

ARKANSAS COTTON VARIETY TESTS

2001



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ARKANSAS

AGRICULTURAL

EXPERIMENT

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Division of Agriculture

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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 31 main entries and 29 first-year entries, while the southern test had 33 main entries and 32 first-year entries. This report also includes the Mississippi County Variety Test (an on-farm evaluation of selected varieties).

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2001 Arkansas Cotton Variety Test

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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 and Benson (2000) documented several unintentional biases that were inherent to the Arkansas cotton variety 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 that genetic differences among entries is the ultimate goal of the test, therefore, all varieties are treated the same. Within the official variety test (OVT), no specialized production inputs were implemented with respect to genetically enhanced varieties. Roundup Ready® varieties, Buctril® resistant varieties, Bt varieties, and conventional varieties were all treated equally with respect to weed and insect control.

Materials and Methods

The 2001 Arkansas Cotton Variety Test was conducted at the Northeast Research and Extension Center at Keiser, the Delta Branch Experiment Station at Clarkedale, the Cotton Branch Experiment Station at Marianna, and the Southeast Branch Experiment Station at Rohwer. An irrigated test was conducted at each site, and a non-irrigated test 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 (1st 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 in all. All varieties were planted in two-row plots ranging in length from 40 to 50

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feet. Varieties entered in the Mississippi County test were planted in 6-row plots running the full length of the field (approximately 1270 feet). The Mississippi County test included conventional, Roundup-ready, and stacked gene (Roundup, and Bollguard,) varieties. In this test, Roundup, and stacked gene varieties were treated with Roundup applied over-the-top. All 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, including COTMAN rules for insecticide termination (Table 1). All plots were machine-harvested and yield per acre calculated and statistically analyzed.

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 2 of the 4 replications of the irrigated tests at Keiser (north test) and Marianna (south test), 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 both the OVT and first-year tests. Due to re-planting at Rohwer and uneven emergence in the non-irrigated test at Keiser, NAWF data were not collected at these locations. 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 heights for varieties were 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 2 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 percentage lint to seedcotton). Fiber properties were determined using HVI classification.

Lint Yield: Seedcotton yield per plot was converted to seedcotton yield per acre 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 ability, 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 (LSD). An LSD was calculated when the F value from ANOVA 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 due to uncontrolled variation and are therefore considered not significant.

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 2001 growing season were such that DD60 accumulations were only slightly above the historical average (1960 - 1998) for north and central Arkansas, but well below the historical averages for south Arkansas. Early season rain and hail storms at Rohwer resulted in having to re-plant on June 11.

Results

Table 1

Table 1 represents cultural inputs and production information for variety trials at Keiser (irrigated and non-irrigated); Clarendale, Marianna (irrigated and non-irrigated); 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 represent 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 represent the results of the 1st year Arkansas Cotton Variety Test. Varieties listed in these tables have never been entered in the Arkansas Cotton Variety Test.

Tables 19-22

Tables 19 - 22 represent two- and three-year means.

Table 23

Table 23 represents results of the Mississippi County on-farm 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. p. 560-563. In Proc. Beltwide Cotton Prod. 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 Prod. Res. Conf., San Antonio, TX. 4-8 Jan. 2000. National Cotton Council, Memphis, TN.

Acknowledgments

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Table 1. Cultural practices for locations in the Arkansas Cotton Variety Test.

Location	Fertilizer amt/a	Planting date	Irrigation dates	Defoliation date	Harvest date
Keiser, irrigated	120-20-40	27-Apr	22-Jun 11-Jul 20-Jul 3-Aug 16-Aug	6-Sep 12-Sep	9-Oct
Keiser, non-irrigated	120-20-40	27-Apr	NA	29-Aug	13-Sep
Clarkdale, irrigated	80-46-60	2-May	27-Jun 3-Jul 12-Jul 18-Jul 31-Jul 10-Aug	7-Sep 10-Sep	2-Oct
Marianna, irrigated	84-30-60	2-May	28-Jun 9-Jul 21-Jul 4-Aug	25-Sep 8-Oct	29-Oct
Marianna, non-irrigated	84-30-60	1-May	NA	17-Sep	Oct 1 & 3
Rohwer, irrigated ¹	108-92-120 0.8lb Boron	11-Jun	2-Jul 25-Jul 7-Aug 25-Aug	22-Oct 29-Oct	7-Nov

¹ Rohwer location test was destroyed by a hail storm on May 27 and re-planted on June 11.

Table 2. Weather summary for the 2001 growing season in north, central, and south Arkansas.

Month	Keiser			Marianna			Rohwer		
	2001 DD60's	Historical avg. ¹ DD60's	Rain (2001) in.	2001 DD60's	Historical avg. DD60's	Rain (2001) in.	2001 DD60's	Historical avg. DD60's	Rain (2001) in.
May	382	326	4.9	385	326	4.0	412	635	7.0
June	500	549	2.3	504	549	3.5	531	564	2.2
July	682	659	1.6	684	659	2.2	699	672	2.2
August	669	579	0.7	652	579	0.6	650	621	3.8
September	340	366	1.9	373	366	1.6	372	532	1.8
Total	2572	2479	11.5	2597	2479	11.9	2663	3024	16.8

¹ DD60 accumulation based on historical weather data for Keiser, Marianna, and Rohwer; 1960-1998.

Table 3. Results of the 2001 Arkansas Cotton Variety Test with irrigation on a Tunica silty clay soil at Keiser.¹

Variety	Lint yield lb/a	R frac.	Leaf pub. rating	Plant ht cm	Days to cutout in.	Fiber properties g/tex	Fiber properties			
							Len in.	R Unif. r	Str r	Elo %
ST 4691B	1560	1	40.5	3	99.0	2	1.14	16	83.7	27
FiberMax FM 958	1474	2	40.9	1	95.2	22	1.16	7	83.5	29
Sure-Grow 105	1429	3	38.7	11	103	23	1.16	8	84.5	13
FiberMax FM 966	1407	4	38.8	10	22	101	1.17	3	85.0	6
GC 106	1393	5	38.9	9	6.3	2	95.6	20	84.3	20
SG 215 BG/RR	1376	6	38.4	12	1.4	31	106	15	95.9	16
ARK 8712	1356	7	38.1	14	2.1	25	104	18	94.1	30
BXN 47	1343	8	40.9	2	5.6	8	111	8	97.2	6
ST 4892BR	1331	9	36.9	22	6.4	1	112	5	96.8	10
Sure-Grow 747	1308	10	38.9	8	2.4	22	109	10	96.6	11
DES H16-24-19	1301	11	37.5	17	5.4	10	98	29	98.0	5
Sure-Grow 521R	1299	12	37.6	16	3.0	18	112	5	95.4	21
DES H16-14-20	1276	13	37.2	19	5.0	11	113	4	96.1	14
DES H16-14-09	1276	14	37.2	19	4.7	12	103	23	94.9	26
GC 108	1232	15	36.8	24	4.5	13	104	21	95.2	23
Miscot 8839	1225	16	32.9	31	2.1	26	121	1	98.5	3
ST 4793R	1222	17	40.2	4	6.3	3	117	2	96.9	9
Miscot 8806	1221	18	38.2	13	4.2	15	106	13	95.7	18
PhytoGen PSC 355	1214	19	40.0	5	5.7	6	105	17	95.9	17
Sure-Grow 501BR	1189	20	37.4	18	1.7	29	103	22	95.0	25
Garst/Agripro 4600RR	1188	21	37.2	21	4.3	14	102	26	95.6	19
DP 20 B	1183	22	35.4	25	2.2	24	98	30	96.0	15
PM 1218 BG/RR	1182	23	37.9	15	2.6	19	104	20	93.3	31
DP 451 B/RR	1168	24	34.3	28	1.9	28	100	28	94.7	27
BXN 49B	1165	25	33.9	29	5.7	7	105	16	96.9	8
DES 810	1141	26	35.0	27	5.6	8	104	18	97.2	6
PM 1199 RR	1138	27	39.2	7	3.5	16	102	25	94.4	29
Garst/Agripro 1500RR	1137	28	36.9	23	1.6	30	107	12	96.3	12
DP 436 RR	1122	29	35.3	26	2.0	27	89	31	95.0	24
ST X9905	1101	30	39.5	6	6.0	5	108	11	98.3	4
ST 580	1075	31	33.1	30	2.6	19	115	3	102.0	1
LSD 0.10	154		4.0		0.8		ns	2.9	0.04	1.2
Mean	1259		37.5		3.8		106	96.2	1.14	84.4
C.V. (%)	10.4		5.8		17.4		10.8	2.6	1.9	30.1
R-squared x 100	63.2		68.0		90.1		50.2	38.6	0.8	4.0
1 Planted April 27								65.7	65.7	77.9

Table 5. Results of the 2001 Cotton Variety Test with irrigation on a Dundee silt loam soil at Clarkdale.¹

Variety	Lint yield lb/a	Lint fract. %	Plant ht cm	Plant ht in.	Fiber properties	Fiber properties				
						Len r	Len r	Str r	Elo r	Mic r
Sure-Grow 747	1242	1	37.8	11	22	1.17	18	28.0	9.0	4.3
Sure-Grow 105	1138	2	37.1	19	25	1.16	23	30.8	9.0	4.6
Miscot 8806	1101	3	36.9	21	132	28	1.17	18	29.8	9.0
SG 215 BG/RR	1096	4	37.6	13	150	12	1.13	29	26.9	9.3
ARK 8712	1092	5	36.7	25	134	26	1.23	3	31.6	5
FiberMax FM 958	1092	6	39.3	1	139	24	1.23	3	31.8	3
ST 4691B	1058	7	39.3	2	155	5	1.23	3	30.0	17
DP 20 B	1051	8	38.2	7	145	17	1.20	11	27.6	27
GC 108	1045	9	38.2	8	153	7	1.20	11	24.5	27
Sure-Grow 501BR	1039	10	36.8	23	149	13	1.17	18	30.3	14
Miscot 8839	1027	11	36.2	27	157	2	1.23	2	28.5	24
ST 4892BR	1023	12	38.6	4	152	9	1.15	25	30.1	16
GC 106	1023	13	37.5	15	130	30	1.15	25	29.5	21
Sure-Grow 521R	1020	14	37.5	14	141	20	1.16	21	29.2	22
BXN 47	1019	15	37.7	12	163	1	1.18	17	30.4	13
DES H16-14-20	1008	16	38.4	6	145	16	1.20	13	30.9	10
DES H16-14-09	1008	17	37.3	17	145	18	1.15	27	31.5	7
BXN 49B	996	18	37.2	18	147	15	1.20	13	30.1	15
DES H16-24-19	994	19	37.8	10	151	10	1.21	9	31.7	4
DP 436 RR	991	20	34.0	31	132	27	1.22	7	26.4	31
DP 451 B/RR	987	21	34.1	30	132	29	1.22	7	27.3	29
PM 1199 RR	973	22	38.6	3	123	31	1.15	27	32.5	2
Gart/Agripro 1500RR	960	23	36.5	26	153	7	1.22	6	31.1	9
PhytoGen PSC 355	960	24	36.7	24	142	19	1.19	15	29.7	20
FiberMax FM 966	952	25	36.8	22	141	20	1.21	9	33.9	1
PM 1218 BG/RR	944	26	37.4	16	140	23	1.12	30	33.6	31
DES 810	928	27	35.3	28	153	6	1.16	23	31.6	6
ST 4793R	918	28	38.5	5	155	4	1.16	21	29.9	18
ST 580	888	29	35.2	29	151	10	1.19	15	30.6	12
ST X9905	888	30	37.9	9	156	3	1.24	1	31.4	8
Gart/Agripro 4600RR	884	31	36.9	20	149	13	1.12	30	28.1	25
LSD 0.10	136	2.1	4		0.04		ns	1.8	0.4	0.4
Mean	1011	37.2	145		1.18		85.0	29.9	8.7	4.1
C.V. (%)	11.4	3.3	7.1		1.9		1.0	3.6	2.4	5.0
R-squared x 100	41.9	70.4	54.3		82.4		41.1	84.7	83.2	80.4

¹ Planted May 2

Table 4. Results of the 2001 Cotton Variety Test without irrigation on a Tunica silt clay soil at Keiser.¹

Variety	Plant properties							Fiber properties						
	Lint yield lb	Lint r % frac	Plant ht cm	r	Len in.	r	Unif %	r	Str g/tex	r	Elo %	r	Mic r	
SG 215 BG/RR	1257	1	42.0	6	79	4	1.05	24	83.0	25	27.9	30	5.0	3
ST 4691B	1234	2	42.3	5	78	5	1.0	9	83.1	22	29.0	24	8.3	27
Sure-Grow 501BR	1193	3	40.7	14	80	2	1.04	28	82.1	29	30.3	15	9.0	10
GC 108	1166	4	41.3	9	81	1	1.11	5	84.0	10	31.3	5	9.1	3
ST 4892BR	1142	5	43.2	2	71	15	1.05	24	83.1	22	30.5	14	8.8	19
GC 106	1116	6	40.4	21	72	14	1.14	1	84.3	2	30.8	10	8.8	20
Sure-Grow 747	1115	7	42.9	3	73	12	1.07	19	83.5	18	28.9	25	9.3	2
Sure-Grow 105	1099	8	40.5	19	66	24	1.11	5	83.8	12	30.0	20	9.0	5
ST X9905	1093	9	40.7	15	69	20	1.08	17	83.4	20	30.6	13	8.1	29
FiberMax FM 958	1083	10	41.0	11	71	15	1.13	3	84.2	4	30.9	9	7.7	31
Miscot 8839	1037	11	40.1	22	74	8	1.10	8	83.5	18	28.3	27	8.3	28
DP 451 B/RR	1025	12	38.3	29	65	25	1.08	17	84.0	6	29.3	21	8.5	24
Garst/Agripro 1500RR	1011	13	40.0	23	76	7	1.07	20	83.0	24	30.6	12	9.0	10
BXN 49B	982	14	41.1	10	74	8	1.12	4	84.0	6	30.1	19	8.4	25
Sure-Grow 521R	981	15	39.5	26	68	21	1.06	23	83.6	17	29.1	22	9.0	5
DES H16-24-19	976	16	39.5	25	61	30	1.09	12	83.7	16	31.0	8	9.0	5
BXN 47	966	17	40.7	15	78	6	1.07	20	82.7	27	28.3	27	8.1	29
PhytoGen PSC 355	946	18	40.6	18	71	17	1.07	20	84.7	1	32.4	2	9.7	1
ST 580	940	19	40.6	17	71	17	1.09	12	83.4	21	33.0	1	9.0	10
ARK 8712	926	20	39.0	27	74	8	1.14	2	84.3	3	30.2	17	8.9	17
DP 20 B	923	21	40.4	20	68	21	1.08	15	83.7	14	27.2	31	9.0	10
Miscot 8806	922	22	39.7	24	63	27	1.08	15	84.0	6	31.3	5	9.0	5
PM 1218 BG/RR	904	23	41.7	7	63	28	1.05	24	82.7	27	28.0	29	9.0	10
ST 4793R	902	24	42.8	4	64	26	1.04	28	83.8	12	30.8	10	9.0	10
DES H16-14-20	893	25	41.0	12	80	2	1.09	10	83.8	11	32.3	3	9.1	4
PM 1199 RR	893	26	41.5	8	62	29	1.05	24	83.7	14	29.1	22	8.6	22
Garst/Agripro 4600RR	880	27	38.4	28	70	19	0.98	31	82.0	30	30.3	16	8.9	17
DES H16-14-09	865	28	43.6	1	73	12	1.09	12	83.0	25	31.7	4	8.7	21
FiberMax FM 966	845	29	40.9	13	56	31	1.09	10	84.2	4	31.2	7	8.4	26
DES 810	829	30	37.6	30	74	8	1.04	30	81.9	31	30.2	18	8.6	23
DP 436 RR	805	31	33.7	31	67	23	1.11	7	84.0	6	28.7	26	9.0	10
LSD 0.10	194	3.0	ns	ns	0.03	ns	ns	ns	ns	2.4	ns	0.6	ns	ns
Mean	998	40.5	71	1.08	83.5	30.1	ns	ns	ns	ns	ns	ns	ns	ns
C.V. (%)	16.5	4.4	10.4	1.7	1.0	4.6	ns	ns	ns	ns	ns	ns	ns	ns
R-squared x 100	48.2	70.4	61.0	87.8	60.8	69.1	78.2	75.4	78.2	75.4	78.2	75.4	78.2	75.4

¹ Planted April 27

Table 6. 2001 Arkansas Cotton Variety Test results - means across northern locations.

Variety	Lint yield lb/a	Lint frac.	r	Plant ht. cm	r	Len in.	r	Unif. %	r	Fiber properties				
										g/tex	r	Str	r	Elo
ST 4691B	1284	1	40.70	1	122	3	1.15	9	84.20	20	29.00	24	8.40	28
SG 215 BG/RR	1243	2	39.30	10	118	10	1.08	29	84.20	19	27.80	29	9.20	2
Sure-Grow 105	1222	3	38.80	17	108	26	1.14	16	84.40	14	30.30	18	9.00	8
Sure-Grow 747	1222	4	39.80	4	114	15	1.12	22	84.20	22	28.80	26	9.20	3
FiberMax FM 958	1216	5	40.40	3	112	18	1.17	2	84.50	12	31.00	7	7.80	31
GC 106	1177	6	38.90	13	110	17	1.14	13	84.50	11	29.60	19	9.00	8
ST 4892BR	1165	7	39.50	7	120	7	1.11	23	84.40	14	30.90	12	8.90	15
GC 108	1148	8	38.80	16	119	9	1.16	5	84.50	10	30.40	17	8.90	11
Sure-Grow 501BR	1140	9	38.30	18	117	12	1.10	27	84.00	26	30.70	14	9.10	4
ARK 8712	1125	10	37.90	23	110	22	1.19	1	85.20	1	30.50	16	8.90	11
BXN 47	1109	11	39.70	6	125	2	1.13	19	83.80	28	29.00	23	8.50	26
Sure-Grow 521R	1100	12	38.20	21	115	14	1.12	21	84.70	5	29.20	21	9.00	6
Miscot 8839	1096	13	36.40	27	126	1	1.17	3	84.50	9	28.90	25	8.60	25
DES H16-24-19	1090	14	38.30	19	112	27	1.15	10	84.30	17	31.20	6	8.90	17
Miscot 8806	1081	15	38.20	20	108	24	1.13	18	84.70	6	31.00	9	9.00	6
FiberMax FM 966	1068	16	38.80	15	108	29	1.16	7	84.80	4	32.90	1	8.10	30
DP 451 BiRR	1060	17	35.50	30	106	28	1.15	11	84.70	7	28.50	27	8.50	27
DES H16-14-20	1059	18	38.90	14	119	4	1.15	12	84.30	18	31.40	4	9.00	5
DP 20 B	1052	19	38.00	22	111	25	1.14	15	84.20	21	27.20	31	8.90	13
DES H16-14-09	1049	20	39.40	8	113	20	1.10	25	84.10	24	31.50	2	8.70	22
BXN 49B	1048	21	37.40	26	116	16	1.17	4	84.40	13	29.40	20	8.60	24
PhytoGen PSC 355	1040	22	39.10	11	113	18	1.13	19	84.90	3	31.30	5	9.50	1
Garst/Agripro 1500RR	1036	23	37.80	24	119	8	1.14	13	83.80	27	30.90	13	8.60	23
ST X9905	1027	24	39.30	9	119	11	1.15	8	84.10	25	30.60	15	8.30	29
ST 4793R	1014	25	40.50	2	121	5	1.10	26	84.50	8	30.90	10	8.90	16
PM 1218 BG/RR	1010	26	39.00	12	110	23	1.08	30	83.20	30	28.30	28	8.80	19
PM 1199 RR	1001	27	39.80	5	103	30	1.11	23	85.10	2	30.90	10	8.80	18
Garst/Agripro 4600RR	984	28	37.50	25	114	21	1.07	31	83.00	31	29.10	22	8.80	21
DP 436 RR	973	29	34.30	31	102	31	1.16	6	84.30	16	27.20	30	8.90	13
ST 580	968	30	36.30	28	120	5	1.13	17	84.10	23	31.50	3	8.90	10
DES 810	966	31	36.00	29	118	13	1.10	28	83.80	29	31.00	8	8.80	20
LSD 0.10	93		1.70		8		0.02		0.80		1.20		0.30	0.20
Keiser, irrigated	1259		37.50		106		1.14		84.40		30.10		8.90	4.40
Keiser, non-irrigated	998		40.50		70		1.08		83.50		30.10		8.90	4.60
Clarkdale, irrigated	1011		37.20		145		1.18		85.00		29.90		8.70	4.10
Mean	1098		38.40		114		1.13		84.30		30.00		8.80	4.40
LSD 0.10	98		1.40		9		0.01		0.17		1.00		0.20	0.10
C.V. (%)	12.7		4.60		9.10		1.85		0.93		4.10		3.10	5.30
R-squared x 100	68.2		78.60		92.10		93.30		72.00		78.70		79.70	82.40
Prob. (variety x location)	0.09		0.42		0.46		0.20		0.69		0.11		0.56	0.30

Table 7. Results of the 2001 Arkansas Cotton Variety Test with irrigation on a Calloway silt loam soil at Marianna.¹

Variety	Lint yield lb/a	Leaf			Plant			Days to cutout			Fiber properties							
		Leaf frac.	r	%	pub.	r	ht	r	in.	r	Len	r	Str	r	Elo	r	Mic	r
DES H16 14-09	1188	1	40.3	10	4.3	12	148	26	97.5	27	1.07	32	82.9	26	31.2	3	9.0	8
DES H16 24-19	1186	2	38.2	27	5.6	6	145	30	99.8	19	1.15	5	83.7	9	29.9	10	8.9	11
PhytoGen PSC 355	1156	3	40.6	7	5.4	8	149	25	99.0	24	1.13	16	84.0	4	28.4	23	9.1	1
Fibermax FM 958	1129	4	40.8	4	3.5	18	135	32	99.4	21	1.17	3	83.7	9	29.9	10	8.2	32
ST 4892BR	1112	5	40.5	8	6.4	3	162	8	103.0	9	1.11	23	83.0	24	29.8	12	9.1	3
ST X9905	1111	6	41.0	3	5.5	7	158	18	101.0	16	1.15	5	83.3	15	31.0	4	8.4	29
Miscot 8806	1106	7	39.2	18	4.0	13	146	28	97.4	28	1.10	25	82.3	33	30.8	5	8.8	17
ST 4691B	1103	8	40.5	9	6.5	2	168	3	105.0	1	1.13	17	83.2	18	28.6	20	8.9	12
Sure-Grow 105	1091	9	37.0	30	2.8	25	141	31	94.6	33	1.15	5	84.3	2	30.4	6	8.9	10
BXN 47	1068	10	41.8	1	5.0	9	161	10	101.0	14	1.10	25	82.5	32	28.2	25	8.4	29
DES 810	1066	11	37.1	29	4.6	11	156	22	101.0	15	1.11	21	83.4	14	29.8	12	8.9	12
BXN 49B	1055	12	39.2	17	6.3	4	160	13	102.0	10	1.14	14	83.2	19	27.8	27	8.6	25
PM 1218 BG/RR	1026	13	39.8	12	3.6	16	156	20	97.2	30	1.08	29	82.5	31	28.5	21	8.7	21
DES H16 14-20	1015	14	38.9	21	5.9	5	159	15	101.0	13	1.12	18	83.1	22	30.2	8	9.0	4
DP 20 B	983	15	39.1	19	3.2	20	150	24	98.7	25	1.11	21	83.1	23	26.2	32	8.8	18
Sure-Grow 521R	959	16	39.7	13	2.8	24	153	23	98.4	26	1.09	27	83.6	12	28.3	24	9.0	4
PM 1199 RR	951	17	41.2	2	4.6	10	132	33	96.4	31	1.05	33	82.6	30	31.6	2	8.5	27
ST 4793R	942	18	40.8	5	6.5	1	159	14	100.0	17	1.10	24	83.1	20	29.7	14	8.8	18
Fibermax FM 966	935	19	40.7	6	3.2	21	148	26	101.0	12	1.14	10	83.7	9	32.3	1	7.9	33
Miscot 8839	928	20	38.8	24	2.0	31	164	6	100.0	18	1.14	12	84.3	1	29.1	19	8.9	12
SG 215 BG/RR	928	20	39.4	16	1.6	32	158	18	99.1	23	1.08	30	83.2	17	26.9	31	8.9	15
Sure-Grow 747	926	22	40.0	11	3.4	19	163	7	103.0	8	1.14	12	83.7	7	26.9	29	9.0	4
Sure-Grow 501BR	904	23	38.5	25	2.1	28	161	9	97.4	28	1.08	30	83.1	20	29.5	18	8.9	15
DP 436 RR	883	24	35.2	32	2.4	27	146	29	96.1	32	1.14	14	83.4	13	26.0	33	8.7	20
ST 580	868	25	38.9	21	2.9	23	159	16	104.0	3	1.12	18	82.7	28	28.5	21	9.0	4
ARK 8712	864	26	38.3	26	3.0	22	161	10	99.1	22	1.17	3	84.0	6	30.0	9	9.0	8
Deltapine 565	859	27	38.9	21	3.7	15	168	2	101.0	11	1.18	2	84.1	3	29.6	17	8.6	23
DP 451 B/RR	819	28	34.0	33	2.5	26	161	10	99.6	20	1.15	5	83.7	7	26.9	29	8.6	25
DeltaPEARL	799	29	39.7	13	2.0	29	165	5	104.0	5	1.19	1	84.0	4	29.7	15	8.2	31
Sure-Grow 821	761	30	39.1	20	1.4	33	156	20	104.0	4	1.12	20	83.3	16	29.6	16	9.1	1
Garst/Agripro 4600RR	727	31	39.5	15	4.0	14	158	17	103.0	7	1.09	28	83.0	25	27.9	26	8.7	21
NUCOTN 33 B	720	32	35.6	31	3.6	17	169	1	105.0	2	1.14	10	82.9	26	27.8	28	8.6	23
Garst/Agripro 1500RR	686	33	37.3	28	2.0	30	166	4	103.0	6	1.15	9	82.7	29	30.3	7	8.5	28
LSD 0.10	127		2.0		0.7		11.8			4.1	0.04		ns		1.7		0.3	
Mean	965		39.1		3.8		156		100.3		1.12		83.3		29.1		8.7	
C.V. (%)	11.2		3.1		15.1		6.4			3.5	1.9		0.7		3.4		3.8	
R-squared x 100	71.5		81.5		90.7		67.7			60.2	83.2		60.8		82.7		72.2	

1 Planted May 2.

Table 8. Results of the 2001 Arkansas Cotton Variety Test without irrigation on a Calloway silt loam soil at Marianna.¹

Variety	Lint yield lb/a	Lint frac. r	Days to cutout r	Plant ht cm	Plant in.			Fiber properties			Mic r
					Len r	Unif r	% g/tex	Str r	Elo r	Mic r	
SG 215 BG/RR	845	1	43.4	2	89.2	15	111	13	1.02	26	81.5
Miscot 8806	818	2	38.9	24	84.9	30	99	24	1.08	7	84.3
BXN 47	816	3	45.2	1	85.0	29	94	28	1.02	28	81.8
Fibermax FM 958	812	4	40.5	13	86.6	25	93	29	1.11	2	84.0
PhytoGen PSC 355	799	5	39.7	18	87.1	23	104	18	1.05	19	83.5
ST 4691B	790	6	42.5	3	90.5	7	115	7	1.06	13	82.5
Sure-Grow 747	779	7	41.7	7	89.5	12	112	12	1.04	21	82.9
ST 4892BR	770	8	41.7	6	91.1	5	116	5	1.04	23	82.8
DES H16 24-19	770	9	37.5	29	87.5	22	100	23	1.05	19	81.6
Sure-Grow 501BR	769	10	42.5	4	88.3	19	110	14	1.01	30	82.3
ST X9905	763	11	40.3	15	91.1	4	115	8	1.08	7	82.9
Miscot 8839	761	12	40.8	12	88.9	16	104	19	1.08	7	83.5
DP 436 RR	746	13	38.0	27	85.4	28	89	31	1.08	4	83.4
NuCOTN 33 B	736	14	37.0	32	92.9	1	126	1	1.08	4	82.9
Sure-Grow 105	729	15	40.3	16	82.1	33	90	30	1.04	21	82.0
DES 810	715	16	38.0	27	88.4	18	113	10	1.02	26	81.8
Sure-Grow 821	708	17	39.0	23	91.3	3	112	11	1.08	4	82.4
ARK 8712	697	18	37.4	31	90.5	8	117	3	1.13	1	84.1
PM 1218 BG/RR	690	19	39.7	18	89.9	11	121	2	1.04	23	83.8
ST 580	690	20	38.2	26	91.4	2	114	9	1.05	17	82.7
DES H16 14-09	679	21	40.8	11	83.1	32	95	27	1.01	29	82.0
DP 451 B/RR	668	22	37.5	29	90.2	9	108	15	1.07	11	82.5
Garst/AgriPro 1500RR	658	23	40.4	14	88.7	17	104	19	1.05	17	81.5
Fibermax FM 966	652	24	39.2	22	86.4	27	101	22	1.06	14	83.6
DP 20 B	639	25	39.6	20	88.2	20	104	17	1.06	14	81.3
DES H16 14-20	637	26	38.9	25	90.6	6	115	6	1.06	14	82.4
Garst/AgriPro 4600RR	618	27	39.3	21	90.0	10	106	16	1.00	31	81.5
Sure-Grow 521R	613	28	40.9	10	84.7	31	87	33	0.99	33	82.1
BXN 49B	605	29	41.1	9	86.4	26	89	32	1.04	23	81.9
DeltaPine 565	603	30	35.7	33	89.2	14	116	4	1.07	11	83.2
ST 4793R	591	31	42.3	5	86.6	24	96	26	1.00	32	81.0
DeltaPEARL	561	32	41.6	8	87.9	21	96	25	1.10	3	81.7
PM 1199 RR	501	33	39.8	17	89.5	12	101	21	1.08	7	83.7
LSD 0.10	125		2.9		ns	18		0.05	1.4	1.2	0.4
Mean	704		40.0		88.3	105		1.05	82.6	29.6	0.5
C.V. (%)	15.1		4.3		4.9	14.3		2.6	1.0	2.4	4.9
R-squared x 100	46.7		74.2		61.4	69.4		76.0	70.3	94.2	5.5
1 Planted May 1.											66.8

Table 9. Results of the 2001 Arkansas Cotton Variety Test with irrigation on a Desha silt loam soil at Rohwer.¹

Variety	Lint yield lb/a	Lint frac.	r	Fiber properties												
				in.	r	Len	r	Unif	r	%	g/tex	r	Str	r	Elo	r
ST X9905	1377	1	38.9	2	1.18	13	84.9	23	29.6	12	7.9	32	4.0	30		
PM 1218 BG/RR	1321	2	38.1	4	1.14	30	85.0	22	28.5	18	8.9	5	4.9	1		
Miscot 8806	1274	3	35.6	23	1.16	25	84.6	28	31.2	4	8.4	25	4.1	25		
Miscot 8839	1264	4	35.3	26	1.19	6	86.1	12	27.2	30	8.8	9	4.4	15		
PhytoGen PSC 355	1254	5	37.5	8	1.17	15	86.4	9	28.7	17	9.1	2	4.6	8		
ST 4793R	1174	6	37.8	6	1.15	27	84.7	26	28.2	22	8.7	15	4.6	8		
ARK 8712	1172	7	35.7	22	1.19	6	86.9	2	30.5	8	8.9	5	4.5	12		
Fibermax FM 958	1167	8	39.2	1	1.21	3	86.7	3	31.2	3	8.3	30	4.6	8		
Sure-Grow 747	1160	9	38.2	3	1.17	15	86.6	4	26.7	32	9.1	2	4.8	2		
DES H16 14-09	1160	10	36.7	17	1.16	23	85.4	17	29.7	11	8.6	20	4.7	4		
BXN 49 B	1150	11	36.8	16	1.22	2	86.5	6	28.4	21	8.5	24	4.2	20		
ST 4892BR	1148	12	37.1	12	1.15	28	84.8	25	28.4	19	8.6	17	4.6	8		
ST 4691B	1139	13	37.3	10	1.19	6	86.5	6	27.2	31	8.4	29	4.4	15		
Fibermax FM 966	1134	14	36.7	17	1.19	6	86.0	13	34.9	1	8.0	31	4.0	30		
BXN 47	1125	15	37.1	12	1.17	18	85.9	15	27.6	26	8.4	27	4.6	5		
DP 451 B/RR	1117	16	33.1	32	1.17	15	86.2	11	28.1	23	8.5	22	4.1	25		
DES H16 14-20	1115	17	35.5	25	1.17	18	84.9	24	31.8	2	9.0	4	4.1	25		
DES 810	1083	18	33.7	31	1.17	18	84.3	32	30.4	9	8.8	9	4.0	30		
DP 436 RR	1072	19	32.7	33	1.18	11	85.3	19	27.3	29	8.8	9	4.2	20		
DES H16 24-19	1063	20	34.6	28	1.18	11	85.2	21	30.1	10	8.6	20	4.3	19		
SG 215 BG/RR	1058	21	34.4	29	1.14	30	84.4	31	26.1	33	8.6	17	4.2	20		
Deltapine 565	1040	22	37.1	12	1.20	4	86.3	10	29.3	15	8.4	28	4.5	13		
Sure-Grow 501BR	1025	23	37.4	9	1.14	29	85.8	16	29.6	13	8.8	9	4.5	14		
ST 580	1016	24	35.0	27	1.16	23	85.3	19	27.9	24	8.9	5	4.2	20		
Garst/AgrilPro 4600RR	998	25	36.7	17	1.10	33	84.0	33	29.1	16	8.8	9	4.6	6		
DeltaPEARL	992	26	37.7	7	1.24	1	86.6	5	29.4	14	7.6	33	4.1	25		
Sure-Grow 105	987	27	36.3	20	1.19	6	86.5	6	30.9	6	8.5	22	4.4	15		
Sure-Grow 821	979	28	37.9	5	1.17	18	85.4	17	27.9	25	9.2	1	4.7	3		
Sure-Grow 521R	957	29	35.8	21	1.13	32	84.5	30	27.4	27	8.7	15	4.3	18		
DP 20 B	944	30	36.9	15	1.16	25	84.7	26	27.3	28	8.9	8	4.2	20		
PM 1199 RR	930	31	37.1	11	1.20	5	87.1	1	31.0	5	8.8	9	4.6	6		
Garst/AgrilPro 1500RR	773	32	35.6	23	1.17	18	84.6	29	30.6	7	8.4	25	3.9	33		
NuCOTN 33 B	692	33	33.8	30	1.18	13	86.0	13	28.4	19	8.6	17	4.1	25		
LSD 0.10	210		1.6		0.02			1.0		1.8		0.4	0.3			
Mean	1087		36.3		1.17			85.6		29.1		8.6	4.3			
C.V. (%)	16.5		2.6		1.2			0.7		3.6		2.7	4.6			
R-squared x 100	48.2		88.5		8.9			80.2		85.9		81.4	79.6			

¹ Planted June 11.

Table 10. 2001 Arkansas Cotton Variety Test results - means across southern locations.

Variety	Lint yield lb/a	Lint frac.	r	Plant				Fiber properties						
				cm	r	Len in.	r	Unif. %	r	g/tex	r	Elo %	r	
ST X9905	1083	1	40.10	5	136	10	1.13	5	83.70	19	30.20	9	4.40	28
PhytoGen PSC 355	1069	2	39.20	12	126	23	1.12	17	84.60	3	28.80	20	4.90	3
Miscot 8806	1066	3	37.90	22	123	27	1.11	21	83.70	16	30.60	6	4.70	12
Fibermax FM 958	1036	4	40.10	3	114	33	1.16	2	84.80	2	31.20	3	4.70	12
PM 1218 BG/RR	1012	5	39.20	13	139	5	1.08	27	83.70	18	28.40	23	5.00	1
ST 4691B	1010	6	40.10	4	141	3	1.12	14	84.00	12	27.70	28	4.60	19
ST 4892BR	1010	7	39.80	7	139	4	1.10	25	83.50	22	29.30	17	4.70	6
DES H16 14-09	1009	8	39.30	11	122	28	1.08	29	83.40	25	30.90	5	4.90	2
DES H16 24-19	1006	9	36.80	29	123	26	1.13	12	83.50	23	30.00	11	4.70	14
BXN 47	1003	10	41.30	1	127	21	1.09	26	83.40	26	27.90	27	4.90	4
Miscot 8839	985	11	38.30	21	134	17	1.13	6	84.60	3	28.00	26	8.60	19
Sure-Grow 747	955	12	39.90	6	137	7	1.12	17	84.40	7	27.20	30	8.90	5
DES 810	955	13	36.30	30	134	15	1.10	24	83.10	28	30.00	11	4.60	22
SG 215 BG/RR	944	14	39.00	15	135	13	1.08	30	83.00	29	26.70	32	8.80	9
BXN 49 B	937	15	39.00	14	125	24	1.13	10	83.80	15	28.00	25	8.50	20
Sure-Grow 105	936	16	37.80	23	116	32	1.13	12	84.20	9	30.50	8	4.40	30
DES H16 14-20	922	17	37.70	25	137	8	1.11	19	83.40	24	31.80	2	4.50	26
ARK 8712	911	18	37.10	28	139	6	1.16	3	85.00	1	30.50	7	8.80	8
Fibermax FM 966	907	19	38.90	16	124	25	1.13	11	84.40	8	34.00	1	7.90	33
ST 4793R	902	20	40.30	2	128	20	1.08	28	82.90	31	29.30	18	8.80	10
DP 436 RR	900	21	35.30	32	118	30	1.13	6	84.00	13	26.80	31	8.80	11
Sure-Grow 501BR	899	22	39.50	9	136	11	1.07	31	83.70	17	30.00	13	8.90	6
DP 451 B/RR	868	23	34.80	33	134	14	1.13	9	84.10	10	27.20	29	8.40	29
ST 580	858	24	37.40	26	136	9	1.11	20	83.60	21	29.50	15	8.90	7
DP 20 B	855	25	38.50	19	127	22	1.11	22	83.00	29	26.60	33	8.80	15
Sure-Grow 521R	843	26	38.80	17	120	29	1.07	32	83.40	26	28.40	22	9.00	4
Deltapine 565	834	27	37.20	27	142	2	1.15	4	84.50	5	29.60	14	8.50	23
Sure-Grow 821	816	28	38.60	18	134	16	1.12	15	83.70	20	29.10	19	9.20	1
PM 1199 RR	794	29	39.40	10	117	31	1.11	22	84.50	6	31.10	4	8.50	23
DeltaPEARL	784	30	39.60	8	130	19	1.18	1	84.10	11	29.40	16	7.90	32
Garst/Agripro 4600RR	781	31	38.50	20	132	18	1.06	33	82.80	33	28.60	21	8.60	19
NuCOTN 33 B	716	32	35.50	31	147	1	1.13	6	83.90	14	28.30	24	8.60	19
Garst/Agripro 1500RR	706	33	37.70	24	135	12	1.12	15	82.90	32	30.20	10	4.20	33
LSD 0.10		91.3		1.20		10.6		0.02		0.70		0.90		0.20
Marianna, irrigated	965		39.10		156		1.12		83.30		29.10		8.72	4.60
Marianna, non-irrigated	704		40.00		105		1.05		82.60		29.10		8.61	4.90
Rohwer, irrigated	1087		36.30		NA		1.17		85.60		29.60		8.60	4.30
LSD 0.10		59.8		1.90		20.8		0.01		0.20		0.70		0.07
Mean	91.8		38.40		130		1.11		83.80		29.30		8.60	4.60
C.V. (%)	14.8		3.50		9.8		1.90		0.80		3.20		2.60	4.70
R-squared x 100	76.00		87.30		88.3		93.80		90.50		88.40		83.20	84.00
Prob. (variety x location)	<0.01		0.03		0.3		0.03		<0.01		0.01		0.05	0.02

Table 11. Results of the 2001 Arkansas Cotton Variety Trials for first-year entries with irrigation on a Tunica silty clay soil at Keiser.¹

Variety	Lint yield lb/a	Lint frac. r	Leaf pub. r	Plant ht cm	Days to cutout r	Len in.	Unif r	Fiber properties		
								In.	r	Str r
FiberMax FM 958B	1458	1	39.6	13	2.6	23	100	19	95.8	16
DP 491	1433	2	39.6	12	3.8	9	108	9	98.5	3
ASCI EXP0240	1423	3	39.2	17	2.7	21	98	20	97.0	8
ARK 9111-57-12	1411	4	39.4	14	4.9	5	113	5	95.2	18
Sure-Grow 747- Chk	1401	5	40.8	6	2.2	28	94	29	93.7	26
PH98M-2983	1389	6	41.9	3	3.3	16	117	2	97.9	6
DPLX 99M03	1385	7	42.0	2	6.4	1	101	15	95.3	17
ASCI EXP0263	1384	8	40.2	8	2.4	24	100	18	94.1	24
ARK 9108-04-17	1374	9	38.7	20	2.8	18	103	13	97.1	7
ARK 9111-57-20	1361	10	39.3	16	3.5	13	101	15	95.0	19
FiberMax FM 989BR	1356	11	37.7	24	2.2	27	94	27	92.2	30
M623	1355	12	40.8	5	2.8	19	105	12	96.6	10
PH98M-3196	1355	13	40.5	7	3.5	14	96	24	96.2	13
ARK 9108-23-03	1339	14	40.1	10	2.6	22	103	13	94.4	22
DP 555 BGRR	1334	15	44.1	1	2.9	17	114	4	98.3	4
ARK 9101-91-10	1331	16	38.8	18	3.4	15	95	25	93.7	27
FiberMax FM 966B	1324	17	38.5	21	3.6	12	95	25	96.2	13
ASCI EXP0724	1324	18	38.8	19	1.5	29	110	6	96.7	9
DPLX 00S04	1322	19	39.7	11	4.2	7	106	11	96.3	11
ST 457	1271	20	40.1	9	5.2	3	98	22	94.4	23
ARK 9108-23-05	1260	21	38.0	22	2.4	26	92	30	93.4	28
ARK 9101-97-09	1259	22	36.4	28	5.2	3	100	17	94.9	20
Miscot 8806-3-2-35	1247	23	39.3	15	3.9	8	96	23	93.9	25
DPLX 99X35	1244	24	41.6	4	2.7	20	107	10	96.3	12
Miscot 8806-3-2-21	1226	25	36.9	26	3.8	9	94	27	92.8	29
M611	1220	26	37.4	25	1.2	30	122	1	99.0	1
PhytoGen PSC 355-Chk1095	27	35.8	29	5.5	2	98	21	94.6	21	1.15
DES 816	1090	28	33.3	30	4.9	5	109	7	96.0	15
M658	1063	29	36.5	27	3.7	11	109	8	98.0	5
M651	1046	30	37.9	23	2.4	25	114	3	98.7	2
LSD 0.10	137	3.6	0.8	10	2.6		0.04	1.4	2.3	0.4
Mean	1303	39.1	3.4	103	95.7	1.15	84.2	30.4	8.7	4.4
C.V. (%)	9.0	5.4	19.2	8.5	2.3	1.9	1.0	4.4	3.1	5.8
R-squared x 100	68.4	65.6	82.7	67.7	48.9	76.7	65.6	77.6	90.1	73.1

¹ Planted April 27

Table 12. Results of the 2001 Arkansas Cotton Variety Test for first-year entries without irrigation on a Tunica silty clay soil at Keiser.¹

Variety	Lint yield lb/a	Lint frac.	r	Plant ht cm	r	Len in.	r	Unif %	r	Fiber properties				
										g/tex	r	Mic	r	
DP 555 BGRR	1175	1	45.8	1	84	1	1.10	9	81.7	30	28.6	28	4.8	9
DP 491	1142	2	43.9	4	73	10	1.17	1	82.1	29	29.9	25	4.6	16
ARK 9111-57-12	1134	3	43.0	7	77	5	1.10	9	83.8	7	30.9	19	4.6	10
Miscot 8806-3-2-21	1122	4	41.4	15	69	20	1.06	27	83.4	11	31.7	10	4.9	7
DPLX 99X35	1119	5	45.3	2	75	7	1.06	24	82.8	18	30.2	24	4.9	8
PH98M-2983	1111	6	43.4	5	78	3	1.07	21	82.5	21	29.6	27	4.7	14
FiberMax FM 989BR	1108	7	39.6	29	70	16	1.07	21	82.5	22	31.0	17	4.4	24
ST 457	1107	8	41.0	18	65	27	1.09	12	82.8	17	31.4	13	4.2	27
ASCI EXP0240	1091	9	42.9	8	71	12	1.09	12	82.9	15	30.9	19	4.6	16
ARK 9101-91-10	1084	10	40.3	27	70	16	1.07	21	82.4	24	31.8	9	4.8	10
Sure-Grow 747- Chk	1068	11	44.4	3	67	24	1.09	15	84.0	2	27.3	30	5	2
FiberMax FM 958B	1063	12	41.0	19	65	27	1.09	15	83.1	14	31.7	12	4.5	20
Miscot 8806-3-2-35	1051	13	43.1	6	70	16	1.06	24	82.9	16	28.6	29	5.1	5
ARK 9111-57-20	1043	14	42.1	11	66	6	1.08	19	83.3	12	31.7	10	4.2	26
Phytogen PSC 355- Chk1042	1045	15	41.4	14	66	26	1.08	19	83.9	4	32.3	6	9.8	1
ASCI EXP0724	1041	16	42.3	10	69	21	1.12	5	83.3	12	30.6	21	7.5	30
SPLX 00S04	1030	17	41.2	17	74	9	1.12	6	83.9	5	31.1	16	8.4	19
ASCI EXP0263	1020	18	41.2	16	62	29	1.13	3	83.7	8	34.3	1	8.6	17
ARK 9108-23-03	1006	19	41.6	13	72	11	1.09	15	83.8	6	30.5	23	8.6	18
DES 816	1006	20	39.6	28	68	23	1.09	15	82.2	26	32.3	6	8.9	7
M623	1003	21	40.7	24	70	15	1.09	12	82.7	19	30.5	22	7.7	28
M658	998	22	40.9	22	71	14	1.06	24	82.1	27	31.1	14	8.0	24
ARK 9108-04-17	996	23	42.0	12	70	16	1.06	27	82.5	23	33.7	2	8.9	7
DPLX 99M03	995	24	42.8	9	71	12	1.06	27	82.3	25	32.4	5	8.8	12
ARK 9101-97-09	981	25	41.0	19	69	21	1.11	8	84.0	3	33.5	3	8.8	12
FiberMax FM 966B	970	26	40.8	23	66	25	1.14	2	83.4	10	31.0	17	8.1	23
PH98M-3196	912	27	40.9	21	82	2	1.11	7	82.7	20	29.9	26	8.8	10
M651	890	28	38.3	30	78	4	1.10	9	82.1	27	31.1	15	8.0	24
ARK 9108-23-05	880	29	40.4	25	56	30	1.00	30	83.6	9	32.2	8	8.7	15
M611	875	30	40.3	26	75	7	1.13	3	84.2	1	33.3	4	8.3	20
LSD 0.10	151	1.4		10.8		0.04		1.2		2.0		0.4		0.5
Mean	1035		41.7		70.7		1.09		83.0		31.2		8.6	4.6
C.V. (%)	12.4		2.0		8.9		2.2		0.8		3.8		2.6	6.3
R-squared x 100	54.0		89.4		74.6		76.7		66.7		77.5		93.2	76.5

¹ Planted April 27

Table 13. Results of the 2001 Arkansas Cotton Variety Test for first-year entries with irrigation on a Dundee silt loam soil at Clarkedale.¹

Variety	Lint yield lb/a	Lint r	Lint frac. %	Plant ht cm	Plant r	Len. in.	r Unif.	Str. g/tex	Elo r	Mic r	Fiber properties	
											%	g/tex
Sure-Grow 747- Chk	1257	1	40.4	4	137	21	1.13	22	84.8	4	8.9	1
FiberMax FM 966B	1225	2	38.8	13	133	28	1.11	29	84.6	9	33.3	2
DPLX 99Y35	1182	3	40.9	2	144	13	1.15	12	83.8	19	29.0	28
PH98M-29983	1177	4	41.8	1	147	7	1.14	20	83.8	17	29.3	26
DPLX 99M03	1137	5	39.8	9	138	20	1.14	17	83.3	27	31.5	7
ARK 9108-23-05	1128	6	38.4	16	134	26	1.07	30	83.3	25	30.6	16
PH98M-3196	1125	7	38.6	14	135	24	1.17	3	84.6	9	29.0	29
ASCI EXP0240	1090	8	38.9	12	150	6	1.15	12	84.0	16	32.6	6
ARK 9108-23-03	1080	9	38.2	19	140	16	1.12	25	84.6	7	31.4	9
Miscot 8806-32-35	1077	10	40.4	5	136	23	1.17	7	84.3	12	30.3	20
ARK 9108-04-17	1069	11	38.4	15	147	8	1.13	22	83.0	28	29.5	24
Miscot 8806-32-21	1061	12	38.0	23	133	29	1.13	22	84.3	15	29.4	25
FiberMax FM 958B	1054	13	38.4	17	139	18	1.17	3	84.7	5	32.9	4
ARK 9101-91-10	1032	14	37.2	27	135	25	1.17	3	84.3	12	31.5	7
ASCI EXP0724	1017	15	38.3	18	151	5	1.12	25	83.6	21	30.6	16
Phylogen PSC 355- Chk	1011	16	37.5	25	142	15	1.15	12	84.5	11	29.6	23
DES 816	1001	17	38.1	20	137	22	1.12	28	83.4	24	29.8	22
ARK 9101-97-09	985	18	39.8	8	134	27	1.15	16	84.8	2	32.7	5
ARK 9111-57-20	981	19	39.9	7	144	11	1.12	27	83.3	25	29.2	27
FiberMax FM 989BR	977	20	37.0	28	130	30	1.17	3	83.8	17	30.4	18
ASCI EXP0263	969	21	38.0	21	140	16	1.14	17	83.5	23	33.8	1
M623	966	22	39.1	11	146	9	1.18	2	84.3	12	30.7	13
M611	935	23	37.3	26	162	2	1.16	8	83.7	20	33.1	3
DP 491	918	24	40.0	6	139	19	1.20	1	84.6	6	30.7	14
M651	918	25	37.0	29	154	4	1.15	12	82.9	29	31.2	10
DP 555 BG/RR	894	26	40.8	3	166	1	1.14	17	82.5	30	31.2	11
ST 457	894	27	38.0	22	144	11	1.16	8	84.9	1	30.9	12
ARK 9111-57-12	838	28	39.1	10	142	14	1.14	20	84.8	2	30.3	20
DPLX 00S04	812	29	37.7	24	146	9	1.16	10	84.6	7	30.3	19
M658	690	30	36.4	30	158	3	1.16	10	83.6	22	30.7	14
LSD 0.10	132		1.5		9.9	ns		1.4		2.1	ns	ns
Mean	1017		38.7		143		1.15		84.0		30.8	8.3
C.V. (%)	11.1		2.3		5.9		3.4		1.0		3.9	4.3
R-squared x 100	73.0		82.1		59.9		49.1		62.7		75.3	5.2
1 Planted May 2												52.8

Table 14. Results of the 2001 Arkansas Cotton Variety Test for first-year entries - means across northern locations.

Variety	Lint yield lb/a	r	Plant ht cm	Plant			Fiber properties			
				Lint frac.	r	Len in.	r	Unif %	r	r
Sure-Grow 747-Chk	1242	1	41.9	4	106	1.13	16	84.8	1	27.8
PH98M-2983	1226	2	42.4	3	121	4	1.11	27	22	30
ASCI EXP0240	1201	3	40.3	10	113	13	1.13	83.4	17	29.7
FiberMax FM 958B	1192	4	39.7	18	109	21	1.15	83.6	17	31.1
DPLX 99X35	1182	5	42.6	2	115	8	1.11	84.3	6	31.8
FiberMax FM 966B	1173	6	39.4	20	104	28	1.14	83.5	21	31.8
DPLX 99M03	1172	7	41.5	5	110	18	1.11	84.0	11	32.4
DP 491	1165	8	41.2	6	113	14	1.19	83.3	26	31.5
ARK 9101-91-10	1149	9	38.8	23	106	25	1.12	83.6	19	30.5
FiberMax FM 989BR	1147	10	38.1	27	104	29	1.13	83.0	20	31.7
ARK 9108-04-17	1146	11	39.7	17	114	11	1.10	83.3	24	31.6
ARK 9108-23-03	1142	12	39.9	13	112	16	1.12	84.3	4	30.7
Miscot 8806-3-2-21	1136	13	38.8	24	105	27	1.10	84.2	7	30.3
DP 555 BG/RR	1134	14	43.6	1	129	2	1.13	82.0	30	29.0
PH98M-3196	1130	15	40.0	12	109	20	1.14	83.8	12	29.2
ARK 9111-57-20	1128	16	40.4	9	113	12	1.11	83.7	14	30.0
ARK 9111-57-12	1127	17	40.5	8	117	7	1.13	84.6	2	30.3
ASCI EXP0724	1127	18	39.8	15	118	6	1.15	83.8	13	30.1
Miscot 8806-3-2-35	1125	19	40.9	7	107	24	1.12	83.6	18	22
ASCI EXP0263	1124	20	39.8	14	108	22	1.14	83.7	15	34.4
M623	1108	21	40.2	11	114	10	1.14	83.3	24	29.7
ST 457	1091	22	39.7	16	110	17	1.14	84.0	10	30.2
ARK 9108-23-05	1089	23	38.9	22	102	30	1.05	83.6	16	31.8
ARK 9101-97-09	1075	24	39.1	21	107	23	1.13	84.6	3	32.2
DPLX 00S04	1055	25	39.6	19	115	9	1.15	84.3	4	30.7
Phylogen PSC 355-Chk	1049	26	38.2	26	109	19	1.13	84.2	9	31.2
DES 816	1032	27	37.0	30	112	15	1.12	83.1	27	31.5
M611	1010	28	38.4	25	129	1	1.15	84.2	7	32.6
M651	951	29	37.7	29	123	3	1.13	82.5	29	31.3
M658	917	30	37.9	28	121	5	1.14	83.3	23	30.9
LSD 0.10	81	1.4	6.1		0.03		0.7		1.2	0.3
Keiser, irrigated	1303	39.1	103		1.15		84.1		30.4	8.7
Keiser, non-irrigated	1035	41.7	71		1.09		83.0		31.1	8.6
Clarkdale, irrigated	1017	38.7	143		1.14		84.0		30.8	8.3
Mean	1118	39.9	112		1.13		83.7		30.8	8.5
LSD 0.10	144	1.0	9.9		0.01		0.6		0.9	4.4
C.V. (%)	10	3.6	7.4		2.6		0.9		4.1	0.1
R-squared x 100	78	83.3	94.7		79.6		74.5		77.8	6.9
Prob.(variety x location)	<0.01	0.4	0.5		0.5		0.8		86.0	73.1
									0.04	0.5

Table 15. Results of the 2001 Arkansas Cotton Variety Test for first-year entries with irrigation on a Calloway silt loam soil at Marianna.¹

Variety	Lint yield lb/a	Lint r %	Leaf pub. r %	Plant ht cm	Days to cutout r	Fiber properties						
						Len in.	r	Unif %	g/tex	r	Elo %	r
PH98M-2983	1285	1	42.7	1	3.8	17	168	8	100	22	1.10	30
ARK 9108-23-05	1232	2	40.4	10	2.9	27	157	23	100	27	1.07	34
DPLX 99X35	1203	3	42.2	3	3.3	25	158	22	98	32	1.11	27
Miscot 8806-2-3-21	1170	4	39.8	14	4.4	8	151	30	100	25	1.11	25
PhytoGen PSC 355 - Chk	1150	5	38.9	23	5.3	3	159	19	101	17	1.13	15
ARK 9108-04-17	1116	6	39.0	18	3.5	20	152	29	99	28	1.10	32
ARK 9101-97-09	1092	7	39.4	17	4.8	4	156	24	100	26	1.13	15
ST 457	1089	8	40.9	5	5.9	1	145	33	101	15	1.12	21
Sure-Grow 747 - Chk	1085	9	40.9	6	2.8	29	152	28	100	23	1.11	28
PH98M-3196	1081	10	40.3	11	3.5	20	153	27	99	29	1.14	7
DPLX 99M03	1072	11	40.9	6	5.7	2	170	4	103	9	1.13	14
Fibermax FM 989 BR	1072	12	38.8	25	2.9	27	149	31	95	33	1.13	15
DES 816	1069	13	38.9	23	4.5	7	156	24	98	31	1.11	28
Germain 271	1067	14	37.5	28	4.7	5	145	33	95	34	1.17	3
Fibermax FM 958 B	1021	15	39.7	15	3.9	14	164	14	101	19	1.13	15
Miscot 8806-2-3-35	1020	16	40.8	8	3.9	13	161	18	102	12	1.12	24
ARK 9101-91-10	1012	17	37.2	32	4.3	9	163	16	99	30	1.11	25
DPLX 00S04	1005	18	39.4	16	3.8	15	167	9	104	4	1.18	2
ARK 9111-57-20	996	19	40.0	13	4.0	12	164	14	102	11	1.14	9
ARK 9108-23-03	963	20	39.0	18	3.4	24	166	13	102	13	1.10	33
M623	937	21	40.7	9	3.1	26	167	10	103	10	1.14	12
Fibermax FM 966 B	921	22	39.0	21	3.8	15	166	12	101	17	1.14	9
ARK 9111-57-12	916	23	39.0	18	3.7	18	161	17	101	20	1.15	5
DP 491	909	24	41.6	4	4.3	9	158	21	104	8	1.22	1
DP 448 B	897	25	37.9	26	2.7	30	159	20	100	24	1.14	9
Germain PG40	848	26	37.4	30	4.7	6	175	3	101	21	1.17	3
ASCI EXP0263	840	27	40.3	11	2.4	33	156	26	101	14	1.10	30
ASCI EXP0240	821	28	37.5	29	3.5	23	168	7	104	5	1.13	15
Germain 377	807	29	37.7	27	2.6	31	146	32	101	16	1.12	21
M651	778	30	37.2	31	3.5	20	170	4	104	6	1.12	21
ASCI EXP0724	724	31	32.2	34	2.5	32	179	1	105	3	1.13	15
M611	644	32	37.1	33	1.4	34	169	6	106	2	1.15	6
DP 555 BG/RR	642	33	42.5	2	3.6	19	178	2	109	1	1.14	13
M653	566	34	39.0	21	4.0	11	167	11	104	7	1.14	7
LSD 0.10	125	2.8	0.5	14	4	0.04					1.4	1.6
Mean	972	39.3	3.7	161	101	1.13					84.0	0.3
C.V. (%)	10.9	4.2	11.9	7.2	3.2	2.2					1.0	4.5
R-squared x 100	79.1	74.4	86.4	58.7	63.5	72.1					64.4	5.0
1 Planted May 2.											87.8	70.6

Table 16. Results of the 2001 Arkansas Cotton Variety Test for first-year entries without irrigation on a Callovay silt loam soil at Marianna.¹

Variety	Lint yield lb/a	Lint frac. r	Days to cutout r	Plant ht cm	Plant ht in.	Unif. % r	Fiber properties		
							Len. in.	Str. g/ex	Ello r
Miscot 8806-2-3-21	963	1	40.5	16	91.0	12	111	21	83.0
ARK 9108-23-05	955	2	40.7	13	93.0	2	118	32	82.2
ARK 9108-04-17	855	3	41.1	12	89.6	20	111	17	82.5
DPLX 99M03	852	4	41.5	7	85.4	33	103	23	1.06
PhytoGen PSC 355 - Chk	851	5	41.3	10	91.6	6	116	6	1.02
Miscot 8806-2-3-35	845	6	43.2	3	92.5	3	121	1	1.04
DPLX 99X35	819	7	43.7	1	86.4	31	98	25	1.01
DP 491	816	8	43.5	2	89.2	21	92	31	1.11
ARK 9108-23-03	798	9	39.8	22	88.7	24	103	22	1.09
DPLX 00S04	794	10	39.6	24	90.7	15	116	8	1.05
PH98M-2983	792	11	41.3	8	91.5	8	116	7	1.03
Sure-Grow 747 - Chk	786	12	40.5	15	87.1	28	96	26	1.07
ARK 9111-57-12	770	13	40.4	17	91.5	9	118	4	1.07
PH98M-3196	768	14	41.9	6	91.6	7	105	19	1.05
DES 816	762	15	39.1	28	92.1	4	113	9	1.04
ARK 9101-97-09	754	16	39.9	20	90.3	17	104	21	1.05
ST 457	743	17	39.3	26	90.9	14	98	24	1.06
ARK 9111-57-20	707	18	42.2	5	89.0	22	111	13	1.07
ASCI EXP0724	703	19	41.3	8	91.0	13	110	17	1.06
DP 448 B	700	20	37.0	34	86.9	29	89	33	1.06
Fibermax FM 989 BR	697	21	39.7	23	85.4	32	96	28	1.08
Germain 271	695	22	37.1	33	86.4	30	90	32	1.09
DP 555 BG/RR	677	23	43.2	3	93.3	1	119	2	1.03
M623	661	24	38.3	29	91.6	5	113	10	1.06
Germain 377	658	25	39.3	27	87.4	27	95	29	1.08
ASCI EXP0240	657	26	40.2	19	87.6	26	112	12	1.06
Fibermax FM 966 B	657	26	40.6	14	91.3	10	105	20	1.04
Fibermax FM 958 B	644	28	40.3	18	87.8	25	92	30	1.04
ARK 9101-91-10	626	29	37.6	30	89.0	22	96	27	1.04
ASCI EXP0263	622	30	41.3	10	83.3	34	81	34	1.04
M611	617	31	39.9	20	89.9	18	110	16	1.06
Germain PG40	592	32	39.6	24	90.7	16	119	3	1.09
M658	586	33	37.6	30	91.2	11	112	11	1.05
M651	530	34	37.2	32	89.9	18	106	18	1.04
LSD 0.10	143		1.9		ns		ns		ns
Mean	734		40.3		89.5		106		82.5
C.V. (%)	16.6		2.8		4.8		16.9		2.7
R-squared x 100	50.1		83.1		41.0		36.7		46.6
									91.2
									84.4
									77.7

¹ Planted May 1.

Table 17. Results of the 2001 Arkansas Cotton Variety Test for first-year entries with irrigation on a Desha silt loam soil at Rohwer.¹

Variety	Lint				Fiber properties			
	yield lb/a	r frac.	r %	Len in.	r Unif %	r g/tex	Str r	Elo r %
ARK 9108-04-17	1473	1	39.0	3	1.15	30	85.5	20
Miscot 8806-3-2-35	1447	2	38.0	8	1.14	32	84.4	34
DPLX 99M03	1374	3	38.4	6	1.18	12	85.0	29
ARK 9108-23-05	1363	4	38.0	8	1.12	34	84.4	33
ARK 9101-91-10	1356	5	37.1	20	1.16	27	85.9	12
ARK 9101-97-09	1330	6	36.6	24	1.15	30	86.0	10
DPLX 99X35	1328	7	39.1	2	1.19	8	85.7	15
ST 457	1322	8	38.0	11	1.17	24	85.0	27
ASCI EXP0724	1306	9	38.0	11	1.20	7	86.0	9
Sure-Grow 747 - Chk	1277	10	37.0	21	1.18	18	86.1	8
Miscot 8806-3-2-21	1249	11	36.7	23	1.18	12	87.1	3
PH98M-2983	1198	12	37.3	17	1.18	18	86.4	7
DES 816	1194	13	36.0	30	1.18	18	85.5	20
ARK 9108-23-03	1192	14	38.4	7	1.16	27	85.2	25
ARK 9111-57-20	1174	15	38.7	4	1.16	25	85.9	13
ARK 9111-57-12	1164	16	38.0	8	1.19	8	86.7	5
Fibermax FM 989 BR	1157	17	37.3	18	1.13	33	84.5	32
ASCI EXP0263	1146	18	37.7	14	1.18	12	85.5	18
PH98M-3196	1145	19	38.6	5	1.18	18	85.4	22
PhytoGen PSC 355 - Chk	1145	19	37.3	18	1.17	23	85.7	17
ASCI EXP0240	1132	21	37.8	13	1.19	8	85.7	15
Fibermax FM 966 B	1130	22	37.6	15	1.18	12	85.8	14
DPLX 00S04	1126	23	36.0	29	1.20	6	86.7	6
M611	1108	24	35.8	31	1.19	8	85.4	22
Fibermax FM 958 B	970	25	37.4	16	1.18	12	86.0	10
Germain PG40	969	26	34.3	33	1.24	2	88.3	1
Germain 271	945	27	36.4	26	1.21	3	87.4	2
Germain 377	865	28	36.9	22	1.18	12	85.5	18
DP 555 BG/RR	835	29	39.2	1	1.21	4	85.2	25
M651	814	30	36.4	26	1.15	29	84.9	30
DP 448 B	790	31	34.0	34	1.18	18	84.7	31
DP 491	754	32	36.2	28	1.28	1	86.8	4
M623	728	33	36.5	25	1.21	4	85.3	24
M658	517	34	35.0	32	1.16	25	85.0	27
LSD 0.10	202	1.6	0.03				1.4	2.2
Mean	1116	37.2	1.18				85.7	30.5
C.V. (%)	15.4	2.6	1.4				1.0	4.3
R-squared x 100	70.8	79.0	87.1				69.0	2.9
							80.8	86.2

¹ Planted June 11.

Table 18. Results of the 2001 Arkansas Cotton Variety Test for first-year entries - means across southern locations.

Variety	yield lb/a	Plant			Fiber properties		
		Lint frac. %	ht. cm	r in.	Len r	Unif %	g/tex
ARK 9108-23-05	1183	1	39.70	11	137	15	83.40
ARK 9108-04-17	1148	2	39.70	10	131	20	83.90
Miscot 8806-3-2-21	1127	3	39.00	19	131	21	84.80
DPLX 99X35	1116	4	41.60	1	128	26	83.60
Miscot 8806-3-2-35	1104	5	40.70	3	141	6	83.60
PH98M-2983	1091	6	40.40	4	142	4	84.00
DPLX 99M03	1074	7	40.30	7	136	16	83.90
ARK 9101-97-09	1058	8	38.60	20	130	22	84.30
ST 457	1051	9	39.40	13	122	31	83.30
Sure-Grow 747 - Chk	1049	10	39.40	12	124	29	84.10
PhytoGen PSC 355 - Chk	1049	11	39.10	14	138	13	83.80
DES 816	1008	12	38.00	25	135	18	83.90
ARK 9101-91-10	998	13	37.30	28	129	23	84.10
PH98M-3196	998	14	40.20	8	129	23	83.90
ARK 9108-23-03	984	15	39.00	17	134	19	84.10
Fibermax FM 989 BR	975	16	38.60	21	122	30	83.30
DPLX 00S04	975	17	38.30	24	141	5	84.90
ARK 9111-57-20	959	18	40.30	6	137	14	84.90
ARK 9111-57-12	950	19	39.10	14	140	9	85.00
ASCI EXP0724	911	20	37.20	30	145	3	84.30
Fibermax FM 966 B	903	21	39.00	18	135	17	84.00
Germain 271	902	22	37.00	32	118	34	85.10
Fibermax FM 958 B	878	23	39.10	16	128	25	83.90
ASCI EXP0240	870	24	38.50	22	140	7	83.80
ASCI EXP0263	869	25	39.70	9	119	33	83.80
DP 491	826	26	40.40	5	125	27	85.50
Germain PG40	803	27	37.10	31	147	2	85.80
DP 448 B	796	28	36.30	34	124	28	83.60
M611	789	29	37.60	27	139	10	84.50
Germain 377	776	30	37.90	26	121	32	84.00
M623	775	31	38.50	22	140	7	83.20
DP 555 BG/RR	718	32	41.60	2	149	1	83.40
M651	707	33	36.90	33	138	12	83.30
M658	556	34	37.20	29	139	11	83.60
LSD 0.10	92		1.20		12.5	0.02	0.90
Marianna, irrigated	972		39.30		161	1.13	84.03
Marianna, non-irrigated	734		40.30		106	1.05	82.48
Rohwer, irrigated	1116		37.20		NA	1.18	85.70
LSD 0.10	57		0.70		10.8	0.01	0.60
Mean	940		38.90		133	1.12	84.10
C.V. (%)	14.5		3.30		11.3	2.10	1.10
R-squared x 100	80.7		85.00		84.5	92.60	84.80
Prob. (Variety x locations)	<0.01		<0.01		0.7	0.40	0.90
							<0.01

Table 19. Lint yields and ranking for varieties in northern locations of the Arkansas Cotton Variety Test; two-year means 2000-2001.

Variety	Keiser irrig.	r	Keiser non-irrig.	r	Clarkedale irrig.	r	All northern loc.	r
	lb/a	lb/a	lb/a	lb/a	lb/a	lb/a	lb/a	lb/a
FiberMax FM 958	1342	2	921	3	1100	3	1121	1
Sure-Grow 105	1254	5	891	6	1156	1	1100	2
ST 4691B	1346	1	920	4	1033	12	1100	3
SG 215 BG/RR	1234	6	930	2	1060	4	1075	4
Sure-Grow 747	1179	10	863	10	1136	2	1059	5
FiberMax FM 966	1305	3	789	21	1046	9	1047	6
DES H16-24-19	1269	4	811	19	1058	5	1046	7
ST 4892BR	1164	13	918	5	998	16	1027	8
ARK 8712	1216	8	814	17	1040	10	1023	9
Miscot 8806	1161	14	844	14	1046	8	1017	10
GC 106	1219	7	871	8	951	23	1013	11
Miscot 8839	1113	19	870	9	1050	7	1011	12
PhytoGen PSC 355	1150	15	848	12	1030	13	1009	13
GC 108	1121	18	977	1	888	27	995	14
BXN 47	1197	9	776	22	998	17	990	15
Sure-Grow 501BR	1081	21	877	7	1005	15	988	16
PM 1199 RR	1070	22	839	15	1039	11	982	17
DES H16-14-09	1144	16	752	25	1051	6	982	18
PM 1218 BG/RR	1091	20	860	11	960	20	970	19
DES 810	1170	12	729	26	1006	14	968	20
ST 4793R	1121	17	806	20	958	22	962	21
Garst/Agripro 1500RR	1026	25	828	16	972	18	942	22
DES H16-14-20	1171	11	703	27	945	25	940	23
DP 451 B/RR	1019	27	813	18	960	19	931	24
BXN 49B	1062	23	759	24	958	21	926	25
ST X9905	1026	26	848	13	863	28	912	26
ST 580	1048	24	765	23	899	26	904	27
DP 436 RR	986	28	700	28	950	24	879	28
Mean	1153		833		1005		997	

Table 20. Lint yields and ranking for varieties in southern locations of the Arkansas Cotton Variety Test, two-year means 2000-2001.

Variety	Marianna irrig.	r	Marianna non-irrig.	r	Rohwer irrig.	r	All southern loc.	r
	lb/a	lb/a	lb/a	lb/a	lb/a	lb/a	lb/a	lb/a
Miscot 8806	1316	4	603	1	1349	1	1089	1
PhytoGen PSC 355	1377	2	554	5	1336	2	1089	2
Fibermax FM 958	1408	1	525	11	1225	11	1052	3
ST 4691B	1316	5	503	17	1268	5	1029	4
ST X9905	1293	8	553	6	1240	9	1029	5
ST 4892BR	1317	3	508	15	1248	8	1024	6
BXN 49B	1283	9	516	13	1257	7	1018	7
PM 1218 BG/RR	1233	14	506	16	1287	3	1008	8
DES H16 24-19	1299	7	538	8	1182	18	1006	9
Miscot 8839	1157	20	576	3	1277	4	1003	10
Sure-Grow 747	1270	11	528	10	1188	16	995	11
Fibermax FM 966	1258	12	462	23	1262	6	994	12
DES 810	1233	15	553	7	1189	15	991	13
Sure-Grow 105	1314	6	531	9	1128	22	991	14
DP 20 B	1240	13	497	18	1210	13	982	15
SG 215 BG/RR	1204	16	591	2	1120	24	971	16
DES H16 14-09	1194	17	492	19	1174	19	953	17
ST 4793R	1278	10	386	30	1192	14	952	18
ARK 8712	1160	19	481	21	1184	17	941	19
Sure-Grow 501BR	1144	22	564	4	1081	28	929	20
DP 436 RR	1122	24	525	12	1127	23	925	21
BXN 47	1130	23	398	29	1212	12	913	22
Deltapine 565	1090	26	419	27	1229	10	913	23
DES H16 14-20	1181	18	448	26	1106	26	911	24
DeltaPEARL	1111	25	450	25	1133	21	898	25
DP 451 B/RR	1034	28	488	20	1166	20	896	26
ST 580	1067	27	512	14	1108	25	895	27
PM 1199 RR	1150	21	413	28	1033	29	865	28
Garst/Agripro 4600RR	976	30	475	22	1102	27	851	29
NuCOTN 33 B	985	29	456	24	1019	30	820	30
Mean	1204		501		1187		964	

Table 21. Lint yields and ranking for varieties in northern locations of the Arkansas Cotton Variety Test, three-year means 1999-2001.

Variety	Keiser		Northern		Clarkedale		Northern loc.	
	irrig.	r	non-irrig. ¹	r	irrig.	r	mean	r
	lb/a		lb/a		lb/a		lb/a	
FiberMax FM 958	1333	1	790	3	1179	1	1100	1
Sure-Grow 105	1278	4	785	4	1165	2	1076	2
SG 215 B/R	1232	7	797	2	1116	5	1048	3
FiberMax FM 966	1286	3	721	13	1126	4	1044	4
Sure-Grow 747	1247	6	733	12	1132	3	1037	5
ST 4691 B	1287	2	780	5	1007	14	1025	6
GC 106	1271	5	747	8	1009	13	1009	7
GC 108	1170	11	872	1	984	16	1009	8
PhytoGen PSC 355	1166	12	764	6	1085	6	1005	9
ST 4892 BR	1197	9	742	10	1059	8	999	10
ARK 8712	1208	8	698	14	1078	7	995	11
PM 1218 BG/RR	1155	13	758	7	1046	10	986	12
BXN 47	1196	10	626	17	1057	9	960	13
Sure-Grow 501B/R	1076	15	744	9	1034	11	951	14
ST 4793 R	1113	14	686	15	1016	12	938	15
DP 451 B/RR	1056	16	737	11	1002	15	932	16
DP 436 RR	1023	17	648	16	971	17	881	17
Mean	1194		743		1063		1000	

¹ Non-irrigated tests were located at Clarkedale in 1999 and at Keiser in 2000 and 2001.

Table 22. Lint yields and ranking for varieties in southern locations of the Arkansas Cotton Variety Test, three-year means 1999-2001.

Variety	Marianna		Marianna		Rohwer		All	
	irrig.	r	non-irrig.	r	irrig.	r	southern loc.	r
	lb/a		lb/a		lb/a		lb/a	
PhytoGen PSC 355	1332	1	661	2	1392	1	1129	1
Fibermax FM 958	1315	2	644	3	1247	7	1069	2
ST 4691B	1290	3	623	5	1287	3	1066	3
PM 1218 BG/RR	1219	7	591	9	1362	2	1057	4
ST 4892BR	1266	6	580	11	1241	8	1029	5
Sure-Grow 747	1218	8	643	4	1211	10	1024	6
Sure-Grow 105	1282	4	600	7	1170	12	1018	7
BXN 47	1278	5	516	15	1252	5	1015	8
Fibermax FM 966	1186	10	578	12	1252	6	1005	9
SG 215 B/R	1169	11	667	1	1156	13	997	10
ST 4793R	1214	9	501	16	1264	4	993	11
ARK 8712	1134	12	582	10	1220	9	979	12
Sure-Grow 501 BR	1100	13	620	6	1114	15	945	13
DP 436 RR	1070	14	596	8	1131	14	932	14
DP 451 B/RR	992	15	565	13	1194	11	917	15
NuCOTN 33 B	943	16	546	14	962	16	817	16
Mean	1188		595		1216		999	

Table 23. Results of the 2001 Mississippi County Variety Test on a Rounton-Dundee-Crevasse soil complex with irrigation, David Wildy Farms, Manila.¹

Variety	yield lb/a	Lint frac.	r	Days to cutout	r	Len. in.	r	Unif. %	g/tex	r	Str.	r	Elo	r	Mic	r	Fiber properties	
																	%	g/tex
FiberMax FM 966	1372	1	39.3	1	97.0	6	1.17	5	85.7	2	34.9	1	8.1	11	4.7	9		
DP 451 B/RR	1279	2	36.3	10	98.3	4	1.18	2	85.0	7	29.5	11	8.5	8	4.8	6		
ST 4892 BR	1226	3	38.3	3	97.0	7	1.16	9	84.7	8	31.4	4	8.4	10	4.8	4		
Sure-Grow 105	1212	4	37.5	8	95.3	10	1.18	4	85.6	3	30.0	9	8.7	3	4.7	11		
DP 436 RR	1207	5	35.2	12	99.0	3	1.17	5	84.5	9	28.9	12	8.6	5	4.7	11		
FiberMax FM 958	1202	6	37.1	9	96.8	8	1.17	7	84.4	10	31.4	5	7.7	12	4.8	8		
PM 1199 R	1201	7	38.0	4	93.0	12	1.16	8	85.1	6	31.6	3	8.5	9	4.9	2		
ARK 8712	1173	8	36.1	11	95.8	9	1.20	1	85.8	1	32.0	2	8.7	3	4.9	1		
PhytoGen PSC 355	1167	9	37.9	6	105.0	1	1.14	12	84.3	12	30.9	6	9.1	1	4.8	5		
PM 1218 BG/RR	1156	10	37.8	7	95.3	11	1.15	11	84.4	10	29.8	10	8.6	6	4.9	2		
Sure-Grow 747	1148	11	37.9	5	97.3	5	1.18	3	85.6	4	30.5	8	8.7	2	4.7	10		
ST 4793 R	1132	12	38.4	2	99.8	2	1.16	10	85.3	5	30.8	7	8.6	7	4.8	6		
LSD 0.10	82.7		2.3		3.1		ns	0.9	ns		ns		0.4		ns			
Mean	1206		37.5		97.4		1.17		85.0		31.0		8.5		4.8			
C.V. (%)	5.7		5.1		2.7		2.2		0.8		7.7		3.6		4.2			
R-squared x 100	54.7		36.0		78.8		45.5		48.6		39.0		65.8		47.2			

¹ Planted 4/25, defoliated 9/17 and 9/24, harvested 10/17.