31.3	82.5	21
27	DP 0924 B2RF	37.9	1488	5.1	1.08	30.0	82.3	31
28	ST 4498 B2RF	37.6	1484	4.6	1.10	31.5	83.8	21
29	CG 4020 B2RF	37.5	1474	4.5	1.14	28.2	82.3	31
30	DP 0935 B2RF	38.6	1459	4.9	1.07	29.7	81.1	21
31	PHY 425 RF	37.3	1451	5.1	1.10	31.7	83.4	41
32	BCSX0102LLB2	36.6	1445	4.8	1.19	34.1	83.2	31
33	CG 3020 B2RF	36.5	1427	4.3	1.08	28.2	82.0	21
34	BCSX0888LLB2	36.5	1427	5.0	1.10	31.7	82.0	31
35	CG 3035 RF	39.1	1415	4.9	1.08	30.6	82.2	21
36	ST 4554 B2RF	38.1	1406	4.8	1.11	30.7	83.0	31
37	BCSX0614B2F	36.0	1394	5.1	1.13	30.7	83.1	21
38	CG 3520 B2RF	37.4	1367	4.2	1.13	29.0	82.0	31
39	DG 2520 B2RF	37.2	1359	4.5	1.15	29.0	81.8	21
40	BCSX0704B2F	34.5	1297	5.0	1.14	29.6	81.9	31
41	DG 2490 B2RF	36.0	1282	4.1	1.07	28.6	82.2	31
42	FM 1735 LLB2	37.0	1280	4.6	1.11	30.6	82.4	31
	Average	37.8	1519	4.6	1.09	29.4	80.3	
	LSD	1.3	141	0.3	0.46	1.8	1.7	
	CV	2.5	6.6	3.0	0.08	3.0	1.0	14.1

Tennessee AgResearch data of Main et al. (2008). HVI data furnished by FBRI, Lubbock, TX.

Table OVT7. Nodes above cracked boll (NACB) and plant height (in) on dates indicated, and estimated DD60's remaining to maturity of 42 entries in the 2008 Tennessee Official Variety Trial, listed in alphabetical order.

Variety	Agricenter 09/18/08			Ames Pln. 09/12/08			Milan REC 10/20/08			WTREC 09/05/08			Average		
	NACB ¹	DD60 ²	Inches	NACB	DD60	Inches	NACB	DD60	Inches	NACB	DD60	Inches	NACB	DD60	Inches
AM 1532 B2RF	3.9	193	37.3	3.7	185	35.8	0.7	33	33.0	2.1	105	32.8	2.6	129	34.7
AM 1550 B2RF	5.1	253	39.3	2.7	133	35.5	0.6	30	32.0	2.0	100	30.8	2.6	129	34.4
ARK9803-23-04	5.5	273	41.0	3.5	175	40.5	0.7	33	39.5	1.3	63	36.8	2.7	136	39.4
BCSX0102LLB2	4.5	223	37.3	4.0	200	35.5	0.2	10	32.3	2.1	105	31.3	2.7	134	34.1
BCSX0187LLB2	5.8	288	36.3	5.1	255	35.3	1.0	50	29.5	2.1	105	32.3	3.5	174	33.3
BCSX0614B2F	6.2	310	39.8	5.1	253	37.0	1.7	83	33.3	4.1	203	34.3	4.2	212	36.1
BCSX0704B2F	5.6	280	35.8	4.1	203	33.5	1.3	63	31.5	2.3	115	31.5	3.3	165	33.1
BCSX0721B2F	5.3	265	36.0	5.6	278	38.5	1.9	93	33.8	2.9	143	33.5	3.9	194	35.4
BCSX0727B2F	5.9	295	39.0	4.5	225	37.0	0.8	38	35.8	2.4	120	34.3	3.4	169	36.5
BCSX0888LLB2	5.4	270	34.8	3.1	155	33.0	0.7	33	31.3	0.8	38	28.3	2.5	124	31.8
CG 3020 B2RF	4.8	238	38.0	3.7	185	34.3	0.1	5	33.8	1.2	60	29.3	2.4	122	33.8
CG 3035 RF	4.5	225	40.0	3.7	185	36.3	0.8	40	36.8	3.3	163	33.3	3.1	153	36.6
CG 3220 B2RF	4.1	205	36.3	4.3	215	36.5	0.5	25	33.8	1.4	68	32.8	2.6	128	34.8
CG 3520 B2RF	3.1	153	36.3	2.1	105	34.8	0.1	5	32.8	2.4	118	32.3	1.9	95	34.0
CG 4020 B2RF	3.2	160	35.0	2.9	143	35.5	0.5	25	35.5	2.1	105	33.8	2.2	108	34.9
DG 2400 RF	5.3	265	41.5	3.9	193	38.0	0.8	38	38.3	2.9	145	34.3	3.2	160	38.0
DG 2490 B2RF	3.8	188	36.5	3.2	158	37.3	0.4	18	35.3	1.7	83	31.3	2.2	111	35.1
DG 2520 B2RF	3.4	170	36.8	3.2	158	37.0	0.5	23	35.5	2.1	103	31.3	2.3	113	35.1
DG 2570 B2RF	4.1	205	38.0	3.2	160	36.3	1.0	50	34.3	1.6	78	33.3	2.5	123	35.4
DP 0924 B2RF	5.8	290	37.8	5.7	283	37.5	1.6	78	35.8	3.2	158	33.5	4.0	202	36.1
DP 0935 B2RF	5.8	290	36.8	2.9	145	35.3	1.2	58	34.8	4.4	220	36.3	3.6	178	35.8
DP 121 RF	3.7	185	44.5	2.4	120	35.5	0.4	20	36.8	1.8	90	33.5	2.1	104	37.6
DP 141 B2RF	5.4	270	40.0	2.6	128	35.8	0.7	33	37.0	3.0	150	36.3	2.9	145	37.3
DP 143 B2RF	8.1	405	40.3	5.4	268	37.3	1.1	55	37.0	2.7	133	33.5	4.3	215	37.0
DP 161 B2RF	6.2	308	41.3	4.3	213	38.5	1.5	73	39.0	2.6	128	34.3	3.6	180	38.3
DP 164 B2RF	6.2	308	40.8	5.9	295	39.8	0.7	33	35.5	3.0	148	36.5	3.9	196	38.1
DP 444 BG/RR	3.1	155	39.8	2.2	108	36.3	0.0	0	35.0	1.3	63	34.3	1.6	81	36.3
FM 1735 LLB2	4.2	210	37.3	3.8	188	37.8	0.3	15	37.0	1.3	65	33.5	2.4	119	36.4
FM 1740 B2F	4.2	210	34.5	3.5	173	34.5	0.9	43	30.3	1.9	95	33.0	2.6	130	33.1
NG 3331 B2RF	5.9	293	38.8	3.0	150	38.3	0.4	20	37.3	1.9	93	32.8	2.8	139	36.8
NG 4370 B2RF	6.2	310	39.5	4.4	220	37.3	0.7	35	34.8	1.9	93	34.3	3.3	164	36.4
NG 4377 B2RF	6.5	323	40.3	3.8	188	37.5	0.7	33	36.5	2.3	113	33.8	3.3	164	37.0
PHY 315 RF	5.6	280	41.0	2.7	135	37.3	1.1	53	36.3	1.8	90	35.3	2.8	139	37.4
PHY 370 WR	4.6	230	38.5	3.9	193	37.3	0.8	40	39.3	1.2	60	36.5	2.6	131	37.9
PHY 375 WRF	4.3	213	40.8	3.9	195	37.0	0.9	45	37.0	2.5	123	34.3	2.9	144	37.3
PHY 425 RF	3.9	193	41.3	2.8	138	36.8	1.3	65	38.3	2.4	120	37.5	2.6	129	38.4
PHY 485 WRF	4.4	220	38.0	3.1	153	35.8	0.4	20	35.3	1.3	65	35.8	2.3	114	36.2
ST 4427 B2RF	5.4	270	38.8	2.9	145	35.5	0.2	8	34.0	1.7	83	33.0	2.5	126	35.3
ST 4498 B2RF	6.0	300	35.3	3.7	183	36.3	0.4	18	35.8	1.7	83	32.0	2.9	146	34.8
ST 4554 B2RF	5.4	268	38.3	4.8	238	35.5	1.0	48	35.5	2.4	120	32.5	3.4	168	35.4
ST 5327 B2RF	4.9	245	38.5	2.9	145	34.3	0.7	33	38.5	2.1	103	33.8	2.6	131	36.1
ST 5458 B2RF	5.9	293	35.3	4.6	230	35.8	0.2	10	32.5	2.2	110	32.3	3.2	161	33.9
Mean	5.0	250	38.4	3.7	185	36.4	0.7	36	35.1	2.2	108	33.4	2.9	145	35.8

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

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

Tennessee AgResearch data of Main et al. (2008).

Table OVT8. Lint yield of varieties common to Tennessee OVT's from 2, 3, or 4 year averages, listed by yield rank.

2008, 2007 OVT Common Varieties			2008, 2007, 2006 OVT Common Varieties			2008, 2007, 2006, 2005 OVT Common Varieties		
Yield Rank	Variety	Lint Yield lb/ac	Yield Rank	Variety	Lint Yield lb/ac	Yield Rank	Variety	Lint Yield lb/ac
1	PHY375WR	1397	1	ST4554B2RF	1310	1	ST4554B2	1325
2	DP444BG/RR	1311	2	DP444BG/RR	1284	2	PHY370WR	1317
3	PHY370WR	1309	3	PHY370WR	1269	3	DP444BG/RR	1309
4	ST4498B2RF	1302	4	PHY485WRF	1261	4	PHY485WRF	1225
5	ST4427B2RF	1284	5	DG2520B2RF	1229	5	DG2520B2RF	1199
6	ST5458B2RF	1277	6	CG3020B2RF	1202	6	CG4020B2RF	1186
7	FM1740B2RF	1269	7	CG3520B2RF	1201	7	CG3020B2RF	1180
8	PHY315RF	1237	8	CG4020B2RF	1194	8	CG3520B2RF	1163
9	ST 4554 B2RF	1235						
10	AM1550B2RF	1230						
11	DP121RF	1229						
12	ST5327B2RF	1212						
13	PHY485WR	1188						
14	CG3220B2RF	1180						
15	CG3035RF	1177						
16	DP161B2RF	1160						
17	DP164B2RF	1157						
18	DP141B2RF	1152						
19	AM1532B2RF	1151						
20	CG3020B2RF	1147						
21	PHY425RF	1146						
22	CG3520B2RF	1138						
23	FM1735LLB2	1133						
24	DP143B2RF	1118						
25	CG4020B2RF	1103						
26	DG2490B2RF	1102						
27	DG2520B2RF	1088						
	Average	1201			1244			1238
	LSD	248			194			109
	CV	24.8			31.2			26.9

Tennessee AgResearch data of Main et al. (2008).

FACT VARIETY TRIALS

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FACT variety trials were conducted in 2008 to evaluate potential new Delta and Pine Land commercial cultivar performance in large plot environments. 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 therefore data is presented by location.

Table FACT1. Results of FACT cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	07W590DF	42.3	1250	31-1	3	4.7	1.13	30.1	82.5	4.75	715.58
2	MCS0702B2RF	41.5	1249	31-1	4	5.0	1.09	29.0	83.5	0.65	664.00
3	PHY 375 WRF	41.4	1219	31-1	3	4.9	1.12	29.3	83.0	4.50	694.74
4	DP 0920 B2RF	40.8	1204	31-1	3	5.0	1.12	28.1	81.6	2.45	661.66
5	DP 0912 B2RF	39.2	1178	31-1	3	5.3	1.10	29.9	83.4	0.90	629.16
6	DP 0924 B2RF	40.0	1159	31-1	3	5.0	1.14	29.9	83.6	3.10	644.60
7	MCS0711B2RF	38.3	1159	21-1	4	4.7	1.12	29.1	82.2	3.55	649.44
8	07W903DF	42.2	1133	21-1	3	5.1	1.14	29.9	83.1	3.55	635.13
9	ST 4554 B2RF	38.8	1114	31-1	3	5.0	1.12	30.0	83.5	3.00	618.49
10	07X440DF	39.9	1095	21-1	3	4.7	1.05	27.5	81.3	2.00	596.93
11	DP 0935 B2RF	40.6	1057	21-1	2	4.9	1.11	29.6	82.3	5.70	615.29
12	DP 143 B2RF	37.5	995	31-1	4	4.5	1.20	30.7	82.7	3.65	558.65
13	DP 445 BG/RR	37.9	787	21-1	3	4.9	1.14	31.5	84.4	5.70	457.93
Mean		40.0	1123		3	4.9	1.12	29.6	82.9	3.35	626.28

Agent	Philip Shelby	Soil Type	Grenada silt loam
Producer	Tommy and Brent Griggs	Tillage	Conventional
Planting Date	5/8/2008	Prev. Crop	cotton
Defoliation Date	9/10/2008	Fertilizer	85-0-120
Harvest Date	10/1/2008	Row Spacing	38 inches

Table FACT2. Results of FACT cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	MCS0702B2RF	40.8	1470	41-1	5	4.5	1.09	28.9	83.1	-0.85	759.46
2	DP 0912 B2RF	39.4	1408	41-1	5	4.7	1.10	29.3	82.6	-0.85	727.16
3	DP 0920 B2RF	39.8	1399	41-1	5	4.2	1.11	26.1	81.5	-0.50	727.36
4	07X440DF	42.4	1393	41-1	6	4.3	1.11	27.5	82.2	-3.55	682.02
5	MCS0711B2RF	39.9	1358	41-1	5	4.3	1.08	29.5	82.0	-0.80	701.99
6	07W590DF	38.7	1356	41-1	4	4.1	1.11	29.0	83.0	1.85	737.09
7	DP 143 B2RF	37.5	1320	41-1	7	3.2	1.19	29.1	80.0	-7.60	592.62
8	07W903DF	40.4	1270	41-1	5	4.5	1.07	28.3	81.9	-2.05	640.53
9	PHY 375 WRF	39.9	1241	41-1	5	3.7	1.11	27.5	81.5	-0.50	645.32
10	ST 4554 B2RF	38.0	1216	41-1	5	4.4	1.13	32.0	81.7	-0.20	635.89
11	DP 0935 B2RF	39.0	1184	31-1	4	3.9	1.12	27.9	82.4	3.05	657.81
12	DP 445 BG/RR	37.1	1167	41-1	4	3.9	1.11	27.2	81.7	1.65	631.82
13	DP 0949 B2RF	41.6	1082	41-1	4	4.5	1.11	28.2	81.1	1.50	584.42
Mean		39.6	1297		5	4.2	1.11	28.5	81.9	-0.68	671.04

Agent	Philip Shelby	Soil Type	Collins silt loam
Producer	Jason Luckey	Tillage	No-till
Planting Date	5/21/2008	Prev. Crop	cotton
Defoliation Date	10/15/2008	Fertilizer	80-0-90
Harvest Date	10/27/2008	Row Spacing	38 inches

COUNTY STANDARD TEST DEMONSTRATIONS

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West Tennessee Research and Education Center
and Dyer County Extension
The University of Tennessee

County Standard Test demonstrations were conducted in 2008 to evaluate commercial cultivar performance in multiple large plot environments. County standard testing included Roundup Ready and Roundup Ready Flex cultivars. County standard tests of early season cultivars were planted in 15 counties each containing up to 25 cultivars. County standard tests of Liberty Link cultivars were planted in 4 locations with each location containing 5 cultivars. Each cultivar was planted in only one plot at each location and was maintained using the

individual grower's production practices. Seedcotton harvested from each plot was weighed and sampled at picking. Samples were weighed, air dried, and ginned at the West Tennessee Research and Education Center as described above. A sub sample of lint of each entry was analyzed by HVI and hand-classing procedures at the USDA Cotton Classing Office in Memphis, TN. Statistical analysis was not possible for each location but overall yield and fiber quality data were analyzed using Proc MIXED using locations as replications

Table CST1. Results of Roundup Ready and Roundup Ready Flex cotton variety test, all locations average, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	PHY 375 WRF	40.8	1266	31	4	4.5	1.10	28.9	82.0	2.40	694.89
2	DP 0935 B2RF	40.7	1207	31	3	4.6	1.10	29.1	81.9	3.90	680.73
3	CG 3035 RF	40.7	1206	31	3	4.6	1.12	29.2	82.4	4.50	687.23
4	PHY 370 WR	40.0	1189	31	4	4.7	1.08	29.5	82.1	2.65	655.65
5	ST 4498 B2RF	38.4	1180	41	5	4.5	1.12	31.5	82.7	0.20	621.91
6	DP 445 BG/RR	40.4	1158	31	4	4.6	1.12	30.9	83.0	3.75	651.39
7	ST 4427 B2RF	38.5	1157	41	5	4.5	1.11	29.2	82.3	-0.45	602.14
8	DP 121 RF	39.9	1152	41	5	4.8	1.12	29.9	82.5	0.00	604.91
9	DP 444 BG/RR	40.1	1147	31	4	4.4	1.09	28.9	82.5	2.60	631.84
10	DG 2520 B2RF	38.5	1139	41	4	4.5	1.14	28.7	82.0	1.75	618.06
11	DG 2383 RF	38.0	1118	41	5	4.4	1.11	29.3	81.8	-0.45	582.03
12	AM 1532 B2RF	38.9	1027	31	4	4.3	1.14	28.7	81.9	3.20	571.98
	Mean	39.6	1162		4	4.5	1.11	29.5	82.3	2.00	633.56
	LSD	1.2	95		1	0.2	0.02	0.6	0.5		
	CV	4.3	11.7	10.3	14.0	4.9	2.0	1.0	0.9		

Table CST2. Results of Roundup Ready Flex cotton variety test, all locations average, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	FM 1740 B2RF	40.4	1243	31	4	4.7	1.11	29.7	82.3	3.35	694.06
2	DG 2570 B2RF	39.9	1232	31	3	4.7	1.12	29.8	82.5	4.95	707.78
3	ST 5327 B2RF	39.4	1225	41	5	4.6	1.11	30.6	82.8	0.20	645.79
4	ST 4554 B2RF	38.6	1194	31	5	4.8	1.12	30.2	82.5	2.10	652.14
5	CG 3220 B2RF	39.2	1185	31	3	4.6	1.13	29.9	82.6	4.95	680.63
6	DG 2490 B2RF	37.9	1178	41	5	4.1	1.09	28.6	82.0	-0.70	610.20
7	DP 161 B2RF	38.0	1150	31	4	4.5	1.17	30.6	82.5	3.85	647.95
8	DP 143 B2RF	37.9	1121	41	5	4.2	1.17	28.9	80.7	-0.25	585.86
9	AM 1550 B2RF	39.6	1117	31	3	4.5	1.11	28.3	82.5	4.70	638.66
10	CG 4020 B2RF	37.9	1113	31	4	4.4	1.14	28.2	82.0	3.20	620.05
11	DP 141 B2RF	36.6	1113	41	5	4.3	1.16	30.0	81.7	-0.15	582.69
12	DP 164 B2RF	38.2	1100	31	4	4.6	1.16	29.5	82.1	3.45	615.34
13	CG 3520 B2RF	37.6	1081	41	5	4.4	1.14	28.7	82.2	-0.40	563.45
	Mean	38.6	1158		4	4.5	1.13	29.5	82.2	2.25	634.20
	LSD	1.1	80		0.34	0.2	0.0	0.7	1		
	CV	4.0	9.5	10.8	11.4	5.4	1.9	3.2	0.9		

Table CST3. Results of Liberty Link cotton variety test, all locations average, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	BCSX 0888 LLB2	39.6	1362	31	4	4.5	1.15	30.1	82.6	3.65	764.76
2	BCSX 0102 LLB2	39.6	1231	41	5	4.4	1.22	31.4	82.8	0.25	649.09
3	FM 1735 LLB2	40.1	1137	41	4	4.3	1.15	29.9	83.0	2.20	621.80
4	FM 955 LLB2	39.3	1133	41	4	4.5	1.20	30.0	82.8	2.20	619.89
5	BCSX 0187 LLB2	39.5	1130	31	4	4.4	1.13	29.0	81.3	3.10	628.14
	Mean	39.6	1198		4	4.4	1.17	30.1	82.5	2.28	656.74
	LSD	1.33	216		1	0.3	0.03	1.2	0.8		
	CV	2.2	11.7	11.7	8.8	5.1	1.6	2.6	0.6		

Table CST4. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Carroll County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	PHY 370 WR	42.7	997	41-1	4	4.7	1.02	28.6	81.2	2.40	547.61
2	ST 4427 B2RF	40.1	882	41-1	5	4.5	1.05	26.5	81.1	-2.05	444.93
3	AM 1532 B2RF	42.8	759	41-1	3	4.9	1.02	27.3	81.2	-1.30	388.51
4	DP 444 BG/RR	45.1	698	41-1	4	4.6	0.98	25.6	80.7	2.65	385.11
5	DP 445 BG/RR	41.9	681	41-1	3	4.7	1.01	29.0	81.0	-2.75	338.94
6	PHY 375 WRF	41.5	656	41-1	3	4.9	1.02	26.6	79.7	-1.30	336.12
7	DP 121 RF	36.6	646	41-1	4	5.2	1.02	28.1	81.1	-3.80	314.56
8	DG 2520 B2RF	40.4	629	41-1	4	4.7	1.06	27.3	80.3	0.00	330.30
9	DG 2383 RF	43.2	629	51-1	5	4.4	0.99	27.0	78.8	-6.35	290.23
10	ST 4498 B2RF	36.6	588	41-1	4	4.9	1.01	28.7	80.8	-2.95	291.22
11	DP 0935 B2RF	44.2	580	31-1	3	5.0	0.97	25.2	80.6	-5.00	275.46
12	CG 3035 RF	40.2	511	41-1	3	4.8	1.07	26.6	81.1	0.50	271.01
	Mean	41.3	688		4	4.8	1.02	27.2	80.6	-1.66	351.17

Agent	Steve Burgess	Soil Type	Gernada silt loam
Producer	David Renfro	Tillage	No-till
Planting Date	5/5/2008	Prev. Crop	Corn
Defoliation Date	10/1/2008	Fertilizer	40-100-90 + 65 N side dress
Harvest Date	10/15/2008	Row Spacing	30 inches

Table CST5. Results of Roundup Ready Flex cotton variety test, Carroll County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	DP 161 B2RF	43.9	1119	41-1	3	4.5	1.13	29.7	81.9	2.20	611.84
2	DP 143 B2RF	39.9	1037	41-1	4	4.2	1.09	27.4	78.7	0.40	548.77
3	DG 2490 B2RF	40.3	963	41-1	4	4.1	1.06	28.0	81.3	0.15	506.93
4	CG 3220 B2RF	42.3	924	41-1	4	4.6	1.08	28.1	80.9	1.00	494.13
5	CG 4020 B2RF	40.6	914	41-1	3	4.4	1.12	28.4	81.4	1.95	497.88
6	DP 141 B2RF	37.8	847	41-1	4	4.3	1.10	29.6	81.0	1.25	455.08
7	AM 1550 B2RF	41.0	773	41-1	3	5.0	1.01	25.1	80.7	-5.95	359.63
8	ST 5327 B2RF	41.9	756	51-1	4	4.5	1.04	28.6	82.5	-3.00	374.05
9	FM 1740 B2RF	41.3	725	41-1	3	4.7	1.01	26.9	80.6	-2.75	360.93
10	CG 3520 B2RF	37.8	661	41-1	4	4.5	1.05	26.3	80.6	0.00	346.90
11	ST 4554 B2RF	37.9	657	41-1	4	4.8	1.04	28.3	81.3	-1.95	332.07
12	DG 2570 B2RF	41.0	634	41-1	3	4.9	1.04	28.5	81.6	-1.30	324.60
13	DP 164 B2RF	36.9	573	41-1	3	4.8	1.07	28.7	80.9	0.50	303.76
	Mean	40.2	814		4	4.6	1.06	28.0	81.0	-0.58	424.35

Agent	Steve Burgess	Soil Type	Gernada silt loam
Producer	David Renfro	Tillage	No-till
Planting Date	5/5/2008	Prev. Crop	Corn
Defoliation Date	10/1/2008	Fertilizer	40-100-90 + 65 N side dress
Harvest Date	10/15/2008	Row Spacing	30 inches

Table CST6. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Chester County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DP 0935 B2RF	40.2	1102	31-1	3	4.6	1.10	29.6	82.7	2.40	605.18
2	AM 1532 B2RF	39.7	1089	31-1	4	4.7	1.11	30.3	82.6	3.35	608.15
3	DG 2383 RF	37.7	1021	41-1	6	4.5	1.13	30.0	83.4	-3.10	504.27
4	PHY 375 WRF	39.5	1001	31-1	4	4.6	1.13	29.2	82.2	2.65	552.13
5	ST 4427 B2RF	38.3	988	41-1	6	4.7	1.11	30.4	82.8	-3.10	487.87
6	ST 4498 B2RF	37.3	949	41-1	5	4.9	1.10	34.0	82.4	-0.60	492.73
7	CG 3035 RF	39.2	949	31-1	4	4.8	1.15	29.5	82.4	3.25	528.91
8	DG 2520 B2RF	38.2	942	41-1	4	4.9	1.13	28.4	82.3	1.50	508.68
9	DP 121 RF	40.7	926	41-1	4	5.2	1.10	29.8	81.7	-0.60	480.52
Mean		39.0	996		4	4.8	1.12	30.1	82.5	0.64	529.83

Agent	J. Brian Signaigo	Soil Type	Providence silty clay loam
Producer	Tim & Tommy Colbert	Tillage	No-till
Planting Date	5/20/2008	Prev. Crop	cotton
Defoliation Date	9/24/2008	Fertilizer	80-45-60
Harvest Date	10/7/2008	Row Spacing	38 inches

Table CST7. Results of Roundup Ready Flex cotton variety test, Chester County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	ST 5327 B2RF	40.6	1102	31-1	4	4.9	1.07	28.5	81.4	0.70	586.44
2	FM 1740 B2RF	40.6	1087	31-1	4	5.0	1.08	29.2	82.3	0.35	574.71
3	DP 143 B2RF	38.4	1027	31-1	5	4.2	1.18	29.8	81.6	2.00	559.45
4	DG 2490 B2RF	37.1	1006	31-1	5	4.2	1.10	29.4	82.2	1.05	538.59
5	CG 3220 B2RF	37.6	1001	31-1	3	5.0	1.08	29.3	82.3	1.85	544.20
6	DG 2570 B2RF	38.3	989	31-1	3	4.7	1.09	27.8	81.6	3.70	556.06
7	ST 4554 B2RF	39.0	959	41-1	5	5.2	1.13	31.3	82.6	-1.85	485.64
8	CG 3520 B2RF	39.2	949	31-1	5	4.2	1.12	32.7	81.8	2.05	517.53
9	DP 141 B2RF	36.6	947	41-1	5	4.5	1.16	31.0	82.6	0.05	497.58
10	DP 164 B2RF	38.6	939	31-1	3	5.1	1.10	27.7	80.3	1.85	510.40
11	DP 161 B2RF	36.3	929	31-1	4	4.8	1.16	32.3	81.9	3.45	520.00
12	CG 4020 B2RF	38.7	923	31-1	3	4.8	1.12	27.1	79.9	4.30	524.40
13	AM 1550 B2RF	37.4	866	31-1	4	4.8	1.11	29.5	82.2	3.15	481.85
Mean		38.3	979		4	4.7	1.12	29.7	81.7	1.74	530.53

Agent	J. Brian Signaigo	Soil Type	Providence silty clay loam
Producer	Tim & Tommy Colbert	Tillage	No-till
Planting Date	5/20/2008	Prev. Crop	cotton
Defoliation Date	9/24/2008	Fertilizer	80-45-60
Harvest Date	10/7/2008	Row Spacing	38 inches

Table CST8. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Crockett County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DP 121 RF	41.2	995	31-1	4	5.0	1.08	31.3	81.8	2.40	546.44
2	CG 3035 RF	42.2	873	21-1	3	5.3	1.06	30.6	81.4	-0.80	451.28
3	DP 444 BG/RR	40.6	810	31-1	4	5.0	1.06	29.8	81.6	-0.90	417.72
4	DG 2520 B2RF	38.9	795	31-1	3	4.8	1.10	29.1	81.5	2.65	438.26
5	ST 4427 B2RF	39.5	793	41-1	5	5.2	1.05	29.7	82.3	-3.65	387.40
6	DP 0935 B2RF	40.6	766	21-1	3	5.3	1.04	29.0	81.2	-3.20	377.46
7	ST 4498 B2RF	39.4	760	31-1	4	5.1	1.10	33.7	82.0	0.80	405.31
8	DG 2383 RF	37.8	746	31-1	5	5.1	1.03	27.3	81.5	-4.30	359.64
9	PHY 375 WRF	41.2	735	31-1	4	5.1	1.07	30.4	80.9	-0.90	379.17
10	PHY 370 WR	38.0	724	31-1	4	5.0	1.08	31.6	81.9	0.80	385.90
11	DP 445 BG/RR	39.6	715	31-1	4	5.0	1.13	32.2	81.4	1.50	386.25
12	AM 1532 B2RF	38.3	589	31-1	3	4.8	1.12	28.0	80.7	4.30	334.50
Mean		39.8	775		4	5.1	1.08	30.2	81.5	-0.11	405.78

Agent	Richard Buntin	Soil Type	Gernada silt loam
Producer	Dwayne Dove	Tillage	No-till
Planting Date	5/8/2008	Prev. Crop	cotton
Defoliation Date	9/16/2008	Fertilizer	100-50-90
Harvest Date	9/26/2008	Row Spacing	38 inches

Table CST9. Results of Roundup Ready Flex cotton variety test, Crockett County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DG 2570 B2RF	39.0	1346	31-1	3	4.5	1.12	30.6	82.5	4.95	773.45
2	ST 5327 B2RF	40.0	1299	41-1	4	4.9	1.11	30.9	82.6	2.15	709.85
3	DP 164 B2RF	40.0	1297	31-1	4	4.6	1.17	30.3	83.5	3.55	726.77
4	FM 1740 B2RF	39.6	1293	31-1	4	5.0	1.13	29.9	82.2	1.30	695.57
5	AM 1550 B2RF	39.1	1262	31-1	3	4.3	1.13	28.9	81.5	4.30	716.95
6	ST 4554 B2RF	39.0	1236	41-1	5	5.2	1.08	29.6	82.0	-2.65	616.11
7	DG 2490 B2RF	37.2	1203	41-1	6	4.2	1.10	29.2	82.7	-3.35	591.03
8	CG 3220 B2RF	38.3	1170	31-1	3	4.4	1.20	31.4	82.6	5.05	673.10
9	CG 3520 B2RF	40.0	1144	41-1	5	4.7	1.15	28.5	82.8	-0.40	596.06
10	DP 141 B2RF	38.7	1125	41-1	5	4.6	1.19	29.4	81.7	-0.60	583.79
11	DP 161 B2RF	39.5	1122	41-1	4	5.1	1.18	30.6	82.4	0.15	590.97
12	DP 143 B2RF	40.3	1106	41-1	5	4.4	1.19	29.9	81.7	-0.35	576.60
13	CG 4020 B2RF	39.0	1086	31-1	3	4.8	1.13	27.8	82.2	4.30	616.99
Mean		39.2	1207		4	4.7	1.14	29.8	82.3	1.42	651.33

Agent	Richard Buntin	Soil Type	Calhoun and Adler silt loam
Producer	Bubba Fincher	Tillage	No-till
Planting Date	5/22/2008	Prev. Crop	cotton
Defoliation Date	10/6/2008	Fertilizer	100-40-100-15S-32N-1B
Harvest Date	10/16/2008	Row Spacing	38 inches

Table CST10. Results of Liberty Link cotton variety test, Crockett County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	BCSX 0888 LLB2	40.0	2080	41-1	5	4.1	1.18	29.1	82.1	-0.45	1082.64
2	BCSX 0102 LLB2	41.0	1599	41-1	6	3.9	1.22	30.5	82.2	-2.95	792.30
3	FM 955 LLB2	40.0	1520	41-1	5	4.1	1.21	29.8	82.1	-0.20	794.96
4	FM 1735 LLB2	41.0	1415	41-1	5	3.8	1.17	29.7	83.1	0.00	742.61
5	BCSX 0187 LLB2	40.0	1400	41-1	5	4.0	1.14	28.8	80.8	-0.45	728.70
Mean		40.4	1603		5	4.0	1.18	29.6	82.1	-0.81	828.24

Agent	Richard Buntin	Soil Type	Gernada silt loam
Producer	Jimmy Hargett	Tillage	No-till
Planting Date	5/19/2008	Prev. Crop	corn
Defoliation Date	10/10/2008	Fertilizer	100-60-100
Harvest Date	10/22/2008	Row Spacing	38 inches

Table CST11. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Dyer County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	PHY 375 WRF	44.0	1651	41-1	6	4.4	1.17	30.3	83.7	2.40	906.32
2	DP 444 BG/RR	39.9	1499	41-1	6	4.3	1.09	29.5	82.3	-3.45	735.04
3	PHY 370 WR	38.2	1438	41-1	4	4.8	1.09	29.1	82.2	1.00	769.40
4	DP 445 BG/RR	39.3	1362	31-1	4	4.8	1.11	31.1	82.8	2.65	751.14
5	ST 4427 B2RF	36.2	1257	41-1	7	4.0	1.14	30.1	82.9	-2.95	622.92
6	DP 121 RF	37.5	1239	41-1	7	4.6	1.13	30.0	82.6	-4.90	589.71
7	DG 2520 B2RF	37.2	1203	41-1	5	4.4	1.20	28.8	83.2	-0.40	626.81
8	CG 3035 RF	38.9	1170	31-1	4	4.1	1.16	29.2	82.7	3.35	653.61
9	ST 4498 B2RF	34.5	1037	41-1	8	4.1	1.16	31.6	82.8	-2.75	515.85
10	DP 0935 B2RF	36.9	863	31-1	4	4.1	1.16	30.7	82.7	3.80	485.78
11	DG 2383 RF	36.2	841	41-1	6	4.5	1.12	30.5	82.2	-3.10	415.44
12	AM 1532 B2RF	34.8	667	31-1	4	3.9	1.22	29.1	83.4	3.35	372.26
	Mean	37.8	1186		5	4.3	1.15	30.0	82.8	-0.08	620.35

Agent	Tim Campbell	Soil Type	Dekoven silt loam
Producer	Steven Agee	Tillage	Conventional
Planting Date	5/22/2008	Prev. Crop	cotton
Defoliation Date	10/10/2008	Fertilizer	80-40-90
Harvest Date	10/21/2008	Row Spacing	38 inches

Table CST12. Results of Roundup Ready Flex cotton variety test, Dyer County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	ST 5327 B2RF	39.3	1413	41-1	6	4.3	1.15	31.0	83.1	-2.90	700.63
2	DG 2570 B2RF	36.2	1353	31-1	3	4.1	1.18	30.3	83.2	5.00	777.91
3	ST 4554 B2RF	35.8	1298	31-1	3	4.3	1.16	29.2	82.3	4.40	738.74
4	DG 2490 B2RF	40.8	1289	31-1	4	4.2	1.14	29.2	81.8	3.15	717.40
5	FM 1740 B2RF	35.8	1239	41-1	4	4.1	1.19	30.7	83.5	2.45	680.72
6	DP 161 B2RF	36.5	1160	41-1	5	3.7	1.23	31.4	82.3	0.00	608.99
7	CG 3520 B2RF	34.1	1149	41-1	6	4.2	1.21	29.1	83.4	-3.20	566.48
8	DP 143 B2RF	37.7	1121	41-1	6	3.6	1.22	30.2	78.7	-4.05	543.09
9	DP 164 B2RF	35.6	1075	31-1	4	4.1	1.18	29.1	83.0	3.35	600.18
10	CG 3220 B2RF	34.9	1064	31-1	4	4.1	1.19	31.1	83.9	3.90	599.84
11	DP 141 B2RF	35.5	1052	41-1	6	3.4	1.22	31.0	81.7	-5.55	493.84
12	AM 1550 B2RF	36.3	982	31-1	3	4.0	1.15	29.4	83.7	4.85	563.38
13	CG 4020 B2RF	33.8	943	41-1	4	3.8	1.22	29.2	82.9	1.90	512.93
	Mean	36.3	1164		4	4.0	1.19	30.1	82.6	1.02	623.39

Agent	Tim Campbell	Soil Type	Dekoven silt loam
Producer	Steven Agee	Tillage	Conventional
Planting Date	5/22/2008	Prev. Crop	cotton
Defoliation Date	10/10/2008	Fertilizer	80-40-90
Harvest Date	10/21/2008	Row Spacing	38 inches

Table CST13. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Fayette County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DP 0935 B2RF	43.2	1064	31-1	3	5.2	1.07	27.5	82.0	2.40	584.14
2	DP 445 BG/RR	44.3	1003	31-1	3	5.0	1.08	30.6	83.0	2.50	551.65
3	CG 3035 RF	43.2	1001	31-1	3	4.9	1.08	28.8	82.4	3.70	562.56
4	PHY 375 WRF	42.2	976	31-1	4	5.1	1.06	27.4	82.1	2.65	538.26
5	DP 121 RF	42.1	956	31-1	5	5.4	1.05	28.1	80.9	-4.35	460.31
6	ST 4427 B2RF	40.7	955	41-1	5	5.2	1.05	27.8	81.6	-3.90	464.13
7	DG 2383 RF	39.6	945	41-1	5	5.0	1.06	29.1	81.2	-3.90	459.27
8	PHY 370 WR	40.8	899	31-1	4	5.3	1.04	28.9	82.3	-4.50	431.52
9	ST 4498 B2RF	40.0	882	41-1	5	5.0	1.06	31.1	82.1	-3.45	432.62
10	DP 444 BG/RR	42.1	867	31-1	4	4.8	1.03	27.3	82.6	-1.05	446.07
11	DG 2520 B2RF	42.1	860	41-1	4	5.3	1.03	28.9	82.8	-5.00	408.50
12	AM 1532 B2RF	40.8	805	31-1	4	4.7	1.09	28.6	81.6	2.20	440.34
	Mean	41.8	934		4	5.1	1.06	28.7	82.1	-1.06	481.61

Agent	Jeff Via	Soil Type	Memphis silt loam
Producer	MCNabb Bros.	Tillage	Conventional
Planting Date	5/13/2008	Prev. Crop	cotton
Defoliation Date	9/19/2008	Fertilizer	90-60-80
Harvest Date	10/2/2008	Row Spacing	38 inches

Table CST14. Results of Roundup Ready Flex cotton variety test, Fayette County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	AM 1550 B2RF	41.6	1057	31-1	3	5.0	1.06	26.4	82.0	-0.20	552.81
2	DG 2570 B2RF	42.4	1043	31-1	3	5.2	1.10	29.0	83.3	2.05	568.96
3	FM 1740 B2RF	42.7	1005	31-1	3	5.1	1.08	28.2	82.8	2.05	548.23
4	ST 4554 B2RF	41.7	975	31-1	4	5.3	1.07	29.7	82.6	-2.10	491.40
5	CG 3220 B2RF	40.8	973	31-1	3	5.1	1.10	28.8	81.2	1.85	528.83
6	DP 141 B2RF	39.3	970	41-1	5	4.9	1.09	28.2	82.2	-1.05	499.07
7	DP 164 B2RF	42.0	966	31-1	4	5.0	1.11	28.2	81.7	1.05	517.29
8	ST 5327 B2RF	40.9	962	41-1	5	5.0	1.08	29.3	82.4	-2.90	477.15
9	DP 161 B2RF	40.8	956	31-1	4	5.1	1.10	30.3	81.7	0.60	507.64
10	CG 4020 B2RF	40.6	865	31-1	4	4.7	1.12	28.0	82.1	2.90	479.21
11	DP 143 B2RF	39.4	850	31-1	5	4.6	1.14	28.2	80.1	1.60	459.85
12	DG 2490 B2RF	37.8	760	41-1	5	4.2	1.10	30.2	81.4	-0.65	394.06
13	CG 3520 B2RF	40.5	642	41-1	5	4.9	1.10	28.8	82.4	-1.05	330.31
	Mean	40.8	925		4	4.9	1.10	28.7	82.0	0.32	488.83

Agent	Jeff Via	Soil Type	Memphis silt loam
Producer	MCNabb Bros.	Tillage	Conventional
Planting Date	5/13/2008	Prev. Crop	cotton
Defoliation Date	9/19/2008	Fertilizer	90-60-80
Harvest Date	10/2/2008	Row Spacing	38 inches

Table CST15. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	ST 4427 B2RF	41.3	1138	31-1	4	4.8	1.08	29.5	82.4	2.40	624.76
2	CG 3035 RF	43.2	1067	21-1	2	4.8	1.09	30.6	81.6	4.95	612.99
3	DP 0935 B2RF	44.1	1043	21-1	3	5.1	1.04	28.3	80.4	-1.80	528.80
4	PHY 375 WRF	44.5	1037	21-1	4	5.0	1.04	27.3	81.3	2.65	571.91
5	ST 4498 B2RF	41.7	970	41-1	4	4.9	1.10	31.8	84.5	1.85	527.20
6	DG 2383 RF	39.8	950	31-1	4	4.6	1.11	30.3	81.4	3.15	528.68
7	DP 444 BG/RR	42.9	927	31-1	3	4.7	1.08	29.3	82.6	3.90	522.83
8	PHY 370 WR	41.6	907	31-1	3	5.2	1.05	30.2	83.1	0.25	478.44
9	DP 121 RF	43.2	902	31-1	3	5.2	1.10	31.3	83.5	2.60	497.00
10	DG 2520 B2RF	41.6	900	31-1	3	4.8	1.11	27.7	79.1	3.55	504.45
11	DP 445 BG/RR	42.1	812	31-1	3	5.1	1.10	32.3	84.2	2.60	447.41
12	AM 1532 B2RF	41.3	780	31-1	3	4.7	1.10	27.6	80.9	3.70	438.36
Mean		42.3	953		3	4.9	1.08	29.7	82.1	2.48	523.57

Agent	Philip Shelby	Soil Type	Grenada silt loam
Producer	Tommy and Brent Griggs	Tillage	Conventional
Planting Date	5/8/2008	Prev. Crop	cotton
Defoliation Date	9/10/2008	Fertilizer	85-0-120
Harvest Date	10/1/2008	Row Spacing	38 inches

Table CST16. Results of Roundup Ready Flex cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DG 2570 B2RF	43.8	1318	31-1	2	5.2	1.10	28.8	81.2	2.00	718.31
2	FM 1740 B2RF	41.9	1231	21-1	3	4.6	1.13	31.9	82.8	5.50	713.98
3	CG 3220 B2RF	40.5	1173	21-1	3	4.6	1.14	30.2	82.2	5.20	676.82
4	ST 4554 B2RF	39.6	1157	31-1	4	4.9	1.12	30.9	82.8	3.55	648.50
5	DP 161 B2RF	40.2	1138	31-1	4	4.5	1.15	29.2	82.1	3.00	631.59
6	ST 5327 B2RF	40.5	1088	31-1	4	4.8	1.09	33.0	83.3	2.85	602.21
7	DG 2490 B2RF	39.3	1083	31-1	4	4.1	1.06	29.1	81.8	0.85	577.78
8	DP 143 B2RF	39.5	1066	31-1	4	4.6	1.15	29.2	81.7	3.00	591.63
9	DP 164 B2RF	41.7	1055	31-1	3	5.0	1.17	30.9	84.0	3.30	588.69
10	AM 1550 B2RF	42.3	1020	31-1	3	4.8	1.11	28.5	83.5	4.60	582.42
11	CG 4020 B2RF	40.6	999	21-1	3	4.6	1.16	29.4	83.2	5.15	575.92
12	CG 3520 B2RF	40.1	881	31-1	4	4.7	1.11	29.5	82.5	3.35	492.04
13	DP 141 B2RF	29.7	776	31-1	4	4.5	1.17	32.4	81.4	3.45	434.17
Mean		40.0	1076		3	4.7	1.13	30.2	82.5	3.52	602.62

Agent	Philip Shelby	Soil Type	Grenada silt loam
Producer	Tommy and Brent Griggs	Tillage	Conventional
Planting Date	5/8/2008	Prev. Crop	cotton
Defoliation Date	9/10/2008	Fertilizer	85-0-120
Harvest Date	10/1/2008	Row Spacing	38 inches

Table CST17. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	PHY 375 WRF	41.0	1430	41-1	5	4.3	1.11	28.6	82.0	-0.65	741.46
2	PHY 370 WR	41.7	1378	41-1	5	4.5	1.06	28.8	81.8	-2.05	695.20
3	ST 4498 B2RF	37.1	1338	51-1	6	4.5	1.15	30.5	82.7	-4.30	644.92
4	DP 0935 B2RF	41.4	1312	31-1	4	4.5	1.09	28.6	82.8	2.40	720.29
5	DG 2383 RF	38.9	1268	41-1	6	4.1	1.11	28.2	81.3	-3.40	622.59
6	DP 444 BG/RR	37.9	1252	41-1	6	4.5	1.12	28.5	82.4	-3.55	612.85
7	DP 121 RF	39.2	1252	41-1	6	3.9	1.12	30.6	82.8	-2.75	622.87
8	DG 2520 B2RF	37.7	1192	41-1	4	4.1	1.12	27.9	82.2	1.65	645.47
9	DP 445 BG/RR	39.2	1185	41-1	6	4.0	1.10	30.9	82.1	-3.10	585.39
10	ST 4427 B2RF	37.7	1149	51-1	6	4.2	1.14	28.5	80.6	-4.80	548.07
11	CG 3035 RF	40.3	1143	31-1	4	4.4	1.13	28.9	82.7	3.10	635.51
12	AM 1532 B2RF	37.5	1031	31-1	4	4.4	1.14	28.7	81.0	3.00	572.21
Mean		40.3	879	31-1	4	4.7	1.05	28.2	81.1	-1.20	637.23

Agent	Philip Shelby	Soil Type	Collins silt loam
Producer	Jason Luckey	Tillage	No-till
Planting Date	5/21/2008	Prev. Crop	cotton
Defoliation Date	10/15/2008	Fertilizer	80-0-90
Harvest Date	10/27/2008	Row Spacing	38 inches

Table CST18. Results of Roundup Ready Flex cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	FM 1740 B2RF	41.0	1501	41-1	5	4.2	1.11	29.3	82.3	-0.50	780.52
2	DP 141 B2RF	36.2	1427	41-1	6	3.5	1.18	29.7	81.1	-3.30	702.08
3	ST 4554 B2RF	38.9	1418	41-1	6	3.9	1.13	30.8	83.0	-2.75	705.46
4	ST 5327 B2RF	40.2	1380	41-1	5	4.4	1.09	30.1	82.5	-0.60	716.22
5	DG 2490 B2RF	38.9	1309	41-1	6	3.4	1.07	27.8	80.5	-6.50	602.14
6	CG 3220 B2RF	37.9	1240	41-1	5	3.6	1.11	29.9	80.3	-0.40	646.04
7	DP 143 B2RF	38.7	1228	41-1	5	3.6	1.17	28.7	80.4	-0.60	637.33
8	DG 2570 B2RF	40.3	1225	41-1	4	4.4	1.12	29.3	81.9	1.50	661.50
9	AM 1550 B2RF	40.3	1222	41-1	4	4.1	1.11	27.9	82.6	1.85	664.16
10	CG 4020 B2RF	37.2	1214	41-1	5	3.6	1.15	28.4	81.6	-0.60	630.07
11	DP 161 B2RF	36.3	1182	41-1	5	3.4	1.18	30.6	82.1	-2.60	589.82
12	DP 164 B2RF	37.0	1180	41-1	5	3.7	1.17	28.9	81.2	-0.45	614.19
13	CG 3520 B2RF	36.5	1116	41-1	5	3.5	1.14	28.5	80.8	-0.60	579.20
Mean		38.4	1280		5	3.8	1.13	29.2	81.6	-1.20	656.06

Agent	Philip Shelby	Soil Type	Collins silt loam
Producer	Jason Luckey	Tillage	No-till
Planting Date	5/21/2008	Prev. Crop	cotton
Defoliation Date	10/15/2008	Fertilizer	80-0-90
Harvest Date	10/27/2008	Row Spacing	38 inches

Table CST19. Results of Liberty Link cotton variety test, Gibson County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	FM 1735 LLB2	40.9	406	41-1	3	4.2	1.12	28.9	82.5	2.30	222.49
2	FM 955 LLB2	39.4	398	31-1	3	4.9	1.14	28.8	82.4	4.40	226.46
3	BCSX 0102 LLB2	39.0	378	41-1	4	4.4	1.21	32.1	83.0	2.20	206.77
4	BCSX 0187 LLB2	40.5	339	31-1	4	4.4	1.07	28.2	79.9	0.70	180.35
5	BCSX 0888 LLB2	39.4	354	31-1	3	4.5	1.11	30.0	81.9	4.55	201.96
Mean		39.8	375		3	4.5	1.13	29.6	81.9	2.83	207.60

Agent	Philip Shelby	Soil Type	Gernada silt loam
Producer	Milan Res. & Ed. Center	Tillage	No-till
Planting Date	5/24/2008	Prev. Crop	soybean
Defoliation Date	10/2/2008	Fertilizer	100-30-90
Harvest Date	10/16/2008	Row Spacing	40 inches

Table CST20. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Hardeman County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DG 2383 RF	39.1	1345	31-1	5	4.7	1.11	28.9	82.5	2.40	738.41
2	CG 3035 RF	41.2	1333	21-1	3	4.6	1.11	28.0	82.1	4.85	764.48
3	PHY 370 WR	40.2	1326	31-1	4	5.1	1.08	30.4	82.7	0.80	706.76
4	PHY 375 WRF	41.2	1252	31-1	4	4.8	1.08	29.4	82.3	2.65	690.48
5	DP 0935 B2RF	39.9	1249	31-1	4	4.6	1.11	29.4	82.5	3.10	694.44
6	DP 445 BG/RR	41.2	1235	31-1	4	4.9	1.10	29.8	83.4	2.65	681.10
7	DP 121 RF	41.0	1235	31-1	4	5.1	1.11	30.4	82.5	1.50	666.90
8	ST 4427 B2RF	39.7	1232	31-1	5	4.8	1.11	30.6	83.6	2.20	673.90
9	DG 2520 B2RF	39.5	1178	31-1	3	4.7	1.14	29.5	82.7	4.85	675.58
10	ST 4498 B2RF	38.9	1164	31-1	5	4.6	1.11	32.2	81.4	1.90	633.22
11	AM 1532 B2RF	37.7	1157	31-1	4	4.5	1.14	29.4	83.6	3.30	645.61
12	DP 444 BG/RR	39.6	1151	31-1	4	4.7	1.09	29.3	83.8	2.50	633.05
Mean		39.9	1238		4	4.8	1.11	29.8	82.8	2.73	683.66

Agent	Bob Vickers	Soil Type	Lexington silt loam
Producer	Gem Mitchell	Tillage	No-till
Planting Date	5/20/2008	Prev. Crop	cotton
Defoliation Date	9/22/2008	Fertilizer	40-30-80-40N side dress
Harvest Date	10/3/2008	Row Spacing	38 inches

Table CST21. Results of Roundup Ready Flex cotton variety test, Hardeman County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	FM 1740 B2RF	40.2	1542	21-1	3	4.4	1.15	29.6	82.7	5.40	892.82
2	CG 3220 B2RF	41.7	1541	31-1	3	4.5	1.16	30.2	83.5	4.95	885.30
3	DP 141 B2RF	38.1	1462	31-1	4	4.3	1.20	31.2	81.9	3.45	817.99
4	ST 4554 B2RF	40.7	1453	31-1	4	4.9	1.12	31.4	82.5	3.55	814.41
5	AM 1550 B2RF	40.3	1435	21-1	3	4.5	1.12	29.2	82.7	5.05	825.84
6	CG 4020 B2RF	39.1	1402	21-1	4	4.3	1.17	28.6	83.7	3.95	791.43
7	DP 161 B2RF	38.1	1396	31-1	4	4.6	1.20	31.2	84.0	3.75	785.25
8	DG 2570 B2RF	39.7	1393	41-1	3	4.5	1.13	29.6	83.2	2.40	764.76
9	DG 2490 B2RF	38.2	1384	31-1	5	4.2	1.12	28.7	81.2	1.60	748.74
10	DP 143 B2RF	36.4	1312	41-1	5	4.3	1.18	29.4	82.5	-0.40	683.55
11	ST 5327 B2RF	39.6	1298	31-1	4	4.9	1.12	30.2	83.7	3.45	726.23
12	DP 164 B2RF	37.7	1288	31-1	3	4.4	1.16	31.0	82.9	5.05	741.24
13	CG 3520 B2RF	39.3	1258	31-1	4	4.9	1.14	29.2	82.6	3.20	700.71
Mean		39.2	1397		4	4.5	1.15	30.0	82.9	3.49	782.94

Agent	Bob Vickers	Soil Type	Lexington silt loam
Producer	Gem Mitchell	Tillage	No-till
Planting Date	5/20/2008	Prev. Crop	cotton
Defoliation Date	9/22/2008	Fertilizer	40-30-80-40N side dress
Harvest Date	10/3/2008	Row Spacing	38 inches

Table CST22. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Haywood County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DP 0935 B2RF	40.1	1573	31-1	3	4.9	1.13	29.8	82.0	2.40	863.58
2	PHY 375 WRF	41.2	1469	31-1	4	4.6	1.16	29.6	83.0	3.45	821.91
3	ST 4498 B2RF	36.1	1399	41-1	6	4.7	1.13	29.7	83.1	-3.10	691.11
4	DP 444 BG/RR	40.1	1350	41-1	3	4.4	1.12	29.7	82.6	2.65	744.53
5	CG 3035 RF	41.5	1296	41-1	4	4.8	1.12	28.5	81.4	1.50	699.84
6	DP 445 BG/RR	39.9	1257	31-1	3	5.0	1.14	29.6	83.6	3.10	698.89
7	DG 2383 RF	36.5	1236	51-1	6	4.5	1.16	30.0	83.0	-4.50	593.28
8	DP 121 RF	39.9	1225	41-1	4	5.1	1.18	31.2	83.5	0.45	648.64
9	PHY 370 WR	38.7	1184	41-1	4	5.2	1.14	29.5	83.1	0.15	623.38
10	DG 2520 B2RF	37.3	1091	41-1	4	4.7	1.19	29.5	83.9	2.10	595.69
11	ST 4427 B2RF	38.3	1070	41-1	6	4.8	1.15	30.3	83.7	-3.00	529.65
12	AM 1532 B2RF	38.0	1061	41-1	4	4.6	1.17	29.8	82.3	1.80	576.12
Mean		39.0	1268		4	4.8	1.15	29.8	82.9	0.58	673.88

Agent	Tracey Sullivan	Soil Type	Memphis silt loam
Producer	R. Morris English	Tillage	Conventional
Planting Date	5/30/2008	Prev. Crop	cotton
Defoliation Date	10/10/2008	Fertilizer	80-40-90
Harvest Date	10/22/2008	Row Spacing	38 inches

Table CST23. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Lake County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DG 2520 B2RF	38.7	1457	41-1	4	4.2	1.21	30.4	84.4	2.40	799.89
2	CG 3035 RF	38.6	1455	31-1	3	4.5	1.14	29.7	83.4	4.85	834.44
3	PHY 375 WRF	38.2	1417	31-1	5	4.3	1.15	30.9	83.5	2.35	777.22
4	DP 121 RF	37.5	1388	41-1	5	4.5	1.16	31.6	83.6	2.65	765.48
5	ST 4427 B2RF	36.0	1384	41-1	6	4.3	1.12	29.7	81.1	-3.30	680.93
6	ST 4498 B2RF	37.3	1365	41-1	4	4.4	1.16	32.0	82.8	2.20	746.66
7	PHY 370 WR	37.5	1302	31-1	5	4.1	1.13	30.3	83.2	2.05	710.24
8	DG 2383 RF	36.6	1288	41-1	6	4.2	1.15	30.1	82.5	-2.95	638.20
9	DP 0935 B2RF	38.1	1273	31-1	4	4.3	1.13	29.6	81.9	3.15	708.42
10	DP 445 BG/RR	39.5	1270	31-1	4	4.4	1.16	32.6	84.3	3.75	714.38
11	DP 444 BG/RR	37.8	1255	41-1	4	4.1	1.13	29.9	83.7	2.20	686.49
12	AM 1532 B2RF	34.4	1136	31-1	4	4.0	1.17	29.6	81.7	3.40	635.02
Mean		37.5	1333		5	4.3	1.15	30.5	83.0	1.90	724.78

Agent	Greg Allen	Soil Type	Tiptonville & Reelfoot silt loam
Producer	John Lindamood	Tillage	Conventional
Planting Date	5/13/2008	Prev. Crop	cotton
Defoliation Date	10/1/2008	Fertilizer	26-0-74-20S-.5B+10N side dress
Harvest Date	10/12/2008	Row Spacing	38 inches

Table CST24. Results of Roundup Read Flex cotton variety test, Lake County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DG 2490 B2RF	36.8	1382	31-1	5	3.9	1.07	28.7	82.9	-0.75	715.19
2	CG 3220 B2RF	39.9	1134	31-1	3	5.2	1.12	30.2	83.6	3.00	629.37
3	DG 2570 B2RF	40.9	1112	31-1	3	5.1	1.11	30.3	83.3	2.90	616.05
4	CG 4020 B2RF	38.9	1083	21-1	3	4.9	1.12	27.6	81.5	4.85	621.10
5	ST 5327 B2RF	37.7	1077	31-1	5	5.0	1.12	31.0	83.2	0.25	568.12
6	ST 4554 B2RF	37.9	1070	31-1	4	5.2	1.13	31.3	83.1	1.70	579.94
7	DP 141 B2RF	36.9	1068	31-1	4	4.5	1.19	31.0	82.1	3.45	597.55
8	AM 1550 B2RF	40.0	1066	21-1	3	5.1	1.08	27.4	83.1	2.40	585.23
9	DP 164 B2RF	37.9	1044	21-1	3	5.1	1.16	29.0	81.7	3.10	580.46
10	CG 3520 B2RF	37.3	1039	31-1	5	4.8	1.12	28.7	82.4	1.45	560.54
11	FM 1740 B2RF	40.7	1039	31-1	4	5.0	1.12	31.9	82.3	1.50	561.06
12	DP 161 B2RF	37.8	983	31-1	4	4.9	1.18	31.2	83.0	3.65	551.95
13	DP 143 B2RF	36.1	934	31-1	4	4.6	1.14	28.3	80.9	3.00	518.37
Mean		38.4	1079		4	4.9	1.13	29.7	82.5	2.35	591.15

Agent	Greg Allen	Soil Type	Reelfoot silt loam
Producer	Tony Bargery	Tillage	No-till
Planting Date	5/20/2008	Prev. Crop	cotton
Defoliation Date	9/24/2008	Fertilizer	0-0-100 + 100N side dress
Harvest Date	10/6/2008	Row Spacing	38 inches

Table CST25. Results of Liberty Link cotton variety test, Lake County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	BCSX 0102 LLB2	37.4	1148	31-1	4	4.8	1.22	32.3	83.1	3.65	644.60
2	BCSX 0187 LLB2	37.4	1121	31-1	4	4.5	1.15	29.0	82.4	3.00	622.16
3	BCSX 0888 LLB2	38.8	1112	41-1	3	5.2	1.15	30.9	83.6	0.85	593.25
4	FM 955 LLB2	37.7	1015	41-1	4	4.8	1.24	31.2	83.8	2.30	556.22
5	FM 1735 LLB2	36.4	954	41-1	3	4.9	1.15	31.8	83.8	2.70	526.61
Mean		37.5	1070		4	4.8	1.18	31.0	83.3	2.50	588.57

Agent	Greg Allen	Soil Type	Commerce silt loam
Producer	John Lindamood	Tillage	No-till
Planting Date	5/20/2008	Prev. Crop	cotton
Defoliation Date	9/30/2008	Fertilizer	26-0-74-20S-.5B-70N side dress
Harvest Date	10/10/2008	Row Spacing	38 inches

Table CST26. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Lauderdale County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	PHY 370 WR	43.7	1477	41-1	4	4.5	1.12	29.2	82.9	2.40	810.87
2	DP 445 BG/RR	37.6	1293	41-1	4	4.5	1.17	30.9	84.1	2.30	708.56
3	DP 0935 B2RF	39.9	1257	31-1	3	4.4	1.15	31.6	83.5	5.15	724.66
4	PHY 375 WRF	37.0	1255	41-1	5	4.3	1.15	29.5	82.9	2.65	692.13
5	DG 2520 B2RF	37.1	1243	41-1	4	4.4	1.18	28.5	82.1	1.55	671.84
6	ST 4498 B2RF	35.5	1229	41-1	5	4.4	1.17	31.1	82.8	0.05	645.84
7	ST 4427 B2RF	36.1	1219	41-1	6	4.8	1.15	28.3	82.7	-3.35	599.14
8	DP 121 RF	37.2	1204	41-1	5	4.9	1.14	30.1	83.5	-0.05	631.50
9	CG 3035 RF	39.3	1198	41-1	3	4.7	1.14	29.0	83.8	2.25	655.91
10	DG 2383 RF	36.1	1100	51-1	6	4.2	1.17	30.2	83.0	-4.35	529.65
11	AM 1532 B2RF	36.6	1090	31-1	4	4.3	1.20	29.5	83.1	3.45	609.86
12	DP 444 BG/RR	29.8	955	41-1	4	4.6	1.13	29.3	82.9	1.70	517.61
Mean		37.2	1210		4	4.5	1.16	29.8	83.1	1.15	649.80

Agent	James Griffin	Soil Type	Robinsonville & Commerce silt loam
Producer	Leslie Crook	Tillage	Minimum till
Planting Date	5/22/2008	Prev. Crop	cotton
Defoliation Date	9/29/2008	Fertilizer	85-0-60-20S-.5B
Harvest Date	10/15/2008	Row Spacing	38 inches

Table CST27. Results of Roundup Ready Flex cotton variety test, Lauderdale County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	FM 1740 B2RF	39.8	1574	41-1	4	4.6	1.12	30.1	81.6	1.75	853.90
2	ST 4554 B2RF	37.2	1473	41-1	5	4.9	1.13	31.4	84.1	0.10	774.80
3	DG 2490 B2RF	36.4	1450	41-1	5	4.2	1.12	27.9	82.8	-0.30	756.90
4	CG 3220 B2RF	37.0	1410	41-1	3	4.6	1.18	29.3	83.6	2.25	771.98
5	DG 2570 B2RF	38.7	1399	31-1	3	4.4	1.18	30.7	83.0	5.05	805.12
6	DP 161 B2RF	34.6	1381	41-1	4	4.6	1.20	31.4	83.0	2.20	755.41
7	DP 143 B2RF	36.0	1378	41-1	5	3.8	1.24	29.7	81.4	-0.20	720.69
8	DP 141 B2RF	35.7	1370	41-1	5	4.3	1.18	29.2	82.2	-0.60	711.03
9	CG 4020 B2RF	34.9	1325	41-1	4	4.1	1.20	29.8	82.7	2.15	724.11
10	ST 5327 B2RF	36.8	1298	41-1	5	4.3	1.19	32.0	84.2	0.15	683.40
11	DP 164 B2RF	36.7	1291	31-1	4	4.0	1.16	31.1	82.3	3.60	724.25
12	AM 1550 B2RF	36.6	1111	31-1	3	3.9	1.16	28.5	82.4	4.55	633.83
13	CG 3520 B2RF	32.7	1086	41-1	4	4.7	1.17	27.8	82.4	1.55	586.98
Mean		36.4	1350		4	4.3	1.17	29.9	82.7	1.71	730.95

Agent	James Griffin	Soil Type	Robinsonville & Commerce silt loam
Producer	Leslie Crook	Tillage	Minimum till
Planting Date	5/22/2008	Prev. Crop	cotton
Defoliation Date	9/29/2008	Fertilizer	85-0-60-20S-.5B
Harvest Date	10/15/2008	Row Spacing	38 inches

Table CST28. Results of Liberty Link cotton variety test, Lauderdale County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	BCSX 0888 LLB2	40.0	1902	31-1	4	4.3	1.16	30.5	82.9	3.65	1067.97
2	BCSX 0102 LLB2	41.0	1797	41-1	5	4.6	1.23	30.8	83.0	0.05	944.32
3	FM 1735 LLB2	42.2	1772	41-1	4	4.3	1.15	29.2	82.6	1.75	961.31
4	BCSX 0187 LLB2	40.0	1659	31-1	4	4.5	1.15	30.1	82.2	3.25	924.89
5	FM 955 LLB2	40.0	1600	41-1	5	4.1	1.19	30.3	82.8	0.00	840.00
Mean		40.6	1746		4	4.4	1.18	30.2	82.7	1.74	947.70

Agent	James Griffin	Soil Type	Robinsonville silt loam
Producer	Leslie Crook	Tillage	Minimum till
Planting Date	5/5/2008	Prev. Crop	cotton
Defoliation Date	9/24/2008	Fertilizer	30-0-90-15S-.5B-64N side dress
Harvest Date	10/20/2008	Row Spacing	38 inches

Table CST29. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Lincoln County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	AM 1532 B2RF	46.9	1864	31-1	3	4.3	1.16	29.0	82.0	2.40	1027.06
2	ST 4498 B2RF	40.6	1828	41-1	5	4.7	1.15	31.1	83.8	0.35	969.75
3	PHY 375 WRF	41.4	1777	31-1	5	4.3	1.14	27.6	82.1	1.80	968.47
4	DP 0935 B2RF	42.7	1752	31-1	3	4.6	1.09	28.4	82.7	2.65	969.73
5	DP 445 BG/RR	41.6	1737	31-1	4	4.6	1.13	31.2	83.8	3.85	982.27
6	DP 444 BG/RR	41.3	1706	41-1	5	4.1	1.09	28.1	82.4	-0.70	887.12
7	CG 3035 RF	42.5	1681	31-1	3	4.6	1.12	28.9	83.1	4.70	964.89
8	ST 4427 B2RF	39.6	1610	41-1	6	4.5	1.13	28.9	83.2	-3.15	797.76
9	DG 2383 RF	38.8	1599	41-1	5	4.1	1.12	29.8	82.1	-0.05	841.87
10	DG 2520 B2RF	38.3	1553	41-1	6	4.0	1.19	29.8	81.6	-2.95	772.62
11	DP 121 RF	39.7	1498	41-1	5	4.2	1.16	29.5	83.5	0.30	793.94
12	PHY 370 WR	38.0	1142	31-1	5	3.9	1.10	28.3	82.2	1.25	616.11
	Mean	41.0	1646		5	4.3	1.13	29.2	82.7	0.87	882.63

Agent	David Qualls	Soil Type	Armor silt loam
Producer	JBH Farms	Tillage	No-till
Planting Date	5/1/2008	Prev. Crop	cotton
Defoliation Date	10/1/2008	Fertilizer	100-40-80
Harvest Date	10/21/2008	Row Spacing	38 inches

Table CST30. Results of Roundup Ready Flex cotton variety test, Lincoln County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	FM 1740 B2RF	42.3	1633	31-1	4	4.5	1.10	29.4	82.1	2.40	899.78
2	DG 2570 B2RF	42.4	1628	31-1	3	4.7	1.13	30.0	83.5	5.05	940.17
3	ST 5327 B2RF	40.0	1533	41-1	5	4.4	1.11	31.8	82.0	0.00	807.89
4	ST 4554 B2RF	38.6	1527	31-1	5	4.7	1.13	29.6	82.4	1.90	833.74
5	CG 3520 B2RF	38.0	1500	41-1	5	4.2	1.12	27.5	81.3	-0.30	786.00
6	AM 1550 B2RF	39.8	1457	31-1	3	4.3	1.14	28.7	83.2	4.80	837.78
7	CG 3220 B2RF	40.7	1444	31-1	4	4.5	1.14	30.2	82.7	3.65	813.69
8	DG 2490 B2RF	37.4	1372	41-1	5	3.7	1.09	28.3	81.6	-0.70	713.44
9	DP 143 B2RF	37.6	1346	41-1	5	4.1	1.18	28.8	80.5	-0.25	705.98
10	DP 141 B2RF	38.6	1322	41-1	5	4.3	1.16	29.9	81.2	-0.15	694.71
11	DP 161 B2RF	38.2	1319	41-1	5	4.6	1.18	30.7	82.9	0.25	698.41
12	DP 164 B2RF	38.8	1304	31-1	4	4.4	1.18	29.7	81.5	3.45	732.20
13	CG 4020 B2RF	32.8	1127	31-1	4	4.3	1.13	27.5	82.6	3.30	631.12
	Mean	38.9	1424		4	4.4	1.14	29.4	82.1	1.80	776.53

Agent	David Qualls	Soil Type	Armor silt loam
Producer	JBH Farms	Tillage	No-till
Planting Date	5/1/2008	Prev. Crop	cotton
Defoliation Date	10/1/2008	Fertilizer	100-40-80
Harvest Date	10/21/2008	Row Spacing	38 inches

Table CST31. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Madison County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DP 0935 B2RF	42.0	1875	31-1	3	4.7	1.12	28.8	83.0	2.40	1029.38
2	PHY 370 WR	38.7	1853	31-1	4	4.4	1.10	29.0	82.4	2.20	1013.59
3	DP 445 BG/RR	40.9	1716	31-1	4	4.9	1.12	28.9	83.7	3.20	955.81
4	DP 121 RF	40.4	1709	41-1	4	5.0	1.11	28.8	82.9	2.65	942.51
5	ST 4498 B2RF	39.3	1636	41-1	5	4.8	1.10	31.7	83.1	-0.40	852.36
6	DG 2383 RF	35.9	1576	41-1	6	4.0	1.15	29.5	83.1	-4.75	752.54
7	DP 444 BG/RR	40.6	1561	41-1	4	4.5	1.09	29.1	83.9	1.30	839.82
8	ST 4427 B2RF	38.3	1388	41-1	5	4.7	1.09	28.6	82.7	-0.85	716.90
9	AM 1532 B2RF	38.3	1382	31-1	4	4.5	1.14	27.4	83.1	3.20	769.77
10	DG 2520 B2RF	31.2	1377	41-1	4	4.4	1.13	27.1	82.3	1.50	743.58
Mean		38.6	1607		4	4.6	1.12	28.9	83.0	1.05	861.63

Agent	Bill Wyatt	Soil Type	Memphis silt loam
Producer	Jimmy Stanford	Tillage	No-till
Planting Date	5/7/2008	Prev. Crop	cotton
Defoliation Date	10/1/2008	Fertilizer	80-40-80
Harvest Date	10/14/2008	Row Spacing	38 inches

Table CST32. Results of Roundup Ready Flex cotton variety test, Madison County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	DP 143 B2RF	39.3	1514	41-1	5	4.3	1.19	28.7	81.7	-0.60	785.77
2	CG 3220 B2RF	39.2	1477	31-1	4	4.5	1.15	30.2	84.0	3.55	827.86
3	DP 161 B2RF	38.4	1427	31-1	5	4.7	1.21	30.6	85.0	2.45	784.14
4	FM 1740 B2RF	41.0	1396	31-1	4	4.6	1.13	29.0	83.0	3.10	776.18
5	CG 4020 B2RF	39.2	1393	31-1	4	4.4	1.15	27.8	83.3	3.20	775.90
6	DP 164 B2RF	39.1	1370	31-1	3	4.9	1.15	28.5	82.3	4.40	779.53
7	ST 5327 B2RF	40.0	1369	41-1	5	5.0	1.12	29.9	83.3	-2.05	690.66
8	DG 2490 B2RF	37.6	1349	41-1	5	4.1	1.09	28.9	84.0	-0.60	700.13
9	AM 1550 B2RF	40.5	1327	31-1	3	4.6	1.13	27.5	82.9	4.50	756.39
10	CG 3520 B2RF	38.6	1316	31-1	5	4.6	1.20	27.9	82.8	1.80	714.59
11	DP 141 B2RF	37.2	1295	41-1	5	4.2	1.16	29.4	81.6	-0.45	674.05
12	DG 2570 B2RF	41.9	1294	31-1	3	4.9	1.11	30.1	82.9	4.75	740.82
13	ST 4554 B2RF	38.1	1230	41-1	5	4.9	1.12	28.4	82.1	-0.65	637.76
Mean		39.2	1366		4	4.6	1.15	29.0	83.0	1.80	741.83

Agent	Bill Wyatt	Soil Type	Memphis silt loam
Producer	Jimmy Stanford	Tillage	No-till
Planting Date	5/7/2008	Prev. Crop	cotton
Defoliation Date	10/1/2008	Fertilizer	80-40-80
Harvest Date	10/14/2008	Row Spacing	38 inches

Table CST33. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Madison County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	PHY 375 WRF	39.3	1646	31-1	4	4.3	1.14	28.6	82.9	3.20	916.82
2	ST 4498 B2RF	37.8	1634	41-1	5	4.6	1.15	32.0	84.6	0.25	861.94
3	DP 0935 B2RF	35.6	1590	41-1	5	4.4	1.17	30.9	82.4	-0.15	832.37
4	DG 2520 B2RF	36.0	1570	31-1	5	4.0	1.20	28.7	83.9	2.05	856.44
5	CG 3035 RF	40.0	1566	31-1	3	4.8	1.15	31.0	83.2	5.05	901.23
6	DP 445 BG/RR	37.9	1528	31-1	4	4.0	1.19	32.0	84.8	4.00	863.32
7	PHY 370 WR	37.0	1517	41-1	4	4.7	1.12	29.2	81.2	1.50	819.18
8	ST 4427 B2RF	36.4	1513	41-1	4	4.4	1.16	30.5	83.2	2.20	827.61
9	DP 444 BG/RR	39.1	1459	31-1	4	4.3	1.14	29.7	83.2	3.45	816.31
10	DP 121 RF	38.1	1397	41-1	5	4.6	1.18	30.8	83.6	2.35	766.25
11	DG 2383 RF	36.0	1384	41-1	6	4.1	1.15	29.6	82.4	-3.15	683.00
12	AM 1532 B2RF	36.7	1202	31-1	4	3.8	1.19	29.2	82.0	3.15	668.91
	Mean	37.5	1501		4	4.3	1.16	30.2	83.1	1.99	817.78

Agent	Bill Wyatt	Soil Type	Gernada and Calhoun silt loam
Producer	Matt Griggs	Tillage	No-till
Planting Date	5/21/2008	Prev. Crop	corn
Defoliation Date	10/8/2008	Fertilizer	80-var P-var K-10S-2B
Harvest Date	10/18/2008	Row Spacing	38 inches

Table CST34. Results of Roundup Ready Flex cotton variety test, Madison County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-formity (%)	Loan Value +/- (¢/lb.)	Lint Value \$/ac
1	DG 2570 B2RF	39.7	1603	31-1	3	5.2	1.11	30.0	81.4	2.70	884.86
2	ST 4554 B2RF	38.2	1563	41-1	5	4.5	1.19	31.2	83.2	0.05	821.36
3	CG 4020 B2RF	39.1	1547	41-1	4	4.5	1.13	28.6	81.3	1.50	835.38
4	FM 1740 B2RF	38.7	1531	31-1	4	4.5	1.14	29.9	83.3	3.45	856.59
5	CG 3220 B2RF	39.5	1468	31-1	3	5.1	1.13	30.1	83.9	3.00	814.74
6	ST 5327 B2RF	38.6	1437	41-1	5	4.5	1.16	31.8	83.1	0.05	755.14
7	DG 2490 B2RF	36.1	1399	41-1	5	4.1	1.10	27.8	81.8	-0.90	721.88
8	AM 1550 B2RF	39.7	1394	31-1	3	4.5	1.14	28.7	83.9	4.70	797.37
9	DP 161 B2RF	34.2	1392	41-1	5	3.5	1.15	28.0	82.1	-0.60	722.45
10	DP 141 B2RF	36.0	1367	41-1	5	4.5	1.23	30.4	82.6	-0.15	715.62
11	DP 164 B2RF	37.2	1359	31-1	3	4.8	1.22	30.3	83.5	4.95	780.75
12	DP 143 B2RF	36.2	1341	41-1	5	4.1	1.24	28.6	81.7	-0.45	697.99
13	CG 3520 B2RF	37.4	1333	41-1	4	4.5	1.16	29.0	82.8	1.75	723.15
	Mean	40.3	879	31-1	4	4.7	1.05	28.2	81.1	1.45	770.20

Agent	Bill Wyatt	Soil Type	Gernada and Calhoun silt loam
Producer	Matt Griggs	Tillage	No-till
Planting Date	5/21/2008	Prev. Crop	corn
Defoliation Date	10/8/2008	Fertilizer	80-var P-var K-10S-2B
Harvest Date	10/18/2008	Row Spacing	38 inches

Table CST35. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Shelby County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	CG 3035 RF	41.1	1694	21-1	3	3.9	1.11	29.0	82.3	2.40	930.01
2	DG 2520 B2RF	41.4	1652	31-1	4	4.0	1.10	29.3	77.5	1.50	892.08
3	ST 4498 B2RF	42.5	1643	31-1	4	3.8	1.10	31.2	82.7	3.00	911.87
4	DP 0935 B2RF	40.7	1619	21-1	3	3.7	1.07	29.9	79.9	2.65	892.88
5	DP 444 BG/RR	43.7	1617	31-1	3	3.9	1.08	28.6	81.7	3.85	911.18
6	PHY 370 WR	40.2	1561	31-1	5	3.8	1.09	30.0	80.7	1.30	839.82
7	PHY 375 WRF	40.9	1505	31-1	5	3.7	1.06	29.3	79.5	-0.95	775.83
8	DG 2383 RF	38.7	1466	41-1	5	3.7	1.07	29.3	80.3	-1.90	741.80
9	DP 445 BG/RR	41.9	1453	21-1	3	3.9	1.07	31.7	81.1	2.60	800.60
10	ST 4427 B2RF	38.5	1419	41-1	5	3.7	1.08	29.4	81.2	-0.90	732.20
11	DP 121 RF	42.0	1372	31-1	4	4.1	1.10	27.8	80.6	2.35	752.54
12	AM 1532 B2RF	40.1	1323	31-1	4	3.6	1.14	27.9	80.9	3.00	734.27
Mean		41.0	1527		4	3.8	1.09	29.5	80.7	1.58	826.26

Agent	Becky Muller	Soil Type	Adler silt loam
Producer	Ray Sneed	Tillage	Conventional
Planting Date	5/21/2008	Prev. Crop	soybean
Defoliation Date	9/24/2008	Fertilizer	100-30-80
Harvest Date	10/6/2008	Row Spacing	15 inches

Table CST36. Results of Roundup Ready Flex cotton variety test, Shelby County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	ST 5327 B2RF	40.6	1589	31-1	4	3.8	1.09	30.7	81.1	2.80	878.72
2	CG 3520 B2RF	39.3	1520	31-1	4	3.7	1.11	28.4	81.3	3.05	844.36
3	DG 2570 B2RF	38.0	1497	31-1	3	3.4	1.10	30.6	80.8	1.70	811.37
4	DG 2490 B2RF	38.6	1282	41-1	5	3.9	1.06	27.3	81.4	-1.90	648.69
5	CG 4020 B2RF	38.9	1267	31-1	4	4.2	1.06	26.0	79.3	0.10	666.44
6	DP 141 B2RF	38.0	1258	31-1	4	4.1	1.09	27.7	80.0	2.35	690.01
7	DP 161 B2RF	39.3	1224	31-1	4	4.5	1.14	30.7	80.8	3.45	684.83
8	AM 1550 B2RF	42.5	1214	21-1	3	3.9	1.07	27.5	80.2	2.15	663.45
9	FM 1740 B2RF	42.6	1199	31-1	3	4.3	1.07	29.0	80.8	1.65	649.26
10	DP 164 B2RF	39.1	1179	31-1	4	3.8	1.16	29.1	81.5	3.15	656.11
11	ST 4554 B2RF	40.1	1178	31-1	4	4.4	1.07	29.4	81.1	0.70	626.70
12	CG 3220 B2RF	40.2	1166	21-1	3	3.9	1.11	29.8	81.5	5.25	673.37
13	DP 143 B2RF	38.6	1101	31-1	5	3.9	1.15	27.9	79.3	1.00	589.04
Mean		39.7	1283		4	4.0	1.10	28.8	80.7	1.96	698.64

Agent	Becky Muller	Soil Type	Adler silt loam
Producer	Ray Sneed	Tillage	Conventional
Planting Date	5/21/2008	Prev. Crop	soybean
Defoliation Date	9/24/2008	Fertilizer	100-30-80
Harvest Date	10/6/2008	Row Spacing	15 inches

Table CST37. Results of Roundup Ready and Roundup Ready Flex cotton variety test, Tipton County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	ST 4427 B2RF	38.6	1282	41-1	5	3.9	1.06	27.3	81.4	2.40	703.82
2	DP 445 BG/RR	39.1	1179	41-1	4	4.3	1.09	28.2	82.0	1.00	630.77
3	AM 1532 B2RF	39.7	1148	31-1	3	4.4	1.13	30.1	82.4	4.55	654.93
4	DP 121 RF	39.1	976	41-1	5	4.4	1.13	28.0	82.2	2.65	538.26
5	DG 2520 B2RF	39.7	956	31-1	4	4.5	1.13	30.5	82.6	3.55	535.84
6	DG 2383 RF	40.5	910	31-1	4	4.2	1.09	27.8	81.8	2.35	499.14
7	CG 3035 RF	38.4	902	41-1	4	4.5	1.10	28.1	81.7	1.00	482.57
8	ST 4498 B2RF	36.1	887	41-1	5	4.4	1.10	28.5	81.3	-1.05	456.36
9	DP 0935 B2RF	37.8	885	31-1	4	4.1	1.16	28.1	81.3	3.15	492.50
10	PHY 370 WR	40.0	881	41-1	4	4.7	1.13	29.5	82.6	1.95	479.70
11	PHY 375 WRF	38.4	849	41-1	5	4.1	1.15	31.5	83.1	0.20	447.42
12	DP 444 BG/RR	39.6	783	31-1	4	4.2	1.12	27.8	81.0	3.05	434.96
	Mean	38.9	970		4	4.3	1.12	28.8	82.0	2.07	529.69

Agent	Daniel Jacobs	Soil Type	Gernada silt loam
Producer	Glenn Hopkins	Tillage	No-till
Planting Date	5/25/2008	Prev. Crop	cotton
Defoliation Date	10/10/2008	Fertilizer	80-30-90
Harvest Date	10/20/2008	Row Spacing	38 inches

Table CST38. Results of Roundup Ready Flex cotton variety test, Tipton County, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	ST 5327 B2RF	34.6	1023	42-2	5	4.8	1.13	30.6	83.5	-2.40	512.52
2	ST 4554 B2RF	35.6	965	42-2	6	5.3	1.15	31.0	83.2	-7.45	434.73
3	DG 2570 B2RF	36.4	889	32-2	4	5.0	1.15	31.7	84.3	-0.95	458.28
4	FM 1740 B2RF	37.5	889	41-1	5	5.2	1.10	30.3	82.1	-2.65	443.17
5	CG 3520 B2RF	33.6	871	41-1	6	4.6	1.17	29.0	83.6	-3.25	428.97
6	CG 4020 B2RF	35.6	853	41-1	4	4.8	1.17	29.1	82.8	1.75	462.75
7	CG 3220 B2RF	36.9	829	41-1	4	5.3	1.14	30.2	83.6	-1.15	425.69
8	DP 164 B2RF	35.0	820	41-1	5	4.8	1.20	30.0	82.3	-0.35	427.63
9	AM 1550 B2RF	36.5	805	32-2	4	4.8	1.17	30.9	83.3	0.80	429.07
10	DP 161 B2RF	35.8	763	41-1	4	5.1	1.19	31.1	82.9	0.35	403.25
11	DP 143 B2RF	34.9	701	41-1	6	4.7	1.18	28.8	80.7	-3.55	343.14
12	DG 2490 B2RF	35.8	682	41-1	5	4.5	1.10	28.7	83.4	-0.85	352.25
13	DP 141 B2RF	34.8	653	41-1	5	5.0	1.17	30.1	82.4	-2.20	328.46
	Mean	35.6	826		5	4.9	1.16	30.1	82.9	-1.68	419.22

Agent	Daniel Jacobs	Soil Type	Memphis silt loam
Producer	David Templeton	Tillage	Conventional
Planting Date	5/21/2008	Prev. Crop	corn
Defoliation Date	10/9/2008	Fertilizer	40-21-20-.5B
Harvest Date	10/21/2008	Row Spacing	38 inches

Table CST39. Results of cotton variety test, West TN AG Research Center, 2008

Rank	Variety	Gin Turnout (%)	Lint Yield (lb./acre)	HVI Color	Leaf Grade	Mic	Length (inches)	Strength (g/tex)	Uni-	Loan	Lint Value \$/ac
									formity (%)	Value +/- (¢/lb.)	
1	PHY 370 WR	41.2	2150	31-1	5	3.9	1.13	29.1	82.7	2.40	1180.62
2	DP 555 BG/RR	37.3	1858	31-1	4	3.7	1.12	30.3	80.7	3.30	1036.93
3	FM 1735 LLB2	42.3	1857	31-1	3	4.1	1.14	30.0	83.4	5.00	1067.86
4	ST 5327 B2RF	36.6	1823	41-1	6	3.6	1.17	30.4	83.3	2.65	1005.28
5	PHY 425 RF	35.7	1820	41-1	6	4.2	1.19	30.6	84.4	-2.65	907.24
6	DP 444 BG/RR	37.4	1818	41-1	4	3.5	1.15	28.5	83.3	1.75	986.24
7	ST 4498 B2RF	35.5	1685	31-1	5	3.8	1.16	29.9	82.9	2.20	921.83
8	PHY 745 WRF	38.3	1545	41-1	5	3.7	1.16	32.2	83.9	0.30	815.78
9	ST 4554 B2RF	33.9	1526	41-1	6	3.7	1.14	29.6	82.6	-2.95	756.16
10	DP 0935 B2RF	37.1	1498	31-1	3	3.8	1.14	28.2	82.2	4.55	854.35
11	FM 840 B2RF	36.1	1326	41-1	5	3.4	1.22	32.9	84.0	-2.30	665.56
Mean		37.4	1719		5	3.8	1.16	30.2	83.0	1.30	927.08

Agent		Soil Type	Gernada silt loam
Producer	WTREC	Tillage	No-till
Planting Date	5/25/2008	Prev. Crop	soybean
Defoliation Date	9/30/2008	Fertilizer	80-40-80
Harvest Date	10/9/2008	Row Spacing	38 inches

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.

REFERENCES CITED

USDA. 1997. Cotton Classification Results -- Understanding the Data. Agricultural Marketing Service, Cotton Div. Rev. 5/97. 12 pp.

USDA. 1999. The Classification of Cotton. Agricultural Marketing Service, Agric. Handbook 566. Rev. 1/99. Washington, DC. 23 pp.

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