



**ARKANSAS
COTTON
VARIETY TESTS**

2000

***N.R. Benson, F.M. Bourland, W.C. Robertson,
J.M. Hornbeck, and F. E. Groves***

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SUMMARY

The primary aim of the Arkansas Cotton Variety Test is to provide unbiased data regarding the agronomic performance of cotton varieties in the major cotton growing areas in Arkansas. This information helps seed dealers establish marketing strategies and assists producers in choosing varieties to plant. In this way, the annual test facilitates the inclusion of new, improved genetic material into Arkansas cotton production. To identify variety adaptation to different regions of the state, seed companies and public breeders entered varieties for testing in either northern locations (Keiser and Clarkedale), southern locations (Marianna and Rohwer), or both. The northern test had 29 main entries and 30 first-year entries, while the southern test had 32 main entries and 32 first-year entries. This report also includes the Mississippi County Variety Test (an on-farm evaluation of selected varieties) and on-farm variety trials conducted by the Cooperative Extension Service.

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UNIVERSITY OF ARKANSAS

DIVISION OF AGRICULTURE

Arkansas Cotton Variety Tests, 2000

*N.R. Benson, F.M. Bourland, W.C. Robertson,
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The purpose of the University of Arkansas Cotton Variety Test is to provide an unbiased comparison of cotton varieties. Information included is intended to facilitate variety selection by identifying the potential adaptability of varieties to particular cotton growing regions of the state. Bourland et al. (2000) documented several unintentional biases inherent to the Testing program. These include management associated with varieties expressing herbicide and insect resistance. The biases tend to cancel each other so that no great advantage is given to any particular variety. Recognizing the genetic differences among entries is the ultimate goal of the test; therefore, all varieties are treated the same way. No specialized production inputs were implemented with respect to genetically enhanced varieties. Roundup Ready® varieties, Buctril® tolerant varieties, *Bacillus thuringiensis* (*Bt*) varieties, and conventional varieties were all treated equally with respect to weed and insect control.

Cooperative efforts between the Arkansas Agricultural Experiment Station, the Cooperative Extension Service, and Arkansas cotton growers resulted in “systems”-type variety trials. Large, on-farm comparisons of genetically enhanced varieties were conducted across the state and provided the

flexibility to test varietal differences under Roundup Ready®, Bollgard®, and conventional systems for cotton production (see Appendix).

MATERIALS AND METHODS

The 2000 Arkansas Cotton Variety Test was conducted at the Northeast Research and Extension Center at Keiser; the Delta Branch Station at Clarkedale; the Cotton Branch Experiment Station at Marianna; and the Southeast Branch Experiment Station at Rohwer. A test with irrigation was conducted at each site, and a test without irrigation was conducted at Keiser and Marianna. One on-farm variety test was conducted in Mississippi County, located in northeast Arkansas.

Entries were separated into those tested for the first time (first-year entries) and those having been entered in the Arkansas Cotton Variety Test the preceding year. Additionally, varieties could be entered in north Arkansas locations (Keiser–irrigated, Keiser–non-irrigated, and Clarkedale–irrigated), south Arkansas locations (Marianna–irrigated, Marianna–non-irrigated, and Rohwer–irrigated), or all. All varieties were planted in two-row plots ranging in length from 40 to 50 ft. Varieties entered in the Mississippi County test were planted in six-row plots

running the full length of the field (approximately 1270 ft). Tests were arranged in a randomized complete block and replicated four times. Although exact inputs varied across locations, cultural inputs at each location were generally based on University of Arkansas Cooperative Extension Service recommendations for cotton production (Table 1). All plots were machine-harvested, and yield per acre was calculated and statistically analyzed.

Soil-crusting immediately following planting resulted in slow emergence at Clarkedale and poor stands in the non-irrigated test at Marianna. Additionally, high levels of boll weevil infestation were prevalent in one replication of the variety test at Clarkedale. Damage, however, appeared to be consistent across the entire replication and did not result in omitting any plots from analysis.

DATA COLLECTED

Leaf Pubescence: Once per season, visual estimates of leaf pubescence were made on 10 plants from each variety. Leaf pubescence data were collected from two of the four replications at each irrigated location except Clarkedale and included rating individual plants from 1 to 7 (1 = smooth and 7 = very hairy).

Maturity: Starting at approximately first flower, nodes above white flower (NAWF) values were collected from all varieties entered in an irrigated test in the north (Keiser) and an irrigated test in the south (Rohwer). NAWF values were collected approximately once per week until each variety had reached cutout (NAWF = 5). Maturity was determined using methods described by Bourland et al. (1991).

Plant Height: Plant height measurements were collected from each variety prior to harvest. Average plant height for varieties was determined by measuring from the soil surface to the terminal of one average-sized plant per plot.

Lint Percentage and Fiber Data: Prior to mechanical harvest, hand-harvested samples of 50 open bolls (25 from each of two rows) were obtained from two replications at each location. Hand-harvested samples were collected from all four replications of the on-farm test in Mississippi County. The 50 boll samples were ginned (lab gin without the use of lint

cleaners) to determine lint fraction (the proportion of lint to seedcotton). Fiber properties were determined using HVI classification.

Lint Yield: Seedcotton yield per plot was converted to seedcotton yield per acre and then multiplied by lint percentage (determined by variety and location) to estimate lint per acre.

Yield Comparison: Uncontrolled variation is inherent to collection of varietal performance data, particularly yield data. In addition to their genetic differences, variation among varieties may be due to slight differences in soil, pest, or climatic conditions within a field; various interactions with specific management; or random chance. Statistics allow users to define the degree of uncontrolled variation and to interpret data. The statistical tool used to compare means in these tests was Fisher's Protected Least Significant Difference Test (LSD). An LSD was calculated when the F value from analysis of variance was significant. Varietal yields are considered significantly different if the difference between the mean yields of two varieties is greater than the LSD value. Differences smaller than the LSD may have occurred by chance or because of uncontrolled variation and are therefore considered not significantly different.

Additional estimates of variation are provided by measures of R-squared and coefficient of variation (CV). R-squared (times 100) indicates the percentage of variation that is explained by defined sources of variation. Confidence in data increases as R-squared increases. Generally, the meaningfulness of difference among means is questionable when data have R-squared values of less than 50%. To a large extent, confidence in data becomes greater as CV declines. Since CV is a function of the mean of a parameter, R-squared is a better tool for comparing the precision of different experiments.

Environmental Conditions: Environmental conditions varied across the state (Table 2). Temperatures during the 2000 growing season were such that DD60 accumulations were greater than the historical average (30+ years) for north and central Arkansas, but they were similar to historical averages for south Arkansas. Although adequate early in the season, rainfall amounts across the state were extremely low during July and August.

RESULTS

Table 1

Tables 1 represents cultural inputs and production information for variety trials at Keiser (with and without irrigation), Clarkedale, Marianna (with and without irrigation), and Rohwer.

Table 2

Table 2 reports weather information for north, central, and south Arkansas during the 2000 growing season.

Tables 3–10

Tables 3–10 depict the results of the Arkansas Cotton Variety Test. Varieties listed in these tables were tested the previous year in Arkansas.

Tables 11–18

Tables 11–18 show the results of the first-year Arkansas Cotton Variety Test. Varieties listed in these tables have never been entered in the test.

Tables 19–22

Tables 19–22 show two and three means.

Table 23

Table 23 shows results of the Mississippi County On-arm Variety Test.

LITERATURE CITED

- Bourland, F.M., S.J. Stringer, and J.D. Halter. 1991. Maturity of cotton cultivars in Arkansas as determined by nodes above white bloom. pp. 560–563. *In Proc. Beltwide Cotton Production Res. Conf.*, San Antonio, TX. 8–12 Jan. 1991. National Cotton Council, Memphis, TN.
- Bourland, F.M., N.R. Benson, and W.C. Robertson. 2000. Inherent biases in the Arkansas cotton variety testing program. pp. 547–549. *In Proc. Beltwide Cotton Production Res. Conf.*, San Antonio, TX. 4–8 Jan. 2000. National Cotton Council, Memphis, TN.

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Table 1. Production inputs for locations in the 2000 Arkansas Cotton Variety Test.

Location	Planting Date	Fertilizer lb/a	Irrigation Dates	Defoliation Dates	Harvest Date
Keiser, irrigated	12-May	85-20-60	8-Jul	22-Sep	3-Oct
	14-Jul	26-Sep			
	27-Jul				
	8-Aug				
	16-Aug				
Keiser, non-irrigated	12-May	85-20-60	none	22-Sep	30-Sep
Clarkedale, irrigated	12-May	98-46-60	5-Jul	12-Sep	11-Oct
	12-Jul	18-Sep			
	18-Jul				
	25-Jul				
	1-Aug				
	8-Aug				
	15-Aug				
Marianna, irrigated	9-May	85-46-60	8-Jul	21-Sep	21-Oct
	15-Jul	3-Oct			
	25-Jul				
	30-Jul				
	10-Aug				
Marianna, non-irrigated	9-May	85-35-45	none	8-Sep	19-Oct
Rohwer, irrigated	110-30-80	10-Jul	13-Sep	28-Sep	
	19-Jul	21-Sep			
	29-Jul				
	7-Aug				
	17-Aug				
	21-Aug				

Table 2. Weather summary for the 2000 growing season in north, central, and south Arkansas.

Month	Keiser			Marianna			Rohwer		
	2000 DD60's	Historical Avg. ¹ DD60's	Rain in.	2000 DD60's	Historical Avg. DD60's	Rain in.	2000 DD60's	Historical Avg. DD60's	Rain in.
May	411	326	6.27	383	326	4.92	421	635	5.60
June	570	549	5.22	524	549	3.64	562	564	4.80
July	662	659	1.73	666	659	0.27	675	672	0.55
August	734	579	0.72	757	579	0.35	739	621	0.00
September	406	366	3.01	421	366	1.12	449	532	1.59
Total	2783	2479	16.95	2751	2479	10.3	2846	3024	12.54

Table 3. Results of the 2000 Arkansas Cotton Variety Test with irrigation on a Tunica silty clay soil at Keiser.

Variety	Lint yield		Lint fract.		Boll wt.		Leaf pub. ²		Plant ht.		Days to cutout ³		Fiber properties ⁴									
	lb/a	r ¹	%	r	g	r	r	cm	r	r	Mic	r	Len	r	Unif	r	Str	r	Elo	r		
FiberMax FM 958	1210	1	41.7	2	5.1	11	2.0	19	97	25	84	11	4.8	20	1.17	3	84.4	15	30.7	2	8.3	24
FiberMax FM 966	1203	2	39.9	9	6.8	1	2.3	16	93	27	81	19	4.6	25	1.15	5	84.3	17	33.2	1	8.2	28
NK 2108 ss	1137	3	39.5	14	5.0	14	1.8	23	99	24	80	21	4.7	23	1.10	16	83.3	29	27.4	21	8.9	13
Stoneville 4691 B	1132	4	41.3	4	5.2	6	4.7	4	108	12	86	5	4.9	12	1.11	12	84.1	23	28.2	17	8.7	18
Sure-Grow 215 B/R	1092	5	38.9	23	4.7	20	1.3	29	115	2	88	2	4.9	12	1.05	26	84.5	13	25.8	27	9.0	9
PhytoGen PSC 355	1086	6	39.5	14	4.5	26	4.2	7	104	17	83	12	4.8	18	1.11	11	84.8	5	29.2	11	9.4	3
Sure-Grow 105	1079	7	39.7	12	4.9	17	1.7	25	101	22	79	25	5.1	2	1.10	16	84.7	7	29.0	14	9.2	8
ARK 8712	1075	8	39.2	18	4.5	24	2.4	14	105	16	79	23	5.0	7	1.12	8	84.9	3	29.4	10	9.0	11
Sure-Grow 747	1050	9	39.8	11	5.1	10	1.8	24	107	13	79	27	5.0	7	1.11	12	85.7	1	26.8	22	9.3	5
Deltapine 388	1050	9	38.9	22	4.4	28	3.5	8	93	26	75	29	4.6	24	1.07	22	84.1	20	29.0	13	9.3	4
Stoneville BXN 47	1050	11	40.4	6	5.0	15	4.4	6	101	20	82	17	5.1	4	1.11	12	83.8	25	28.2	18	8.6	21
FiberMax FM 819	1047	12	42.3	1	3.7	29	2.4	13	106	14	88	1	4.5	26	1.18	2	84.6	9	29.8	6	8.3	24
FiberMax FM 989	1045	13	39.2	18	5.3	5	1.6	27	114	4	85	10	4.2	29	1.13	6	84.2	18	28.9	15	8.1	29
Germaines 106	1045	13	39.2	18	4.5	24	6.2	1	105	15	82	17	4.5	27	1.11	12	84.1	20	27.7	19	9.5	2
Stoneville 474	1039	15	41.4	3	5.0	16	4.5	5	134	1	87	4	5.3	1	1.07	22	84.6	9	29.5	8	8.9	13
Stoneville ST 4793 R	1020	16	40.3	7	5.7	2	5.5	3	114	5	83	15	5.1	4	1.04	27	83.5	28	29.5	8	8.7	18
Germaines 108	1009	17	41.0	5	5.0	13	2.7	10	109	10	82	16	4.7	22	1.12	8	84.6	9	29.1	12	9.0	9
Paymaster 1199 RR	1001	18	39.9	10	5.1	12	3.2	9	90	29	79	24	5.1	2	1.07	22	84.8	4	29.6	7	8.6	21
Paymaster 1218 BG/RR	999	19	39.3	16	5.2	7	2.5	12	104	17	83	12	5.0	11	1.10	16	84.2	18	26.3	25	8.8	15
Stoneville 4892 BR	997	20	39.6	13	5.4	4	5.8	2	114	3	87	3	5.0	7	1.08	21	84.5	14	28.7	16	8.8	16
Sure-Grow 501 B/R	973	21	39.1	21	4.9	18	2.1	17	113	6	79	22	5.1	4	1.06	25	83.8	25	30.2	5	9.3	5
FiberMax FM 832	968	22	39.2	17	5.6	3	2.4	15	104	17	83	14	4.4	28	1.18	1	85.6	2	30.5	3	8.3	24
Garst/AgriPro AP 7115	932	23	38.5	24	5.1	9	2.1	18	110	9	85	8	4.9	15	1.10	19	83.6	27	27.5	20	8.9	12
Deltapine 425 RR	903	24	37.4	25	4.4	27	1.9	21	111	8	79	25	5.0	7	1.10	19	83.9	24	25.2	29	8.4	23
Sure-Grow 125 B/R	900	25	37.1	27	4.6	22	2.6	11	113	7	86	6	4.8	20	1.04	27	84.1	20	26.5	24	8.8	16
Sure-Grow 125 RR	900	25	40.0	8	4.6	21	1.5	28	109	10	85	9	4.9	15	1.02	29	84.6	12	26.7	23	9.3	5
Phytogen GA 161	875	27	37.4	26	5.1	8	1.9	20	91	28	80	20	4.8	18	1.16	4	84.7	6	30.4	4	8.7	18
Deltapine 451 B/RR	870	28	36.2	28	4.7	19	1.7	25	101	21	85	7	4.9	15	1.12	8	84.4	15	25.8	26	8.3	24
Deltapine 436 RR	850	29	34.5	29	4.6	22	1.8	22	100	23	78	28	4.9	12	1.13	7	84.7	7	25.7	28	9.6	1
LSD 0.10	105		1.2		ns		1.2		ns		ns		0.3	0.04		ns		1.6		0.4		
Mean	1018		39.3		5		2.8		106		82.4		4.8	1.10		84.4		28.4		8.8		
C.V. (%)	9		1.8		13.5		24.5		17		5.6		3.9	2.12		0.7		3.3		2.7		
R-squared x 100	71		92.1		57.1		89.0		33		51.4		77.4	87.30		64.4		88.4		85.6		

¹ r = ranking.² Leaf pubescence is mean of 10 plants/plot rated from 1 (smooth leaf) to 7 (very hairy).³ Cutout = days from planting to NAWF = 5.⁴ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 4. Results of the 2000 Cotton Variety Test without irrigation on a Tunica silty clay soil at Keiser.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Boll wt. g	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
									Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
Paymaster 1218 BG/RR	816	1	41.0	7	4.6	1	76	3	4.8	20	1.13	13	84.4	15	30.7	2	8.3	24
FiberMax FM 832	801	2	40.8	8	4.4	9	81	1	4.6	25	1.19	1	84.3	17	33.2	1	8.2	28
Germaines 108	787	3	41.1	6	4.5	6	75	4	4.7	23	1.18	4	83.3	29	27.4	21	8.9	13
Paymaster 1199 RR	785	4	39.8	11	4.4	7	73	7	4.9	12	1.08	24	84.1	23	28.2	17	8.7	18
FiberMax FM 958	759	5	41.8	3	4.6	1	59	29	4.9	12	1.14	9	84.5	13	25.8	27	9.0	9
NK 2108 ss	753	6	39.0	15	4.6	4	69	15	4.8	18	1.11	18	84.8	5	29.2	11	9.4	3
PhytoGen PSC 355	750	7	39.9	10	3.8	24	68	17	5.1	2	1.11	19	84.7	7	29.0	14	9.2	8
Deltapine 388	747	8	38.5	19	3.3	29	67	18	5.0	7	1.12	16	84.9	3	29.4	10	9.0	11
FiberMax FM 966	733	9	40.6	9	4.6	3	66	23	5.0	7	1.16	7	85.7	1	26.8	22	9.3	5
FiberMax FM 819	721	10	41.7	4	3.7	27	66	21	4.6	24	1.18	2	84.1	20	29.0	13	9.3	4
Stoneville ST 4793 R	710	11	42.7	1	4.5	5	78	2	5.1	4	1.08	24	83.8	25	28.2	18	8.6	21
ARK 8712	701	12	37.5	22	4.1	19	73	8	4.5	26	1.18	2	84.6	9	29.8	6	8.3	24
Stoneville 4892 BR	694	13	41.9	2	4.3	11	65	24	4.2	29	1.09	21	84.2	18	28.9	15	8.1	29
FiberMax FM 989	688	14	38.6	18	3.8	23	73	6	4.5	27	1.15	8	84.1	20	27.7	19	9.5	2
Sure-Grow 105	683	15	38.4	20	4.4	7	68	16	5.3	1	1.13	10	84.6	9	29.5	8	8.9	13
Germaines 106	625	16	37.4	23	3.7	25	71	12	5.1	4	1.12	17	83.5	28	29.5	8	8.7	18
Sure-Grow 747	611	17	39.6	13	4.0	20	70	14	4.7	22	1.13	10	84.6	9	29.1	12	9.0	9
Sure-Grow 125 B/R	610	18	35.7	26	4.1	16	74	5	5.1	2	1.09	23	84.8	4	29.6	7	8.6	21
Stoneville 474	607	19	41.7	5	3.5	28	72	11	5.0	11	1.08	27	84.2	18	26.3	25	8.8	15
Stoneville 4691 B	606	20	38.8	17	4.3	13	73	8	5.0	7	1.11	20	84.5	14	28.7	16	8.8	16
Sure-Grow 125 RR	606	20	39.8	12	4.1	17	66	21	5.1	4	1.08	24	83.8	25	30.2	5	9.3	5
Sure-Grow 215 B/R	603	22	37.6	21	4.2	15	63	25	4.4	28	1.05	29	85.6	2	30.5	3	8.3	24
Deltapine 451 B/RR	601	23	34.8	27	4.1	18	62	27	4.9	15	1.13	10	83.6	27	27.5	20	8.9	12
Deltapine 436 RR	595	24	32.6	29	4.4	9	67	18	5.0	7	1.17	6	83.9	24	25.2	29	8.4	23
Garst/AgriPro AP 7115	586	25	38.9	16	4.3	14	60	28	4.8	20	1.13	13	84.1	20	26.5	24	8.8	16
Stoneville BXN 47	585	26	39.2	14	3.7	25	73	10	4.9	15	1.09	21	84.6	12	26.7	23	9.3	5
Deltapine 425 RR	569	27	33.7	28	3.9	22	63	26	4.8	18	1.13	13	84.7	6	30.4	4	8.7	18
Sure-Grow 501 B/R	560	28	37.0	25	4.3	12	67	20	4.9	15	1.07	28	84.4	15	25.8	26	8.3	24
Phytogen GA 161	559	29	37.0	24	4.0	21	71	12	4.9	12	1.17	5	84.7	7	25.7	28	9.6	1
LSD 0.10	137		2.1		ns		10		0.4		0.04		1.3		1.2		0.3	
Mean	671		38.9		4.1		69		4.6		1.12		84.0		29.6		8.6	
C.V. (%)	17		3.2		10.1		13		5.7		2.10		0.9		2.3		2.3	
R-squared x 100	60		88.8		63.5		46		78		84.63		62.2		92.8		9.0	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 5. Results of the 2000 Cotton Variety Test with irrigation on a Dundee silt loam soil at Clarkedale.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Boll wt. g	<i>r</i>	Fiber properties ²									
							Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
Sure-Grow 105	1173	1	39.2	9	5.0	24	4.6	6	1.12	9	84.4	10	28.8	9	8.4	16
FiberMax FM 966	1139	2	39.3	7	6.5	4	4.3	18	1.15	3	84.8	5	30.6	2	7.9	28
FiberMax FM 958	1107	3	38.3	15	6.6	3	4.1	22	1.13	6	83.4	27	29.7	5	8.1	27
Paymaster 1199 RR	1104	4	40.2	4	5.3	16	4.8	1	1.10	15	84.9	4	27.7	17	8.5	14
PhytoGen PSC 355	1099	5	38.4	14	5.4	14	4.3	14	1.11	13	83.8	20	27.9	15	9.0	5
Sure-Grow 747	1030	6	41.1	1	5.5	13	4.6	4	1.09	17	84.9	3	26.2	29	8.8	7
Sure-Grow 215 B/R	1023	7	38.0	19	6.7	2	4.4	12	1.06	26	84.3	12	26.8	25	8.8	10
Stoneville 4691 B	1007	8	39.6	5	5.9	8	4.4	9	1.10	15	84.3	12	27.2	23	8.3	17
Stoneville ST 4793 R	997	9	39.1	10	5.3	16	4.3	16	1.05	28	83.8	20	28.1	12	8.3	17
Deltapine 388	995	10	38.3	17	4.1	29	3.8	27	1.10	14	84.3	11	29.3	7	8.8	7
ARK 8712	987	11	37.1	23	6.3	5	4.6	4	1.16	2	86.1	1	28.2	11	8.8	7
FiberMax FM 832	982	12	37.2	22	7.2	1	3.7	29	1.20	1	85.3	2	29.4	6	8.2	24
Garst/AgriPro AP 7115	978	13	38.3	16	4.8	26	4.1	26	1.09	17	82.8	29	26.5	27	8.2	24
Stoneville 474	977	14	40.5	2	6.1	6	4.7	3	1.06	25	84.1	15	27.7	17	8.8	10
Stoneville BXN 47	976	15	40.2	3	4.8	27	4.4	9	1.08	21	83.9	18	27.4	20	8.2	24
Paymaster 1218 BG/RR	975	16	39.6	6	5.8	9	4.8	2	1.09	17	83.8	20	26.6	26	8.9	6
Stoneville 4892 BR	972	17	39.3	8	5.6	12	4.6	6	1.06	26	82.9	28	28.5	10	8.3	17
Sure-Grow 501 B/R	971	18	38.7	13	5.8	10	4.3	14	1.07	24	84.8	7	30.8	1	9.2	3
Phytogen GA 161	953	19	35.9	26	5.2	18	4.2	19	1.14	4	84.0	16	30.0	4	8.3	17
Sure-Grow 125 RR	947	20	37.8	20	5.3	15	4.4	9	1.05	28	84.5	9	27.8	16	9.2	2
Sure-Grow 125 B/R	944	21	36.0	25	4.9	25	4.1	25	1.08	20	84.2	14	28.0	14	9.1	4
FiberMax FM 989	941	22	36.7	24	5.2	20	4.1	22	1.11	11	84.7	8	30.1	3	8.3	17
Deltapine 451 B/RR	933	23	34.9	28	5.8	10	4.5	8	1.11	11	83.9	18	26.2	28	8.3	17
Deltapine 425 RR	927	24	35.1	27	5.1	23	4.4	12	1.08	21	83.5	24	27.5	19	8.3	17
FiberMax FM 819	917	25	38.9	12	4.2	28	3.8	28	1.13	5	83.7	23	29.0	8	7.8	29
Deltapine 436 RR	909	26	34.4	29	5.1	21	4.3	16	1.12	7	83.5	24	27.3	21	8.8	10
Germaines 106	878	27	38.1	18	5.1	22	4.1	22	1.12	9	84.8	6	28.1	12	9.3	1
NK 2108 ss	842	28	37.5	21	6.0	7	4.2	21	1.08	21	83.5	26	26.9	24	8.6	13
Germaines 108	731	29	39	11	5.2	18	4.2	19	1.12	7	84.0	16	27.3	21	8.5	14
LSD 0.10	121		1.4		1.2		0.4		0.04		1.3		1.5		0.4	
Mean	980		38.2		5.5		4.3		1.10		84.1		28.1		8.5	
C.V. (%)	11		2.2		12.8		4.9		2.11		0.9		3.2		2.9	
R-squared x 100	52		89.2		67.3		81.5		82.41		62.9		80.5		83.2	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 6. Results of the 2000 Arkansas Cotton Variety Test across northern locations.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Boll wt. g	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
									Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
FiberMax FM 958	1025	1	40.6	4	5.4	3	78	29	4.5	21	1.15	6	83.7	26	30.2	6	8.1	28
FiberMax FM 966	1025	2	39.9	9	5.9	1	79	28	4.5	21	1.15	4	84.4	7	32.6	1	8.0	29
PhytoGen PSC 355	978	3	39.3	13	4.5	24	86	19	4.6	17	1.11	13	84.3	14	29.2	12	9.3	2
Sure-Grow 105	978	4	39.1	15	4.8	18	84	21	4.8	6	1.12	11	84.6	4	29.6	10	8.8	10
Paymaster 1199 RR	963	5	40.0	8	4.9	13	82	24	4.9	1	1.08	22	84.5	5	29.3	11	8.6	18
Deltapine 388	931	6	38.5	18	3.9	28	80	27	4.3	26	1.10	19	84.3	13	29.6	8	9.1	5
Paymaster 1218 BG/RR	930	7	39.9	10	5.2	4	90	8	4.9	4	1.10	15	84.0	21	27.1	24	8.8	10
ARK 8712	921	8	37.9	24	4.9	11	89	12	4.6	14	1.15	4	85.4	1	29.6	9	8.9	9
FiberMax FM 832	917	9	39.1	16	5.7	2	93	5	4.0	29	1.19	1	85.3	2	30.3	5	8.2	26
Stoneville 4691 B	915	10	39.9	12	5.1	8	90	7	4.7	11	1.10	16	84.2	17	28.0	19	8.5	20
NK 2108 ss	911	11	38.7	17	5.2	6	84	22	4.3	24	1.10	20	83.3	27	27.4	22	8.6	17
Stoneville ST 4793 R	909	12	40.7	3	5.1	7	96	2	4.9	3	1.06	27	83.9	23	28.8	14	8.7	14
Sure-Grow 215 B/R	906	13	38.2	22	5.2	5	89	11	4.6	15	1.05	29	84.1	18	27.0	25	8.8	13
Sure-Grow 747	897	14	40.2	7	4.9	14	88	13	4.8	7	1.11	14	84.9	3	27.0	26	9.2	3
FiberMax FM 819	895	15	41.0	2	3.9	29	86	18	4.3	27	1.16	2	84.3	14	30.1	7	8.2	27
FiberMax FM 989	891	16	38.2	23	4.8	19	94	3	4.3	25	1.13	9	84.3	10	30.4	3	8.2	25
Stoneville 4892 BR	887	17	40.3	6	5.1	9	90	10	4.9	2	1.08	23	83.7	25	29.1	13	8.6	16
Stoneville 474	874	18	41.2	1	4.8	16	103	1	4.8	5	1.07	24	84.0	19	28.8	15	8.7	15
Stoneville BXN 47	870	19	39.9	11	4.5	25	87	16	4.6	13	1.09	21	83.8	24	28.2	18	8.4	23
Germaines 106	849	20	38.2	21	4.4	27	88	14	4.2	28	1.11	12	84.3	9	28.2	17	9.1	5
Germaines 108	842	21	40.3	5	4.9	12	92	6	4.5	19	1.14	7	84.5	5	28.5	16	8.8	10
Sure-Grow 501 B/R	835	22	38.3	20	5.0	10	90	9	4.7	8	1.07	26	84.4	8	30.9	2	9.3	1
Garst/AgriPro AP 7115	832	23	38.5	19	4.7	20	85	20	4.5	19	1.10	16	83.2	29	27.3	23	8.5	19
Sure-Grow 125 B/R	818	24	36.3	26	4.6	23	93	4	4.5	18	1.07	24	84.2	16	27.8	20	9.0	8
Sure-Grow 125 RR	818	25	39.2	14	4.7	22	88	15	4.7	12	1.05	28	83.9	22	27.7	21	9.1	4
Deltapine 451 B/RR	801	26	35.3	28	4.9	15	81	25	4.7	9	1.12	10	84.3	11	26.5	28	8.4	22
Deltapine 425 RR	799	27	35.4	27	4.5	26	87	17	4.6	16	1.10	18	83.3	28	26.5	27	8.3	24
Phytogen GA 161	796	28	36.7	25	4.8	17	81	26	4.4	23	1.16	3	84.0	19	30.3	4	8.4	21
Deltapine 436 RR	785	29	33.8	29	4.7	21	84	23	4.7	10	1.14	8	84.3	12	26.5	29	9.0	7
LSD 0.10	70		0.9		0.6		11		0.2		0.02		0.7		0.8		0.2	
Keiser, Irrigated	1018		39.3		5.0		106		4.8		1.10		84.4		28.4		8.8	
Keiser, non-irrigated	671		38.9		4.1		69		4.6		1.12		84.0		29.6		8.6	
Clarkedale, Irrigated	980		38.2		5.5		-		4.3		1.10		84.1		28.1		8.5	
Mean	890		38.8		4.9		87		4.6		1.11		84.2		28.7		8.7	
LSD 0.10	104		0.6		0.4		8		0.4		ns		ns		0.9		0.2	
C.V. (%)	12		2.5		12.6		16		4.8		2.11		0.9		3.0		2.6	
R-squared x 100	82		90.1		77.4		75		85.2		85.82		64.1		89.7		87.4	
Prob. (Variety X Location)	<0.01		<0.01		0.7		0.4		0.07		0.72		0.6		0.06		<0.01	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 7. Results of the 2000 Cotton Variety Test with irrigation on a Calloway silt loam soil at Marianna.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Leaf pub. ²	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ³									
									Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
FiberMax FM 958	1686	1	39.8	6	2.5	11	107	21	4.7	25	1.17	3	84.9	4	28.2	15	8.2	31
Germaines 108	1630	2	39.9	5	3.1	8	122	2	4.8	20	1.15	7	83.8	19	29.7	5	8.9	14
Sure-Grow 747	1614	3	42.3	1	1.4	30	97	31	5.4	1	1.09	26	84.1	16	25.7	28	9.1	8
Stoneville ST 4793 R	1613	4	42.0	2	4.8	1	115	6	5.1	13	1.08	29	83.0	30	28.4	13	8.9	13
PhytoGen PSC 355	1597	5	39.4	11	3.2	6	115	7	5.0	17	1.10	20	84.7	5	29.5	6	9.5	1
FiberMax FM 966	1580	6	38.2	19	1.6	26	107	20	4.6	28	1.15	5	84.9	3	32.8	1	8.2	31
Sure-Grow 105	1536	7	38.8	15	2.1	18	100	27	5.3	5	1.13	13	84.5	9	28.7	12	9.1	7
Stoneville 4691 B	1528	8	39.5	9	4.7	2	114	8	5.3	5	1.11	17	84.1	15	27.3	21	8.9	14
Stoneville 474	1526	9	40.6	4	3.3	4	117	5	5.4	1	1.10	22	83.8	21	28.1	17	8.8	17
Stoneville 4892 BR	1522	10	41.4	3	3.7	3	114	8	5.2	9	1.08	29	84.6	7	28.1	16	9.1	8
Stoneville BXN 47	1511	11	39.8	7	3.3	5	123	1	5.3	7	1.12	16	83.5	26	27.5	20	8.7	20
Deltapine 388	1502	12	39.0	14	2.8	10	101	25	4.8	21	1.10	22	84.2	14	28.9	9	8.9	14
Deltapine 20 B	1497	13	38.6	16	2.3	14	105	23	5.0	17	1.11	17	84.5	9	25.3	31	9.2	3
Sure-Grow 215 B/R	1479	14	37.8	22	1.4	31	112	13	5.4	3	1.06	32	82.6	32	25.9	26	8.9	11
Paymaster 1560 BG	1464	15	39.1	13	2.1	18	109	17	5.0	17	1.11	17	83.5	25	26.5	24	9.2	3
Deltapine 428 B	1463	16	36.6	27	1.5	28	113	11	5.2	10	1.13	12	83.7	24	25.4	29	8.3	26
FiberMax FM 832	1457	17	36.4	29	2.0	20	111	15	4.2	31	1.23	1	85.8	1	30.7	3	8.4	25
ARK 8712	1455	18	37.2	25	2.4	12	112	14	5.2	10	1.14	9	84.6	8	28.8	11	9.0	10
Paymaster 1218 BG/RR	1440	19	39.4	10	2.2	15	109	18	5.3	7	1.10	22	83.8	19	26.1	25	8.7	21
NK 2108 ss	1397	20	39.2	12	1.7	22	94	32	4.5	29	1.10	22	83.3	27	27.3	21	8.6	22
FiberMax FM 989	1392	21	38.0	21	2.0	21	99	29	4.6	27	1.15	7	83.8	21	31.3	2	8.3	26
Sure-Grow 501 B/R	1383	22	38.1	20	1.6	27	113	10	5.2	10	1.07	31	83.9	18	28.8	10	9.2	5
Germaines 106	1374	23	38.4	18	3.2	6	100	27	4.8	21	1.15	5	84.3	13	28.3	14	9.5	1
Deltapine 436 RR	1361	24	33.0	31	1.4	31	99	30	5.1	16	1.14	10	84.5	11	25.4	29	8.8	17
FiberMax FM 819	1360	25	38.6	16	1.7	25	107	22	4.2	31	1.17	3	85.0	2	29.4	7	8.3	30
Paymaster 1199 RR	1349	26	37.7	23	2.4	13	100	26	5.4	3	1.10	20	84.7	5	29.4	7	8.8	17
Sure-Grow 125 B/R	1303	27	37.1	26	1.7	22	118	3	5.1	13	1.09	26	83.0	30	27.9	18	8.9	12
Paymaster 1560 B/R	1296	28	39.7	8	3.0	9	117	4	4.8	21	1.12	15	83.1	29	27.1	23	8.3	26
Phytogen GA 161	1268	29	36.6	28	2.1	17	113	12	4.7	26	1.18	2	84.0	17	30.3	4	8.5	23
Deltapine NuCotn 33B	1249	30	37.3	24	2.2	15	111	16	4.4	30	1.14	11	84.4	12	27.9	18	8.3	26
Deltapine 451 B/RR	1248	31	32.3	32	1.5	28	103	24	5.1	13	1.13	13	83.2	28	25.3	32	8.5	23
Deltapine 422 B/RR	1197	32	35.7	30	1.7	22	108	19	4.8	21	1.09	26	83.8	21	25.8	27	9.1	6
LSD 0.10	125		2.0		0.9		10		0.3		0.04		ns		1.7		0.4	
Mean	1446		38.3		2.4		109		4.9		1.12		84.0		28.0		8.7	
C.V. (%)	7		3.0		21.8		8		3.4		1.98		1.0		3.5		2.9	
R-squared X 100	72		88.0		86.6		54		90.9		84.73		59.9		88.7		80.9	

¹ *r* = ranking.² Leaf pubescence is mean of 10 plants/plot rated from 1 (smooth leaf) to 7 (very hairy).³ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 8. Results of the 2000 Cotton Variety Test without irrigation on a mixed Calloway, Loring and Memphis silt loam soil at Marianna.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Boll wt. g	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
									Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
Sure-Grow 501 B/R	359	1	38.3	8	5.2	7	70	11	4.8	8	1.06	19	84.4	2	29.5	7	8.8	4
Deltapine 20 B	354	2	37.3	17	5.0	9	66	22	4.7	10	1.03	27	82.3	27	26.9	19	8.6	7
Sure-Grow 215 B/R	336	3	38.5	7	3.7	22	70	9	5.2	1	1.05	20	83.8	6	26.6	21	8.5	9
Deltapine 388	334	4	37.7	13	3.9	21	63	29	4.9	6	1.01	30	82.1	29	28.9	9	9.1	1
Sure-Grow 105	332	5	36.1	20	4.8	11	60	30	5.0	3	1.09	8	84.7	1	27.9	14	8.6	6
Paymaster 1199 RR	324	6	38.7	3	4.2	14	71	4	5.1	2	1.01	31	83.1	20	28.1	13	8.4	12
Paymaster 1218 BG/RR	321	7	38.7	3	4.3	13	75	1	4.6	14	1.03	27	82.8	23	26.5	22	8.0	20
PhytoGen PSC 355	308	8	38.6	5	3.7	22	71	7	4.8	9	1.04	23	84.1	4	29.4	8	9.0	2
Deltapine 451 B/RR	307	9	33.7	31	4.0	19	64	27	4.9	6	1.08	11	83.1	18	26.5	24	8.2	15
Deltapine 436 RR	303	10	33.2	32	7.0	2	63	28	4.5	21	1.04	23	82.9	21	26.5	22	8.1	17
Deltapine 428 B	303	11	35.1	26	4.0	18	69	13	4.5	18	1.07	12	81.9	31	24.3	32	7.3	28
Sure-Grow 125 B/R	302	12	36.6	19	4.1	16	70	12	4.5	18	1.04	23	83.3	16	27.1	17	8.3	14
Deltapine 422 B/RR	301	13	35.3	24	9.3	1	66	21	4.1	29	1.06	17	82.4	24	25.6	28	8.1	17
Germaines 108	299	14	37.8	12	5.6	5	72	2	4.4	22	1.09	6	83.7	7	28.4	12	8.5	11
Sure-Grow 747	277	15	38.9	2	5.2	8	70	9	4.7	10	1.05	20	83.5	10	26.5	24	8.6	7
NK 2108 ss	273	16	35.7	23	4.8	11	59	31	4.1	29	1.00	32	81.4	32	25.7	27	7.1	30
FiberMax FM 966	271	17	37.7	13	4.1	16	66	20	4.4	23	1.09	6	83.6	9	30.4	1	7.2	29
Stoneville 474	268	18	37.4	16	3.5	27	67	18	4.4	23	1.05	22	83.4	14	25.1	31	7.0	31
ARK 8712	265	19	35.2	25	3.7	25	72	3	4.5	20	1.12	2	83.7	7	29.8	4	8.5	9
Paymaster 1560 BG	262	20	37.1	18	4.0	19	66	22	5.0	4	1.06	17	83.5	13	30.4	1	8.7	5
Germaines 106	249	21	37.7	15	3.6	26	69	14	4.2	26	1.09	8	83.5	10	28.6	10	8.9	3
Stoneville 4892 BR	245	22	38.1	10	6.3	4	67	18	4.9	5	1.04	23	82.4	24	25.8	26	8.1	16
Phytogen GA 161	241	23	34.7	28	6.7	3	71	7	4.1	27	1.13	1	83.4	14	29.8	6	8.0	20
FiberMax FM 958	237	24	34.9	27	3.1	32	65	25	4.6	17	1.11	4	83.3	17	27.8	16	7.6	25
FiberMax FM 989	235	25	35.9	21	3.7	22	58	32	4.3	25	1.07	12	82.1	29	29.8	4	8.0	20
FiberMax FM 819	235	25	38.5	6	3.5	27	65	24	4.6	16	1.12	3	84.3	3	30.3	3	8.1	17
Stoneville BXN 47	215	27	38.2	9	3.2	31	67	16	4.6	14	1.07	15	84.0	5	25.4	29	7.7	24
Stoneville 4691 B	215	27	37.9	11	3.5	27	71	4	4.0	32	1.07	12	82.4	26	25.3	30	6.8	32
Paymaster 1560 B/R	201	29	35.9	21	4.2	15	71	4	4.1	29	1.07	15	82.8	22	26.7	20	7.5	27
FiberMax FM 832	199	30	33.8	29	5.3	6	68	15	4.1	27	1.10	5	82.3	28	28.6	11	7.5	26
Stoneville ST 4793 R	181	31	39.0	1	3.5	30	67	16	4.7	13	1.03	27	83.5	10	27.1	18	8.0	20
Deltapine NuCotn 33B	175	32	33.7	30	5.0	10	65	25	4.7	10	1.08	10	83.1	18	27.9	14	8.3	13
LSD 0.10	69		2.2		ns		6		0.5		0.05		1.5		1.8		0.6	
Mean	273		36.7		4.5		67		4.5		1.06		83.1		27.6		8.1	
C.V. (%)	22		3.6		35.7		8		6.7		2.87		1.0		3.8		4.5	
R-squared x 100	85		82.3		60.2		67		79.5		71.47		62.9		85.4		85.4	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 9. Results of the 2000 Cotton Variety Test with irrigation on a Desha silt loam soil at Rohwer.

Variety	Lint	Lint	Boll	Leaf	Days to	Fiber Properties ⁴														
	yield	r ¹	fract.	r	wt.	r	pub. ²	r	cutout ³	r	Mic	r	Len	r	Unif	r	Str	r	Elo	r
	lb/a		%		g															
Deltapine 20 B	1476	1	39.5	15	4.9	3	2.0	25	71.8	17	4.8	18	1.12	20	84.0	20	27.6	22	9.2	3
PhytoGen PSC 355	1417	2	39.7	11	4.7	8	4.3	11	70.8	19	4.7	24	1.14	11	85.1	6	30.5	5	9.5	1
Stoneville 4691 B	1396	3	40.9	5	3.8	19	4.7	9	71.9	16	5.0	14	1.14	12	84.3	18	27.0	27	8.6	22
FiberMax FM 966	1389	4	39.7	11	3.6	26	2.0	25	75.6	3	4.5	28	1.17	6	85.5	2	34.0	1	8.3	28
Stoneville BXN 47	1363	5	41.1	3	3.1	31	5.0	6	73.3	8	5.0	14	1.13	18	85.1	5	28.1	20	9.0	7
Germaines 106	1350	6	40.0	10	4.9	4	5.9	1	72.2	15	4.5	28	1.13	15	84.4	16	27.8	21	9.0	7
Stoneville 4892 BR	1347	7	41.0	4	3.7	25	5.6	3	72.5	11	5.1	12	1.11	25	85.0	7	28.9	13	8.8	16
Deltapine NuCotn 33B	1346	8	38.3	21	3.2	29	2.5	18	72.6	10	4.7	23	1.16	8	83.9	25	27.6	23	8.7	18
FiberMax FM 958	1283	9	40.1	9	3.8	19	2.9	15	70.4	21	4.8	18	1.16	8	84.0	20	29.9	10	8.1	32
Stoneville 474	1277	10	41.6	1	4.1	16	4.9	7	72.4	13	5.0	13	1.11	22	84.3	17	28.5	18	8.8	15
Sure-Grow 105	1269	11	38.1	24	4.6	10	2.5	19	70.0	22	5.4	2	1.13	15	84.2	19	28.9	12	8.9	12
FiberMax FM 819	1252	12	40.8	7	3.1	30	1.9	28	76.8	2	4.7	24	1.19	3	85.5	2	31.0	4	8.3	28
Paymaster 1218 BG/RR	1252	13	39.6	13	3.8	19	3.1	13	69.2	26	5.3	5	1.06	32	82.2	32	27.3	24	8.6	20
Sure-Grow 747	1216	14	41.2	2	4.5	15	2.7	17	68.0	30	5.7	1	1.11	25	85.0	7	26.8	28	9.1	5
Deltapine 451 B/RR	1215	15	36.1	30	3.7	24	2.1	22	68.7	27	5.1	7	1.16	8	84.9	12	27.3	24	8.6	22
Stoneville ST 4793 R	1210	16	40.7	8	3.0	32	5.8	2	74.7	5	5.0	14	1.08	30	83.5	26	28.8	14	8.6	20
Deltapine 388	1206	17	39.1	18	4.1	17	4.8	8	67.2	31	5.3	4	1.07	31	82.8	31	28.8	14	9.0	10
FiberMax FM 832	1203	18	38.2	22	5.4	1	2.9	16	78.3	1	4.3	32	1.23	1	85.0	9	32.3	3	8.3	28
ARK 8712	1195	19	37.9	26	4.7	9	3.1	14	69.3	25	5.1	7	1.17	6	86.0	1	30.0	8	9.0	7
Germaines 108	1194	20	38.5	20	3.4	27	5.0	5	72.5	11	4.6	27	1.18	4	83.5	27	28.8	14	8.9	14
Sure-Grow 125 B/R	1194	21	38.7	19	3.8	19	2.3	21	74.6	6	4.8	18	1.11	25	83.4	29	26.8	28	8.7	18
Deltapine 428 B	1193	22	35.7	32	4.8	6	1.6	30	72.2	14	5.1	7	1.13	15	84.0	23	26.0	32	8.3	28
Paymaster 1560 BG	1192	23	39.1	17	3.3	28	3.6	12	69.8	24	5.1	7	1.11	22	84.0	24	30.0	9	8.9	12
Deltapine 422 B/RR	1184	24	38.0	25	4.8	6	2.1	23	69.9	23	4.8	18	1.14	12	84.0	20	26.7	30	9.3	2
Deltapine 436 RR	1182	25	36.1	30	4.6	10	1.9	27	68.5	29	5.1	7	1.13	18	85.0	9	27.0	26	9.1	6
Sure-Grow 215 B/R	1182	25	38.2	22	3.8	19	1.5	32	70.7	20	5.0	14	1.09	29	84.6	15	26.3	31	9.0	10
Sure-Grow 501 B/R	1136	27	39.1	16	4.6	10	2.5	19	71.6	18	5.2	6	1.11	22	84.9	11	30.1	7	9.2	4
Paymaster 1199 RR	1135	28	40.9	5	4.8	5	4.4	10	65.2	32	5.4	2	1.10	28	85.2	4	28.6	17	8.6	22
NK 2108 ss	1122	29	37.9	27	5.2	2	2.1	24	73.5	7	4.4	31	1.12	21	83.1	30	28.5	18	8.5	25
Phytogen GA 161	1101	30	36.9	29	4.6	10	1.6	30	68.6	28	4.5	28	1.20	2	84.8	13	30.4	6	8.4	26
Paymaster 1560 B/R	1060	31	39.6	13	4.6	10	5.6	4	75.6	3	4.7	24	1.14	12	83.4	28	29.1	11	8.8	16
FiberMax FM 989	1038	32	37.6	28	3.8	18	1.7	29	72.8	9	4.7	22	1.18	4	84.7	14	32.9	2	8.4	26
LSD 0.10	128		2.3		ns		1.1		3.8		0.3		0.03		1.3		1.4		0.3	
Mean	1237		39.0		4.1		3.2		71.6		4.9		1.13		84.3		28.8		8.8	
C.V. (%)	9		3.4		19.3		19.4		3.1		4.1		1.67		0.9		2.9		2.2	
R-squared x 100	62		74.0		72.7		91.5		78.0		83.9		89.34		72.2		91.6		86.0	

¹ r = ranking.² Leaf pubescence is mean of 10 plants/plot rated from 1 (smooth leaf) to 7 (very hairy).³ Cutout = days from planting to NAWF = 5.⁴ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 10. Results of the 2000 Cotton Variety Test across south Arkansas locations.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Leaf pub. ² g	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ³									
									Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
Deltapine 20 B	1109	1	38.5	16	2.1	20	85	24	4.8	17	1.09	21	83.6	22	26.6	25	9.0	4
PhytoGen PSC 355	1107	2	39.2	9	3.8	10	93	6	4.8	19	1.09	19	84.6	4	29.9	6	9.3	1
FiberMax FM 966	1080	3	38.5	14	1.8	26	87	20	4.5	28	1.14	7	84.7	3	32.4	1	7.9	32
FiberMax FM 958	1069	4	38.3	19	2.7	14	86	21	4.7	21	1.14	4	84.0	15	28.6	13	8.0	30
Stoneville 4691 B	1046	5	39.4	6	4.7	2	93	5	4.7	20	1.11	15	83.6	23	26.5	26	8.1	28
Sure-Grow 105	1046	6	37.7	21	2.3	18	80	30	5.2	3	1.11	12	84.4	5	28.5	14	8.9	7
Germaines 108	1041	7	38.7	11	4.0	8	97	1	4.6	22	1.14	6	83.6	21	28.9	10	8.7	13
Stoneville 4892 BR	1038	8	40.2	3	4.6	3	90	15	5.1	5	1.08	23	84.3	8	27.9	17	8.7	12
Sure-Grow 747	1036	9	40.8	1	2.2	19	84	26	5.3	2	1.08	24	84.2	11	26.3	29	8.9	6
Stoneville BXN 47	1029	10	39.7	5	4.1	6	95	2	4.9	11	1.10	16	84.2	10	27.0	23	8.5	18
Stoneville 474	1024	11	39.8	4	4.1	6	92	9	4.9	12	1.08	22	83.8	16	27.2	21	8.2	25
Deltapine 388	1014	12	38.6	13	3.8	9	82	28	5.0	10	1.06	32	83.0	30	28.8	11	9.0	5
Paymaster 1218 BG/RR	1004	13	39.2	8	2.6	15	92	7	5.0	7	1.06	30	82.9	31	26.6	24	8.4	20
Stoneville ST 4793 R	1001	14	40.6	2	5.3	1	91	13	4.9	15	1.06	31	83.3	26	28.1	16	8.5	17
Sure-Grow 215 B/R	999	15	38.1	20	1.4	32	91	12	5.2	4	1.07	29	83.7	20	26.3	30	8.8	11
Germaines 106	991	16	38.7	12	4.6	4	84	25	4.5	26	1.12	10	84.0	14	28.2	15	9.1	2
Deltapine 428 B	986	17	35.8	30	1.5	31	91	13	4.9	12	1.11	13	83.2	28	25.2	32	8.0	30
Paymaster 1560 BG	972	18	38.3	18	2.8	12	87	18	5.0	8	1.09	20	83.7	19	29.4	9	8.9	8
ARK 8712	972	19	36.8	25	2.7	13	92	9	4.9	14	1.14	5	84.7	2	29.5	7	8.8	10
Sure-Grow 501 B/R	959	20	38.5	15	2.0	21	92	8	5.1	6	1.08	25	84.4	6	29.5	8	9.0	3
FiberMax FM 832	953	21	36.2	28	2.4	16	90	16	4.2	32	1.19	1	84.3	7	30.5	3	8.1	27
FiberMax FM 819	949	22	39.3	7	1.8	29	86	21	4.5	29	1.16	3	84.9	1	30.2	4	8.2	24
Deltapine 436 RR	949	23	34.1	31	1.6	30	81	29	4.9	16	1.10	16	84.1	12	26.3	28	8.6	14
Paymaster 1199 RR	936	24	39.1	10	3.4	11	86	21	5.3	1	1.07	27	84.3	9	28.7	12	8.6	16
Sure-Grow 125 B/R	933	25	37.5	23	2.0	22	94	4	4.8	18	1.08	25	83.2	27	27.2	20	8.6	14
NK 2108 ss	931	26	37.6	22	1.9	24	77	32	4.3	31	1.07	27	82.6	32	27.2	22	8.1	28
Deltapine 451 B/RR	923	27	34.0	32	1.8	27	83	27	5.0	9	1.12	11	83.7	18	26.3	27	8.4	20
Deltapine NuCotn 33B	923	28	36.4	26	2.3	17	88	17	4.6	22	1.12	9	83.8	17	27.8	18	8.4	19
Deltapine 422 B/RR	894	29	36.3	27	1.9	23	87	19	4.5	25	1.10	18	83.4	25	26.0	31	8.8	9
FiberMax FM 989	888	30	37.1	24	1.8	28	79	31	4.5	24	1.13	8	83.5	24	31.3	2	8.2	23
Phytogen GA 161	870	31	36.0	29	1.8	25	92	9	4.4	30	1.17	2	84.1	13	30.1	5	8.3	22
Paymaster 1560 B/R	852	32	38.4	17	4.3	5	94	3	4.5	26	1.11	14	83.1	29	27.6	19	8.2	25
LSD 0.10	64		1.2		0.7		6		0.2		0.02		0.8		0.9		0.3	
Marianna, Irrigated	1446		38.3		2.4		109		4.9		1.12		84.0		28.0		8.7	
Marianna, Non-irrigated	273		36.7		-		67		4.5		1.06		83.1		27.6		8.1	
Rohwer, Irrigated	1236		39.0		3.2		-		4.9		1.13		84.3		28.8		8.8	
LSD 0.10	128		2.0		0.6		6		ns		ns		ns		0.6		0.3	
Mean	985		38.0		2.8		88		4.8		1.10		83.8		28.1		8.5	
C.V. (%)	10		3.4		20.6		8		4.8		2.20		1.0		3.4		3.3	
R-squared x 100	98		85.5		91.1		93		86.8		88.73		72.9		89.4		89.1	
Prob. (Variety x Location)	<0.01		0.3		0.0		0		0.3		0.61		0.18		0.02		<0.01	

¹ *r* = ranking.² Leaf pubescence is mean of 10 plants/plot rated from 1 (smooth leaf) to 7 (very hairy).³ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 11. Results of the 2000 Arkansas Cotton Variety Trials for first year entries with irrigation on a Tunica silty clay soil at Keiser.

Variety/Location	Lint yield lb/a	r ¹	Lint fract. %	r	Boll wt g	r	Leaf pub. ²	r	Plant ht. cm	r	Days to cutout ³	r	Fiber properties ⁴									
													Mic	r	Len	r	Unif	r	Str	r	Elo	r
H16-24-19	1236	1	40.7	9	4.7	8	4.0	9	110	6	84.9	8	4.6	19	1.14	3	83.8	11	28.4	14	8.7	21
H10-35-03	1199	2	39.9	16	4.1	21	5.3	3	105	14	85.2	6	4.3	27	1.10	11	83.4	17	28.8	8	9.2	11
Sure-Grow 747	1183	3	41.0	8	4.9	2	2.9	13	104	16	80.8	24	5.2	2	1.09	16	85.2	2	25.9	30	9.2	9
HCR 7061-39	1156	4	39.7	17	4.9	2	2.7	17	106	12	82.2	19	4.7	15	1.16	1	84.3	6	28.7	9	9.4	5
8806-3-2-19	1101	5	40.2	14	4.2	19	3.5	10	97	26	79.7	26	4.6	19	1.14	4	84.0	9	29.7	3	9.4	7
Stoneville 474	1081	6	41.7	4	4.0	25	5.7	2	105	13	86.1	3	5.0	6	1.06	25	83.4	17	28.2	16	8.7	21
Gavilan	1077	7	39.9	15	4.1	21	3.5	11	111	5	75.4	28	5.1	3	1.10	14	82.9	27	28.4	13	9.0	12
NK 2165C	1076	8	40.7	9	4.6	13	2.6	18	98	23	82.0	20	4.7	13	1.07	23	83.3	20	26.5	28	8.8	19
H16-14-20	1066	9	41.3	6	5.3	1	4.4	7	103	17	87.4	1	4.4	26	1.13	6	85.1	3	29.4	4	9.9	1
Deltapine x9C84	1057	10	41.0	7	4.4	15	2.3	22	90	29	83.5	15	5.0	5	1.06	24	83.0	25	27.1	25	8.7	21
HCR 7312	1057	10	39.6	19	3.9	27	2.8	14	114	1	85.5	5	4.5	23	1.10	11	84.2	8	26.9	27	9.0	15
HCR 7311	1049	12	39.6	19	4.2	17	2.3	22	103	18	83.4	16	5.1	4	1.05	28	82.5	29	27.9	18	9.0	12
Stoneville ST 580	1021	13	40.7	9	3.9	28	2.3	22	100	19	83.7	14	4.6	21	1.10	11	83.6	12	27.3	21	9.4	5
Condor	1014	14	42.2	2	4.4	15	2.2	25	106	10	82.3	18	5.4	1	1.03	29	82.9	26	27.2	24	9.0	15
H16-14-09	1012	15	38.4	26	4.8	6	4.8	5	112	3	83.9	13	4.7	13	1.08	18	83.4	17	28.5	11	9.4	4
8839-3-10-2	1000	16	39.1	24	4.2	17	2.7	15	114	2	84.0	12	4.8	11	1.15	2	84.7	5	27.4	19	9.0	12
ss 9901	990	17	39.3	21	3.7	29	1.3	30	97	25	74.0	30	4.9	7	1.06	25	83.3	20	27.0	26	8.7	21
Stoneville x00001	959	18	40.6	12	4.6	11	2.7	15	108	7	85.0	7	4.8	11	1.12	7	84.2	7	27.2	23	8.5	26
DES 607	955	19	39.3	22	4.8	7	2.1	26	106	10	82.0	20	4.9	9	1.11	10	83.6	12	26.1	29	9.5	2
Stoneville x9905	951	20	40.2	13	4.9	2	4.9	4	107	8	86.8	2	4.7	15	1.08	21	83.2	22	28.6	10	8.3	28
M 657	938	21	44.4	1	4.0	25	4.6	6	98	22	84.5	11	4.7	15	1.06	25	83.2	22	27.4	19	8.8	18
Deltapine 420 RR	926	22	39.2	23	4.6	11	2.6	19	99	21	81.9	22	4.8	10	1.08	18	83.8	10	27.3	22	9.2	9
Garst/AgriPro1500 RR	915	23	37.3	29	4.1	23	1.4	29	94	27	82.9	17	4.2	28	1.13	5	83.6	14	29.1	6	8.9	17
M 539	913	24	41.4	5	4.7	9	2.4	21	111	4	85.8	4	4.5	23	1.12	8	83.1	24	29.2	5	8.3	28
ss 9501	907	25	39.7	18	4.2	19	5.7	1	93	28	76.4	27	4.9	7	1.12	8	85.3	1	28.5	12	9.5	3
Germaines GC 113	895	26	38.0	27	3.7	29	2.5	20	107	8	84.7	10	4.7	15	1.09	16	83.5	15	31.5	1	9.3	8
Germaines GC 114	891	27	38.9	25	4.5	14	4.3	8	105	15	84.9	8	4.5	23	1.08	21	83.5	15	29.0	7	8.7	21
HCR 9228	881	28	37.7	28	4.1	23	1.7	28	90	30	81.3	23	4.0	30	1.08	18	82.6	28	28.2	15	8.5	26
M 557	813	29	41.8	3	4.7	9	2.0	27	98	23	80.0	25	4.6	22	1.02	30	80.8	30	28.0	17	8.3	28
M 643	812	30	37.2	30	4.9	5	3.2	12	99	20	74.4	29	4.1	29	1.10	14	85.0	4	31.1	2	8.8	19
LSD 0.10	141		2.9		ns		1.0		13		5.3		0.3		0.04		1.4		1.4		0.5	
Mean	1004		40.0		4.4		3.2		103		82.5		4.7		1.09		83.6		28.1		9.0	
C.V. (%)	12		4.2		12.4		18.9		11		3.8		3.9		2.22		1.0		3.0		3.1	
R-squared x 100	77		63.8		66.8		90.6		60		86.5		85.5		84.54		73.3		82.4		80.1	

¹ r = ranking.² Leaf pubescence is mean of 10 plants/plot rated from 1 (smooth leaf) to 7 (very hairy).³ Cutout = days from planting to NAWF = 5.⁴ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 12. Results of the 2000 Arkansas Cotton Variety Trials for first year entries without irrigation on a Tunica silty clay soil at Keiser.

Variety	Lint yield lb/a	<i>r</i> '	Lint fract. %	<i>r</i>	Boll wt. g	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
									Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
8806-3-2-19	766	1	38.7	13	4.2	13	65	21	4.5	13	1.11	13	84.4	7	33.1	3	9.1	5
HCR 7061-39	718	2	38.5	15	4.8	1	70	6	4.4	18	1.14	4	82.2	29	30.3	19	8.4	19
8839-3-10-2	703	3	36.8	25	3.7	28	73	2	4.4	21	1.12	7	82.8	28	27.2	30	7.7	30
ss 9501	670	4	39.5	9	4.0	19	70	6	5.0	4	1.12	7	85.7	1	32.3	5	9.2	3
HCR 7312	661	5	37.5	21	4.3	8	72	4	4.7	8	1.11	10	84.5	5	30.8	15	8.8	10
NK 2165C	648	6	37.7	20	4.1	18	65	21	4.0	28	1.08	23	81.9	30	29.3	26	8.3	21
H16-24-19	645	7	35.1	30	4.5	5	66	18	4.3	24	1.17	1	84.9	2	32.4	4	8.8	10
Garst/AgriPro1500 RR	644	8	37.7	18	4.2	15	63	24	3.9	30	1.11	11	83.9	12	30.8	14	8.3	21
H16-14-09	639	9	39.7	7	4.6	2	67	13	4.7	8	1.06	29	83.0	22	31.3	13	8.9	9
Germaines GC 113	633	10	36.1	28	3.8	25	70	10	4.6	11	1.10	15	84.2	9	34.5	2	9.0	7
H10-35-03	629	11	37.7	18	4.2	15	68	12	4.5	17	1.09	19	82.9	26	31.7	10	8.7	12
Gavilan	629	12	38.6	14	4.2	15	73	1	4.2	26	1.11	13	84.0	10	31.8	7	8.4	19
Condor	625	13	41.6	2	4.3	8	70	9	5.0	4	1.07	26	83.4	17	29.9	21	8.2	23
ss 9901	618	14	38.1	16	3.7	27	60	27	5.0	2	1.10	15	83.3	19	30.5	16	8.7	13
Sure-Grow 747	612	15	38.9	11	3.9	24	67	14	4.5	15	1.08	23	83.5	16	28.5	27	8.5	15
Stoneville x9905	602	16	40.0	5	4.3	8	69	11	4.3	24	1.09	19	83.0	22	29.9	21	7.8	28
M 557	599	17	39.7	8	4.0	20	70	6	4.3	22	1.07	28	83.0	22	31.5	11	8.5	15
M 539	598	18	40.0	4	3.6	30	67	15	4.5	13	1.09	19	82.9	26	31.5	11	7.9	27
Stoneville 474	594	19	41.3	3	3.9	21	66	20	5.2	1	1.07	26	83.2	21	30.5	16	8.6	14
Stoneville ST 580	589	20	37.4	22	4.3	8	59	28	4.8	7	1.13	5	84.9	2	31.7	8	9.3	2
Deltapine x9C84	573	21	37.8	17	4.3	8	55	30	5.0	2	1.12	7	83.3	18	29.5	24	8.2	23
DES 607	561	22	39.0	10	4.5	6	67	15	4.5	15	1.14	2	84.3	8	28.3	28	9.1	5
HCR 7311	549	23	36.1	27	4.6	2	66	19	4.8	6	1.13	5	83.9	12	29.6	23	8.9	8
HCR 9228	548	24	37.0	24	4.5	7	60	26	4.0	28	1.10	17	83.2	20	30.4	18	7.8	29
M 657	540	25	42.0	1	4.2	13	71	5	4.6	11	1.06	30	83.6	15	30.1	20	8.2	23
Stoneville x00001	535	26	39.8	6	3.8	26	73	2	4.4	18	1.11	11	84.0	11	27.9	29	8.1	26
M 643	516	27	36.8	25	4.6	2	65	23	4.1	27	1.08	23	84.4	6	36.0	1	9.1	4
H16-14-20	513	28	38.8	12	3.9	21	61	25	4.4	18	1.14	2	84.9	2	32.0	6	9.3	1
Germaines GC 114	493	29	37.2	23	3.7	29	67	15	4.7	10	1.10	17	83.8	14	31.7	9	8.5	18
Deltapine 420 RR	489	30	36.1	29	3.9	21	58	29	4.3	22	1.09	19	82.9	25	29.4	25	8.5	15
LSD 0.10	ns		2.3		ns		9		0.4		0.04		1.3		1.8		0.6	
Mean	605		33.3		4.1		66		4.5		1.10		83.6		30.8		8.5	
C.V. (%)	20		3.5		8.9		12		5.4		2.12		0.9		3.4		4.0	
R-squared x 100	45		76.0		63.9		44		80.0		72.88		72.0		86.6		78.2	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 13. Results of the 2000 Arkansas Cotton Variety Trials for first year entries with irrigation on a Dundee silt loam soil at Clarkdale.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Boll wt. g	<i>r</i>	Fiber properties ²									
							Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
H16-24-19	1121	1	36.5	26	5.1	19	4.0	19	1.12	10	83.2	26	28.7	21	8.2	23
H16-14-09	1093	2	37.9	14	6.1	4	4.2	13	1.05	29	83.4	21	29.7	9	8.4	8
H10-35-03	1084	3	37.0	21	5.1	20	3.8	26	1.09	20	84.3	7	29.9	7	8.4	8
8839-3-10-2	1073	4	36.7	24	5.1	20	4.3	8	1.15	3	84.3	5	28.8	18	8.4	8
DES 607	1042	5	39.8	5	5.6	10	4.1	15	1.13	6	84.3	7	26.3	30	8.4	8
Sure-Grow 747	1038	6	41.2	2	5.7	9	4.5	5	1.10	17	85.6	1	28.1	27	8.7	2
HCR 7311	1034	7	37.5	18	5.4	14	4.7	2	1.10	15	84.2	10	29.1	16	8.3	17
ss 9501	1029	8	37.3	19	5.6	11	3.8	26	1.15	3	84.7	2	29.3	14	8.3	17
Deltapine 420 RR	1013	9	37.0	20	7.5	1	4.2	13	1.10	17	83.3	23	27.2	28	8.3	17
HCR 7061-39	1006	10	36.0	28	5.9	6	4.0	18	1.17	1	84.1	12	28.2	25	8.6	3
8806-3-2-19	990	11	38.6	9	5.1	18	4.6	4	1.10	17	84.1	13	28.9	17	8.4	8
Garst/AgriPro1500 RR	983	12	38.0	12	5.0	22	4.0	22	1.11	13	83.7	16	29.8	8	8.3	17
ss 9901	978	13	37.6	16	4.5	29	4.1	16	1.09	20	83.7	18	29.4	12	8.4	8
Germaines GC 113	968	14	36.7	22	4.8	26	4.1	16	1.13	6	84.7	3	31.9	2	8.6	4
HCR 7312	962	15	36.7	22	6.2	3	4.2	11	1.12	10	84.6	4	28.6	22	8.5	5
Condor	959	16	39.4	7	5.5	13	4.5	7	1.07	25	83.4	21	28.5	23	7.9	29
Deltapine x9C84	958	17	39.5	6	4.9	24	4.0	19	1.08	22	83.1	27	28.2	24	8.1	26
Germaines GC 114	933	18	35.8	29	4.7	28	4.2	11	1.08	22	84.2	10	30.9	4	8.4	8
Gavilan	930	19	41.5	1	5.3	16	4.8	1	1.10	15	83.8	15	29.6	10	8.8	1
Stoneville 474	927	20	40.9	3	4.9	25	4.5	5	1.07	25	84.3	7	28.2	25	8.3	17
Stoneville x00001	920	21	37.8	15	5.2	17	3.9	24	1.16	2	84.3	6	28.8	18	8.5	5
Stoneville ST 580	910	22	37.6	16	5.8	7	4.6	3	1.11	13	83.5	19	28.8	20	8.4	8
HCR 9228	907	23	36.4	27	5.0	22	3.7	29	1.06	28	82.9	29	29.3	13	8.0	28
NK 2165C	904	24	38.3	10	5.8	8	4.3	8	1.08	24	82.9	30	26.9	29	8.2	23
M 657	884	25	40.3	4	4.7	27	3.9	25	1.04	30	83.3	24	29.3	14	8.1	26
H16-14-20	882	26	38.2	11	4.3	30	4.0	19	1.12	9	83.5	19	30.0	5	8.5	5
Stoneville x9905	838	27	39.4	7	6.4	2	4.3	8	1.12	8	83.1	27	29.4	11	8.2	23
M 557	838	28	37.9	13	6.0	5	4.0	22	1.06	27	83.7	16	29.9	6	8.3	17
M 539	791	29	36.6	25	5.5	12	3.8	26	1.11	12	83.3	25	31.5	3	7.9	30
M 643	746	30	34.8	30	5.4	15	3.5	30	1.15	5	84.1	13	33.5	1	8.4	16
LSD 0.10	130		1.9		ns		0.3		0.04		0.9		1.9		ns	
Mean	956		37.9		5.4		4.1		1.10		83.8		29.2		8.3	
C.V. (%)	12		3.0		13.8		4.8		2.04		0.6		3.8		3.1	
R-squared x 100	50		81.0		61.9		83.5		83.12		78.1		77.8		55.9	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 14. Results of the 2000 Arkansas Cotton Variety Trials for first year entries across north locations.

Variety	Lint yield lb/a	r ¹	Lint fract. %	r	Boll wt. g	r	Plant ht. cm	r	Fiber properties ²									
									Mic	r	Len	r	Unif	r	Str	r	Elo	r
H16-24-19	1000	1	37.4	25	4.8	11	88	7	4.3	23	1.14	2	84.0	11	29.8	12	8.6	17
H10-35-03	971	2	38.2	19	4.4	23	87	12	4.2	27	1.09	18	83.5	19	30.1	7	8.8	10
HCR 7061-39	960	3	38.1	20	5.2	2	88	9	4.4	21	1.15	1	83.5	17	29.0	17	8.8	8
8806-3-2-19	952	4	39.2	13	4.5	22	81	24	4.6	9	1.11	9	84.1	6	30.6	4	8.9	5
Sure-Grow 747	944	5	40.3	4	4.8	9	85	15	4.7	4	1.09	19	84.8	2	27.5	29	8.8	9
8839-3-10-2	925	6	37.5	24	4.3	25	93	1	4.5	14	1.14	3	83.9	12	27.8	26	8.4	24
H16-14-09	915	7	38.6	16	5.2	4	89	5	4.5	11	1.06	27	83.2	23	29.8	11	8.9	7
HCR 7312	893	8	37.9	21	4.8	10	93	2	4.5	12	1.11	11	84.4	5	28.7	22	8.7	12
Gavilan	878	9	40.0	5	4.5	18	92	3	4.7	5	1.10	15	83.6	16	29.9	9	8.7	13
HCR 7311	877	10	37.7	22	4.7	12	85	17	4.9	3	1.09	17	83.5	17	28.8	21	8.7	13
NK 2165C	876	11	38.9	14	4.8	8	82	23	4.3	22	1.07	25	82.7	29	27.6	28	8.4	21
ss 9501	869	12	38.8	15	4.6	16	82	22	4.6	9	1.13	4	85.2	1	30.0	8	9.0	3
Stoneville 474	867	13	41.3	2	4.2	28	85	15	4.9	2	1.07	26	83.6	15	28.9	20	8.5	18
Condor	866	14	41.0	3	4.7	13	88	9	4.9	1	1.06	28	83.2	24	28.5	23	8.4	25
Deltapine x9C84	862	15	39.4	8	4.5	20	72	30	4.7	6	1.09	21	83.1	25	28.3	24	8.3	27
ss 9901	862	16	38.3	18	4.0	30	78	28	4.7	6	1.08	23	83.4	20	28.9	18	8.6	16
DES 607	853	17	39.3	11	5.0	5	86	13	4.5	13	1.13	6	84.1	9	26.9	30	9.0	4
Garst/AgriPro1500 RR	848	18	37.7	23	4.4	24	79	26	4.0	28	1.12	8	83.7	14	29.9	10	8.5	20
Stoneville ST 580	840	19	38.6	17	4.6	14	80	25	4.6	8	1.11	10	84.0	10	29.3	16	9.0	2
Germaines GC 113	832	20	36.9	29	4.1	29	88	8	4.4	17	1.11	13	84.1	8	32.6	2	8.9	5
H16-14-20	820	21	39.4	9	4.5	21	82	20	4.3	26	1.13	5	84.5	3	30.5	6	9.2	1
Deltapine 420 RR	809	22	37.4	25	5.3	1	78	27	4.4	18	1.09	19	83.3	21	27.9	25	8.7	15
Stoneville x00001	804	23	39.4	9	4.5	17	90	4	4.4	16	1.12	7	84.1	7	27.8	26	8.3	26
Stoneville x9905	797	24	39.8	6	5.2	2	88	9	4.4	19	1.09	16	83.1	26	29.3	15	8.1	28
M 657	787	25	42.2	1	4.3	26	84	18	4.4	20	1.05	29	83.3	22	28.9	19	8.4	22
HCR 9228	779	26	37.0	28	4.5	19	75	29	3.9	29	1.08	24	82.9	28	29.3	14	8.1	29
Germaines GC 114	772	27	37.3	27	4.3	27	86	14	4.5	14	1.08	22	83.8	13	30.5	5	8.5	18
M 539	767	28	39.3	11	4.6	15	89	6	4.3	23	1.10	14	83.1	27	30.7	3	8.0	30
M 557	750	29	39.8	7	4.9	7	84	19	4.3	23	1.05	30	82.5	30	29.8	12	8.4	23
M 643	691	30	36.2	30	4.9	6	82	21	3.9	30	1.11	12	84.5	3	33.5	1	8.7	11
LSD 0.10	80		1.4		0.5		8		0.2		0.02		0.7		1.0		0.3	
Keiser, Irrigated	1004		40.0		4.4		103		4.7		1.09		83.6		28.1		9.0	
Keiser, Non-irrigated	605		38.3		4.1		66		4.5		1.10		83.6		30.8		8.5	
Clarkedale, Irrigated	958		37.9		5.4		-		4.1		1.10		83.8		29.2		8.3	
Mean	856		38.8		4.6		85		4.4		1.10		83.7		29.4		8.6	
LSD 0.10	149		0.7		0.8		11		0.2		0.04		0.8		ns		0.2	
C.V. (%)	14		3.6		12.4		11		4.7		2.13		0.9		3.4		3.4	
R-squared x 100	83		78.1		78.2		86		87.9		81.67		74.1		88.0		82.6	
Prob. (Variety X Location)	0		0.3		0.3		1		<0.01		0.10		0.03		0.3		0.04	

¹ r = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 15. Results of the 2000 Arkansas Cotton Variety Trials for first year entries with irrigation on a Calloway silt loam soil at Marianna.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
							Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
8806-3-2-19	1525	1	39.0	14	100	24	5.0	6	1.11	22	84.2	12	33.1	6	8.8	13
Stoneville x9905	1475	2	39.5	12	115	4	4.7	19	1.13	14	84.0	22	30.2	20	8.4	25
Deltapine x8C80	1422	3	41.9	4	118	3	4.6	22	1.15	3	84.2	15	28.7	29	7.9	32
H16-24-19	1411	4	36.9	28	102	22	4.7	19	1.16	2	85.1	2	31.7	8	9.2	4
H10-35-03	1399	5	38.6	18	102	23	4.7	19	1.11	22	84.2	12	31.5	11	9.0	7
Stoneville 474	1396	6	42.1	2	103	19	5.4	3	1.04	32	83.9	24	27.3	32	8.8	13
Sure-Grow 747	1394	7	41.2	5	103	21	5.4	3	1.11	22	84.0	19	27.4	31	9.2	3
8839-3-10-2	1385	8	38.3	20	100	25	4.9	13	1.13	11	84.1	17	28.9	28	8.4	25
H16-14-20	1347	9	40.5	9	106	16	4.6	22	1.12	17	83.5	29	31.4	12	9.4	1
HCR 7311	1332	10	39.1	13	97	28	5.0	6	1.11	20	84.1	17	30.5	17	8.8	13
Deltapine 565	1320	11	38.8	16	118	2	4.9	10	1.15	5	83.4	30	30.5	19	8.5	20
Condor	1309	12	40.9	6	111	8	5.6	1	1.07	29	84.0	19	29.4	23	8.5	20
Gavilan	1297	13	40.8	7	108	13	5.5	2	1.10	27	83.7	28	29.0	27	9.0	7
HCR 7061-39	1293	14	37.6	25	111	10	4.4	29	1.18	1	84.6	5	30.6	16	8.9	12
Stoneville ST 580	1265	15	37.7	24	110	12	4.9	10	1.15	3	84.7	3	31.6	10	9.1	5
HCR 7312	1249	16	38.2	21	100	25	4.5	25	1.14	6	84.3	10	29.6	22	9.0	7
DES 607	1235	17	40.6	8	93	30	4.8	17	1.14	7	84.3	9	28.6	30	8.5	20
Garst/AgriPro 4600 RR	1225	18	40.4	10	104	18	5.0	6	1.07	29	83.8	25	30.8	14	8.3	28
H16-14-09	1199	19	37.9	23	103	20	4.9	13	1.12	17	84.0	22	30.8	13	8.4	25
Stoneville x00001	1192	20	39.0	14	108	14	4.8	17	1.13	11	84.4	8	29.3	24	8.8	13
Deltapine x9C84	1185	21	42.0	3	96	29	5.0	9	1.10	26	83.8	25	29.2	25	8.5	20
ss 9501	1181	22	37.4	27	98	27	5.1	5	1.14	7	85.4	1	30.7	15	9.4	1
ss 9901	1160	23	39.7	11	91	31	4.5	27	1.11	20	84.3	11	29.7	21	8.9	10
ss 9815	1152	24	38.8	16	110	11	4.9	13	1.09	28	83.4	30	31.7	8	8.6	19
HCR 9228	1128	25	35.5	31	89	32	4.4	32	1.13	14	84.0	21	32.4	7	8.8	13
M 657	1088	26	42.1	1	115	6	4.6	22	1.07	29	82.7	32	29.0	26	8.1	31
Germaines GC 113	1073	27	36.1	29	107	15	4.9	10	1.13	14	84.5	7	35.5	2	9.0	6
Ligur	1040	28	38.4	19	111	9	4.5	25	1.13	11	84.1	16	34.8	3	8.5	20
M 557	913	29	37.6	25	119	1	4.5	27	1.14	9	84.7	3	30.5	17	8.3	28
M 539	882	30	38	22	115	5	4.4	29	1.14	10	83.8	25	33.4	5	8.3	28
Germaines GC 114	871	31	35.8	30	113	7	4.9	13	1.11	22	84.2	12	33.8	4	8.9	10
M 643	813	32	35.1	32	106	17	4.4	29	1.12	17	84.5	6	36.0	1	8.7	18
LSD 0.10	131		2.1		10		0.3		0.04		ns		2.8		0.4	
Mean	1223		39.0		106		4.8		1.12		84.1		30.8		8.7	
C.V. (%)	9		3.2		8		3.5		1.89		0.9		5.3		2.6	
R-squared x 100	78		83.0		57		88.1		79.57		54.1		77.9		82.7	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 16. Results of the 2000 Arkansas Cotton Variety Trials for first year entries without irrigation on a mixed Calloway, Loring and Memphis silt loam soil at Marianna.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
							Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
Gavilan	403	1	42.3	1	69	9	5.1	1	1.07	15	83.1	12	25.7	15	9.1	2
DES 607	402	2	40.2	4	65	23	4.8	7	1.09	8	84.1	3	24.1	21	9.2	1
M 539	398	3	42.1	2	66	19	4.5	23	1.10	4	82.7	18	27.9	6	7.7	29
HCR 7061-39	393	4	37.7	17	67	17	4.6	22	1.10	4	82.0	27	26.5	12	8.3	13
8839-3-10-2	390	5	37.2	20	73	3	4.6	20	1.09	8	83.6	5	23.0	26	7.9	26
H10-35-03	390	5	37.0	21	72	4	4.9	4	1.03	30	82.8	16	26.8	9	9.0	3
8806-3-2-19	387	7	38.4	11	66	19	4.9	3	1.03	29	81.7	29	25.6	16	8.3	13
HCR 7312	346	8	36.7	24	63	28	4.4	29	1.11	3	83.7	4	23.9	22	8.3	13
Condor	344	9	39.6	6	69	9	4.9	4	1.04	25	82.4	20	22.7	28	8.1	24
Stoneville x9905	342	10	38.3	12	75	1	4.5	25	1.04	25	82.2	22	21.9	30	7.1	30
Deltapine x8C80	339	11	37.6	18	68	14	4.8	10	1.09	8	82.3	21	21.6	31	6.7	32
Stoneville ST 580	333	12	36.2	27	66	18	4.8	7	1.07	15	83.0	14	26.4	13	9.0	3
Sure-Grow 747	332	13	40.3	3	66	19	4.9	4	1.07	19	83.4	8	20.8	32	8.5	9
Garst/AgriPro 4600 RR	331	14	37.3	19	69	11	4.5	27	1.01	32	82.1	23	24.8	19	7.9	27
Germaines GC 113	323	15	34.5	30	68	12	4.7	16	1.08	14	82.0	27	31.6	2	8.5	10
HCR 9228	318	16	39.6	6	59	30	4.6	21	1.06	21	82.1	25	25.3	17	7.8	28
Germaines GC 114	312	17	36.5	26	65	22	4.7	13	1.09	8	83.6	5	28.7	5	8.4	11
H16-14-09	305	18	38.2	13	65	24	4.8	11	1.04	25	81.4	30	24.4	20	8.4	11
H16-24-19	305	19	36.6	25	67	15	4.8	7	1.07	15	82.1	23	26.2	14	8.6	7
Stoneville 474	289	20	40.0	5	68	12	4.5	25	1.03	30	83.0	13	23.0	26	8.0	25
M 557	287	21	38.1	14	70	7	4.2	30	1.05	24	80.8	32	26.9	8	8.2	20
HCR 7311	287	22	38.7	10	70	6	4.7	15	1.07	15	82.8	17	26.8	10	8.2	20
Ligur	282	23	35.4	29	65	24	4.5	23	1.11	2	83.4	10	31.0	3	8.6	7
ss 9901	275	24	36.1	28	58	31	4.8	11	1.08	12	82.1	26	23.8	23	8.2	20
ss 9501	274	25	36.8	23	63	26	4.4	28	1.09	7	84.2	2	24.9	18	8.6	6
ss 9815	273	26	30.3	32	70	8	4.7	16	1.04	25	82.9	15	23.7	25	8.3	19
H16-14-20	258	27	38.0	15	67	15	4.7	16	1.06	21	83.4	8	29.6	4	8.8	5
M 643	245	28	34.1	31	63	27	3.8	32	1.12	1	85.1	1	33.2	1	8.3	13
Deltapine 565	235	29	36.8	22	73	2	4.7	16	1.10	4	83.5	7	26.6	11	8.3	13
Deltapine x9C84	230	30	37.8	16	58	31	5.1	1	1.08	12	81.3	31	23.8	23	8.2	20
M 657	211	31	39.2	8	63	28	4.7	13	1.05	23	83.2	11	27.1	7	8.3	13
Stoneville x00001	191	32	38.7	9	71	5	4.2	31	1.07	19	82.5	19	22.5	29	7.0	31
LSD 0.10	89		3.9		6		0.4		0.03		1.3		3.0		0.6	
Mean	313		37.7		67		4.6		1.07		82.7		25.5		8.2	
C.V. (%)	24		6.1		8		5.6		1.85		0.9		6.9		4.2	
R-squared x 100	67		67.3		63		70.7		79.66		73.5		83.8		85.0	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 17. Results of the 2000 Arkansas Cotton Variety Trials for first year entries with irrigation on a Desha silt loam soil at Rohwer.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Boll wt. g	Days to cutout ²			Fiber properties ³									
						<i>r</i>	<i>r</i>	<i>r</i>	Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
8806-3-2-19	1423	1	39.0	13	3.7	22	71.4	20	4.9	17	1.09	25	84.7	7	31.1	17	8.8	7
Deltapine 565	1418	2	40.7	6	4.3	14	70.6	26	5.2	9	1.16	2	84.6	8	30.4	24	8.4	17
Gavilan	1388	3	43.1	1	3.8	20	67.4	32	5.4	1	1.07	29	83.5	20	31.1	19	8.4	17
Stoneville 474	1322	4	40.8	4	4.5	12	75.6	6	5.0	14	1.11	16	83.9	15	30.5	23	8.3	22
H16-24-19	1301	5	36.9	29	3.8	20	73.2	10	4.8	26	1.13	10	85.1	3	31.7	13	8.6	10
HCR 7312	1300	6	37.6	24	3.8	19	72.0	13	4.9	17	1.16	2	84.9	5	31.2	16	8.6	10
Stoneville x00001	1298	7	41.2	3	3.6	27	74.0	8	4.8	26	1.11	16	83.2	25	28.1	32	8.1	28
H10-35-03	1294	8	37.3	26	4.2	15	73.0	11	4.7	28	1.13	10	84.0	13	32.1	9	8.9	2
8839-3-10-2	1290	9	37.5	25	4.7	10	75.7	5	4.9	21	1.13	14	84.2	11	29.4	29	8.4	17
Deltapine x9C84	1285	10	38.7	16	4.8	8	76.2	3	5.2	7	1.14	9	84.3	10	30.3	25	8.3	22
ss 9901	1274	11	40.4	7	4.0	16	78.9	1	5.1	10	1.11	16	83.5	21	31.1	17	8.3	22
Deltapine x8C80	1274	11	39.7	11	4.4	13	76.8	2	4.8	25	1.19	1	83.1	27	29.9	26	7.8	32
Sure-Grow 747	1270	13	39.8	10	4.9	6	69.0	29	5.3	3	1.09	22	84.9	4	29.1	30	8.8	4
HCR 7061-39	1220	14	37.7	23	5.2	3	70.5	27	4.6	29	1.15	7	83.0	28	30.8	21	8.8	4
HCR 7311	1211	15	36.5	30	5.1	4	72.4	12	5.1	12	1.14	8	83.8	16	32.1	9	8.7	9
Condor	1210	16	41.7	2	3.5	28	71.5	19	5.2	4	1.11	20	83.5	22	29.9	26	8.1	29
Garst/AgriPro 4600 RR	1205	17	38.6	17	3.7	22	71.0	24	5.2	7	1.06	32	83.8	17	29.7	28	8.4	17
Stoneville ST 580	1199	18	38.2	20	3.6	26	71.7	17	4.9	17	1.09	22	83.4	23	30.7	22	8.8	7
H16-14-09	1187	19	38.7	15	5.1	5	70.1	28	5.4	2	1.07	29	82.4	32	32.0	12	8.6	10
ss 9815	1171	20	37.2	27	3.9	18	71.4	20	5.2	4	1.10	21	84.0	12	32.3	8	8.5	15
Ligur	1167	21	37.2	28	3.4	29	75.5	7	4.9	17	1.15	6	85.6	1	36.4	1	8.3	27
Germaines GC 113	1154	22	35.5	31	3.4	30	71.8	15	5.0	16	1.12	15	84.6	8	33.8	2	8.9	2
DES 607	1144	23	40.8	4	4.6	11	71.3	22	5.0	14	1.09	25	83.7	18	28.8	31	8.6	14
ss 9501	1113	24	39.9	9	3.7	24	71.9	14	5.2	4	1.13	10	84.8	6	32.7	7	8.8	4
Stoneville x9905	1103	25	40.4	8	5.8	2	71.7	17	4.9	21	1.11	16	83.0	28	31.3	15	8.3	22
H16-14-20	1096	26	37.8	21	4.8	8	74.0	8	4.5	30	1.13	10	83.1	26	31.0	20	9.1	1
Germaines GC 114	1093	27	38.6	18	3.1	32	68.0	31	5.1	10	1.08	27	83.9	14	33.3	5	8.6	10
M 657	1052	28	39.4	12	4.8	7	75.7	4	5.0	13	1.08	27	83.6	19	31.4	14	8.4	16
M 539	1044	29	38.2	19	3.6	25	71.0	23	4.8	23	1.16	5	83.3	24	33.8	2	7.9	31
HCR 9228	1044	30	37.8	22	3.2	31	71.7	16	4.3	32	1.07	29	82.5	31	33.3	6	8.0	30
M 557	1040	31	38.9	14	3.9	17	70.9	25	4.8	23	1.09	22	82.6	30	32.1	9	8.3	22
M 643	807	32	29.6	32	6.1	1	68.6	30	4.3	31	1.16	2	85.5	2	33.8	2	8.4	17
LSD 0.10	136		2.8		ns		4.0		0.3		0.04		1.4		1.9		0.4	
Mean	1200		38.6		4.2		72.3		4.9		1.11		83.9		31.4		8.5	
C.V. (%)	10		4.2		21.6		3.3		3.3		1.97		1.0		3.7		2.7	
R-squared x 100	67		80.6		70.0		76.8		85.8		83.78		70.3		82.1		78.6	

¹ *r* = ranking.² Cutout = days from planting to NAWF = 5.³ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 18. Results of the 2000 Cotton Variety Test for first year entries across south Arkansas locations.

Variety	Lint yield lb/a	<i>r</i> ¹	Lint fract. %	<i>r</i>	Plant ht. cm	<i>r</i>	Fiber properties ²									
							Mic	<i>r</i>	Len	<i>r</i>	Unif	<i>r</i>	Str	<i>r</i>	Elo	<i>r</i>
8806-3-2-19	1111	1	38.8	12	83	26	4.9	6	1.07	28	83.5	16	29.9	9	8.6	13
Gavilan	1029	2	42.1	1	89	12	5.3	1	1.08	25	83.4	18	28.6	20	8.8	6
H10-35-03	1028	3	37.6	23	87	16	4.7	20	1.09	22	83.7	13	30.1	8	8.9	3
8839-3-10-2	1022	4	37.7	22	86	19	4.8	17	1.11	10	84.0	8	27.1	28	8.2	26
Deltapine x8C80	1012	5	39.7	7	93	4	4.7	20	1.14	1	83.2	26	26.7	30	7.5	32
H16-24-19	1006	6	36.8	29	85	21	4.7	20	1.12	8	84.1	6	29.9	10	8.8	6
Stoneville 474	1002	7	41.0	2	86	20	4.9	7	1.06	31	83.6	14	26.9	29	8.4	21
Sure-Grow 747	998	8	40.4	5	84	23	5.2	3	1.09	22	84.1	5	25.8	32	8.8	5
Deltapine 565	991	9	38.8	14	96	1	4.9	9	1.14	4	83.8	10	29.1	18	8.4	20
Stoneville x9905	973	10	39.4	11	95	2	4.7	23	1.09	19	83.0	29	27.8	24	7.9	31
HCR 7061-39	969	11	37.7	21	89	10	4.5	29	1.14	1	83.2	25	29.3	15	8.7	10
HCR 7312	965	12	37.5	25	81	27	4.6	25	1.14	4	84.3	4	28.2	22	8.6	11
Condor	955	13	40.7	3	90	6	5.2	2	1.07	29	83.3	21	27.3	26	8.2	25
HCR 7311	943	14	38.1	19	83	25	4.9	7	1.11	11	83.5	15	29.8	12	8.5	14
Stoneville ST 580	928	15	37.3	26	88	13	4.9	14	1.10	14	83.7	12	29.5	13	9.0	2
DES 607	927	16	40.5	4	79	29	4.9	15	1.10	15	84.0	7	27.2	27	8.7	9
Garst/AgriPro 4600 RR	920	17	38.7	15	86	18	4.9	13	1.05	32	83.2	24	28.4	21	8.2	28
ss 9901	903	18	38.7	16	74	31	4.8	17	1.10	18	83.3	22	28.2	23	8.5	17
H16-14-20	900	19	38.8	13	87	17	4.6	25	1.10	15	83.3	20	30.6	6	9.1	1
Deltapine x9C84	900	20	39.5	9	77	30	5.1	4	1.11	13	83.1	28	27.7	25	8.3	22
H16-14-09	897	21	38.3	17	84	24	5.0	5	1.08	27	82.6	32	29.0	19	8.5	15
Stoneville x00001	893	22	39.6	8	89	8	4.6	25	1.10	17	83.4	19	26.6	31	8.0	29
ss 9815	865	23	35.4	30	90	7	4.9	9	1.08	26	83.4	17	29.2	16	8.4	19
ss 9501	856	24	38.0	20	81	28	4.9	9	1.12	8	84.8	2	29.4	14	8.9	4
Germaines GC 113	850	25	35.3	31	87	15	4.8	16	1.11	11	83.7	11	33.6	3	8.8	8
HCR 9228	830	26	37.6	24	74	32	4.4	31	1.08	24	82.8	30	30.3	7	8.2	27
Ligur	829	27	37.0	27	88	14	4.6	24	1.13	6	84.4	3	34.1	2	8.5	17
M 657	784	28	40.2	6	89	10	4.8	17	1.07	30	83.2	26	29.2	17	8.3	23
M 539	774	29	39.4	10	90	5	4.6	28	1.13	6	83.2	23	31.7	5	8.0	29
Germaines GC 114	758	30	36.9	28	89	9	4.9	12	1.09	20	83.9	9	31.9	4	8.6	11
M 557	747	31	38.2	18	95	3	4.5	30	1.09	20	82.7	31	29.8	11	8.3	24
M 643	621	32	32.9	32	84	22	4.2	32	1.14	3	85.0	1	34.6	1	8.5	1
LSD 0.10	69		1.7		6		0.2		0.02		0.7		1.5		0.3	
Marianna, Irrigated	1223		39.0		106		4.8		1.12		84.1		30.8		8.7	
Marianna, Non-irrigated	313		37.7		67		4.6		1.07		82.7		25.5		8.2	
Rohwer, Irrigated	1200		38.6		-		4.9		1.11		83.9		31.4		8.5	
LSD 0.10	84		0.8		6		4.8		1.10		83.6		29.3		8.5	
Mean	912		38.4		86		0.3		0.02		0.6		ns		0.3	
C.V. (%)	11		4.6		8		4.2		1.90		0.9		5.2		3.2	
R-squared x 100	96		76.7		92		83.8		87.32		77.6		91.4		85.7	
Prob. (Variety x Location)	<0.01		0.05		<0.01		<0.01		0.01		0.05		0.6		<0.01	

¹ *r* = ranking.² Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

Table 19. Lint yields and ranking for varieties in north locations of the Arkansas Cotton Variety Test, two-year means 1999-2000.

Variety	Keiser	North		Clarkedale		All north		<i>r</i>
	irrig. lb/a	<i>r</i> ¹	non-irrig. ² lb/a	<i>r</i>	irrig. lb/a	<i>r</i>	loc. lb/a	
FiberMax FM 958	1262	2	643	5	1223	1	1043	1
FiberMax FM 966	1225	3	659	4	1213	2	1032	2
Sure-Grow 105	1203	7	628	7	1178	3	1003	3
PhytoGen PSC 355	1142	13	673	3	1147	4	987	4
Paymaster 1218 BG/RR	1142	12	685	2	1098	6	975	5
NK 2108 ss	1276	1	641	6	975	23	964	6
Deltapine 388	1206	6	627	8	1028	13	954	7
Sure-Grow 215 B/R	1160	9	567	15	1126	5	951	8
Sure-Grow 747	1217	4	542	20	1078	7	945	9
Germaines 108	1140	14	725	1	954	27	939	10
ARK 8712	1134	15	584	12	1072	10	930	11
FiberMax FM 819	1164	8	598	10	1021	17	928	12
Germaines 106	1211	5	562	16	1003	19	925	13
Stoneville 4892 BR	1130	16	542	21	1078	8	917	14
Stoneville ST 4793 R	1059	22	578	13	1066	11	901	15
FiberMax FM 832	1069	21	603	9	1026	14	899	16
Stoneville 4691 B	1151	10	554	18	982	22	895	17
Stoneville BXN 47	1122	18	457	27	1076	9	885	18
Stoneville 474	1146	11	474	26	1023	15	881	19
Garst/AgriPro AP 7115	1127	17	546	19	964	25	879	20
Sure-Grow 125 B/R	1028	23	556	17	1023	16	869	21
Deltapine 451 B/RR	1000	26	593	11	1010	18	868	22
Sure-Grow 125 RR	1070	20	511	24	996	20	859	23
Sure-Grow 501 B/R	1020	25	520	22	1031	12	857	24
FiberMax FM 989	1081	19	505	25	972	24	852	25
Deltapine 425 RR	1025	24	518	23	983	21	842	26
Deltapine 436 RR	974	27	570	14	962	26	835	27
Mean	1129		580		1048		919	

¹ *r* = ranking.² Non-irrigated test was at Clarkedale in 1999 and at Keiser in 2000.

Table 20. Lint yields and ranking for varieties in south locations of the Arkansas Cotton Variety Test, two-year means 1999-2000.

Variety	Marianna		Marianna		Rohwer		Mean south	
	irrig. lb/a	<i>r</i> ¹	non-irrig. lb/a	<i>r</i>	irrig. lb/a	<i>r</i>	loc. lb/a	<i>r</i>
Phytogen PSC 355	1508	2	524	2	1531	1	1188	1
Stoneville 4691 B	1477	7	455	17	1435	2	1122	2
FiberMax FM 966	1436	10	503	5	1369	7	1103	3
Stoneville 474	1488	5	420	22	1400	4	1103	4
Paymaster 1218 BG/RR	1412	12	492	6	1402	3	1102	5
FiberMax FM 958	1501	3	476	11	1327	12	1101	6
Sure-Grow 105	1473	9	472	12	1353	9	1099	7
Stoneville BXN 47	1489	4	426	19	1378	6	1098	8
Sure-Grow 747	1509	1	507	4	1262	18	1093	9
Stoneville ST 4793 R	1487	6	410	23	1355	8	1084	10
Germaines 108	1475	8	489	9	1283	15	1082	11
Deltapine 20 B	1341	20	459	16	1386	5	1062	12
Sure-Grow 215 B/R	1410	14	489	8	1255	19	1051	13
Deltapine 388	1411	13	490	7	1243	21	1048	14
Stoneville 4892 BR	1420	11	389	26	1335	10	1048	15
ARK 8712	1405	15	468	14	1268	17	1047	16
NK 2108 ss	1370	18	538	1	1203	27	1037	17
FiberMax FM 832	1389	17	388	27	1334	11	1037	18
Germaines 106	1398	16	423	21	1289	14	1037	19
FiberMax FM 819	1341	19	409	24	1293	13	1014	20
Paymaster 1560 BG	1318	21	408	25	1250	20	992	21
Sure-Grow 501 B/R	1295	23	472	13	1203	26	990	22
Deltapine 428 B	1301	22	424	20	1219	23	982	23
Sure-Grow 125 B/R	1221	25	484	10	1218	24	974	24
Deltapine 451 B/RR	1165	29	461	15	1272	16	966	25
Deltapine 436 RR	1257	24	446	18	1189	29	964	26
Deltapine 422 B/RR	1142	30	508	3	1210	25	953	27
Paymaster 1560 B/R	1191	27	382	28	1198	28	923	28
Deltapine NuCotn 33 B	1166	28	357	30	1232	22	918	29
FiberMax FM 989	1209	26	377	29	1168	30	918	30
Mean	1364		452		1294		1037	

¹ *r* = ranking.

Table 21. Lint yields and ranking for varieties in north locations of the Arkansas Cotton Variety Test, three-year means 1998-2000.

Variety	Keiser	North		Clarkedale		Mean north		
	irrig. lb/a	<i>r</i> ¹	non-irrig. ² lb/a	<i>r</i>	irrig. lb/a	<i>r</i>	loc. lb/a	<i>r</i>
Sure-Grow 105	1113	6	744	3	1155	2	1004	1
Paymaster 1218 BG/RR	1051	10	790	1	1165	1	1002	2
PhytoGen PSC 355	1128	4	747	2	1112	3	996	3
Sure-Grow 747	1151	1	676	7	1082	4	970	4
Deltapine 388	1134	3	700	5	1040	5	958	5
FiberMax FM 819	1097	8	696	6	1000	8	931	6
Stoneville 474	1142	2	642	11	1003	7	929	7
FiberMax FM 832	1091	9	722	4	954	11	922	8
Stoneville BXN 47	1128	5	605	13	1008	6	914	9
Garst/AgriPro AP 7115	1097	7	658	10	964	9	906	10
FiberMax FM 989	1025	11	658	9	914	13	866	11
Deltapine 436 RR	970	12	665	8	922	12	852	12
Deltapine 425 RR	968	13	627	12	958	10	851	13
Mean	1084		687		1021		931	

¹ *r* = ranking.² Non-irrigated test was at Clarkedale in 1999 and at Keiser in 2000.**Table 22. Lint yields and ranking for varieties in south locations of the Arkansas Cotton Variety Test, three-year means 1998-2000.**

Variety	Marianna	Marianna		Rohwer		Mean south		
	irrig. lb/a	<i>r</i> ¹	non-irrig. lb/a	<i>r</i>	irrig. lb/a	<i>r</i>	loc. lb/a	<i>r</i>
Phytogen PSC 355	1491	1	639	1	1548	1	1226	1
Paymaster 1218 BG/RR	1400	5	590	3	1435	2	1142	2
Sure-Grow 105	1368	6	573	5	1399	5	1113	3
Sure-Grow 747	1422	3	591	2	1307	9	1107	4
Stoneville 474	1421	4	494	11	1377	6	1097	5
Stoneville BXN 47	1361	7	496	10	1417	4	1091	6
Deltapine 20 B	1285	11	539	8	1434	3	1086	7
Stoneville ST 4793 R	1487	2	410	16	1355	7	1084	8
Deltapine 388	1348	8	590	4	1272	13	1070	9
Paymaster 1560 BG	1304	9	533	9	1286	11	1041	10
Deltapine 428 B	1263	12	550	6	1269	14	1027	11
FiberMax FM 832	1295	10	483	12	1303	10	1027	12
FiberMax FM 819	1259	13	446	13	1318	8	1008	13
Deltapine 436 RR	1196	14	540	7	1214	15	983	14
Deltapine NuCotn 33 B	1091	16	428	14	1280	12	933	15
FiberMax FM 989	1123	15	413	15	1140	16	892	16
Mean	1319		521		1335		1058	

¹ *r* = ranking.

Table 23. Results of the 2000 Mississippi County Variety Test on a Routon-Dundee-Crevasse soil complex, David Wildy Farms, Manila.¹

Variety	Lint yield ²		Lint fract.		Boll wt. g	Days to cutout ⁴			Mic	Len	Fiber properties ⁵							
	lb/a	r ³	%	r		r	r	r			r	Unif	r	Str	r	Elo	r	
Paymaster 1218 BG/RR	957	1	38.1	5	5.6	1	97	7	4.8	3	1.10	11	84.2	11	27.0	8	8.5	11
Phytogen PSC 355	941	2	37.7	7	4.6	10	101	1	4.7	5	1.14	2	84.4	9	28.9	1	9.2	1
Stoneville 4892 BR	931	3	39.1	2	4.9	3	100	2	4.6	9	1.09	12	84.6	6	28.6	4	8.8	6
Sure-Grow 747	915	4	39.2	1	4.8	6	97	8	4.9	1	1.13	7	85.1	2	25.0	12	8.9	5
Stoneville BXN 47	905	5	39.0	3	4.6	8	100	3	4.5	10	1.14	2	84.9	4	28.0	6	8.6	10
Sure-Grow 105	892	6	37.5	8	4.3	12	96	10	4.5	11	1.13	6	85.0	3	28.1	5	8.6	8
ARK 8712	890	7	37.0	9	5.2	2	88	12	4.9	1	1.17	1	85.3	1	28.9	2	9.0	4
Phytogen PSC 952	859	8	38.3	4	4.9	4	100	4	4.8	4	1.12	8	83.9	12	27.9	7	9.1	2
Deltapine 451 B/RR	843	9	35.6	11	4.7	7	96	9	4.6	7	1.13	4	84.5	7	26.1	10	8.3	12
Deltapine 388	841	10	38.0	6	4.6	9	98	6	4.6	7	1.11	10	84.4	9	28.8	3	9.0	3
Deltapine 425 RR	780	11	37.0	10	4.5	11	95	11	4.7	6	1.12	9	84.5	8	26.7	9	8.6	8
Deltapine 436 RR	779	12	34.4	12	4.8	5	99	5	4.5	11	1.13	4	84.6	5	25.5	11	8.7	7
LSD 0.10	49		1.6		0.5		ns		ns		0.02		0.7		1.4		0.4	
Mean	878		37.6		4.8		97		4.7		1.12		84.6		27.4		8.8	
C.V. (%)	4.7		3.5		9.0		9		7.3		1.62		0.7		4.4		3.9	
R-squared x 100	78.4		66.4		53.2		32		37.2		66.92		47.9		66.7		44.8	

¹ Wildy test planted May 8, and harvested Oct. 18.² All variables determined from four replications.³ r = ranking.⁴ Cutout = days from planting to NAWF = 5.⁵ Fiber micronaire (Mic), length (Len), length uniformity (Unif), strength (Str), and elongation (Elo).

APPENDIX

Cooperative Extension Service On-Farm Variety Trials

Working with cotton producers across the state, the Cooperative Extension Service compared varieties grown in conventional, Bollgard[®], and Bollgard/Roundup Ready[®] systems. Cultural inputs for these tests were based on the producers' standards for cotton production and were applied equally to all varieties in each test. Tests were replicated two to four times and were arranged in a randomized complete block. Plots were four to eight rows running the length of the field. All plots were machine-harvested using producer equipment, and all harvested cotton was weighed with a boll buggy equipped with load cells.

Varieties tested under a Bollgard[®]/Roundup Ready[®] system received at least one over-the-top application of Roundup[®]. All locations except for the St. Francis and Lonoke county trials received an additional application of Roundup[®] as a post-directed spray. All other cultural practices were consistent within a test and were based on producer standards.

Four tests were conducted comparing Bollgard[®] varieties. These tests provided a *head-to-head* comparison of varieties with Bollgard[®]. Cultural practices including weed control, fertility, irrigation, and insect control were consistent within each test and were based on producer standards.

Thirteen separate conventional variety trials were conducted in 10 counties during the 2000 growing season. These trials were similar to the Arkansas Cotton Variety Test in that all cultural practices were applied equally to varieties in the test.

Data Collected

Lint Fraction and Fiber Analysis: After each plot was harvested and seedcotton weights recorded, a grab sample of seedcotton was collected for determining percentage of lint. Grab samples were ginned (lab gin without lint cleaners), and lint samples collected. Fiber properties were determined using HVI classification.

Ashley County
Paul Cochran - Cooperator
Kenneth Williams - Staff Chairman

Planting Date: 5-1-00
 Replications: 3
 Irrigation Furrow
 Management: Conventional

Harvest Date: 10-30-00
 Soil Series: Herbert Silt Loam
 Fertility: 30-0-30 Preplant
 70-0-0 1st Square

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
SG 105	1147	38.65	4.6	26.6	1.12
FM 958	1101	38.38	3.8	32.2	1.12
PSC 355	1098	39.52	4.2	28.8	1.11
FM 966	1095	39.43	4.3	30.7	1.14
SG 501	1074	41.46	4.8	28.5	1.13
DP 5111	1073	38.49	4.8	28.8	1.09
ST 4892BR	1047	40.78	4.8	26.4	1.08
PSC 952	1039	38.63	4.5	28.2	1.11
DP 388	1038	38.71	4.2	27.0	1.09
GC 333	1027	36.98	4.5	30.0	1.10
DP 5415	1011	38.85	4.9	27.1	1.10
ST 4691B	1010	42.51	3.7	29.0	1.10
GC 204	1008	37.66	5.2	29.1	1.12
DP 51	995	36.30	4.4	25.3	1.08
GC 271	994	36.29	4.4	30.0	1.12
AP 7115	992	38.66	4.1	28.8	1.08
FM 819	982	40.25	3.8	33.3	1.18
FM 989	982	37.20	4.1	32.7	1.12
DES 607	981	41.28	4.3	26.4	1.13
SG 125	970	38.24	4.1	25.2	1.14
ST 4793R	960	39.54	4.4	27.0	1.07
FM 832	940	37.00	3.6	33.4	1.22
ST 474	933	39.32	4.4	26.6	1.09
SG 747	931	38.59	4.3	25.7	1.10
GC 251	875	36.17	4.2	29.2	1.12
ST BXN47	856	39.58	4.5	28.2	1.10
Mean	1006	38.79	4.3	28.6	1.11
LSD (0.05)	141.1	—	—	—	—
CV (%)	8.41	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Arkansas Cotton Variety Tests 2000

Ashley County
Bruce Bond - Cooperator
Kenneth Williams - Staff Chairman

Planting Date:5-25-00
 Replications: 2
 Irrigation: Furrow
 Management: Conventional

Harvest Date: 10-30-00
 Soil Series: Hebert Silt Loam
 Fertility: 28-33-102 Preplant
 5 lb Sulfur Preplant
 72-0-0 1st Square

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in
ST 4691B	1416	42.34	4.7	27.8	1.16
DP 428B	1390	38.43	4.9	25.3	1.12
SG 215BR	1360	40.26	4.7	25.7	1.07
SG 521BR	1355	39.95	4.6	25.2	1.09
SG 501BR	1332	39.51	4.8	26.9	1.11
PM 1218BG/RR	1330	39.91	4.7	25.5	1.06
ST 4793R	1324	42.07	4.8	27.5	1.13
DP 20B	1303	39.90	4.2	26.4	1.10
DP 451B/RR	1299	37.96	5.0	26.4	1.16
DP 422B/RR	1253	39.01	4.2	28.2	1.09
SG 150BR	1223	38.37	4.7	26.0	1.11
SG 125BR	1210	39.39	4.8	26.7	1.10
DP 33B	1204	37.50	4.2	27.5	1.15
DP 409B/RR	1192	38.55	4.3	26.8	1.12
DP 458B/RR	1167	38.60	4.8	28.0	1.12
DP 425RR	1153	37.62	4.7	25.0	1.12
DP 436RR	1153	36.83	4.9	26.2	1.15
PM 1560BG	1150	40.03	4.9	28.2	1.14
ST 474	1142	40.46	4.9	25.7	1.12
ST 4892BR	1137	40.17	4.9	29.2	1.14
SG 125	1137	39.29	4.7	26.7	1.16
DP 429RR	1112	39.78	4.5	26.6	1.09
PM 1560BG/RR	1103	39.42	4.1	29.7	1.14
DP 420RR	1095	39.14	4.7	26.0	1.11
SG 125R	1087	40.58	4.4	25.0	1.07
ST BXN47	1054	40.57	4.8	28.0	1.10
SG 150R	1004	38.09	4.6	25.7	1.08
DP 5415RR	928	37.97	4.4	31.2	1.14
Mean	1200	39.35	4.6	26.9	1.12
LSD (0.05)	151.8	—	—	—	—
CV (%)	6.16	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

**Craighead County
Mike Wallace Farm - Cooperator
Steve Culp - Staff Chairman**

Planting Date: 5-6-00
Irrigation: Furrow
Management: Conventional

Harvest Date: 10-12-00
Soil Series: Commerce Very Fine Sand
Fertility: 17-50-99 Preplant
100-0-0 1st square

Variety	Lint Yield ¹ lb/A	Lint Fraction ² %	Micronaire	Strength g/tex	Length in.
FM 958	1437	42.29	4.5	28.4	1.17
DP 51	1436	39.32	4.6	24.5	1.08
FM 966	1425	40.93	4.2	32.0	1.14
GC 271	1404	39.17	4.8	28.3	1.18
ST 474	1391	44.64	4.7	26.8	1.10
SG 747	1374	41.22	4.6	23.3	1.11
DP 388	1341	40.15	4.1	27.2	1.09
PSC 355	1330	40.69	4.7	26.2	1.10
ST BXN 47	1260	42.73	4.4	27.6	1.10
GC 251	1247	36.84	4.9	28.3	1.08
Mean	1364	40.8	4.6	27.3	1.12

¹ Non-replicated.

² Data obtained from a laboratory gin without the use of a lint cleaner.

Arkansas Cotton Variety Tests 2000

Crittenden County
Weaver Farm - Cooperator
Steve Rodery - Staff Chairman
Larry Stauber - County Extension Agent

Planting Date: 5-2-00

Harvest Date: 9-28-00

Replications: 2

Soil Series: Commerce Silt Loam

Irrigation: None

Fertility: 40-20-60 Preplant

Management: Conventional

40-0-0 1st Square

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
ST BXN47	725	42.70	5.0	29.1	1.11
FM 966	677	41.60	5.4	26.5	1.10
FM 819	676	41.79	5.4	23.6	1.09
PM 1218BG/RR b	676	38.06	4.4	30.2	1.15
GC 251	675	42.45	5.0	27.3	1.08
SG 747	667	45.85	5.3	27.6	1.15
DP 458B/RRb	653	37.07	4.8	24.3	1.12
AP 6101	649	42.68	4.8	29.1	1.15
GC 204	646	41.61	4.4	27.0	1.06
SG 215BRb	645	37.75	5.7	27.3	1.06
AP 7115	643	41.68	4.7	31.4	1.14
FM 958	640	41.36	4.6	26.0	1.07
DP 451B/RRb	612	38.25	4.9	29.4	1.11
PM 1560BG	606	40.77	5.0	26.9	1.07
GC 333	606	41.77	4.7	27.2	1.08
DP 436RR	589	37.27	4.2	26.4	1.11
PSC 355	583	43.34	4.9	25.9	1.07
GC 271	578	41.53	4.9	26.5	1.10
SG 501	576	40.98	4.8	27.3	1.11
ST 4892BR	466	37.69	4.8	27.8	1.08
Mean	629	40.81	4.9	27.3	1.10
LSD (0.05)	111.3	—	—	—	—
CV (%)	8.45	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

² Planted 5-9-00.

Drew County
Jerry Pamplin - Cooperator
Don Wiley- County Extension Agent
Jerry Sites – Staff Chairman

Planting Date: 5-1-00

Harvest Date: 10-11-00

Replications: 3

Soil Series: Rilla Silt Loam

Irrigation: Furrow

Fertility: 0-30-90 Preplant

Management: Conventional

100-0-0 on 5-18-00

Variety	Seedcotton	Lint	Lint	Micronaire ²	Strength ²	Length ²
	yield	yield	fraction ¹			
	lb/A	lb/A	%		g/tex	in.
PSC 355	2929	1163	39.70			
ST 474	2688	1118	41.60			
SG 747	2707	1115	41.20			
SG 105	2865	1091	38.10			
FM 958	2716	1089	40.10			
FM 819	2475	1010	40.80			
GC 333	2679	—	—			
GC 251	2800	—	—			
GC 204	2753	—	—			
GC 271	2753	—	—			
Mean	2737	1098	40.25			
LSD (0.05)	229.5	NS	—			
CV (%)	4.89	6.09	—			

¹ Data obtained from the Rohwer location of the official variety trial conducted by Dr. Fred Bourland/Ray Benson. Data not available for GC 333, GC 251, GC 204, and GC 271.

² Data not available.

Lafayette County
Brent Brothers - Cooperator
Joe Vestal - Staff Chairman

Planting Date: 5-1-00

Harvest Date: 10-4-00

Irrigation: Furrow

Soil Series: Caspianna Silt Loam

Management: Conventional

Fertility: 30-30-60 Preplant

1.5 lb Boron Preplant

60-0-0 MHS

Variety	Lint Yield ¹	Lint Fraction ²	Micronaire	Strength	Length
	lb/A	%			
				g/tex	in.
PM 1560BG	898	41.26	4.3	32.0	1.16
ST 4691B	722	40.44	4.5	27.8	1.19
DP 428B	689	37.33	3.3	30.4	1.14
DP 33B	586	36.49	4.8	28.1	1.17
SG 747	438	39.75	4.4	29.3	1.15
PSC 355	354	33.74	4.5	30.4	1.18
FM 958	294	35.93	4.3	31.1	1.18
ST 474	270	38.18	4.0	29.7	1.15
Mean	531	37.89	4.3	29.9	1.16

¹ Non-replicated.

² Data obtained from a laboratory gin without the use of a lint cleaner.

Arkansas Cotton Variety Tests 2000

St. Francis County
Joe Whittenton Farm - Cooperator
Margy Cannon - Staff Chairman
Justin Hensley - County Extension Agent

Planting Date: 5-22-00
 Replications: 4
 Irrigation: Pivot
 Management: Conventional

Harvest Date: 10-24-00
 Soil Series: Loring Silt Loam
 Fertility: 0-63-126 Preplant
 1 lb Boron Preplant
 55-0-0 PHS
 55-0-60 1st Bloom

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
SG 105	1331	41.97	4.5	28.2	1.12
PM 1218BG/RR	1267	42.33	4.7	25.5	1.03
FM 958	1205	41.81	4.3	30.5	1.13
SG 747	1203	42.91	4.7	24.8	1.06
ST BXN 47	1146	42.97	4.3	24.8	1.05
AP 7115	1103	38.71	4.2	25.5	1.09
ST 474	1093	42.48	3.8	26.2	1.05
PSC 355	1074	41.70	4.1	29.4	1.10
DP 388	1003	39.69	4.1	27.0	1.10
Mean	1158	41.62	4.3	26.9	1.08
LSD (0.05)	70.8	—	—	—	—
CV (%)	4.19	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Woodruff County
Veazey Bros. Farm - Cooperator
Eugene Terhune - Staff Chairman

Planting Date: 5-23-00
 Replications: 2
 Irrigation: Furrow
 Management: Conventional

Harvest Date: 10-31-00
 Soil Series: Dubbs Silt Loam
 Fertility:

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
DP 388	666	42.43	4.2	26.5	1.10
SG 125BR	642	41.22	4.5	23.6	1.04
PM 1218BG/RR	597	40.54	3.7	28.6	1.04
ST 4892BR	596	43.75	4.8	24.3	1.05
DP 425RR	594	40.90	4.4	24.8	1.06
SG 125R	584	42.25	4.8	25.4	1.05
DP 451B/RR	568	39.24	4.6	25.7	1.08
DP 409B/RR	564	41.81	4.6	25.8	1.04
ST 4973R	557	41.96	3.9	27.7	1.08
DP 420RR	544	40.01	4.1	26.8	1.07
DP 429RR	522	40.62	4.3	28.2	1.09
DP 422B/RR	454	37.76	4.1	24.1	1.06
Mean	574	41.04	4.3	26.0	1.06
LSD (0.05)	71.1	—	—	—	—
CV (%)	5.62	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Greene County
Cliff Cupp - Cooperator
Mark Brawner - Staff Chairman

Planting Date: 5-16-00

Harvest Date: 10-27-00

Replications: 6

Soil Series: Forrest Dale Silt Loam

Irrigation: Furrow

Fertility: 90-0-0 1st square

Management: Bollgard-Roundup Ready

Roundup Ultra, 1 application OTT

Roundup Ultra, 1 application PD

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
SG 215BR	992	41.39	4.4	25.6	1.05
PM 1218BG/RR	975	39.13	4.2	26.0	1.10
ST 4892BR	964	41.30	4.4	25.6	1.09
SG 125BR	944	40.48	3.9	27.5	1.11
DP 451B/RR	886	38.03	3.6	26.8	1.07
DP 422B/RR	837	37.37	3.5	26.9	1.10
Mean	933	39.62	4.0	26.4	1.09
LSD (0.05)	57.2	—	—	—	—
CV (%)	5.15	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Mississippi County
Ramey Farm - Cooperator
Keith Martin - Staff Chairman

Planting Date: 5-13-00

Harvest Date: 10-4-00

Replications: 4

Soil Series: Hayti Fine Sandy loam

Irrigation: Furrow

Fertility: 20-30-70-5-0.3 (N-P-K-S-B) Preplant

Management: Roundup Ready

70-0-0 emergence

Roundup Ultra, 1 application OTT

Roundup Ultra, 1 application PD

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
PM 1218BG/RR	839	41.25	4.6	28.2	1.11
DP 451B/RR	649	37.00	4.5	27.7	1.11
ST 4793R	730	41.75	4.7	28.5	1.08
ST 4892BR	712	41.00	4.6	27.9	1.08
SG 125BR	657	38.50	4.6	27.9	1.08
SG 125R	660	39.25	4.6	26.9	1.08
DP 422B/RR	630	37.50	4.1	27.3	1.09
DP 425RR	601	36.00	4.7	27.6	1.14
DP 420RR	630	38.50	4.5	27.3	1.07
Mean	678	38.97	4.5	27.7	1.10
LSD (0.05)	67.9	—	—	—	—
CV (%)	6.85	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Arkansas Cotton Variety Tests 2000

Poinsett County
Jennings Farm - Cooperator
Mike Hamilton - County Extension Agent

Planting Date: 5-18-00

Harvest Date: 10-24-00

Replications: 4

Soil Series: Tunica Clay

Irrigation: Furrow

Fertility: 0-36-72 Preplant

Management: Roundup Ready

90-0-0 1st Square

Roundup Ultra, 1 application OTT

Roundup Ultra, 3 applications PD

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
PM 1218BG/RR	882	41.85	4.7	26.9	1.10
ST 4793R	772	44.49	5.2	26.2	1.07
DP 436RR	748	40.26	4.7	25.6	1.13
DP 425RR	704	40.54	4.7	27.2	1.12
DP 429RR	692	42.50	4.7	25.7	1.09
DP 420RR	675	41.02	4.3	26.6	1.11
SG 150R	644	39.26	4.6	26.2	1.06
SG 125R	630	42.03	4.7	25.9	1.07
Mean	718	41.49	4.7	26.3	1.09
LSD (0.05)	50.1	—	—	—	—
CV (%)	4.72	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

St. Francis County
Joe Whittenton Farm - Cooperator
Margy Cannon - Staff Chairman
Justin Hensley - County Extension Agent

Planting Date: 5-22-00

Harvest Date: 10-24-00

Replications: 4

Soil Series: Loring Silt Loam

Irrigation:

Pivot

Fertility: 0-63-126 preplant

Management: Bollgard-Roundup Ready

1 lb Boron preplant

Roundup Ultra, 1 application OTT

55-0-0 PHS

Roundup Ultra, 1 Application PD

55-0-60 1st Bloom

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
PM 1218BG/RR	1219	43.73	4.3	27.9	1.02
SG 521BR	1196	41.05	4.1	26.8	1.05
SG 215BR	1195	42.06	4.6	25.0	1.04
ST 4892BR	1180	44.53	4.6	26.0	1.06
DP 451B/RR	1123	40.05	4.9	26.0	1.09
SG 150B/RR	1111	41.17	4.6	26.8	1.07
SG 501BR	1110	41.54	5.2	27.3	1.06
DP 422B/RR	1101	41.30	4.2	27.0	1.07
SG 125B/RR	1061	41.43	4.9	26.9	1.08
Mean	1144	41.87	4.6	26.6	1.06
LSD (0.05)	62	—	—	—	—
CV (%)	4	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Chicot County
William Lane - Cooperator
Carl Hayden- Staff Chairman

Planting Date: 5-15-00

Harvest Date: 10-14-00

Replications: 2

Soil Series: Commerce Silt Loam

Irrigation: Furrow

Fertility: 110-0-0 1st Square

Management: Bollgard

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
DP 20B	897	41.52	4.6	24.8	1.07
DP 428B	874	39.74	5.1	24.0	1.09
DP 33B	824	39.60	5.1	24.9	1.11
ST 4691B	818	43.31	5.1	25.3	1.10
SG 150BR	801	39.05	5.0	27.0	1.10
SG 125BR	783	38.54	4.8	25.9	1.09
SG 501BR	774	39.98	5.2	26.1	1.06
PM 1218BG/RR	773	41.22	4.6	26.6	1.08
PM 1560BG/RR	637	39.44	4.8	26.0	1.10
Mean	798	40.27	4.9	25.6	1.09
LSD (0.05)	58.8	—	—	—	—
CV (%)	3.19	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Drew County
Jerry Pamplin - Cooperator
Don Wiley- County Extension Agent
Jerry Sites – Staff Chairman

Planting Date: 4-28-00

Harvest Date: 9-26-00

Irrigation: Furrow

Soil Series: Rilla Silt Loam

Management: Bollgard

Fertility: 0-30-90 Preplant

100-0-0 on 5-18-00

Variety	Seedcotton yield lb/A	Lint yield ¹ lb/A	Lint fraction ² %	Micronaire ³	Strength ³ g/tex	Length ³ in.
PM 1218BG/RR	3257	1290	39.60			
ST 4691B	3071	1256	40.90			
SG 215BR	2893	1105	38.20			
PM 1560BG	2757	1078	39.10			
DP 428B	2895	1033	35.70			
PM 1560BG/RR	2564	1015	39.60			
DP 458B/RR	2532	—	—			
Mean	2853	1130	38.85			

¹ Non-replicated.

² Data obtained from the Rohwer location of the official variety trial conducted by Dr. Fred Bourland/Ray Benson. Data not available for DP 458B/RR.

³ Data not available.

Arkansas Cotton Variety Tests 2000

Jefferson County
Chuck Hooker - Cooperator
April Fisher - County Extension Agent

Planting Date: 5-1-00
 Replications: 2
 Irrigation: Furrow
 Management: Bollgard

Harvest Date: 10-1-00
 Soil Series: Rilla Silt Loam
 Fertility: 45-0-0 emergence
 45-0-0 1st square
 100 lb. Ammonium Sulfate 7-30-00

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
PM 1218BG/RR	1193	41.68	4.9	27.1	1.08
DP 428B	1101	38.01	5.3	24.9	1.11
PM 1560BG	1027	41.14	4.8	26.1	1.09
SG 215BR	990	40.29	4.6	25.3	1.05
DP 451B/RR	984	36.74	4.5	26.7	1.13
ST 4691B	983	42.15	4.6	28.3	1.13
DP 422B/RR	964	38.24	4.6	26.0	1.11
SG 125BR	869	38.08	4.3	26.7	1.11
PM 1560BG/RR	833	39.17	4.2	29.7	1.13
Mean	994	39.50	4.6	26.8	1.10
LSD (0.05)	24.4	—	—	—	—
CV (%)	1.06	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.

Monroe County
Van Miller Farm - Cooperator
Mitch Crow - Staff Chairman

Planting Date: 5-25-00
 Replications: 4
 Irrigation: Pivot
 Management: Bollgard

Harvest Date: 11-1-00
 Soil Series: Lafe Silt Loam
 Fertility:

Variety	Lint Yield lb/A	Lint Fraction ¹ %	Micronaire	Strength g/tex	Length in.
PM 1560BG	727	38.88	4.9	28.1	1.13
ST 4691B	726	39.62	4.9	28.3	1.13
DP 428B	716	36.40	4.4	26.9	1.15
ST 4892BR	714	40.98	5.3	27.9	1.14
SG 501BR	668	36.29	4.8	26.9	1.11
SG 150BR	647	36.53	4.8	26.0	1.12
PM 1218BG/RR	576	39.26	4.6	25.9	1.11
PM 1560BG/RR	546	38.45	4.7	27.0	1.14
Mean	665	38.30	4.8	27.1	1.13
LSD (0.05)	45.6	—	—	—	—
CV (%)	4.67	—	—	—	—

¹ Data obtained from a laboratory gin without the use of a lint cleaner.