

COTTON CULTIVAR TESTS FOR 2002
IN CENTRAL AND SOUTH TEXAS

P. Thaxton, C. W. Smith, D. G. Bordovsky,
D. Deno, T. Dusek, C. Eixmann, M. Jakubik, R. King,
K. Schaefer, and R. Sutton

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Cotton cultivar tests (CCT) are conducted each year by the Texas Agricultural Experiment Station to determine the relative performance of cultivars (varieties) available to producers in Texas. These tests are conducted statewide to evaluate commercial cultivars in every cotton growing region. Since Texas is a large state with diverse climates and growing seasons, the CCT results are reported separately for Central and South Texas, the Rolling and High Plains, and Far West Texas. This report concentrates on the cotton production regions of Central and South Texas.

Test locations, soil types, planting dates, and harvest dates are given in Table 1, with yield and fiber characteristics presented in Tables 2 - 30.

Yield and other characteristics were analyzed as randomized complete blocks. Least significant differences (LSD) are used to determine if two cultivars are different at $k=100$, which approximates the 5% probability level. Values reported for any two cultivars that differ by more than the LSD value are expected to be different in 95 of every 100 comparisons. The test average (mean) and the coefficient of variation (CV) also are reported for each characteristic measured at each location. The coefficient of variation is a measure of the uniformity of the test site (e.g. soil uniformity, drainage, disease, etc.). Lower coefficients of variation are desirable.

Agronomic Determinations

Lint yield: Lint yield per acre is determined as follows: (lbs. seedcotton/plot) x (appropriate gin turnout) x (area conversion factor).

Gin turnout: Amount of lint in a random sample of machine harvested seedcotton expressed as a percent of seed cotton in the sample.

Fiber Quality Determinations

Fiber quality parameters were determined by high volume instrument (HVI) testing at the Texas Tech University International Textile Research Center at Lubbock, TX.

Fiber Fineness: Fiber fineness, micronaire, is a measure of the maturity and/or the fineness of cotton fibers and is reported in micronaire units. Micronaire is a relative measure of the development, or maturity, of the secondary wall of the cotton fiber throughout its entire length. Processing rates, fabric dyeing, and yarn and fabric appearance are adversely affected by immature fibers. Fine fibers, although mature, weigh less per unit length and may require reduced processing speeds compared to thicker fibers, yet these finer fibers may produce stronger yarns. Thick or coarse fibers result in fewer fibers in a cross section of yarn, and therefore, may produce weaker yarns.

Fiber fineness is determined by forcing air through a specified weight of lint. The rate of

air flow is related to fiber thickness. Finer fibers result in more fibers per specified weight and, therefore, have greater resistance to air flow. Micronaire values of 3.4 or below indicate fine and perhaps immature fibers, and values of 5.0 or higher indicate coarse fibers. Values of 3.5 to 4.9 are desirable and indicate mature, well-developed fibers.

Fiber Length: Fiber length is reported in hundredths of an inch as measured by High Volume instrument and is the average of the longest 50 percent of the fibers in the sample, usually referred to as the upper half mean (UHM). Long fibers are desirable because they produce greater yarn strength, aid in spinning finer yarns, and can be processed at higher speeds.

HVI fiber lengths (in.)
and descriptive designation

Below 0.97	Short
0.97 - 1.10	Medium
1.11 -1.28	Long
Above 1.28	Extra long

Fiber Uniformity: Fiber uniformity index (UI) provides a relative measure of the length uniformity of cotton fibers. Uniformity is calculated as the ratio of the average length of all fibers to the average length of the longest 50 percent of the fibers in the sample. High uniformity values indicate uniform fiber length distribution and are associated with a high-quality product and with low manufacturing waste.

Uniformity ratios
and descriptive designation

Below 77	Very low
77-79	Low
80-82	Average
83-85	High
Above 85	Very high

Fiber Strength: Yarn strength and ease of processing are positively correlated with strong fibers. Strength values are reported in grams of force required to break a bundle of cotton fibers with the holding jaws separated by 1/8 inch. The size of the bundle of fibers is described in tex units. Fiber strength is described from very low to very high within UHM classifications.

HVI 1/8-inch gauge strength (grams/tex)	Fiber length group and descriptive designation
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Short

(0.96 inch or less)

18-19	Very low
20-21	Low
22-23	Average
24-25	High
26-27	Very high

Medium

(0.97-1.10 inch)

17-19	Very low
20-22	Low
23-25	Average
26-28	High
29-31	Very high

Long

(1.11-1.28 inch)

18-20	Very low
21-23	Low
24-26	Average
27-29	High
30-32	Very high

Fiber Elongation: Elongation is the degree of extension of the fibers before break occurs when measuring strength. Fiber bundle elongation is correlated with yarn elongation but has an insignificant effect on yarn strength. Its value and importance in yarn manufacture has not been fully established.

Fiber elongation
and descriptive designation

4.9 and below	Very low
5.0-5.8	Low
5.9-6.7	Average
6.8-7.6	High
7.7 and above	Very high

Table 1. Locations, soil types, planting dates, harvest dates, and irrigation of cultivars evaluated in Central and South Texas, 2002.

Location (nearest town)	Soil type	Planting dates	Harvest dates	Irrigation
Weslaco	Hildago s.c.l. ¹	4/13/02	7/31/02	Yes
Corpus Christi	Victoria clay	4/17/03	8/21/03	No
San Patricio Co. (Sinton)	Victoria clay	3/13/02	- ⁴	No
San Patricio Co. (Sinton)	Victoria clay	3/13/02	8/29/02	Yes
Upper Coast (Wharton Co.)	Lake Charles clay	3/26/02	8/19/02	No
College Station	Westwood s.l. ²	4/25/02	11/11/02	Yes
Uvalde	Uvalde s.c.l. ¹	4/3/02	10/3/02	Yes
Thrall	Burleson clay	4/23/02	9/12/02	No
Dallas (Prosper)	Houston c.l. ³	5/15/02	10/15/02	No
Chillicothe	Abilene c.l.	5/21/02	12/2/02	Yes

1. s.c.l. = sandy clay loam

2. s.l. = silt loam

3. c.l. = clay loam

4. San Patricio Dryland Test was lost due to hail.

Table 2. Agronomic performance and fiber quality of cotton cultivars evaluated at Weslaco (Lower Rio Grande Valley) during 2002. (Irrigated)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Deltapine 493	791	36.7	5.7	1.06	30.3	83	4.2	0.4705	372	1
Deltapine 491	772	35.9	5.3	1.08	29.6	83	4.2	0.4825	372	2
Deltapine 555 BG/RR	691	34.8	5.3	1.05	28.3	81	3.6	0.4645	321	4
FiberMax 832 B	653	30.8	4.5	1.15	33.5	84	4.2	0.5455	356	3
Deltapine 545 BG/RR	629	33.4	5.1	1.07	29.8	82	3.4	0.4840	304	7
Deltapine DeltaPearl	618	32.2	5.1	1.09	31.2	83	3.9	0.5010	310	6
Syngenta D2429	600	30.9	5.2	1.05	31.5	84	5.9	0.4900	294	10
Stoneville 5599BR	599	33.2	4.8	1.05	31.3	83	4.9	0.5285	317	5
TAM 96 WD-22	587	33.3	4.3	1.04	29.1	80	5.6	0.4925	289	11
Stoneville 4892 BR	578	31.7	5.4	1.02	30.3	84	4.7	0.4440	257	21
FiberMax 991R	576	30.1	5.1	1.05	30.6	82	4.5	0.4865	280	14
Deltapine 449 BG/RR	571	31.7	4.8	1.03	29.7	83	4.4	0.4985	285	12
Stoneville 4691B	570	32.2	5.4	1.12	31.1	86	4.5	0.4900	279	15
TAM 96 WD-69s	563	29.1	4.4	1.05	31.5	82	6.3	0.5260	296	9
Sure-Grow 215 B/RR	560	30.1	4.7	1.01	26.2	83	6.0	0.4740	265	18
Deltapine 458 B/RR	558	32.7	5.3	1.05	29.5	82	5.0	0.4680	261	20
FiberMax 958	553	31.4	4.6	1.08	29.8	83	3.2	0.5380	298	8
Stoneville 457	546	30.7	5.1	1.07	32.2	84	6.5	0.4900	268	17
Deltapine 5415 RR	545	31.5	5.3	1.05	29.3	84	5.6	0.4680	255	22
Deltapine 5690 RR	529	31.3	5.0	1.03	29.9	82	4.6	0.4590	243	26
Acala 1517-99	517	29.6	4.5	1.13	34.0	84	4.5	0.5450	282	13
FiberMax 832	506	29.0	4.5	1.18	35.1	84	3.6	0.5455	276	17
Paymaster 1199 RR	506	31.1	5.1	1.03	29.3	83	4.6	0.4555	230	30
FiberMax 989 R	503	31.3	4.2	1.03	30.9	83	4.3	0.5025	253	23
Stoneville 580	498	30.5	5.3	1.05	32.8	84	5.2	0.4755	237	27
TAM 96 WD-81	498	29.8	4.8	1.04	30.0	82	5.1	0.4960	247	25
Stoneville 4793 R	497	31.5	5.2	1.02	30.8	82	4.9	0.4590	228	32
Deltapine 448 B	494	30.5	5.1	1.03	28.4	82	4.8	0.4530	224	33
FiberMax 966	487	31.9	4.9	1.10	33.9	84	3.1	0.5430	264	19
DES 810	457	29.4	5.0	1.08	33.6	84	5.0	0.5035	230	31
TAM 96 WD-18	457	28.4	3.9	1.13	33.4	84	4.8	0.5465	250	24
Deltapine NuCotn33B	454	29.9	4.9	1.00	29.0	82	5.0	0.4715	214	35
Deltapine 444 BG/RR	452	31.6	4.5	1.05	29.0	83	5.1	0.5225	236	29
Stoneville 5303 R	451	30.6	5.3	1.03	33.3	85	4.5	0.4490	202	38
Sure-Grow 521R	444	30.8	4.8	1.01	29.9	83	6.1	0.4775	212	37
Deltapine 565	443	30.3	5.6	1.09	32.0	84	4.7	0.4860	215	34
PhytoGen PSC 355	439	30.5	4.9	1.08	32.0	83	6.1	0.5405	237	28
Tamcot Pyramid	437	31.5	5.1	1.00	28.8	83	4.6	0.4390	192	41
FiberMax 989 BR	435	29.3	4.3	1.02	28.1	81	4.4	0.4925	214	36
Deltapine 436 RR	401	27.9	4.9	1.02	27.7	83	5.8	0.4950	198	40

Table 2. Continued.....

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
TAM 54G-2-99H	382	28.9	4.4	1.05	32.5	83	4.1	0.5300	202	39
Paymaster 1218 BR	376	30.7	4.9	1.04	29.2	83	4.9	0.4950	186	42
FiberMax 989	361	29.0	5.1	1.12	36.0	85	3.6	0.5065	183	43
DES 816	335	29.2	4.9	1.03	32.1	82	5.3	0.4985	167	45
Deltapine 451 B/RR	329	28.4	4.7	1.07	28.1	82	4.6	0.5200	171	44
All-Tex Atlas	.	28.6	5.1	1.01	34.5	84	5.8	0.4475	-	-
Tamcot Sphinx	.	30.0	5.1	1.03	32.3	84	4.2	0.4625	-	-
LSD (k=100) ²	128	2.3	1.0	0.07	3.0	2.2	0.5	-	-	-
% CV	17.0	3.7	7.6	2.9	4.7	1.1	6.0	-	-	-
Mean	525	31.0	4.9	1.05	31.0	83	4.8	0.4920	255	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 3. Agronomic performance and fiber quality of cotton cultivars evaluated at Weslaco (Lower Rio Grande Valley) during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 491	1006	37.9	5.3	1.12	29.7	83	5.0
Stoneville 5599 BR	941	36.1	4.9	1.08	29.8	83	5.4
Deltapine 555 BG/RR	881	35.5	4.9	1.06	28.2	82	4.9
Sure-Grow 215 BG/RR	876	33.2	5.0	1.03	25.3	83	6.4
Deltapine DeltaPearl	844	35.1	5.2	1.10	29.8	83	4.7
Delatpine NuCotn33B	829	32.3	4.8	1.04	28.4	83	5.8
TAM 96 WD-22	826	35.9	4.3	1.08	28.2	82	6.1
Stoneville 4691B	824	35.7	5.3	1.10	28.4	84	5.7
Stoneville 4892 BR	809	35.1	5.3	1.04	28.4	83	5.5
Deltapine 448 B	806	32.5	5.0	1.05	27.5	82	5.4
FiberMax 958	805	34.5	4.8	1.10	29.0	83	4.5
TAM 96 WD-81	797	33.1	4.9	1.06	27.9	82	5.7
TAM 96 WD-18	762	32.0	4.2	1.15	32.2	84	5.8
FiberMax 966	757	34.8	5.0	1.12	33.0	85	4.4
Tamcot Pyramid	747	34.9	5.2	1.01	27.7	83	5.5
Deltapine 565	717	33.7	5.3	1.11	30.0	84	5.7
Paymaster 1199 RR	710	33.8	5.1	1.05	27.8	84	5.5
PhytoGen PSC 355	702	34.0	5.0	1.08	29.9	84	6.6
Sure-Grow 521R	700	33.9	5.0	1.03	27.8	83	6.6
Paymaster 1218 BR	694	34.3	5.0	1.04	27.5	83	5.7
TAM 96 WD-69s	684	32.0	4.5	1.05	29.5	82	6.5
FiberMax 989	659	32.6	4.9	1.11	33.6	84	4.8
Deltapine 451 B/RR	601	31.2	4.8	1.07	26.5	82	5.3
Stoneville 4793 R	593	34.7	5.3	1.03	28.5	83	5.7
FiberMax 832	580	32.2	4.7	1.18	33.4	84	4.8
Deltapine 436 RR	560	30.8	4.9	1.04	26.8	83	6.2
LSD(k=100) ¹	281	1.8	0.5	0.04	2.0	ns	0.9
% CV	14.2	2.6	4.4	1.9	3.5	1.1	7.6
Mean	765	34.0	4.9	1.07	28.9	83	5.5

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 4. Agronomic performance and fiber quality of cotton cultivars evaluated at Weslaco (Lower Rio Grande Valley) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
TAM 96 WD-22	1017	37.2	4.3	1.10	28.0	82	6.4
TAM 96 WD-81	989	34.3	4.7	1.08	27.8	82	6.2
Delatpine DeltaPearl	984	36.3	4.9	1.13	29.6	83	5.3
FiberMax 958	962	34.5	4.8	1.12	29.2	84	5.2
Delatpine NuCotn33B	951	33.6	4.8	1.07	28.1	83	6.3
FiberMax 966	949	36.1	4.7	1.12	31.6	85	5.4
Tamcot Pyramid	923	35.9	4.9	1.04	28.2	83	6.1
PhytoGen PSC 355	909	35.7	4.8	1.09	29.4	84	7.1
Stoneville 4892 BR	897	36.4	5.2	1.06	27.8	84	5.9
Stoneville 4691B	878	36.5	5.1	1.11	28.4	84	6.0
FiberMax 989	855	34.1	4.7	1.13	33.4	84	5.3
FiberMax 832	853	34.2	4.5	1.20	33.4	85	5.2
Paymaster 1218 BR	845	35.6	5.0	1.06	26.9	84	6.2
Sure-Grow 521R	798	35.0	4.8	1.04	26.9	83	7.0
Deltapine 451 B/RR	788	32.4	4.9	1.08	26.2	83	5.9
Stoneville 4793 R	745	36.3	5.1	1.05	28.0	83	5.9
Deltapine 436 RR	735	31.8	4.8	1.06	26.7	83	6.7
LSD(k=100) ¹	157	2.3	ns	0.04	3.0	1.7	0.9
% CV	10.3	3.1	4.1	1.7	4.4	0.8	7.5
Mean	682	35.3	5.0	1.08	30.4	84	5.8

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 5. Agronomic performance and fiber quality of cotton cultivars evaluated at Corpus Christi (Coastal Bend) during 2002. (Dryland)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Stoneville 5599BR	828	33.5	5.4	1.05	30.1	84	4.3	0.4715	390	1
Deltapine 491	745	31.8	5.0	1.14	31.5	83	4.8	0.5030	375	2
Deltapine 493	700	34.3	5.1	1.07	33.1	84	4.5	0.4915	344	3
Deltapine 449 BG/RR	676	29.3	5.1	1.05	32.9	83	4.5	0.4905	332	4
DES 816	668	28.5	5.2	1.07	32.3	84	5.8	0.4900	327	5
Stoneville 4892 BR	623	31.1	5.5	1.07	29.7	85	5.9	0.4725	294	9
FiberMax 966	592	29.4	5.2	1.10	35.5	85	3.1	0.5045	299	8
Stoneville 4691 B	586	30.3	5.2	1.07	29.3	83	4.8	0.4830	283	12
FiberMax 989 BR	585	29.8	4.7	1.05	34.0	84	4.9	0.5310	311	6
Deltapine 545 BG/RR	579	31.3	5.0	1.07	30.2	83	4.0	0.4865	282	13
FiberMax 832 B	579	28.9	5.0	1.15	35.3	84	4.4	0.5060	293	11
FiberMax 819	579	28.5	5.0	1.16	34.9	85	4.0	0.5070	294	10
Deltapine NuCotn33 B	556	27.8	5.1	1.14	32.1	84	5.6	0.5040	280	14
Stoneville 457	554	30.0	4.9	1.08	33.1	84	7.9	0.5430	301	7
FiberMax 958	549	30.1	5.0	1.11	35.3	84	3.3	0.5055	278	16
FiberMax 832	548	27.3	5.0	1.15	35.4	85	4.0	0.5070	278	15
Deltapine 458 B/RR	542	29.6	5.3	1.06	29.2	83	5.6	0.4670	253	22
Tamcot Sphinx	525	27.6	5.1	1.08	35.4	84	4.6	0.5035	264	19
Sure-Grow 521R	522	31.6	5.2	1.03	28.5	84	6.4	0.4565	238	29
Syngenta D2429	519	28.9	5.3	1.07	31.6	85	7.1	0.4750	247	25
Deltapine 555 BG/RR	508	33.4	5.1	1.08	30.1	82	4.2	0.4960	252	23
PhytoGen PSC 355	500	27.8	5.1	1.07	32.0	84	6.8	0.4900	245	27
FiberMax 991R	499	28.6	4.8	1.13	35.0	84	3.8	0.5450	272	17
Deltapine 436 RR	494	28.0	5.1	1.08	28.0	84	6.1	0.4960	245	26
Tamcot Pyramid	491	29.7	5.0	1.00	30.2	83	5.2	0.4425	217	33
Deltapine 5690 RR	491	30.0	5.1	1.09	33.4	84	4.6	0.5035	247	24
Deltapine 444 BG/RR	485	30.9	4.4	1.09	30.6	84	5.2	0.5415	263	20
TAM 96 WD-18	485	27.3	4.7	1.13	34.0	85	5.9	0.5460	265	18
Deltapine 448 B	476	28.9	4.8	1.12	31.6	85	4.8	0.5445	259	21
DES 810	471	27.0	5.0	1.05	33.3	84	6.0	0.4915	231	30
TAM 96 WD-81	460	27.4	4.8	1.06	30.7	82	5.7	0.5260	242	28
Deltapine 451 B/RR	452	28.2	5.1	1.09	29.2	84	5.1	0.4960	224	31
Stoneville 4793 R	444	30.2	5.3	1.05	30.8	84	5.3	0.4740	210	36
TAM 54-G-2-99H	434	27.3	4.9	1.04	33.7	84	4.7	0.5035	219	32
Paymaster 1218 BG/RR	430	28.9	5.3	1.04	30.1	83	5.7	0.4430	190	39
Deltapine 5415 RR	423	29.7	5.2	1.12	31.9	85	6.0	0.5050	214	34
All-Tex Atlas	415	25.7	5.0	1.06	32.4	83	5.8	0.4890	203	38
Paymaster 1199 RR	389	30.0	5.3	1.08	30.6	85	4.7	0.4870	189	40
Acala 1517-99	386	25.5	4.6	1.15	35.6	84	5.0	0.5455	211	35
Deltapine 565	382	27.3	4.6	1.14	32.0	85	4.8	0.5445	208	37

Table 5. Continued.....

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Delatpine DeltaPearl	363	31.3	5.0	1.13	32.5	83	3.9	0.5045	183	41
Sure-Grow 215 BG/RR	.	29.8	5.4	1.01	28.2	84	7.6	0.4605	-	-
TAM 96 WD-22	.	30.5	4.3	1.10	29.4	83	5.8	0.5660	-	-
LSD (k=100) ²	177	1.5	0.5	0.05	2.2	1.8	0.6	-	-	-
% CV	18.7	2.8	4.1	2.1	3.6	0.9	6.5	-	-	-
Mean	531	29.3	5.0	1.08	32.1	84	5.2	0.4995	262	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 6. Agronomic performance and fiber quality of cotton cultivars evaluated at Corpus Christi (Coastal Bend) during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 491	867	37.8	4.8	1.15	32.8	84	5.6
FiberMax 958	796	36.6	4.9	1.11	32.4	84	4.6
FiberMax 966	783	35.3	5.0	1.09	33.9	85	4.3
Stoneville 4892 BR	774	37.2	5.3	1.06	29.2	84	6.3
Stoneville 4691B	765	36.0	5.0	1.08	28.7	84	5.7
FiberMax 819	715	35.9	5.0	1.13	32.5	85	5.2
Tamcot Pyramid	714	35.6	5.0	1.01	29.2	83	5.8
Tamcot Sphinx	706	33.9	5.1	1.07	32.5	84	5.6
Sure-Grow 521R	705	36.0	5.0	1.03	27.6	84	6.7
PhytoGen PSC 355	695	34.9	5.2	1.07	30.1	84	7.3
FiberMax 832	667	33.9	4.7	1.16	34.3	85	5.2
Deltapine 436 RR	656	33.2	5.0	1.08	27.9	85	6.9
Deltapine 448 B	655	34.2	4.8	1.09	29.4	85	5.8
Delatpine DeltaPearl	653	37.3	4.8	1.13	31.7	84	5.0
Stoneville 4793R	622	36.6	5.2	1.04	29.2	84	6.0
TAM 96 WD-81	563	33.5	4.6	1.06	29.5	82	6.0
All-Tex Atlas	557	31.8	5.0	1.06	31.1	83	6.3
Deltapine 451 B/RR	554	32.8	5.0	1.08	28.1	84	5.8
Deltapine 565	531	34.7	4.9	1.11	30.3	85	5.7
Paymaster 1199 RR	523	36.3	5.4	1.05	28.6	84	5.7
LSD (k=100)	157	2.3	ns	0.04	3.0	1.7	0.9
% CV	10.3	3.1	4.1	1.7	4.4	0.8	7.5
Mean	682	35.3	5.0	1.08	30.4	84	5.8

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 7. Agronomic performance and fiber quality of cotton cultivars evaluated at Corpus Christi (Coastal Bend) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
FiberMax 966	922	36.4	4.5	1.10	32.3	84	4.5
PhytoGen PSC 355	901	36.7	4.9	1.06	28.9	83	7.2
Stoneville 4892 BR	881	37.9	5.0	1.06	28.0	84	6.0
FiberMax 958	863	38.1	4.7	1.10	30.2	84	4.7
FiberMax 832	843	35.8	4.4	1.15	32.2	84	5.1
Stoneville 4691B	794	37.2	4.5	1.07	27.6	83	5.7
Tamcot Pyramid	791	36.3	4.7	1.01	27.9	83	5.6
FiberMax 819	786	37.9	4.6	1.13	31.6	84	5.0
Tamcot Sphinx	780	34.8	4.8	1.07	30.2	84	5.5
Delatpine DeltaPearl	768	38.7	4.6	1.12	30.1	83	5.0
Deltapine 436 RR	754	33.8	4.8	1.07	27.0	84	6.7
Sure-Grow 521R	736	36.6	4.8	1.03	26.7	83	6.4
Stoneville 4793R	701	37.3	4.9	1.04	28.3	84	5.8
All-Tex Atlas	655	33.5	4.8	1.06	30.2	83	6.3
Deltapine 451 B/RR	649	33.9	4.8	1.09	27.1	84	5.7
LSD(k=100) ¹	201	1.9	0.3	0.03	2.0	ns	0.6
% CV	12.2	3.2	3.7	1.5	4.2	0.8	7.1
Mean	788	36.3	4.7	1.08	29.2	84	5.8

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 8. Agronomic performance and fiber quality of cotton cultivars evaluated at San Patricio County (Coastal Bend) during 2002. (Irrigated)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro-naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong-ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Deltapine 493	1326	35.6	5.0	1.10	31.7	83	4.8	0.5010	664	2
Deltapine 491	1300	34.1	4.9	1.16	32.4	84	4.7	0.5440	707	1
Stoneville 5599BR	1298	36.1	5.0	1.11	33.0	83	3.8	0.5045	655	3
Stoneville 4793 R	1233	34.8	5.3	1.04	30.3	84	5.2	0.4440	547	18
Sure-Grow 521R	1207	32.8	5.0	1.06	28.8	83	6.9	0.4830	583	10
Stoneville 457	1198	34.1	5.1	1.08	31.1	84	7.8	0.5020	601	7
TAM 96 WD-22	1192	34.2	4.3	1.13	30.3	85	5.9	0.5420	646	4
FiberMax 819	1160	33.9	5.0	1.13	32.9	84	4.1	0.5055	586	9
Deltapine 565	1151	32.8	5.1	1.08	29.7	83	5.3	0.4985	574	13
BCG ² 245	1141	32.5	4.5	1.11	34.4	84	3.5	0.5450	622	5
Stoneville 580	1128	34.1	5.3	1.08	31.8	83	5.3	0.4850	547	19
FiberMax 989 BR	1127	31.2	4.8	1.09	31.2	82	4.5	0.5380	606	6
Sure-Grow 215 BG/RR	1121	31.6	5.1	1.05	27.2	84	7.5	0.4840	543	21
Syngenta D2429	1096	30.0	5.2	1.09	30.5	85	7.4	0.5030	551	16
FiberMax 966	1095	31.7	4.7	1.10	34.7	84	3.3	0.5430	595	8
PhytoGen PSC 355	1094	32.4	5.2	1.08	31.6	85	6.4	0.5030	550	17
TAM 96 WD-69s	1094	31.7	4.9	1.07	30.3	83	6.0	0.5260	575	12
Deltapine DeltaPearl	1089	32.8	5.1	1.09	31.1	82	4.3	0.4985	543	20
FiberMax 958	1079	32.5	5.1	1.10	31.5	84	4.1	0.5020	542	22
Deltapine 5415 RR	1066	32.2	5.2	1.10	29.9	84	6.3	0.4995	532	23
FiberMax 832	1060	31.0	4.6	1.21	35.2	86	4.1	0.5475	508	11
Stoneville 5303 R	1058	32.7	5.3	1.05	36.1	85	4.6	0.4765	504	28
Deltapine 444 BG/RR	1054	33.0	4.4	1.10	30.2	84	5.5	0.5390	568	14
Deltapine 449 BG/RR	1039	31.3	5.0	1.02	32.0	83	4.9	0.4615	479	30
Deltapine 451 B/RR	1026	31.1	5.1	1.10	28.9	84	5.2	0.4960	509	25
BCG 295	1023	30.5	4.5	1.15	33.1	84	4.0	0.5455	558	15
Deltapine 448 B	1017	30.7	5.0	1.08	28.3	84	5.3	0.4960	504	27
Deltapine 545 BG/RR	1011	34.5	5.2	1.04	27.9	81	4.3	0.4530	458	35
Deltapine 458 B/RR	999	31.3	5.4	1.06	31.5	83	5.8	0.4730	473	31
DES 816	997	31.1	4.9	1.07	30.9	83	6.4	0.5285	527	24
Deltapine 555 BG/RR	983	35.2	4.9	1.01	27.7	80	4.6	0.4715	463	32
TAM 96 WD-81	955	30.8	4.8	1.07	30.0	82	5.1	0.5235	500	29
TAM 96 WD-18	930	30.2	4.6	1.17	33.9	84	4.8	0.5455	507	26
Deltapine 436 RR	926	29.7	5.2	1.11	28.7	83	6.5	0.4970	460	34
BCG 28R	925	33.0	5.2	1.11	30.4	83	4.5	0.5005	463	33
Deltapine 5690 RR	917	30.5	5.3	1.08	32.0	83	4.9	0.4850	445	36
DES 810	886	29.8	4.9	1.04	30.3	84	6.0	0.4995	443	37
Paymaster 1199 RR	876	31.9	5.2	1.05	30.6	84	5.5	0.4900	429	38
Paymaster 1218 BG/RR	776	30.7	5.3	1.01	28.8	82	5.5	0.4255	330	39
Tamcot Sphinx	.	32.7	5.2	1.07	33.4	85	4.8	0.4925	-	-
LSD (k=100) ³	93	2.2	0.4	0.06	1.6	1.9	0.5	-	-	-
%CV	6.5	3.3	3.6	2.5	2.8	1.0	5.6	-	-	-
Mean	1079	32.4	5.0	1.08	31.1	84	5.2	0.5025	538	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. BCG = Beltwide Cotton Genetics.
3. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 9. Agronomic performance and fiber quality of cotton cultivars evaluated at San Patricio County (Coastal Bend) during 2001 and 2002 (Irrigated).

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 491	1354	38.4	4.6	1.15	32.6	84	5.5
PhytoGen PSC 355	1322	36.8	5.1	1.08	30.0	85	6.9
Stoneville 4892BR	1292	38.2	5.1	1.07	29.6	84	6.0
Deltapine 565	1275	37.3	4.9	1.11	30.3	84	5.9
TAM 96 WD-22	1270	38.0	4.2	1.12	29.1	84	6.3
FiberMax 966	1265	36.2	4.7	1.10	33.7	85	4.5
Sure-Grow 521R	1257	37.5	4.8	1.06	27.8	84	7.0
Deltapine NuCotn33B	1250	35.0	4.8	1.09	30.6	84	6.2
Deltapine DeltaPearl	1240	37.2	4.9	1.11	30.7	83	5.1
Deltapine 448 B	1234	35.4	4.8	1.10	28.9	84	5.9
TAM 96 WD-69s	1214	34.5	4.5	1.07	30.0	83	6.5
FiberMax 958	1199	36.9	5.0	1.11	31.2	84	4.9
TAM 96 WD-81	1197	34.3	4.6	1.09	29.9	83	5.9
Sure-Grow 215 BG/RR	1180	36.3	5.1	1.05	26.0	84	7.3
FiberMax 832	1178	35.2	4.5	1.20	34.2	86	5.1
FiberMax 819	1157	38.3	4.8	1.13	32.6	84	5.0
Paymaster 1199 RR	1137	36.8	5.1	1.08	29.6	85	6.2
Deltapine 451 B/RR	1036	34.4	5.0	1.11	28.6	84	6.0
Paymaster 1218 BG/RR	1015	35.8	5.2	1.03	27.0	83	6.2
Deltapine 436 RR	1011	33.6	5.1	1.11	27.7	83	6.8
LSD(k=100) ¹	ns	1.6	0.3	0.04	2.1	1.7	0.9
% CV	9.4	2.2	2.7	1.6	3.5	0.8	7.3
Mean	1210	36.5	4.9	1.09	29.9	84	5.9

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 10. Agronomic performance and fiber quality of cotton cultivars evaluated at San Patricio County (Coastal Bend) during 2000, 2001, and 2002 (Irrigated).

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Delatpine DeltaPearl	1229	38.3	4.8	1.13	29.8	82	4.9
PhytoGen PSC 355	1227	37.0	4.9	1.08	29.4	84	6.8
FiberMax 958	1218	38.1	4.8	1.13	30.9	84	4.9
Stoneville 4892BR	1194	38.2	4.7	1.07	28.1	83	5.7
Sure-Grow 215 BG	1152	37.0	4.9	1.05	25.5	84	6.9
Deltapine 565	1152	36.6	4.6	1.11	29.9	83	6.0
Delatpine NuCotn33B	1152	35.4	4.6	1.10	29.7	83	6.0
Sure-Grow 521R	1135	37.7	4.6	1.06	27.1	83	6.6
Deltapine 436 RR	962	34.1	4.8	1.11	27.4	83	6.5
Deltapine 451 B/RR	956	34.7	4.8	1.10	27.6	83	5.6
Paymaster 1218 BG/RR	902	37.2	5.1	1.04	26.5	83	5.8
LSD(k=100) ¹	221	2.1	ns	0.03	1.6	ns	0.7
% CV	10.3	3.2	3.7	1.6	3.5	1.0	7.2
Mean	1116	36.8	4.8	1.09	28.3	83	6.0

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 11. Agronomic performance and fiber quality of cotton cultivars evaluated at San Patricio County (Coastal Bend) during 2000 and 2001 (Dryland).

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 20B	879	39.2	3.9	1.09	28.4	83	6.8
Stoneville 4892 BR	839	39.8	4.0	1.03	27.6	83	6.0
PhytoGen PSC 355	832	39.3	4.4	1.07	29.0	84	7.1
Sure-Grow 105	824	38.7	4.2	1.08	28.6	84	6.4
Deltapine 436 RR	799	36.6	4.1	1.09	27.6	83	6.8
Deltapine 451 BR	794	37.2	4.2	1.10	27.1	83	6.1
Sure-Grow 215 BR	783	39.0	4.2	1.03	25.5	83	6.8
Stoneville 4691B	774	40.5	3.8	1.04	27.0	83	6.0
Paymaster 1218 BR	774	38.3	4.1	1.04	26.9	84	6.2
FiberMax 819	773	41.0	3.9	1.12	32.1	84	6.0
Sure-Grow 747	758	39.9	4.2	1.07	26.9	84	7.1
Stoneville BXN 47	756	40.3	4.0	1.06	26.5	82	5.8
Garst AP 9257	741	40.1	3.9	1.07	29.2	83	6.0
Sure-Grow 501 BR	734	38.7	4.3	1.06	29.5	84	6.7
Texas 418	726	38.2	3.9	1.06	29.6	83	6.3
FiberMax 966	703	38.9	3.9	1.09	32.1	84	5.1
FiberMax 958	699	39.8	4.1	1.11	31.9	84	5.2
FiberMax 989	689	37.8	3.8	1.10	32.5	84	6.0
Garst AP 7126	688	41.5	4.5	1.10	28.6	83	6.4
Garst 4600 RR	679	38.8	4.0	1.01	27.1	83	6.2
Garst AP 6101	672	37.9	4.2	1.11	31.2	83	6.3
Stoneville BXN 16	671	38.3	3.7	1.03	29.3	83	5.5
FiberMax 832	647	38.5	3.7	1.15	33.2	85	5.8
Tamcot Pyramid	645	37.9	3.8	1.03	27.5	82	6.1
LSD (k=100) ¹	ns	2.6	ns	0.03	2.7	ns	0.6
% CV	10.0	2.7	5.8	1.5	4.5	0.9	5.0
Mean	745	39.0	4.0	1.07	28.9	83	6.2

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 12. Agronomic performance and fiber quality of cotton cultivars evaluated at San Patricio County (Coastal Bend) during 1999, 2000, and 2001 (Dryland).

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str. (g/tex)	UI (ratio)	Elong- ation (%)
PhytoGen PSC 355	895	39.1	4.7	1.06	27.6	83	7.0
Paymaster 1218 BR	835	38.6	4.6	1.04	25.8	84	6.1
Sure-Grow 105	821	38.8	4.5	1.08	27.4	84	6.4
Sure-Grow 501 BR	787	38.6	4.5	1.05	27.9	84	6.6
Sure-Grow 747	780	39.6	4.6	1.08	25.9	84	7.0
Stoneville BXN 47	720	40.0	4.3	1.06	27.2	82	5.8
Garst AP 6101	682	37.9	4.4	1.11	30.1	83	6.4
LSD(k=100) ¹	140	ns	ns	0.02	ns	ns	0.4
% CV	8.8	2.2	3.9	1.2	5.7	0.9	3.2
Mean	789	38.9	4.5	1.07	27.4	83	6.5

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 13. Agronomic performance and fiber quality of cotton cultivars evaluated in Jackson County (Upper Coast) during 2002. (Irrigated)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return Rank
Deltapine 493	1341	37.9	5.1	1.14	34.4	84	4.7	0.5055	678	3
Stoneville 5599 BR	1283	32.3	4.5	1.17	34.7	84	4.6	0.5455	700	1
Deltapine 555 BG/RR	1266	37.2	4.7	1.14	32.4	84	4.2	0.5435	688	2
Deltapine 449 BG/RR	1199	33.4	4.8	1.16	33.9	84	4.8	0.5455	654	4
Deltapine DeltaPearl	1183	38.2	5.1	1.18	34.6	82	3.9	0.5025	594	10
Deltapine 491	1178	35.3	5.0	1.21	35.0	84	4.3	0.5060	596	9
FiberMax 832 B	1167	32.1	4.8	1.21	35.7	86	4.4	0.5475	639	5
Stoneville BXN 47	1164	34.0	5.2	1.16	31.6	85	5.3	0.5055	588	11
Stoneville 5303 R	1161	32.7	5.1	1.13	36.0	85	5.3	0.5065	588	12
Deltapine NuCotn33 B	1154	31.6	4.6	1.17	32.5	85	6.2	0.5465	631	6
Syngenta D2429	1136	31.4	5.2	1.14	33.5	87	7.1	0.5075	577	17
Sure-Grow 521R	1126	32.4	4.9	1.13	30.3	85	6.7	0.5420	610	7
PhytoGen PSC 355	1109	32.0	5.3	1.13	32.0	85	7.0	0.4890	542	24
Deltapine 545 BG/RR	1094	35.1	4.8	1.14	32.9	84	4.2	0.5450	596	8
FiberMax 989 BR	1070	31.0	4.3	1.17	35.9	85	4.4	0.5465	585	13
TAM 96 WD-22	1069	31.8	3.8	1.17	30.3	83	6.0	0.5420	579	15
Sure-Grow 215 BG/RR	1065	32.7	5.1	1.10	29.1	85	7.2	0.4970	529	26
FiberMax 991R	1064	32.5	4.9	1.18	33.9	84	4.6	0.5455	580	14
Stoneville 4892 BR	1059	33.4	5.3	1.13	32.0	86	5.5	0.4900	519	30
FiberMax 958	1056	33.5	4.9	1.24	36.5	86	3.8	0.5475	578	16
Stoneville 4691 B	1049	33.0	5.2	1.14	30.0	84	5.3	0.5015	526	27
Deltapine 448 B	1045	32.1	4.9	1.18	31.7	85	5.6	0.5450	570	18
Deltapine 565	1041	34.0	5.4	1.18	34.5	85	4.9	0.4910	511	31
Stoneville 457	1034	33.1	4.8	1.18	33.1	85	7.5	0.5465	565	19
FiberMax 966	1020	32.5	4.6	1.21	38.7	86	3.4	0.5475	558	20
Stoneville BXN 49 B	1015	32.0	4.4	1.17	32.5	84	5.4	0.5455	554	21
FiberMax 989 R	999	32.3	4.5	1.15	37.3	83	4.1	0.5445	544	22
Deltapine 5690 RR	995	32.2	4.7	1.16	34.7	85	4.9	0.5465	544	23
TAM 53B-2-99	989	30.5	4.7	1.05	34.6	84	5.0	0.5310	525	28
BCG ² 245	987	30.9	4.3	1.21	35.9	83	4.1	0.5445	537	25
Deltapine 5415 RR	965	33.3	5.3	1.16	32.7	84	6.2	0.4900	473	37
Stoneville 580	954	30.8	4.7	1.18	32.4	84	5.6	0.5440	519	29
Stoneville 4793 R	941	33.6	5.2	1.11	31.7	85	6.0	0.5050	475	36
BCG 30R	924	29.0	4.4	1.20	32.6	83	5.2	0.5445	503	32
Paymaster 1199 RR	913	32.7	5.2	1.14	33.8	85	5.3	0.5065	462	39
FiberMax 832	911	31.2	4.5	1.22	36.9	84	4.1	0.5455	497	33
Deltapine 458 B/RR	895	33.5	5.2	1.18	32.6	85	5.7	0.5070	545	44
Deltapine 444 BG/RR	883	32.8	4.0	1.16	31.5	85	5.6	0.5465	483	34
BCG 295	880	31.0	4.6	1.19	33.7	84	4.9	0.5455	480	35
Deltapine 451 B/RR	878	30.6	5.1	1.17	31.0	85	5.5	0.5055	444	46

Table 13. Continued.....

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Paymaster 1218 BG/RR	860	32.3	4.8	1.12	30.1	85	6.2	0.5420	466	38
TAM 96 WD-81	851	29.5	4.5	1.10	32.4	82	5.4	0.5380	458	43
Tamcot Pyramid	849	31.9	4.4	1.06	31.2	84	5.4	0.5295	450	45
BCG 28R	847	32.8	4.7	1.20	32.6	84	5.0	0.5455	462	40
TAM 96 WD-69s	846	27.9	4.2	1.14	32.3	83	6.6	0.5440	460	41
TAM 96 WD-18	838	29.0	4.3	1.23	34.2	85	5.2	0.5465	458	42
Deltapine 436 RR	812	29.4	5.1	1.18	30.2	85	6.5	0.5030	408	51
FiberMax 819	807	31.4	4.8	1.21	36.8	85	4.3	0.5465	441	47
FiberMax 989	784	31.6	4.7	1.16	36.5	84	4.1	0.5455	428	48
DES 810	759	29.2	4.6	1.14	33.0	85	5.6	0.5460	414	49
DES 816	749	30.7	4.8	1.13	34.1	86	6.0	0.5470	410	50
Tamcot Sphinx	571	30.2	4.9	1.13	35.2	85	4.9	0.5460	312	52
LSD (k=100) ³	239	2.3	0.6	0.06	1.9	2.9	0.5	-	-	-
% CV	15.3	3.6	5.6	2.3	3.1	1.2	5.6	-	-	-
Mean	1012	32.3	4.8	1.16	33.3	84	5.3	0.5302	528	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. BCG = Beltwide Cotton Genetics.
3. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 14. Agronomic performance and fiber quality of cotton cultivars evaluated at the Texas Upper Coast Area during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 491	1331	38.7	4.7	1.22	33.6	85	5.1
Stoneville 5599BR	1311	36.5	4.4	1.14	33.2	83	5.3
FiberMax 958	1268	36.9	4.6	1.22	35.2	85	4.6
PhytoGen PSC 355	1236	35.3	5.0	1.13	30.2	85	7.1
Stoneville 4892BR	1209	35.8	4.8	1.10	30.4	85	5.9
TAM 96 WD-22	1206	36.2	3.9	1.17	28.9	84	6.2
Delatpine DeltaPearl	1203	39.4	4.9	1.17	32.7	83	4.8
Delatpine NuCotn33 B	1199	33.5	4.4	1.13	30.9	84	6.3
FiberMax 966	1174	36.4	4.4	1.19	37.2	86	4.5
Sure-Grow 521R	1137	34.9	4.6	1.10	29.1	84	6.5
Stoneville BXN 49B	1131	34.3	4.2	1.13	31.4	84	5.8
Sure-Grow 215 BG/RR	1116	35.0	4.8	1.08	27.8	85	6.8
Stoneville 4691B	1116	35.0	4.9	1.10	29.1	83	5.7
Stoneville BXN 47	1092	36.2	4.8	1.13	30.8	85	5.8
FiberMax 832	1085	35.3	4.3	1.22	36.1	85	4.9
Deltapine 565	1053	36.0	4.9	1.14	32.4	84	5.6
Deltapine 448 B	1047	34.5	4.6	1.13	30.4	84	6.0
FiberMax 819	1043	35.9	4.6	1.21	35.0	85	5.0
TAM 96 WD-69s	1036	32.3	4.1	1.13	32.1	83	6.6
Stoneville 4793R	1024	36.5	5.0	1.09	29.8	85	6.1
Deltapine 451 B/RR	1021	32.8	4.8	1.13	28.8	84	5.9
Paymaster 1199 RR	1012	35.5	4.9	1.12	31.6	85	5.8
FiberMax 989	1004	35.5	4.2	1.15	36.2	84	5.1
Tamcot Pyramid	958	35.5	4.2	1.07	30.0	84	5.9
Paymaster 1218 BG/RR	954	36.1	4.8	1.10	28.7	85	6.3
TAM 96 WD-81	954	33.4	4.3	1.11	31.0	83	5.8
Deltapine 436 RR	937	31.6	4.8	1.14	28.2	84	6.7
Tamcot Sphinx	818	33.2	4.6	1.13	33.4	85	5.7
LSD(k=100) ¹	277	3.0	0.4	0.05	1.3	ns	1.1
% CV	10.1	3.8	4.2	2.1	2.3	1.1	8.7
Mean	1099	35.3	4.6	1.13	31.5	84	5.8

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 15. Agronomic performance and fiber quality of cotton cultivars evaluated at Upper Coast during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
PhytoGen PSC 355	1161	35.9	4.7	1.12	30.3	84	7.0
FiberMax 958	1159	37.0	4.3	1.21	33.1	84	4.8
Stoneville 4892BR	1097	36.2	4.5	1.10	29.6	84	5.9
Deltapine DeltaPearl	1086	39.4	4.7	1.16	31.5	83	4.8
FiberMax 966	1051	36.8	4.1	1.17	35.5	85	4.6
Sure-Grow 521R	1045	35.0	4.4	1.07	28.3	84	6.5
Stoneville 4691B	1041	35.7	4.6	1.09	28.0	83	5.5
Sure-Grow 215 BG/RR	1027	35.7	4.7	1.07	27.4	84	6.8
Stoneville BXN 47	998	36.8	4.7	1.11	29.5	84	5.8
FiberMax 819	986	37.1	4.3	1.19	33.7	85	5.1
Stoneville 4793R	973	36.8	4.6	1.09	29.0	84	6.0
Deltapine 451 B/RR	970	33.2	4.6	1.12	28.4	84	6.0
FiberMax 832	970	35.5	4.0	1.21	34.5	84	5.3
FiberMax 989	920	35.3	4.0	1.13	34.8	83	5.3
Tamcot Pyramid	905	35.5	4.0	1.07	29.5	84	5.9
Paymaster 1218 BG/RR	901	36.1	4.5	1.10	28.0	84	6.2
Deltapine 436 RR	885	32.1	4.6	1.13	27.9	84	6.6
Tamcot Sphinx	783	32.8	4.2	1.12	31.5	84	5.7
LSD(k=100) ¹	183	1.8	0.3	0.03	1.8	ns	0.8
% CV	9.8	3.1	3.9	1.6	3.8	0.9	8.3
Mean	998	35.7	4.4	1.13	30.6	84	5.8

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 16. Agronomic performance and fiber quality of cotton cultivars evaluated at College Station (South Central) during 2002. (Irrigated)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Deltapine 493	1581	37.9	5.0	1.11	29.0	83	4.3	0.4970	786	1
Stoneville 5599BR	1444	34.3	5.0	1.12	28.8	82	4.2	0.4945	714	3
Deltapine 491	1362	36.2	4.7	1.20	30.2	83	3.8	0.5405	736	2
FiberMax 966	1301	33.1	4.7	1.14	32.1	83	2.9	0.5425	706	4
Deltapine 555 BG/RR	1270	38.4	5.0	1.10	26.0	83	4.2	0.4950	629	8
Deltapine 545 BG/RR	1234	36.4	4.8	1.12	27.2	82	4.2	0.5340	659	5
TAM 96 WD-22	1197	33.6	4.5	1.12	25.3	83	5.8	0.5305	635	7
Paymaster 1218 BR	1191	33.9	5.2	1.06	26.4	84	5.4	0.4840	576	14
FiberMax 832	1187	32.1	4.5	1.20	30.9	85	3.9	0.5450	647	6
Deltapine 458 BR	1186	34.0	5.2	1.08	27.7	83	5.1	0.4950	587	12
PhytoGen PSC 355	1163	32.6	4.9	1.11	27.9	84	6.1	0.5375	625	9
Stoneville BXN 49 B	1155	31.9	4.9	1.12	27.6	84	5.3	0.5375	621	11
Deltapine 449 BG/RR	1153	32.5	4.9	1.12	28.7	85	4.3	0.5385	621	10
Delatpina DeltaPearl	1152	34.5	5.0	1.14	28.2	82	3.7	0.4945	570	16
Stoneville 5303 R	1148	32.0	5.0	1.09	29.1	85	4.8	0.4970	571	15
Deltapine 5690 RR	1137	32.6	5.2	1.11	28.6	84	4.6	0.4980	566	17
Stoneville 457	1135	32.5	5.2	1.09	28.0	84	7.8	0.4960	563	18
Sure-Grow 215 BR	1129	32.8	5.1	1.08	24.5	84	6.5	0.4900	553	23
Stoneville 4691B	1116	33.9	5.1	1.11	27.5	85	5.4	0.4990	557	21
FiberMax 958	1073	33.3	4.9	1.16	29.6	84	3.4	0.5415	581	13
Deltapine 565	1072	33.4	5.2	1.11	26.3	84	5.0	0.4980	534	27
Miscot 8806	1035	30.9	4.8	1.10	29.0	84	5.2	0.5355	554	22
FiberMax 989 R	1031	32.1	4.5	1.11	29.8	84	4.3	0.5410	558	20
Delatpina NuCotn33B	1029	32.7	5.0	1.10	25.2	83	5.5	0.4890	503	33
FiberMax 819	1026	33.1	4.5	1.15	31.4	85	3.4	0.5450	559	19
Deltapine 5415 RR	1024	34.4	5.5	1.10	27.6	85	5.9	0.4810	493	34
Stoneville 4892 BR	1022	32.7	5.4	1.10	28.6	84	5.4	0.4800	491	35
Deltapine 444 BG/RR	1018	34.2	4.2	1.11	26.6	84	5.7	0.5390	549	24
Stoneville 580	1017	31.9	5.3	1.10	27.2	84	6.0	0.4800	488	36
Deltapine 451 B/RR	1011	31.3	5.1	1.12	27.0	85	5.1	0.4990	504	32
DES 810	1002	29.5	4.7	1.11	29.1	85	5.4	0.5385	540	25
TAM 41A-1-99	988	30.6	4.8	1.07	27.9	84	5.4	0.5235	517	29
Acala 1517-99	986	32.7	4.3	1.17	30.9	83	4.4	0.5430	535	26
Sure-Grow 521R	968	32.3	5.1	1.10	27.3	84	5.9	0.4960	480	38
DES 816	962	31.7	4.9	1.09	30.8	83	5.6	0.5405	520	28
Deltapine 448 B	949	32.6	4.9	1.09	25.7	83	4.9	0.5345	507	30
FiberMax 989 BR	943	30.3	4.7	1.12	28.5	84	4.3	0.5375	507	31
Miscot 8839	942	31.0	5.0	1.14	26.9	84	5.4	0.498	469	40
Deltapine 436 RR	940	29.5	5.0	1.14	26.1	85	5.7	0.4990	469	41
Deltapine 20 B	935	31.2	5.0	1.13	25.9	84	5.7	0.4980	466	42

Table 16. Continued.....

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Paymaster 1199 RR	927	32.4	5.2	1.09	29.8	86	4.8	0.5015	465	43
TAM 6M-1-00	903	33.5	4.7	1.12	27.8	82	4.6	0.5340	482	37
TAM 96 WD-18	878	30.5	4.5	1.18	29.7	84	4.6	0.5415	475	39
Tamcot Pyramid	861	34.0	4.8	1.09	26.4	85	5.4	0.5365	462	44
TAM 7A-1-00	838	30.1	4.1	1.09	27.2	83	5.2	0.5360	449	45
TAM 53B-2-99	830	30.6	4.6	1.08	29.3	85	5.2	0.5365	445	46
TAM 16D-1-00	779	30.7	4.5	1.06	28.3	85	4.9	0.5245	409	47
All-Tex Atlas	658	30.9	4.7	1.07	28.2	83	5.6	0.5225	344	48
LSD (k=100) ²	164	1.4	0.3	0.03	1.9	1.6	0.5	-	-	-
% CV	11.4	2.2	3.2	1.6	3.4	0.8	5.7	-	-	-
Mean	1073	32.7	4.8	1.11	28.2	84	5.0	0.5170	547	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 17. Agronomic performance and fiber quality of cotton cultivars evaluated at College Station (South Central) during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 555 BG/RR	1267	41.9	5.0	1.10	26.7	82	4.7
Stoneville 5599 BR	1264	37.5	4.9	1.13	28.5	82	4.8
PhytoGen PSC 355	1174	37.7	4.9	1.12	27.8	83	6.6
FiberMax 966	1136	34.5	4.7	1.15	31.7	83	3.4
Deltapine 491	1128	40.4	4.7	1.17	30.0	82	4.3
Paymaster 1218 BR	1128	37.9	5.1	1.08	26.3	84	5.8
Stoneville BXN 49B	1127	37.1	4.8	1.12	27.7	83	5.5
Stoneville 4691B	1127	38.2	5.0	1.11	27.3	83	5.6
TAM 96 WD-22	1126	37.7	4.4	1.13	25.5	82	6.1
FiberMax 832	1094	35.7	4.5	1.19	30.1	84	4.3
Sure-Grow 215 BR	1088	36.6	5.0	1.08	24.7	83	7.0
Delatpine DeltaPearl	1082	38.7	5.0	1.15	27.6	82	4.4
FiberMax 819	1025	37.2	4.6	1.16	31.4	84	4.0
Paymaster 1199 RR	1021	37.1	5.3	1.10	28.8	85	5.4
Deltapine 565	1012	37.1	5.1	1.12	27.4	83	5.4
Stoneville 4892 BR	1010	36.3	5.3	1.11	28.6	84	5.7
Sure-Grow 521R	987	36.0	5.0	1.09	26.7	84	6.5
Delatpine NuCotn33 B	986	36.1	4.9	1.09	26.2	82	5.9
FiberMax 958	984	37.5	5.0	1.16	30.1	83	3.8
Deltapine 20 B	938	36.3	4.8	1.11	25.6	83	6.5
Deltapine 451 B/RR	912	32.3	5.1	1.12	26.6	84	5.7
Deltapine 448 B	900	35.9	4.8	1.09	26.1	82	5.4
Deltapine 436 RR	870	32.8	5.0	1.14	25.8	84	6.1
Tamcot Pyramid	825	35.9	4.9	1.09	26.2	84	5.8
All-Tex Atlas	662	32.0	4.8	1.08	28.6	83	5.9
LSD(k=100) ¹	216	3.6	0.2	0.3	1.4	1.9	0.4
% CV	9.5	4.4	2.3	1.3	2.6	0.9	3.8
Mean	1046	36.8	4.9	1.12	27.6	83	5.4

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 18. Agronomic performance and fiber quality of cotton cultivars evaluated at College Station (South Central) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
PhytoGen PSC 355	1342	38.3	4.8	1.12	28.1	84	6.9
Stoneville 4691B	1301	39.2	5.0	1.12	27.2	84	5.8
FiberMax 819	1264	38.5	4.5	1.17	32.4	85	4.6
Deltapine DeltaPearl	1254	39.6	4.9	1.15	28.4	82	4.9
FiberMax 832	1251	36.4	4.3	1.20	32.3	84	4.9
Stoneville 4892 BR	1240	37.9	5.2	1.12	28.4	85	6.0
FiberMax 966	1240	36.0	4.7	1.14	33.0	84	4.0
Sure-Grow 215 BR	1212	37.4	5.0	1.08	24.9	83	6.9
Paymaster 1218 BR	1210	38.5	4.9	1.08	27.0	84	6.2
Deltapine 565	1207	37.9	5.0	1.12	27.8	83	5.8
Deltapine NuCotn33 B	1187	36.5	4.7	1.11	27.1	83	6.2
Deltapine 20 B	1131	36.8	4.7	1.11	26.1	83	6.7
FiberMax 958	1122	38.1	4.9	1.16	30.7	84	4.4
Tamcot Pyramid	1067	37.1	4.8	1.08	26.7	83	6.0
Deltapine 451 B/RR	1064	33.6	5.1	1.12	26.6	84	5.9
Deltapine 436 RR	1010	33.7	5.0	1.13	26.3	84	6.4
All-Tex Atlas	903	33.0	4.6	1.10	29.9	83	6.2
LSD(k=100) ¹	168	2.4	0.2	0.03	1.8	1.6	0.6
% CV	8.2	3.9	2.8	1.5	4.1	0.9	6.3
Mean	1177	37.0	4.8	1.12	28.4	84	5.7

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 19. Agronomic performance and fiber quality of cotton cultivars evaluated at Uvalde (Winter Garden) during 2002. (Irrigated)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro-naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong-ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Deltapine 493	1356	33.2	4.8	1.15	33.0	83	4.2	0.5445	738	1
Deltapine 565	1269	32.9	4.9	1.17	31.7	85	4.7	0.5450	692	2
FiberMax 991R	1260	33.0	4.5	1.16	34.3	84	4.3	0.5455	787	3
Delatpine NuCotn33 B	1245	31.0	4.4	1.13	29.8	84	4.9	0.5410	774	5
Stoneville 5599BR	1242	35.3	4.9	1.16	32.0	84	4.2	0.5440	676	4
Deltapine 555 BG/RR	1241	34.8	4.6	1.12	29.6	83	4.0	0.5400	670	6
FiberMax 989 R	1220	35.7	4.2	1.10	32.9	83	3.9	0.5435	663	7
Deltapine 458 B/RR	1216	32.6	5.0	1.14	31.5	84	5.2	0.5040	613	17
Deltapine 449 BG/RR	1212	34.2	4.8	1.12	33.7	85	4.2	0.5460	662	8
Sure-Grow 521R	1194	32.9	4.6	1.10	28.6	84	6.6	0.5355	639	9
Sure-Grow 215 BG/RR	1191	32.4	4.9	1.08	29.0	84	6.3	0.5355	638	11
Stoneville 580	1178	33.4	5.2	1.17	31.2	85	5.3	0.5055	595	21
Deltapine 451 B/RR	1177	30.4	4.3	1.15	28.3	85	4.7	0.5390	634	12
Deltapine 5415 RR	1176	33.8	5.1	1.15	31.3	84	6.2	0.5045	593	22
Delatpine DeltaPearl	1173	33.7	4.8	1.16	32.1	84	4.0	0.5440	638	10
Paymaster 1218 BG/RR	1162	33.3	5.1	1.08	29.3	84	5.5	0.4960	576	24
Deltapine 5690 RR	1162	33.5	4.9	1.09	32.3	83	4.5	0.5405	628	13
Deltapine 448 B	1153	31.8	4.3	1.14	30.3	84	4.7	0.5410	624	14
Stoneville 5303 R	1143	31.8	5.1	1.11	33.3	85	4.7	0.5065	579	23
FiberMax 832	1137	31.4	4.5	1.26	34.2	85	3.9	0.5465	621	15
TAM 96 WD-22	1136	34.4	4.3	1.18	28.7	84	5.8	0.5380	611	19
FiberMax 832 B	1129	33.0	4.6	1.21	33.9	86	4.2	0.5475	618	16
FiberMax 966	1116	32.3	4.2	1.17	34.5	86	3.3	0.5490	613	18
FiberMax 958	1099	32.9	4.8	1.16	33.3	84	3.4	0.5455	600	20
Deltapine 545 BG/RR	1065	35.2	4.8	1.12	29.8	84	3.9	0.5410	576	25
FiberMax 989 BR	1055	32.4	4.8	1.14	32.5	84	4.3	0.5450	575	26
TAM 96 WD-81	1010	31.7	5.0	1.10	28.4	82	5.0	0.4925	497	32
TAM 96 WD-69s	1003	29.6	4.8	1.11	30.8	84	6.0	0.5435	545	27
DES 816	981	32.0	4.7	1.12	32.4	84	5.7	0.5435	533	28
Deltapine 491	979	33.6	4.3	1.17	32.5	82	3.9	0.5420	531	29
PhytoGen PSC 355	966	30.2	4.5	1.09	34.4	85	5.9	0.5440	526	30
Deltapine 436 RR	964	30.2	4.6	1.15	28.6	85	6.1	0.5390	520	31
Paymaster 1199 RR	963	33.9	5.3	1.11	31.7	85	4.9	0.4890	471	33
LSD (k=100) ²	195	4.7	0.8	0.06	1.6	2.1	0.5	-	-	-
% CV	11.2	5.1	6.7	263	2.7	1.0	5.3	-	-	-
Mean	1010	32.7	4.7	1.13	31.4	84	4.8	0.5336	608	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately p=0.05 (k=100) if they differ by more than the LSD at the base of the column.

Table 20. Agronomic performance and fiber quality of cotton cultivars evaluated at Uvalde during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str. (g/tex)	UI (ratio)	Elong- ation (%)
Sure-Grow 215 BG/RR	1149	36.0	4.2	1.07	25.7	83	6.7
Paymaster 1218 BG/RR	1076	36.9	4.4	1.09	27.0	84	6.1
Delatpine NuCotn33B	1012	34.0	3.8	1.11	27.7	82	5.7
Sure-Grow 521R	1007	36.7	4.0	1.09	27.1	83	6.6
Deltapine 451 B/RR	960	33.8	4.0	1.13	26.1	83	5.5
FiberMax 832	940	35.3	3.8	1.21	32.5	84	4.9
Deltapine 436 RR	934	33.8	4.2	1.13	26.5	84	6.8
Deltapine 565	933	36.8	4.1	1.14	29.5	83	5.4
FiberMax 958	914	36.7	4.0	1.16	30.6	83	4.8
Delatpine DeltaPearl	911	36.3	3.9	1.14	29.2	83	4.7
PhytoGen PSC 355	893	36.1	4.2	1.10	30.0	85	6.5
Tamcot Sphinx	873	35.5	4.2	1.11	28.9	84	5.7
LSD(k=100) ¹	ns	1.9	0.5	0.03	2.4	1.6	0.8
% CV	13.0	2.5	4.9	1.5	3.7	0.8	6.9
Mean	1100	36.2	4.4	1.12	29.7	84	5.7

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 21. Agronomic performance and fiber quality of cotton cultivars evaluated at Uvalde (Winter Garden) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Sure-Grow 215 BG/RR	1149	36.0	4.2	1.07	25.7	83	6.7
Paymaster 1218 BG/RR	1076	36.9	4.4	1.09	27.0	84	6.1
Delatpine NuCotn33B	1012	34.0	3.8	1.11	27.7	82	5.7
Sure-Grow 521R	1007	36.7	4.0	1.09	27.1	83	6.6
Deltapine 451 B/RR	960	33.8	4.0	1.13	26.1	83	5.5
FiberMax 832	940	35.3	3.8	1.21	32.5	84	4.9
Deltapine 436 RR	934	33.8	4.2	1.13	26.5	84	6.8
Deltapine 565	933	36.8	4.1	1.14	29.5	83	5.4
FiberMax 958	914	36.7	4.0	1.16	30.6	83	4.8
Delatpine DeltaPearl	911	36.3	3.9	1.14	29.2	83	4.7
PhytoGen PSC 355	893	36.1	4.2	1.10	30.0	85	6.5
Tamcot Sphinx	873	35.5	4.2	1.11	28.9	84	5.7
LSD(k=100) ¹	ns	2.0	ns	0.03	1.6	1.1	0.5
% CV	14.4	3.0	5.8	1.7	3.5	0.7	5.5
Mean	967	35.7	4.1	1.12	28.4	83	5.8

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 22. Agronomic performance and fiber quality of cotton cultivars evaluated at Thrall (Southern Blacklands) during 2002. (Dryland)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro-naire (units)	Length (in)	Str. (g/tex)	UI (ratio)	Elong-ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Stoneville 5599BR	914	34.8	4.8	1.13	30.8	83	3.8	0.5425	496	1
Deltapine 555 BG/RR	814	37.6	4.8	1.07	28.6	82	3.3	0.5200	423	2
Deltapine 449 BG/RR	671	31.1	4.4	1.10	33.0	83	4.3	0.5420	364	3
Deltapine 545 BG/RR	639	34.0	4.6	1.09	29.1	82	3.5	0.5320	340	4
Deltapine 20 B	618	29.1	4.3	1.12	28.9	83	5.0	0.5365	332	5
Stoneville 4892 BR	616	31.4	4.9	1.03	29.5	82	4.7	0.4960	306	11
Paymaster 1218 BG/RR	614	32.6	4.9	1.06	29.3	84	4.5	0.5235	321	8
FiberMax 989 BR	603	30.4	4.1	1.12	33.5	84	4.1	0.5465	330	6
Deltapine 444 BG/RR	595	31.7	4.2	1.10	31.0	84	4.8	0.5430	323	7
Deltapine NuCotn33 B	593	30.5	4.6	1.08	28.1	82	4.8	0.5320	315	9
Deltapine 493	578	35.6	5.1	1.10	31.4	83	3.8	0.5010	290	12
Deltapine 451 B/RR	574	28.6	4.7	1.08	28.2	83	4.3	0.5345	307	10
Deltapine 458 BR	540	30.1	4.8	1.05	29.4	83	4.8	0.5225	282	13
Sure-Grow 215 BR	524	30.1	4.3	1.04	29.2	82	6.4	0.4925	258	17
Deltapine 448 B	511	29.9	4.6	1.10	29.8	83	4.4	0.5380	275	14
PhytoGen PSC 355	505	29.8	5.0	1.10	32.5	85	6.4	0.5045	255	18
Syngenta D2429	497	31.1	5.2	1.10	32.8	85	5.8	0.5045	251	19
TAM 96 WD-22	493	32.5	4.5	1.15	29.6	83	5.0	0.5405	266	15
Deltapine 436 RR	491	29.3	4.6	1.12	29.3	85	5.3	0.5385	264	16
Deltapine 565	452	29.7	4.7	1.12	31.9	84	4.3	0.5435	246	20
Stoneville 4793 R	448	30.8	4.7	1.07	31.4	84	4.6	0.5295	237	22
Paymaster 1199 RR	438	31.4	5.0	1.11	33.4	85	4.2	0.5065	222	29
FiberMax 819	436	32.4	4.5	1.12	33.8	84	3.5	0.5450	238	21
Deltapine 491	434	33.8	4.8	1.17	31.2	83	3.7	0.5430	236	24
FiberMax 966	433	30.8	4.6	1.15	37.0	84	2.7	0.5455	236	23
TAM 6M-1-00	430	32.4	4.8	1.14	32.5	83	4.1	0.5440	234	25
TAM 41A-1-99	427	28.4	4.7	1.07	31.5	84	4.8	0.5295	226	28
Deltapine DeltaPearl	421	31.4	4.6	1.14	31.1	83	3.4	0.5425	228	27
TAM 96 WD-18	421	29.1	4.4	1.17	34.7	84	4.4	0.5455	230	26
Stoneville 457	377	31.1	4.7	1.08	31.5	83	6.7	0.5405	204	30
TAM 96 WD-81	373	29.1	4.9	1.10	31.5	83	4.7	0.5405	202	31
Tamcot Sphinx	370	29.3	4.8	1.05	34.7	84	4.2	0.5310	196	32
TAM 53B-2-99-2	366	29.7	4.4	1.07	34.5	84	4.2	0.5310	194	33
Acala 1517-99	348	29.3	4.4	1.21	37.1	84	4.1	0.5455	190	34
DES 816	348	27.8	4.6	1.10	34.1	85	4.8	0.5440	189	35
Sure-Grow 521R	345	30.2	4.5	1.05	30.8	84	5.6	0.5295	183	36
DES 810	331	28.8	4.6	1.07	33.7	85	5.1	0.5635	187	37
TAM 16D-1-00	319	28.5	4.5	1.05	31.7	85	3.7	0.5305	169	40
Deltapine 5690 RR	317	30.3	4.6	1.08	33.0	83	3.9	0.5420	172	38
Deltapine 5415 RR	316	30.4	4.7	1.09	30.7	84	5.0	0.5415	171	39

Table 22. Continued.....

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
TAM 53B-2-99-1	292	28.9	4.4	1.09	35.5	84	4.1	0.5430	159	41
Stoneville 5303 R	275	29.1	4.7	1.06	33.1	85	4.0	0.5320	146	42
All-Tex Atlas	246	27.2	4.6	1.06	32.0	84	5.7	0.5295	130	43
LSD (k=100) ²	116	2.0	0.4	0.04	1.9	1.5	0.4	-	-	-
% CV	18.3	3.4	3.6	1.9	3.2	0.8	5.1	-	-	-
Mean	468	31.0	4.6	1.10	31.9	84	4.5	0.5368	203	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 23. Agronomic performance and fiber quality of cotton cultivars evaluated at Thrall (Southern Blacklands) during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 20 B	509	35.7	4.6	1.09	28.1	83	6.3
TAM 96 WD-22	496	38.5	4.5	1.13	28.9	82	5.6
Stoneville 4892BR	473	37.3	5.2	1.06	30.1	83	5.2
Deltapine 451 B/RR	451	33.8	5.2	1.08	27.0	83	5.1
Delatpine NuCotn33B	442	35.2	4.8	1.08	28.3	82	5.3
PM 1218 BG/RR	440	38.2	5.2	1.05	28.7	84	5.4
Deltapine 458 B/RR	438	35.8	5.0	1.07	29.7	83	5.3
Paymaster 1199 RR	429	37.5	5.2	1.08	31.5	85	5.0
PhytoGen PSC 355	419	37.1	5.3	1.08	31.7	85	6.7
Delatpine DeltaPearl	415	38.5	4.9	1.11	29.7	82	4.2
Deltapine 491	413	40.7	5.0	1.13	30.6	83	4.4
Sure-Grow 215 BR	413	36.2	4.9	1.04	27.9	83	7.1
Deltapine 565	403	36.2	5.1	1.10	31.3	83	5.0
FiberMax 958	400	37.3	5.1	1.13	32.9	84	3.6
Deltapine 436 RR	399	33.9	5.0	1.10	28.5	84	6.1
TAM 96 WD-69s	392	34.3	4.7	1.09	31.2	83	6.4
Sure-Grow 521RR	387	36.2	4.9	1.05	29.1	84	6.3
Deltapine 448 B	380	35.4	4.8	1.09	28.9	83	5.0
FiberMax 819	357	37.4	4.9	1.12	33.4	84	4.0
TAM 96 WD-81	355	35.3	4.9	1.07	29.6	82	5.6
Stoneville 4793R	347	37.0	5.1	1.06	30.8	84	5.4
Tamcot Sphinx	343	35.2	4.8	1.04	32.0	84	4.9
Tamcot Pyramid	337	36.7	4.8	1.04	29.1	83	5.7
All-Tex Atlas	264	33.0	4.8	1.05	31.2	83	5.9
LSD(k=100) ¹	ns	2.1	ns	0.6	2.6	1.8	0.7
% CV	20.3	2.8	4.9	2.3	3.9	0.9	6.3
Mean	410	36.5	4.9	1.09	30.0	83	5.4

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 24. Agronomic performance and fiber quality of cotton cultivars evaluated at Thrall (Southern Blacklands) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Deltapine 20 B	500	36.3	4.3	1.07	27.8	83	6.5
PhytoGen PSC 355	464	37.7	4.9	1.06	30.8	84	6.8
Stoneville 4892BR	462	37.6	4.7	1.05	28.6	83	5.3
Paymaster 1218 BG/RR	458	37.9	4.6	1.05	27.5	83	5.6
Deltapine 451 B/RR	446	34.1	4.6	1.07	27.0	83	5.3
Sure-Grow 215 BR	444	36.5	4.4	1.02	27.1	82	6.8
Delatpine NuCotn33B	428	35.3	4.4	1.07	28.2	82	5.5
Deltapine 436 RR	426	34.2	4.5	1.08	28.1	84	6.5
Deltapine 565	414	37.0	4.7	1.08	30.0	83	5.3
FiberMax 958	412	37.7	4.5	1.11	31.4	83	4.2
Tamcot Sphinx	388	35.3	4.3	1.04	31.1	83	5.3
Sure-Grow 521RR	384	36.8	4.5	1.03	27.8	83	6.3
FiberMax 819	380	38.8	4.6	1.11	32.3	84	4.5
Tamcot Pyramid	372	36.8	4.3	1.03	28.0	82	5.8
Stoneville 4793R	340	37.5	4.7	1.04	28.8	83	5.5
All-Tex Atlas	304	33.8	4.4	1.04	30.9	83	6.0
LSD(k=100) ¹	ns	1.6	ns	0.03	2.3	ns	1.8
% CV	17.2	2.7	5.2	1.8	4.6	0.9	7.9
Mean	414	36.5	4.5	1.06	29.1	83	5.7

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 25. Agronomic performance and fiber quality of cotton cultivars evaluated at Dallas (Northern Blacklands) during 2002. (Dryland)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro-naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong-ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Deltapine 493	794	35.4	4.9	1.06	31.3	83	3.6	0.5285	420	1
Sure-Grow 215 BR	700	32.3	4.6	1.04	28.6	84	5.8	0.4960	347	3
TAM 96 WD-22	681	32.6	4.2	1.06	28.5	81	4.8	0.5215	355	2
Stoneville 4892 BR	640	32.8	4.5	1.06	30.7	84	4.5	0.5295	339	4
Deltapine 449 BG/RR	621	32.3	4.4	1.06	31.9	83	3.5	0.5285	328	5
Paymaster 1218 BG/RR	575	32.8	4.8	1.04	31.8	83	4.6	0.5010	288	14
Deltapine 491	574	34.4	4.5	1.10	33.4	82	3.8	0.5395	310	6
Deltapine 5415 RR	572	34.1	5.1	1.06	31.2	83	4.8	0.4890	280	17
Deltapine 436 RR	570	29.1	4.6	1.11	29.7	84	5.0	0.5410	308	7
FiberMax 989 BR	566	31.5	4.3	1.05	32.1	82	3.8	0.5260	298	10
Deltapine 5690 RR	565	32.3	4.7	1.05	33.3	83	3.9	0.5300	299	9
Sure-Grow 521R	564	31.5	4.5	1.05	29.9	84	5.3	0.5270	297	11
PhytoGen PSC 355	563	29.2	4.4	1.09	34.2	85	6.1	0.5440	306	8
Tamcot Pyramid	552	30.8	4.4	1.00	28.4	83	4.3	0.4740	262	25
TAM 41-A-1-99	547	29.5	4.3	1.00	30.3	83	4.1	0.4775	261	26
FiberMax 966	545	31.0	4.5	1.10	36.4	84	2.3	0.5430	296	12
Paymaster 1199 RR	544	31.7	4.8	1.08	30.6	85	4.0	0.5425	295	13
Deltapine 20 B	536	28.5	4.3	1.09	29.4	82	4.6	0.5320	285	15
TAM 96 WD-69s	533	28.5	4.3	1.07	32.3	83	5.1	0.5285	282	16
Deltapine 444 BG/RR	526	32.5	4.0	1.07	29.1	84	4.3	0.5250	276	18
Deltapine 448 B	514	31.1	4.4	1.06	29.9	82	4.1	0.5235	269	20
Deltapine 451 B/RR	506	30.2	4.5	1.07	27.2	83	3.6	0.5225	264	23
TAM 96 WD-81	503	29.8	4.5	1.02	30.7	80	4.7	0.4985	251	30
Deltapine 545 BG/RR	502	33.1	4.3	1.06	28.5	82	3.4	0.5200	261	27
Tamcot Sphinx	501	30.6	4.6	1.01	34.1	83	3.8	0.4815	241	32
Delatpine NuCotn33 B	499	29.9	4.2	1.09	31.0	82	4.1	0.5395	269	19
DES 810	499	29.3	4.6	1.05	32.7	84	4.9	0.5310	265	22
TAM 96 WD-18	493	29.3	4.0	1.10	34.6	82	4.3	0.5410	267	21
FiberMax 819	486	31.4	4.5	1.10	36.0	84	3.3	0.5430	264	24
Deltapine 458 B/RR	478	31.4	4.6	1.07	31.4	83	4.2	0.5285	253	28
Deltapine 565	471	31.2	4.6	1.07	30.4	82	3.8	0.5235	247	31
Acala 1517-99	460	28.9	4.0	1.18	39.1	84	4.1	0.5470	252	29
Deltapine 555 BG/RR	454	35.4	4.5	1.05	29.0	82	3.0	0.5200	236	33
DES 816	447	29.5	4.3	1.04	35.1	82	4.5	0.5000	224	35
Delatpine DeltaPearl	428	30.7	4.6	1.14	31.5	83	2.7	0.5425	232	34

Table 25. Continued....

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
Open Canopy R550	385	30.2	4.6	1.10	30.6	83	3.8	0.5405	208	36
All-Tex Atlas	.	28.2	4.5	1.03	34.6	83	4.8	0.5025	-	-
Tamcot Luxor	.	28.8	4.1	0.99	30.0	83	3.7	0.4785	-	-
LSD (k=100) ²	101	1.4	0.4	0.04	2.9	2.1	0.4	-	-	-
% CV	12.9	2.3	4.4	2.0	4.6	1.0	5.1	-	-	-
Mean	540	31.2	4.5	1.06	31.5	83	4.2	0.5257	282	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI, and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 26. Agronomic performance and fiber quality of cotton cultivars evaluated at Dallas (Northern Blacklands) during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
TAM 96 WD-22	645	34.1	4.6	1.07	28.5	82	5.1
Sure-Grow 215 BR	627	34.2	5.2	1.03	28.0	84	6.0
PhytoGen PSC 355	604	32.0	5.1	1.07	32.1	85	6.1
Stoneville 4892 BR	565	34.5	5.3	1.08	30.4	84	4.9
Deltapine 491	554	35.3	5.0	1.13	33.3	83	3.9
Sure-Grow 521 RR	554	33.9	5.1	1.05	28.8	84	5.7
Deltapine 20 B	548	31.7	4.8	1.10	29.3	83	5.0
Paymaster 1218 BG/RR	541	33.9	5.2	1.04	30.6	83	4.7
Deltapine 451 B/RR	530	31.7	5.0	1.08	27.6	83	4.0
Deltapine 436 RR	516	31.2	5.0	1.10	29.4	84	5.1
Paymaster 1199 RR	509	32.9	5.2	1.06	29.9	84	4.3
Deltapine 565	504	32.9	5.0	1.09	30.9	83	4.3
Deltapine 458 B/RR	494	32.3	5.0	1.10	32.1	83	4.4
TAM 96 WD-69s	485	30.1	4.6	1.05	31.2	82	5.5
Delatpine NuCotn33 B	483	31.1	4.9	1.11	31.5	83	4.4
Deltapine 448 B	482	31.3	4.7	1.11	30.6	83	4.2
Tamcot Pyramid	476	31.5	4.6	1.00	27.5	82	4.9
TAM 96 WD-81	470	31.2	4.8	1.04	30.2	81	4.9
Tamcot Sphinx	430	31.7	4.9	1.00	32.2	83	4.2
Delatpine DeltaPearl	427	32.7	5.1	1.13	31.6	83	3.3
LSD(k=100) ¹	129	2.2	0.5	0.06	2.6	ns	0.5
% CV	9.8	3.0	4.2	2.6	3.8	1.2	5.3
Mean	523	32.6	4.9	1.07	30.3	83	4.7

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 27. Agronomic performance and fiber quality of cotton cultivars evaluated at Dallas (Northern Blacklands) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Sure-Grow 215 BR	556	33.9	5.0	1.02	26.3	83	5.8
PhytoGen PSC 355	519	32.3	4.8	1.05	30.6	84	6.3
Sure-Grow 521 RR	515	33.3	4.7	1.04	27.6	83	5.8
Deltapine 20 B	510	32.5	4.6	1.09	28.2	83	5.3
Paymaster 1218 BG/RR	503	33.3	4.9	1.04	29.0	83	5.1
Deltapine 436 RR	463	31.0	4.8	1.09	28.4	83	5.5
Deltapine 451 B/RR	445	30.8	4.6	1.08	26.5	83	4.4
Deltapine NuCotn33B	438	31.3	4.6	1.09	29.9	82	4.8
Tamcot Pyramid	419	31.5	4.4	0.99	26.3	82	5.0
Tamcot Sphinx	397	31.4	4.7	1.01	30.1	83	4.6
LSD(k=100) ¹	111	2.4	ns	0.04	1.8	ns	0.7
% CV	11.4	3.7	4.3	2.0	3.8	1.0	7.5
Mean	477	32.1	4.7	1.05	28.3	83	5.3

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 28. Agronomic performance and fiber quality of cotton cultivars evaluated at Chillicothe (Northern Rolling Plains) during 2002. (Irrigated)

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)	Loan value ¹ (\$/lb)	Return (\$/ac)	Return rank
FiberMax 958	1391	27.1	3.4	1.20	34.6	84	4.3	0.5265	732	1
Paymaster 2344 BG/RR	1335	26.3	4.3	1.09	31.2	84	5.9	0.5415	723	2
FiberMax 989 BR	1268	26.0	3.4	1.14	31.7	82	4.5	0.5210	661	6
FiberMax 5013	1255	26.5	4.2	1.11	31.5	85	5.9	0.5460	685	3
Syngenta D2429	1250	24.8	3.5	1.18	33.4	85	6.5	0.5465	683	4
FiberMax 966	1223	25.8	3.4	1.21	37.7	85	3.6	0.5275	685	9
Paymaster 2266 RR	1213	24.6	4.0	1.13	32.7	84	6.3	0.5465	663	5
Paymaster 2167 RR	1206	26.9	4.1	1.04	29.7	84	5.8	0.5010	604	13
Tamcot Pyramid	1205	26.6	4.0	1.10	30.9	84	5.4	0.5430	654	7
Paymaster 2280 BG/RR	1190	25.2	3.6	1.15	32.6	83	5.4	0.5445	648	8
PhytoGen PSC 355	1174	24.6	3.5	1.17	32.6	85	7.0	0.5465	642	10
TAM 96 WD-22	1173	26.1	3.2	1.16	28.2	82	5.8	0.4940	579	19
Paymaster 2326 RR	1170	25.1	4.2	1.13	33.0	85	5.7	0.5475	641	11
DÉS 816	1147	24.2	3.7	1.15	33.7	85	5.8	0.5480	629	12
Stoneville 5303 R	1145	22.9	3.4	1.11	33.2	84	5.2	0.5260	602	14
FiberMax 819	1097	25.6	3.5	1.22	34.1	84	4.1	0.5455	598	15
Stoneville 4892BR	1091	25.2	3.6	1.11	31.0	83	5.6	0.5425	592	16
All-Tex Atlas RR	1071	25.4	3.7	1.09	33.4	83	5.6	0.5435	582	17
Stoneville 457	1063	26.6	3.8	1.16	30.5	84	7.3	0.5455	580	18
Sure-Grow 215 BG/RR	1056	23.1	3.5	1.07	27.6	83	6.7	0.5225	552	20
TAM 96 WD-18	1045	22.5	3.0	1.21	32.0	83	5.4	0.5025	525	27
DES 810	1043	22.8	3.3	1.15	33.7	83	5.6	0.5255	548	21
Deltapine 458 BR	1005	23.7	3.4	1.11	30.7	82	6.1	0.5210	524	28
TAM 96 WD-69s	1001	22.2	3.3	1.14	31.4	82	6.3	0.5210	522	29
Deltapine 555 BG/RR	1000	27.2	3.3	1.15	30.5	82	4.0	0.5215	522	30
Tamcot Sphinx	999	24.5	3.4	1.12	33.9	84	5.0	0.5260	525	26
Stoneville 580	992	23.0	3.5	1.13	31.8	83	6.0	0.5425	538	22
Deltapine 449 BG/RR	984	23.9	3.6	1.11	31.1	82	4.8	0.5400	531	23
Stoneville 474	981	24.5	3.8	1.14	29.4	84	5.5	0.5390	529	24
Tamcot Luxor	971	24.7	3.6	1.14	32.0	84	4.9	0.5435	528	25
TAM 96 WD-81	947	21.5	3.2	1.14	31.7	83	5.5	0.5020	475	34
Acala 1517-99	940	23.2	3.4	1.25	36.7	84	4.6	0.5265	495	31
Stoneville 2454 RR	936	25.3	3.9	1.07	30.5	82	5.6	0.5275	494	32
Stoneville 4793 R	926	23.5	3.4	1.10	31.3	84	5.8	0.5225	484	33
All-Tex Atlas	871	23.1	3.6	1.11	34.4	84	6.4	0.5450	502	35
LSD (k=100) ²	99	2.9	0.5	0.04	2.3	1.4	0.6	-	-	-
% CV	6.7	5.1	7.3	1.8	3.7	0.8	5.6	-	-	-
Mean	1100	24.7	3.6	1.13	32.0	84	5.5	0.5318	583	-

1. Loan value based on grade 41-4 adjusted for length, strength, UI and micronaire. Base loan for 2002 is 52 cents per pound.
2. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 29. Agronomic performance and fiber quality of cotton cultivars evaluated at Chillicothe (Northern Rolling Plains) during 2001 and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
TAM 96 WD-22	1110	28.2	3.9	1.16	28.5	83	5.7
Paymaster 2326 RR	1044	26.6	4.8	1.11	32.2	84	5.5
Paymaster 2266 RR	1036	26.4	4.4	1.11	32.0	84	6.1
Tamcot Pyramid	1032	27.6	4.5	1.10	29.8	83	5.3
PhytoGen PSC 355	1029	26.5	4.4	1.15	31.7	85	6.7
Paymaster 2344 BG/RR	1022	25.8	4.7	1.10	31.5	84	5.6
Paymaster 2280 BG/RR	1006	26.7	4.1	1.14	32.7	83	5.1
Sure-Grow 215 BG/RR	980	26.8	4.3	1.09	27.3	83	6.5
TAM 96 WD-69s	957	24.4	4.0	1.15	31.0	83	6.3
Tamcot Sphinx	944	26.1	4.3	1.12	32.8	84	4.9
TAM 96 WD-81	871	24.3	4.2	1.12	30.4	82	5.5
All-Tex Atlas	870	24.8	4.3	1.10	32.7	84	5.9
Stoneville 474	841	26.9	4.5	1.14	29.8	84	5.3
Stoneville 2454 RR	814	26.9	4.5	1.08	29.9	83	5.7
LSD(k=100) ¹	ns	ns	ns	0.04	2.0	ns	0.4
% CV	11.4	5.1	5.9	1.7	3.0	1.0	3.6
Mean	968	26.3	4.3	1.12	30.9	83	5.7

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.

Table 30. Agronomic performance and fiber quality of cotton cultivars evaluated at Chillicothe (Northern Rolling Plains) during 2000, 2001, and 2002.

Cultivar	Lint yield (lb/ac)	Gin turnout (%)	Micro- naire (units)	Length (in)	Str (g/tex)	UI (ratio)	Elong- ation (%)
Paymaster 2280 BG/RR	913	27.6	4.2	1.12	32.4	83	5.1
PhytoGen PSC 355	889	27.0	4.4	1.13	31.2	84	6.7
Paymaster 2326 RR	879	26.9	4.7	1.09	31.7	83	5.5
Tamcot Pyramid	863	27.3	4.4	1.08	28.4	83	5.2
Tamcot Sphinx	850	27.2	4.4	1.10	31.5	83	5.0
Stoneville 474	777	28.0	4.5	1.12	28.7	83	5.2
All-Tex Atlas	760	25.1	4.2	1.09	32.2	83	5.9
Stoneville 2454 RR	736	27.7	4.4	1.07	29.2	83	5.6
LSD(k=100) ¹	ns	1.9	ns	0.03	1.7	ns	0.3
% CV	11.1	3.4	5.0	1.4	3.2	0.9	3.7
Mean	833	27.1	4.4	1.10	30.7	83	5.5

1. Values within columns are different at approximately $p=0.05$ ($k=100$) if they differ by more than the LSD at the base of the column.