Cotton Variety Tests in Oklahoma 1968–73

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Contents

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Cotton Variety Tests in Oklahoma, 1968-1973[1]

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The purpose of the cotton variety testing program in Oklahoma is to determine the relative performance (under Oklahoma environmental conditions) among cotton varieties available commercially and to distribute that information to cotton producers throughout the state. Individual producers should then use the information to choose the cotton variety best adapted to their particular situations.

Cotton variety tests are conducted at several locations in Oklahoma each year under irrigation and on dryland. Yield and other agronomic characters are determined in each test as are the more important measurements of fiber quality. Continuous testing over years is necessary because of the release of new varieties each year and because of the modifications in existing varieties by the breeders who maintain them. Testing at several locations each year is required because a variety which performs well in one part of the state may or may not perform well in another. Also, yield, earliness, and fiber coarseness (i.e., micronaire) data from a limited number of tests can be misleading because environment influences those three characters to a considerable degree. For those traits, long-term averages are much better indicators of relative performance than are results from only a few tests.

A similar bulletin, B-623, was published for tests conducted from 1956 through 1962 as was another, B-665, for the years 1963 through 1967. This bulletin presents test information from 1968 through 1973. As data is collected on varieties which have recently been released, that information will also be published and distributed.

[1] The research published herein was conducted under Oklahoma Agricultural Experiment Station Project S-714 (Cotton Variety Tests).

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Procedures

During the period 1968 through 1973, irrigated cotton variety tests were conducted at Altus and Chickasha. Dryland tests were also conducted each of those years at Mangum and Chickasha. Irrigated tests were performed at Tipton in 1972 and 1973; but those data were not included in this bulletin because only two years testing were involved. Dryland tests were conducted at Perkins in 1968 and 1969 and at Tipton in 1973, but they were not included herein because of the limited time spans involved. Data for the 1968, 1969, 1972, and 1973 tests may be found in the previous Oklahoma Agricultural Experiment Station Reports P-607, P-634, P-680, and P-694, respectively.

Individual tests reported herein were planted in randomized complete-block experimental designs with 30 varieties in each test. Six replications per test were used in the experiments from 1968 through 1970 with five replications per test thereafter. Plots were two rows 50 feet long with rows spaced 40 inches apart. Two rows of a common border were grown on each side of each plot. Cultural information by year is given for the Altus tests in Table 1, Chickasha (irrigated) in Table 2, Mangum in Table 3, and Chickasha (dryland) in Table 4. The 1973 test at Mangum (Table 3) was not harvested because of uneven stands caused by wind-blown sand early in the season. The 1970 dryland test at Chickasha (Table 4) was not harvested because of severe drouth damage. Yields were also very low because of drouth in the Chickasha dryland test the following year (Tables 11 and 12); and perhaps, that test should have been discarded as well. However, rather than lose the test two years in a row, the 1971 data were calculated and are reported herein.

The total number of cotton varieties commercially available was too large for all varieties to be tested at every location in every year. Therefore, varieties thought to have utility in a general area or type of culture (e.g., irrigated versus dryland conditions) were included in the experiments most closely approximating that situation. Some varieties were grown at a particular location throughout the period 1968 through 1973. The data for those varieties have been reported in tables separate from those grown less than the full six years. Typical reasons why varieties were not grown in a test over all years include: seed in short supply in a particular year, variety replaced by a subsequent release, variety not released until sometime after 1968, variety performed poorly and was dropped from the testing program, etc.

In the tables on the right-hand side, the average performance for each variety is given over the years it was tested at that location. In those tables in which the varieties were *not* grown all six years, varietal averages are comparable with each other and with the averages for varieties

grown over all years at that location since Patterson's[3] method was used to adjust for year effects. His method is not entirely accurate, but it is useful for purposes of comparison. Averages for varieties tested at a location are comparable with each other in any combination. One may also compare data within a particular year for any combination of varieties grown at that location. One should be cautioned against comparing varieties not grown in the same year and location. Under such circumstances it is difficult, if not impossible, to determine whether the differences observed can be attributed to varieties, to environments, or to variety by environment interactions.

For yield (Tables 5 through 12) and earliness (Tables 13 through 15), statistical analyses are represented by LSD (least significant difference) values given at the base of those tables for each test. An LSD may be used to compare differences in performance between varieties at that location in the year involved. If the difference in performance between two varieties exceeds the LSD value for that test, the chances are approximately 19 out of 20 that the *apparent* difference for that trait is a *real* difference. Of course, two varieties with significantly different performance for one character may be very similar for another and vice versa.

Results

Below are discussed the individual agronomic (yield, earliness, and lint percent) and fiber quality (length, length uniformity, coarseness, and strength) characters which are reported in this bulletin. In examining the results for these characters, the producer should keep in mind that he is seeking a variety having high yield, moderate to high earliness, reasonably high lint percent, and fiber that is long, uniform, and strong with a coarseness consistently in the acceptable range under his environmental conditions. When the producer uses these data to choose the variety best adapted to his particular situation, he should study the variety test which comes nearest to fulfilling the conditions existing on his farm. Attention should be given to location in the state, to whether the test was irrigated or dryland, etc., and to how the varieties in that test performed *relative* to one another.

Agronomic Characters

The agronomic characters discussed below are yield measured as pounds of lint per acre, earliness estimated by percent first harvest, and lint percent calculated on the basis of both snapped and picked cotton. For each of these characters, higher numerical values are in general

[3] Patterson, R E. 1950. A method of adjustment for calculating comparable yields in variety tests. Agron. J. 42:509-511.

more desirable than are lower ones.

Yield. Although fiber quality is important (particularly length and coarseness), lint yield is probably the single most important criteria the producer should use in deciding which variety he should grow. However, yield is a character which is considerably influenced by environment; and relative yield performance should be studied over a number of years at a location to more reliably determine which varieties consistently yield well in that area. Irrigation versus no-irrigation can have a profound effect on relative varietal performance. Some varieties do well under irrigation but cannot compete with others under dryland conditions. Others do relatively better on dryland than under irrigation. This suggests that if a producer irrigates, he should study yields in the irrigated test closest to his farm. If he does not or cannot irrigate, he should study the dryland test in his area. Yield results are presented in Tables 5 through 12.

Earliness. Relative maturity is a character of particular importance on the northern extremities of the Cotton Belt where growing seasons are comparatively short. It has been our experience in conducting variety tests in Oklahoma that *in general* the earlier the variety, the better it performs under dryland conditions. Under irrigation, a moderate amount of earliness is still required, but extreme earliness is not as necessary for maximum performance as it is on dryland. Like yield, multiple observations of earliness are much more reliable than are single estimates. Earliness was calculated herein as percent first harvest by dividing the weight of lint per plot from the first harvest by the weight of lint from both harvests. The character can be measured only in those tests harvested more than once. The only such dryland experiment was at Mangum in 1969. Results from that test were not reported herein, but may be found in the publication P-634. In the irrigated tests earliness was estimated two years at Altus and four years at Chickasha. Those data are presented in Tables 13 through 15.

Lint percent. The producer should consider lint percent in his choice of variety *if* he pays by the hundredweight for harvesting or *if* his ginning costs are levied by weight of snaps or seed cotton rather than by weight of lint or by the bale. Pulled lint percents (Tables 16 through 23) were calculated by dividing the weight of lint by the total weight of the snapped sample from which it came, and those percents should be studied if harvesting is accomplished using mechanical strippers. Picked lint percents (Tables 24 through 31) were estimated by dividing the weight of lint by the total weight of the seedcotton sample from which it came, and those percents should be considered if harvesting is done with mechanical pickers. However, the producer should keep in mind

that as the price of cotton seed increases, the importance of high lint percent declines. Also, a higher yielding variety with a moderate (sometimes even very low) lint percent often gives higher net returns per acre than does a lower yielding variety with a high lint percent. Differences in lint yield mean more in terms of dollars and cents than do differences in lint percent.

Fiber Quality Characters

The fiber quality characters discussed below are fiber length measured as 2.5 percent span length, fiber length uniformity as uniformity index, fiber coarseness as micronaire, and fiber strength a 1/8" and 0" gauge stelometer. For each of these characters except coarseness, higher numerical values are more desirable than are lower ones. For fiber coarseness, there is a range of acceptability; and micronaire values outside that range result in lower prices per pound of lint.

Fiber length. Length is one of the major criteria determining the price per pound that the producer receives for his lint. It was measured here as 2.5 percent span length, in inches, on the digital fibrograph since this measurement corresponds closely with classer's length. Tables 32 through 39 provide this information for the varieties at the various test locations used. Table A in the Appendix converts periodic 2.5 percent span length measurements into 32's and into fractions of an inch to aid the reader in the interpretation of this data.

Fiber length uniformity. Length uniformity relates to the amount of waste in the manufacturing process; i.e., the higher the uniformity, the less the waste. It was measured here as uniformity index, i.e., the ratio expressed as a percentage of 50 to 2.5 percent span length. Both span length measurements are obtained in inches on the digital fibrograph. Tables 40 through 47 summarize the length uniformity data. At present, price incentives are not received by the producer for lint having high fiber length uniformity.

Fiber coarseness. Micronaire was used to measure fiber coarseness because it is the measurement commonly used in commercial channels of trade. Micronaire is estimated in standard (curvilinear scale) micronaire units, i.e., micrograms per inch. At present, the desirable range for micronaire is from 3.5 to 4.9 inclusive. If the fiber is too fine (below 3.5) or too coarse (above 4.9), the price per pound of lint is reduced. It should be noted, however, that penalties are somewhat greater for micronaires below 3.5 than for those above 4.9. The micronaire data are shown in Tables 48 through 55. Like yield and earliness, fiber coarseness is greatly influenced by the environment; and observations over a number of years at a location are much more reliable than are those from one or two years at that same location.

Fiber strength. Although the producer presently receives no direct financial incentive for fiber strength, the character is related to yarn strength and to efficiency in the spinning process. Strength was measured as 1/8" gauge stelometer because it corresponds more closely with yarn strength than does any other strength measurement currently in use. Those measurements are shown in grams-force per tex in Tables 56 through 63. In past reports, strength data reported in grams-force per *grex*. This change merely involves moving the decimal one space to the right, e.g., 2.13 grams-force per grex under the old system becomes 21.3 grams-force per tex under the new. The change was made to increase the uniformity of fiber testing and reporting techniques for cotton variety tests across the United States. Strength was also measured as 0" gauge stelometer because that measurement can be converted into pounds per square inch by multiplying the observed values (in grams-force per tex) by a factor of 2161.4. Table B in the Appendix converts periodic 0" gauge readings into pounds per square inch in thousands for the reader's convenience. Tables 64 through 71 report 0" guage data from the individual variety tests.

Summary and Conclusions

Oklahoma cotton variety test results for the years 1968 through 1973 are presented in the form of tables with a brief discussion for each of the characters studied. These results should be used by the individual cotton producer to choose the variety best adapted to his area and production practices. Test results of newer cotton varieties were available for only one or two years and could not be included in a publication which summarizes many years of testing. Information on the more recent variety releases from 1972 and 1973 can be obtained by requesting Research Reports P-680 and P-694, respectively, from the Department of Agronomy, Oklahoma State University.

Table 1. Cultural information relating to the irrigated cotton variety tests at Altus, 1968 through 1973*

Years	Planting dates	Fertilizer applications	Number of irrigations	Insecticide applications	Harvest dates
1968	June 10	150 lbs. 18-48-0 30 lbs. N	3	3	November 22
1969	May 24	45 lbs. P_2O_5	4	8	November 11 December 4
1970	May 19	200 lbs. 30-10-70 100 lbs. 18-46-0	5	3	November 12
1971	June 3	200 lbs. 18-46-0	3	0	January 12
1972	May 31	150 lbs. 18-46-0	2	0	December 22
1973	May 29	200 lbs. 18-46-0	3	2	November 13 December 11

*The soil type at this location is a Hollister clay loam.

Table 2. Cultural information relating to the irrigated cotton variety tests at Chickasha, 1968 through 1973*

Years	Planting dates	Fertilizer applications	Number of irrigations	Insecticide applications	Harvest dates
1968	May 1 (Repl. June 21)	200 lbs. 12-24-12	2	9	December 6
1969	May 26	200 lbs. 12-24-12	3	4	October 21 November 17
1970	May 19	200 lbs. 10-20-10	5	10	October 28 November 16
1971	May 25	200 lbs. 10-20-10	2	8	November 15
1972	May 11	200 lbs. 12-24-12	4	8	September 27 November 8
1973	May 15 (Repl. June 8)	200 lbs. 15-30-15	0**	5	October 24 November 28

*The soil type at this location is a Reinach silt loam.
**Irrigation was not required because of abundant rainfall in 1973.

Table 3. Cultural information relating to the dryland cotton variety tests at Mangum, 1968 through 1973*

Years	Planting dates	Fertilizer applications	Insecticide applications	Harvest dates
1968	May 28	150 lbs. 14-28-14	5	December 7
1969	May 24	150 lbs. 8-32-16 30 lbs. N	5	November 13 December 20
1970	May 26	150 lbs. 8-32-16 30 lbs. N	2	December 8
1971	June 5	150 lbs. 8-32-16 20 lbs. N	0	January 6
1972	June 2	160 lbs. 15-30-15 20 lbs. N	0	December 20
1973	June 12	160 lbs. 15-30-15 20 lbs. N	0	**

*The soil type at this location is a Meno loamy fine sand.
**Test was not harvested due to uneven stands caused by wind-blown sand.

Table 4. Cultural information relating to the dryland cotton variety tests at Chickasha, 1968 through 1973*

Years	Planting dates	Fertilizer applications	Insecticide applications	Harvest dates
1968	June 14	None	7	December 3
1969	May 29	None	0	November 24
1970	May 26	None	0	**
1971	June 15	None	4	November 20
1972	May 24	None	2	October 11
1973	June 7	None	5	December 8

*The soil type at this location is a Reinach silt loam.
**Test was not harvested due to severe drouth damage.

Table 5. Yield of varieties tested 6 years under irrigation at Altus

Variety	Lint yield, pounds/acre						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 16	351	630	490	262	369	1140	540
Stoneville 213	319	686	528	208	334	913	498
Paymaster 202	380	558	419	228	351	1010	491
Lockett BXL	321	626	507	211	318	893	479
Stoneville 7A	273	628	432	151	324	777	431
Lockett 4789	306	532	433	133	284	833	420
Lockett 4789-A	307	576	438	137	315	712	414
Lankart 3840	412	543	486	122	95	769	405
Coker 201	224	420	407	172	196	910	388
Yearly average	321	578	460	180	287	884	452
LSD (0.05)	56	67	65	53	117	178	89

Table 6. Yield of varieties tested 3 to 5 years under irrigation at Altus

Variety	Lint yield, pounds/acre						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	359	644		182	299	829	465
Deltapine 45A	329	679		161	303	765	448
Tamcot 788		771	473	261	314	1036	545
Stripper Cala-S		616	518	218	219	860	460
Lankart 57	401	686	491	130			494
Paymaster 111	295	449	363	152			382
Coker 310			547	198	385	854	495
Coker 5110			467	238	326	895	481
Westburn 70			564	214	322	683	445
Coker 4104	254	612	521				461
Westburn	357	524	459				446
Paymaster 101-A	358	605	360				440
Dunn 56C	321	511	401				410
Paymaster 18		554	438	228			453
Acala SJ-1		323	286	77			275
Lankart 611			506		262	1073	522
Delcot 277			544		264	922	485
Coker 312				235	313	980	511
Paymaster 101-B				249	263	895	471
Paymaster 111-A				153	305	889	451
Dunn 118				206	238	888	446
HyBee 100A				209	252	822	429
LSD (0.05)	56	67	65	53	117	178	89

Table 7. Yield of varieties tested 6 years under irrigation at Chickasha

Variety	Lint yield, pounds/acre						
	1968	1969	1970	1971	1972	1973	Average
Stoneville 213	145	692	435	457	1093	513	556
Deltapine 16	178	684	329	433	1136	519	547
Stoneville 7A	96	687	419	400	1172	504	546
Lockett BXL	187	645	318	365	1068	632	536
Paymaster 202	248	645	296	294	997	673	526
Lockett 4789-A	216	629	276	257	1084	529	499
Coker 201	141	700	225	373	1089	426	492
Lockett 4789	156	604	323	333	1036	491	491
Lankart 3840	218	572	332	294	885	515	469
Yearly average	176	651	328	356	1062	534	518
LSD (0.05)	51	69	69	73	142	116	87

Table 8. Yield of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	Lint yield, pounds/acre						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	116	696		378	956	415	474
Lankart LX 571	220	586		315	932	445	462
Tamcot 788		636	318	350	1058	663	537
Stripper Cala-S		593	228	195	990	472	427
Paymaster 111	140	603	276	340			480
Lankart 57	183	581	254	249			457
Westburn 70			335	393	991	599	528
Coker 5110			279	464	1017	436	497
Coker 310			267	370	1022	456	477
Paymaster 101-A	295	642	296				544
Westburn	157	675	338				523
Coker 4104	127	713	321				520
Dunn 56C	146	577	242				455
Paymaster 18		625	272	330			482
Acala SJ-1		570	166	313			423
Delcot 277			404		1199	638	624
Lankart 611			310		1050	632	541
Paymaster 101-B				347	1069	572	530
Coker 312				389	965	504	487
Paymaster 111-A				305	1031	501	480
HyBee 100A				414	995	403	471
Dunn 118				355	874	518	450
LSD (0.05)	51	69	69	73	142	116	87

Table 9. Yield of varieties tested 5 years on dryland at Mangum

Variety	Lint yield, pounds/acre						
	1968	1969	1970	1971	1972	1973*	Average
Lankart 3840	144	384	328	353	108		263
Lankart LX 571	92	490	267	331	125		261
Lankart 57	116	464	292	328	68		254
Lockett 4789-A	124	318	290	297	117		229
Paymaster 202	90	391	233	309	108		226
Yearly average	113	409	282	324	105		247
LSD (0.05)	NS	110	82	76	60		95

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 10. Yield of varieties tested 3 or 4 years on dryland at Mangum

Variety	Lint yield, pounds/acre						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	85	446		284	66		230
Lockett BXL	88		265	340	129		247
Lockett 4789	87		279	320	65		229
Tamcot 788		434	321	356	129		277
Stripper Cala-S		480	311	332	97		272
Westburn	161	559	289				315
Coker 4104	87	523	330				292
Paymaster 101-A	106	443	224				237
Dunn 56C	102	388	222				216
Stoneville 7A	79	504		274			251
Paymaster 111	35	364		227			174
Tamcot 24		528	254		103		277
Stripper Cala-N		527	269		81		274
Lankart 611		479	228		123		258
Prolific Stormproof		637		389	84		338
Coker 310		506		362	143		305
Westburn 70			315	408	173		309
Paymaster 111-A			282	320	70		234
LSD (0.05)	NS	110	82	76	60		95

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 11. Yield of varieties tested 5 years on dryland at Chickasha

Variety	Lint yield, pounds/acre						
	1968	1969	1970*	1971	1972	1973	Average
Paymaster 202	462	283		63	229	513	310
Lockett 4789-A	517	277		30	253	455	306
Lankart LX 571	466	335		35	231	444	302
Lankart 57	464	320		43	240	401	294
Lankart 3840	425	292		36	226	395	275
Coker 201	410	265		44	203	311	247
Yearly average	457	295		42	230	420	289
LSD (0.05)	58	43		17	58	93	54

*Test was not harvested due to severe drouth damage.

Table 12. Yield of varieties tested 3 or 4 years on dryland at Chickasha

Variety	Lint yield, pounds/acre						
	1968	1969	1970*	1971	1972	1973	Average
Lockett BXL	470			55	309	489	333
Lockett 4789	446			26	237	554	318
Coker 310		277		70	222	534	318
Tamcot 788		267		54	236	433	290
Prolific Stormproof		284		36	205	425	280
Stripper Cala-S		179		34	153	481	254
Stoneville 7A	437	336		50			299
Paymaster 111	374	236		47			243
Lankburn	386	274				515	290
Lankart 611		298			195	571	329
Stripper Cala-N		205			220	480	276
Westburn 70				77	232	535	340
Paymaster 101-B				71	270	487	334
Deltapine 16				52	244	532	334
Coker 5110				53	203	548	326
HyBee 200A				42	201	538	319
Quapaw				53	223	455	302
Paymaster 111-A				45	201	461	294
Dunn 119				47	189	438	283
LSD (0.05)	58	43		17	58	93	54

*Test was not harvested due to severe drouth damage.

Table 13. Earliness of varieties tested 2 years under irrigation at Altus

Variety	Percent first harvest						
	1968*	1969	1970*	1971*	1972*	1973	Average
Lankart 3840		82.4				86.6	84.5
Lankart LX 571		82.5				78.7	80.6
Paymaster 202		73.3				84.6	79.0
Lockett BXL		77.0				79.9	78.5
Lockett 4789-A		80.3				74.3	77.3
Tamcot 788		70.6				79.2	74.9
Stoneville 213		79.8				69.1	74.5
Stripper Cala-S		67.7				74.8	71.3
Lockett 4789		65.7				73.6	69.7
Deltapine 16		68.9				69.3	69.1
Coker 201		58.3				72.4	65.4
Stoneville 7A		74.1				56.2	65.2
Deltapine 45A		64.5				62.5	63.5
Yearly average		72.7				73.9	73.3
LSD (0.05)		8.4				10.9	9.7

*Test was harvested only once.

Table 14. Earliness of varieties tested 4 years under irrigation at Chickasha

Variety	Percent first harvest						
	1968*	1969	1970	1971*	1972	1973	Average
Lankart 3840		71.2	83.0		80.3	52.6	71.8
Paymaster 202		67.2	83.4		72.6	50.2	68.4
Lockett BXL		71.1	84.7		71.4	44.1	67.8
Lockett 4789-A		72.6	74.8		68.8	48.2	66.1
Tamcot 788		61.9	83.8		64.2	53.3	65.8
Lockett 4789		63.1	87.3		67.1	39.3	64.2
Stoneville 213		66.0	76.6		70.5	32.7	61.5
Stripper Cala-S		67.4	80.1		49.6	44.6	60.4
Deltapine 16		55.8	80.2		66.0	31.2	58.3
Coker 201		62.1	66.9		67.7	31.3	57.0
Stoneville 7A		58.1	74.5		63.0	24.7	55.1
Yearly average		65.1	79.6		67.4	41.1	63.3
LSD (0.05)		4.9	6.7		12.0	10.6	8.6

*Test was harvested only once.

Table 15. Earliness of varieties tested 2 or 3 years under irrigation at Chickasha

Variety	Percent first harvest						
	1968*	1969	1970	1971*	1972	1973	Average
Lankart LX 571		67.1			66.6	41.7	63.9
Deltapine 45A		57.0			56.8	24.3	51.5
Westburn 70			88.0		77.6	48.2	71.9
Lankart 611			86.2		67.1	52.2	69.1
Delcot 277			87.5		68.7	36.7	64.9
Coker 5110			78.0		63.3	31.9	58.3
Coker 310			75.4		51.9	40.7	56.6
Dunn 56C		64.5	83.8				65.1
Westburn		62.3	84.4				64.3
Paymaster 101-A		65.4	81.2				64.3
Lankart 57		61.5	83.9				63.7
Paymaster 111		62.6	76.8				60.7
Paymaster 18		62.4	73.1				58.7
Coker 4104		55.0	75.7				56.0
Acala SJ-1		54.0	70.0				53.0
Paymaster 101-B					68.6	55.2	71.0
Paymaster 111-A					69.5	35.6	61.6
Dunn 118					64.0	37.3	59.7
Coker 312					58.1	31.9	54.1
HyBee 100A					62.3	26.0	53.2
LSD (0.05)		4.9	6.7		12.0	10.6	8.6

*Test was harvested only once.

Table 16. Pulled lint percent of varieties tested 6 years under irrigation at Altus

Variety	Lint percent (pulled)						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 16	23.0	23.3	26.8	20.7	24.3	27.2	24.2
Coker 201	24.2	24.4	28.0	20.1	21.5	26.1	24.1
Paymaster 202	23.4	22.1	26.4	20.3	24.7	27.3	24.0
Stoneville 213	23.9	24.7	25.9	17.7	23.0	26.2	23.6
Lockett BXL	22.5	22.3	25.5	20.4	23.7	25.2	23.3
Stoneville 7A	22.4	24.3	25.4	16.4	23.3	24.1	22.7
Lankart 3840	22.0	22.1	26.0	19.5	20.4	25.4	22.6
Lockett 4789-A	22.9	21.8	24.1	19.7	23.0	23.9	22.6
Lockett 4789	20.8	22.2	24.1	16.9	22.8	24.7	21.9
Yearly average	22.8	23.0	25.8	19.1	23.0	25.6	23.2

Table 17. Pulled lint percent of varieties tested 3 to 5 years under irrigation at Altus

Variety	Lint percent (pulled)						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	22.7	23.5		18.3	23.1	26.0	23.2
Deltapine 45A	24.0	23.9		16.7	20.7	26.3	22.8
Tamcot 788		25.4	26.0	21.8	23.8	27.2	24.7
Stripper Cala-S		23.5	25.3	20.6	23.0	24.9	23.4
Lankart 57	22.7	23.5	28.1	18.2			23.7
Paymaster 111	21.3	22.1	25.3	18.4			22.3
Coker 310			27.9	19.0	24.4	26.3	24.2
Coker 5110			26.0	17.5	23.8	26.8	23.4
Westburn 70			27.7	17.6	22.7	24.2	22.9
Coker 4104	23.2	26.9	26.8				25.0
Westburn	22.3	22.3	25.7				22.8
Paymaster 101-A	23.6	23.3	22.6				22.5
Dunn 56C	22.0	21.5	23.7				21.7
Paymaster 18		22.3	25.3	20.0			23.1
Acala SJ-1		22.2	24.6	13.2			20.6
Lankart 611			26.0		22.7	27.3	23.7
Delcot 277			25.9		23.5	24.2	22.9
Paymaster 101-B				21.1	23.4	25.4	23.9
Coker 312				18.1	22.3	27.3	23.2
HyBee 100A				18.1	20.8	26.2	22.3
Dunn 118				19.1	21.4	23.7	22.0
Paymaster 111-A				17.8	21.9	24.2	21.9

Table 18. Pulled lint percent of varieties tested 6 years under irrigation at Chickasha

Variety	Lint percent (pulled)						
	1968	1969	1970	1971	1972	1973	Average
Coker 201	23.3	28.9	29.5	28.5	27.7	26.5	27.4
Stoneville 213	20.0	26.2	28.0	28.0	28.6	26.6	26.2
Deltapine 16	20.8	26.1	28.3	26.4	28.4	25.8	26.0
Stoneville 7A	20.2	26.6	27.8	26.8	28.6	24.9	25.8
Lankart 3840	21.8	26.8	26.6	24.4	26.0	26.5	25.4
Paymaster 202	24.0	26.0	25.8	23.4	26.4	26.1	25.3
Lockett 4789-A	22.7	26.5	26.2	23.7	26.9	24.9	25.2
Lockett BXL	20.4	27.3	26.5	24.7	26.6	25.8	25.2
Lockett 4789	20.3	25.9	26.9	24.3	27.1	23.8	24.7
Yearly average	21.5	26.7	27.3	25.6	27.4	25.7	25.7

Table 19. Pulled lint percent of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	Lint percent (pulled)						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	23.0	27.1		23.6	27.4	26.2	25.8
Deltapine 45A	20.1	25.9		26.3	27.1	24.9	25.2
Tamcot 788		26.2	26.0	24.1	27.4	25.6	25.0
Stripper Cala-S		26.0	26.2	23.1	28.1	24.3	24.7
Lankart 57	20.9	26.6	27.7	23.4			25.1
Paymaster 111	21.0	26.6	25.6	24.8			24.9
Coker 310			28.4	26.2	29.3	25.1	26.5
Coker 5110			25.6	26.9	28.6	26.4	26.1
Westburn 70			26.7	24.9	26.5	26.5	25.4
Coker 4104	22.9	26.4	27.4				26.1
Paymaster 101-A	23.7	26.7	25.7				25.9
Westburn	22.2	26.6	26.9				25.8
Dunn 56C	21.8	23.7	23.6				23.6
Paymaster 18		26.3	26.3	23.8			24.6
Acala SJ-1		25.2	25.9	24.9			24.5
Delcot 277			26.7		28.4	26.0	25.9
Lankart 611			26.9		26.6	26.1	25.4
HyBee 100A				25.7	28.6	26.7	26.5
Coker 312				25.9	27.9	26.3	26.2
Paymaster 101-B				24.9	28.6	25.8	25.9
Paymaster 111-A				22.3	25.5	24.0	23.4
Dunn 118				21.8	23.6	23.2	22.3

Table 20. Pulled lint percent of varieties tested 5 years on dryland at Mangum

Variety	Lint percent (pulled)						
	1968	1969	1970	1971	1972	1973*	Average
Lankart LX 571	19.8	25.1	24.3	21.1	17.6		21.6
Lankart 3840	19.7	23.2	22.8	22.4	19.0		21.4
Lankart 57	18.8	25.4	26.3	20.0	16.7		21.4
Paymaster 202	21.2	23.0	21.6	22.2	19.2		21.4
Lockett 4789-A	19.0	22.4	24.1	20.9	16.1		20.5
Yearly average	19.7	23.8	23.8	21.3	17.7		21.3

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 21. Pulled lint percent of varieties tested 3 or 4 years on dryland at Mangum

Variety	Lint percent (pulled)						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	19.0	24.9		20.3	17.7		21.2
Lockett BXL	19.9		23.2	22.6	16.5		21.2
Lockett 4789	18.1		24.1	21.5	13.8		20.1
Tamcot 788		24.5	23.9	21.4	20.6		22.3
Stripper Cala-S		24.3	22.1	22.1	16.0		20.8
Coker 4104	23.4	25.3	25.4				23.6
Paymaster 101-A	20.8	24.1	24.7				22.1
Westburn	19.7	23.5	23.9				21.2
Dunn 56C	20.1	21.6	21.3				19.9
Stoneville 7A	21.0	24.2		18.4			20.9
Paymaster 111	14.0	22.0		16.8			17.3
Stripper Cala-N		25.7	24.2		18.0		22.2
Lankart 611		25.3	21.6		19.6		21.7
Tamcot 24		21.8	23.6		16.8		20.3
Prolific Stormproof		28.1		28.1	18.7		25.3
Coker 310		24.5		23.9	18.8		22.8
Westburn 70			21.5	24.7	18.8		22.0
Paymaster 111-A			23.4	20.1	16.0		20.2

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 22. Pulled lint percent of varieties tested 5 years on dryland at Chickasha

Variety	Lint percent (pulled)						
	1968	1969	1970*	1971	1972	1973	Average
Paymaster 202	25.1	25.0		21.1	27.4	26.2	25.0
Lankart 57	25.6	28.3		21.3	27.4	20.8	24.7
Lankart LX 571	25.1	26.5		21.4	26.8	23.4	24.6
Lankart 3840	24.2	26.3		22.2	27.0	22.8	24.5
Lockett 4789-A	25.2	25.9		19.8	26.1	23.8	24.2
Coker 201	25.7	28.3		24.9	24.3	17.5	24.1
Yearly Average	25.2	26.7		21.8	26.5	22.4	24.5

*Test was not harvested due to severe drouth damage.

Table 23. Pulled lint percent of varieties tested 3 or 4 years on dryland at Chickasha

Variety	Lint percent (pulled)						
	1968	1969	1970*	1971	1972	1973	Average
Lockett 4789	23.6			21.2	27.1	26.7	25.2
Lockett BXL	24.4			20.3	26.0	23.5	24.1
Prolific Stormproof		27.8		23.2	28.5	23.6	25.9
Coker 310		25.9		23.4	25.4	26.2	25.4
Tamcot 788		22.7		22.2	26.2	22.6	23.6
Stripper Cala-S		22.1		20.3	24.4	26.2	23.4
Stoneville 7A	24.6	26.2		24.6			25.1
Paymaster 111	23.9	25.2		22.2			23.7
Lankburn	22.7	23.3				24.8	23.3
Lankart 611		26.8			25.2	26.7	25.5
Stripper Cala-N		23.0			25.9	23.9	23.6
Deltapine 16				24.8	26.7	23.8	26.0
Westburn 70				23.3	26.1	23.4	25.2
Paymaster 101-B				23.5	25.7	23.6	25.2
HyBee 200A				23.2	25.2	24.5	25.2
Coker 5110				23.1	25.1	24.3	25.1
Quapaw				20.6	26.3	24.0	24.6
Paymaster 111-A				20.8	24.8	24.2	24.2
Dunn 119				19.8	25.0	22.7	23.4

*Test was not harvested due to severe drouth damage.

Table 24. Picked lint percent of varieties tested 6 years under irrigation at Altus

Variety	Lint percent (picked)						
	1968	1969	1970	1971	1972	1973	Average
Coker 201	34.6	34.8	39.3	35.5	37.2	37.8	36.5
Deltapine 16	32.2	32.7	37.9	34.9	36.6	37.4	35.3
Stoneville 7A	32.5	34.7	38.1	30.9	38.0	35.1	34.9
Paymaster 202	32.6	31.8	37.1	33.3	35.9	36.7	34.6
Stoneville 213	31.5	34.9	34.7	32.1	38.0	36.4	34.6
Lankart 3840	32.0	30.9	36.9	33.0	35.8	36.1	34.1
Lockett BXL	31.7	32.3	36.5	31.9	35.5	35.3	33.9
Lockett 4789	32.1	31.5	35.7	30.5	35.2	34.8	33.3
Lockett 4789-A	32.5	31.1	35.5	30.9	35.4	34.0	33.2
Yearly average	32.4	32.7	36.9	32.6	36.4	36.0	34.5

Table 25. Picked lint percent of varieties tested 3 to 5 years under irrigation at Altus

Variety	Lint percent (picked)						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	34.7	33.8		31.4	37.5	37.7	35.5
Lankart LX 571	33.8	33.8		31.9	35.8	36.7	34.9
Tamcot 788		35.8	35.9	33.8	36.2	37.3	35.4
Stripper Cala-S		33.7	35.1	31.5	33.6	33.8	33.1
Lankart 57	34.8	32.8	39.3	32.3			35.7
Paymaster 111	32.8	31.3	36.7	33.0			34.3
Coker 310			39.9	34.2	38.0	37.5	36.4
Coker 5110			37.7	31.6	37.8	37.6	35.2
Westburn 70			40.4	31.3	35.1	35.4	34.6
Coker 4104	33.3	36.8	36.0				35.9
Paymaster 101-A	34.8	33.1	35.2				34.9
Westburn	32.6	30.8	36.4				33.8
Dunn 56C	32.1	31.2	34.4				33.1
Paymaster 18		32.6	37.3	31.4			34.2
Acala SJ-1		32.1	35.6	28.2			32.4
Delcot 277			37.1		38.1	36.7	35.4
Lankart 611			36.7		35.8	37.6	34.8
Coker 312				33.5	37.5	39.5	36.3
Paymaster 101-B				34.8	36.4	36.1	35.3
HyBee 100A				31.7	36.5	37.6	34.8
Paymaster 111-A				32.6	35.9	34.7	33.9
Dunn 118				31.0	34.9	34.3	32.9

Table 26. Picked lint percent of varieties tested 6 years under irrigation at Chickasha

Variety	Lint percent (picked)						
	1968	1969	1970	1971	1972	1973	Average
Coker 201	34.7	38.0	38.4	40.5	36.5	40.2	38.1
Stoneville 7A	31.0	35.8	36.7	37.2	38.3	37.4	36.1
Stoneville 213	30.5	35.1	37.0	38.0	37.4	37.8	36.0
Deltapine 16	31.3	36.0	36.1	36.8	38.1	37.7	36.0
Lockett BXL	31.1	35.9	34.8	34.8	35.4	37.2	34.9
Lankart 3840	32.0	35.6	35.2	34.3	34.5	36.3	34.7
Lockett 4789-A	33.0	35.0	34.8	34.0	35.4	35.9	34.7
Paymaster 202	33.5	34.9	33.7	33.1	35.8	36.1	34.5
Lockett 4789	30.4	34.9	34.9	33.7	36.0	35.7	34.3
Yearly average	31.9	35.7	35.7	35.8	36.4	37.1	35.5

Table 27. Picked lint percent of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	Lint percent (picked)						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	31.2	36.1		37.8	37.1	37.4	35.9
Lankart LX 571	32.6	36.4		34.5	36.9	36.5	35.4
Tamcot 788		36.0	34.5	34.6	36.3	37.6	35.1
Stripper Cala-S		33.7	33.3	32.4	34.6	34.8	33.0
Lankart 57	33.2	37.2	37.0	34.1			36.0
Paymaster 111	32.9	35.6	34.4	35.6			35.3
Coker 310			37.6	37.9	39.8	38.3	37.6
Coker 5110			35.2	37.9	38.0	38.4	36.5
Westburn 70			34.6	34.6	34.4	36.9	34.3
Paymaster 101-A	34.8	35.7	34.4				35.9
Coker 4104	32.8	36.3	35.6				35.9
Westburn	33.6	35.4	34.6				35.5
Dunn 56C	31.3	33.7	32.2				33.4
Acala SJ-1		35.2	35.2	36.3			35.2
Paymaster 18		34.6	33.6	33.3			33.5
Delcot 277			35.7		37.5	38.9	36.4
Lankart 611			36.7		36.6	37.7	36.0
Coker 312				38.4	37.5	40.1	37.6
HyBee 100A				37.5	38.7	39.7	37.6
Paymaster 101-B				36.1	37.1	37.2	35.8
Paymaster 111-A				33.2	34.3	35.6	33.3
Dunn 118				33.0	32.9	34.1	32.3

Table 28. Picked lint percent of varieties tested 5 years on dryland at Mangum

Variety	Lint percent (picked)						
	1968	1969	1970	1971	1972	1973*	Average
Lankart 57	33.9	35.5	39.7	32.2	34.6		35.2
Lankart LX 571	33.5	34.8	38.5	33.1	35.3		35.0
Lankart 3840	33.3	32.8	37.6	34.9	34.4		34.6
Paymaster 202	33.9	33.3	36.2	34.3	33.4		34.2
Lockett 4789-A	33.1	33.1	35.6	33.7	30.4		33.2
Yearly average	33.5	33.9	37.5	33.6	33.6		34.4

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 29. Picked lint percent of varieties tested 3 or 4 years on dryland at Mangum

Variety	Lint percent (picked)						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	35.4	36.3		35.9	35.5		36.5
Lockett BXL	33.1		36.0	35.4	34.0		34.5
Lockett 4789	32.4		36.1	33.7	33.3		33.7
Tamcot 788		35.0	36.0	34.7	35.9		35.2
Stripper Cala-S		33.9	35.7	33.6	32.2		33.6
Coker 4104	36.5	35.1	37.6				35.8
Paymaster 101-A	34.1	34.1	37.6				34.7
Dunn 56C	33.7	32.7	37.6				34.1
Westburn	33.5	33.2	36.6				33.9
Stoneville 7A	33.9	34.5		34.5			35.0
Paymaster 111	31.1	33.4		26.6			31.1
Lankart 611		35.6	38.1		34.9		35.6
Stripper Cala-N		36.4	37.2		33.8		35.2
Tamcot 24		32.0	36.0		32.8		33.0
Prolific Stormproof		38.3		38.7	35.3		38.1
Coker 310		34.9		38.5	37.2		37.6
Paymaster 111-A			37.1	33.2	36.6		35.1
Westburn 70			36.1	35.8	34.2		34.9

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 30. Picked lint percent of varieties tested 5 years on dryland at Chickasha

Variety	Lint percent (picked)						
	1968	1969	1970*	1971	1972	1973	Average
Coker 201	36.9	38.5		37.6	40.0	32.2	37.0
Lankart 57	35.5	39.2		33.7	40.4	34.5	36.7
Lankart LX 571	34.2	36.7		32.6	37.4	37.4	35.7
Paymaster 202	34.6	35.2		32.8	38.0	37.1	35.5
Lockett 4789-A	34.8	36.6		32.1	37.5	35.9	35.4
Lankart 3840	33.9	35.3		33.1	37.5	35.3	35.0
Yearly average	35.0	36.9		33.7	38.5	35.4	35.9

*Test was not harvested due to severe drouth damage.

Table 31. Picked lint percent of varieties tested 3 or 4 years on dryland at Chickasha

Variety	Lint percent (picked)						
	1968	1969	1970*	1971	1972	1973	Average
Lockett 4789	34.0			32.4	37.5	35.3	35.1
Lockett BXL	34.2			31.8	37.5	35.1	34.9
Prolific Stormproof		39.4		36.1	39.3	37.5	37.9
Coker 310		36.3		36.1	39.7	39.1	37.6
Tamcot 788		34.2		33.7	39.2	34.2	35.1
Stripper Cala-S		33.9		32.1	34.2	35.3	33.7
Stoneville 7A	34.8	35.5		36.4			36.3
Paymaster 111	34.1	36.0		33.5			35.2
Lankburn	32.2	33.7				36.9	34.4
Lankart 611		36.3			38.2	37.1	36.2
Stripper Cala-N		34.5			36.3	35.4	34.4
Deltapine 16				37.1	39.4	39.4	38.7
HyBee 200A				36.0	39.6	37.9	37.9
Coker 5110				36.5	39.5	37.2	37.8
Paymaster 101-B				35.4	38.0	35.8	36.4
Dunn 119				33.6	38.4	35.5	35.9
Westburn 70				34.6	36.5	33.8	35.0
Paymaster 111-A				33.1	35.7	36.0	35.0
Quapaw				31.2	36.3	36.3	34.6

*Test was not harvested due to severe drouth damage.

Table 32. Fiber length of varieties tested 6 years under irrigation at Altus

Variety	2.5% span length, inches						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 16	1.146	1.163	1.053	1.015	1.105	1.135	1.103
Stoneville 7A	1.093	1.144	1.104	1.033	1.062	1.148	1.097
Lockett BXL	1.102	1.132	1.085	.993	1.088	1.126	1.088
Stoneville 213	1.111	1.128	1.059	1.056	1.053	1.106	1.086
Lockett 4789-A	1.113	1.117	1.063	.978	1.078	1.162	1.085
Lankart 3840	1.098	1.167	1.043	.965	1.073	1.104	1.075
Coker 201	1.090	1.129	1.051	.935	1.071	1.118	1.066
Lockett 4789	1.077	1.089	1.022	.984	1.051	1.091	1.052
Paymaster 202	1.007	1.021	.937	.924	.943	.987	.970
Yearly average	1.093	1.121	1.046	.987	1.058	1.109	1.069

Table 33. Fiber length of varieties tested 3 to 5 years under irrigation at Altus

Variety	2.5% span length, inches						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	1.115	1.120		1.044	1.060	1.079	1.079
Lankart LX 571	1.063	1.075		1.007	1.059	1.092	1.055
Tamcot 788		1.139	1.084	1.011	1.107	1.106	1.094
Stripper Cala-S		1.085	1.031	.969	1.053	1.086	1.050
Paymaster 111	1.067	1.078	.987	.943			1.026
Lankart 57	1.032	1.030	.976	.910			.994
Coker 310			1.121	1.081	1.176	1.183	1.159
Coker 5110			1.095	1.065	1.147	1.203	1.147
Westburn 70			1.022	.997	1.042	1.103	1.060
Coker 4104	1.182	1.187	1.090				1.135
Dunn 56C	1.125	1.149	1.061				1.094
Westburn	1.064	1.091	1.009				1.037
Paymaster 101-A	.983	1.015	1.022				.989
Acala SJ-1		1.181	1.060	1.017			1.104
Paymaster 18		.960	.882	.921			.939
Delcot 277			1.122		1.126	1.196	1.146
Lankart 611			.987		1.017	1.063	1.020
Coker 312				1.077	1.143	1.214	1.162
Dunn 118				1.069	1.117	1.146	1.128
HyBee 100A				1.047	1.094	1.121	1.105
Paymaster 111-A				.994	1.067	1.086	1.067
Paymaster 101-B				.907	.939	1.023	.974

Table 34. Fiber length of varieties tested 6 years under irrigation at Chickasha

Variety	2.5% span length, inches						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 16	1.194	1.137	1.089	1.082	1.183	1.179	1.144
Coker 201	1.191	1.099	1.099	1.095	1.140	1.134	1.126
Stoneville 7A	1.161	1.139	1.143	.974	1.168	1.171	1.126
Lankart 3840	1.143	1.111	1.079	1.051	1.134	1.130	1.108
Stoneville 213	1.131	1.106	1.123	1.030	1.069	1.123	1.097
Lockett 4789-A	1.151	1.084	1.087	1.021	1.102	1.111	1.093
Lockett BXL	1.140	1.075	1.074	1.029	1.134	1.099	1.092
Lockett 4789	1.135	1.078	1.058	1.027	1.120	1.094	1.085
Paymaster 202	1.047	.964	.981	.913	1.003	1.015	.987
Yearly average	1.144	1.088	1.081	1.025	1.117	1.117	1.095

Table 35. Fiber length of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	2.5% span length, inches						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	1.162	1.109		1.048	1.105	1.117	1.105
Lankart LX 571	1.123	1.076		1.068	1.090	1.072	1.083
Stripper Cala-S		1.066	1.040	.974	1.073	1.090	1.058
Tamcot 788		1.114	1.106	1.061	1.116	1.111	1.111
Paymaster 111	1.105	1.077	1.010	1.024			1.065
Lankart 57	1.075	1.006	.980	1.013			1.029
Coker 310			1.168	1.109	1.212	1.216	1.186
Coker 5110			1.167	1.096	1.182	1.211	1.174
Westburn 70			1.036	1.016	1.100	1.088	1.070
Coker 4104	1.237	1.164	1.159				1.177
Dunn 56C	1.167	1.104	1.091				1.111
Westburn	1.129	1.055	1.022				1.059
Paymaster 101-A	1.053	.970	1.068				1.021
Acala SJ-1		1.163	1.121	1.062			1.146
Paymaster 18		.926	.888	.942			.949
Delcot 277			1.184		1.177	1.177	1.169
Lankart 611			.982		1.052	1.020	1.008
Coker 312				1.112	1.152	1.205	1.165
HyBee 100A				1.110	1.153	1.176	1.155
Dunn 118				1.021	1.157	1.173	1.126
Paymaster 111-A				.999	1.079	1.110	1.071
Paymaster 101-B				.933	.988	.991	.979

Table 36. Fiber length of varieties tested 5 years on dryland at Mangum

Variety	2.5% span length, inches						
	1968	1969	1970	1971	1972	1973*	Average
Lankart 3840	1.110	1.107	1.015	1.066	1.144		1.088
Lockett 4789-A	1.094	1.101	1.011	1.034	1.072		1.062
Lankart LX 571	1.078	1.041	.987	.956	1.128		1.038
Lankart 57	1.011	.983	.942	.977	1.107		1.004
Paymaster 202	1.012	1.010	.903	.902	1.029		.971
Yearly average	1.061	1.048	.972	.987	1.096		1.033

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 37. Fiber length of varieties tested 3 or 4 years on dryland at Mangum

Variety	2.5% span length, inches						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	1.090	1.093		1.019	1.129		1.068
Lockett BXL	1.070		1.014	.993	1.121		1.054
Lockett 4789	1.038		.967	1.030	1.115		1.042
Tamcot 788		1.096	1.018	1.069	1.141		1.088
Stripper Cala-S		1.007	.996	.998	1.087		1.029
Coker 4104	1.118	1.160	1.006				1.101
Dunn 56C	1.115	1.116	1.014				1.088
Westburn	1.088	1.097	.916				1.040
Paymaster 101-A	.998	.998	.095				.973
Stoneville 7A	1.089	1.123		1.021			1.079
Paymaster 111	1.008	1.088		1.026			1.042
Tamcot 24		1.183	1.046		1.167		1.126
Stripper Cala-N		1.048	.960		1.040		1.010
Lankart 611		.962	.910		1.009		.955
Coker 310		1.167		1.012	1.177		1.108
Prolific Stormproof		.983		.887	1.061		.966
Westburn 70			1.030	.964	1.101		1.046
Paymaster 111-A			1.009	.973	1.081		1.036

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 38. Fiber length of varieties tested 5 years on dryland at Chickasha

Variety	2.5% span length, inches						
	1968	1969	1970*	1971	1972	1973	Average
Coker 201	1.117	1.024		.964	1.032	1.155	1.058
Lankart 3840	1.124	1.041		.985	1.022	1.038	1.042
Lockett 4789-A	1.101	1.006		.928	1.007	1.150	1.038
Lankart LX 571	1.092	1.033		.958	.973	1.131	1.037
Lankart 57	1.025	.940		.917	.898	1.084	.973
Paymaster 202	1.015	.935		.833	.884	1.026	.939
Yearly average	1.079	.997		.931	.969	1.097	1.015

*Test was not harvested due to severe drouth damage.

Table 39. Fiber length of varieties tested 3 or 4 years on dryland at Chickasha

Variety	2.5% span length, inches						
	1968	1969	1970*	1971	1972	1973	Average
Lockett BXL	1.098			.894	1.000	1.164	1.035
Lockett 4789	1.084			.889	1.004	1.084	1.011
Coker 310		1.118		1.008	1.094	1.181	1.117
Tamcot 788		1.059		.899	1.040	1.093	1.039
Stripper Cala-S		1.005		.872	.972	1.098	1.003
Prolific Stormproof		.911		.851	.905	1.034	.942
Stoneville 7A	1.148	1.072		.898			1.052
Paymaster 111	1.072	.971		.870			.984
Lankburn	1.142	1.007				1.156	1.059
Stripper Cala-N		1.014			.920	1.060	.992
Lankart 611		.953			.983	1.037	.985
Dunn 119				.987	1.092	1.154	1.094
Coker 5110				.947	1.058	1.153	1.069
Deltapine 16				.966	1.041	1.128	1.061
HyBee 200A				.936	1.036	1.128	1.049
Paymaster 111-A				.945	.995	1.042	1.010
Quapaw				.919	.988	1.073	1.009
Westburn 70				.849	.982	1.123	1.001
Paymaster 101-B				.808	.946	1.019	.940

*Test was not harvested due to severe drouth damage.

Table 40. Fiber length uniformity of varieties tested 6 years under irrigation at Altus

Variety	Uniformity index, %						
	1968	1969	1970	1971	1972	1973	Average
Paymaster 202	48.3	49.7	48.9	46.7	47.5	49.9	48.5
Lankart 3840	44.2	46.2	47.2	43.8	44.5	49.0	45.8
Lockett 4789	44.3	45.9	46.1	44.4	45.4	48.6	45.8
Lockett BXL	44.7	45.4	45.8	42.4	47.5	48.4	45.7
Coker 201	44.3	46.2	45.6	43.6	45.3	48.3	45.6
Lockett 4789-A	44.2	45.3	46.0	41.8	45.8	49.5	45.4
Deltapine 16	43.1	45.8	44.6	43.6	44.6	48.2	45.0
Stoneville 213	44.8	45.8	43.8	44.3	43.5	48.0	45.0
Stoneville 7A	41.6	44.2	43.0	43.7	43.5	45.5	43.6
Yearly average	44.4	46.1	45.7	43.8	45.3	48.4	45.6

Table 41. Fiber length uniformity of varieties tested 3 to 5 years under irrigation at Altus

Variety	Uniformity index, %						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	44.8	46.5		43.1	45.1	48.5	45.5
Deltapine 45A	44.5	46.6		40.4	47.5	46.7	45.1
Tamcot 788		47.2	45.7	45.0	44.4	49.1	46 0
Stripper Cala-S		45.9	43.6	45.4	43.8	46.9	44.9
Paymaster 111	45.2	47.6	46.6	44.7			46.6
Lankart 57	45.4	47.4	46.6	43.4			46.3
Coker 5110			46.8	43.0	44.7	47.5	45.3
Coker 310			45.9	43.1	45.2	46.3	44.9
Westburn 70			45.0	44.8	43.0	45.5	44.4
Paymaster 101-A	46.6	50.0	45.9				47.7
Dunn 56C	46.0	47.6	44.9				46.4
Westburn	43.5	46.7	45.7				45.5
Coker 4104	43.1	45.2	41.5				43.5
Paymaster 18		49.0	49.1	47.8			49.0
Acala SJ-1		47.9	47.7	44.1			47.0
Lankart 611			46.3		47.5	47.8	46.3
Delcot 277			45.9		44.8	49.4	45.8
Paymaster 101-B				46.7	48.7	50.0	48.2
Paymaster 111-A				43.9	46.7	48.5	46.1
Dunn 118				45.3	44.6	48.5	45.9
HyBee 100A				41.4	44.2	46.7	43.9
Coker 312				40.7	42.5	45.1	42.5

Table 42. Fiber length uniformity of varieties tested 6 years under irrigation at Chickasha

Variety	Uniformity index, %						
	1968	1969	1970	1971	1972	1973	Average
Paymaster 202	51.2	49.7	48.8	45.1	48.6	50.2	48.9
Coker 201	49.5	48.3	46.6	47.7	47.7	48.8	48.1
Lockett 4789-A	47.9	48.7	49.0	43.1	46.6	49.2	47.4
Lockett 4789	48.6	48.7	47.1	45.1	47.4	47.3	47.4
Lankart 3840	48.7	48.4	47.7	42.9	46.8	49.4	47.3
Stoneville 213	46.5	47.7	48.4	46.6	45.6	48.3	47.2
Deltapine 16	46.8	46.7	45.1	45.4	48.1	48.8	46.8
Lockett BXL	47.3	47.9	47.4	44.2	45.9	47.7	46.7
Stoneville 7A	45.8	46.7	46.2	42.3	45.8	46.8	45.6
Yearly average	48.0	48.1	47.4	44.7	46.9	48.5	47.3

Table 43. Fiber length uniformity of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	Uniformity index, %						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	49.4	48.1		46.3	47.3	47.1	47.7
Deltapine 45A	47.3	48.4		47.1	47.2	47.8	47.6
Tamcot 788		46.8	46.4	44.8	45.3	47.0	46.2
Stripper Cala-S		46.4	45.9	42.8	45.7	45.5	45.4
Paymaster 111	50.0	49.4	47.0	47.5			48.7
Lankart 57	49.3	48.7	48.2	43.6			47.7
Coker 5110			45.7	42.3	46.2	49.5	46.4
Coker 310			47.3	41.0	47.1	46.0	45.8
Westburn 70			45.5	42.6	43.3	46.1	44.8
Paymaster 101-A	50.7	50.5	46.8				48.8
Dunn 56C	49.8	48.2	49.0				48.5
Coker 4104	47.7	46.7	47.1				46.6
Westburn	47.6	47.2	46.3				46.5
Paymaster 18		50.3	48.7	46.3			49.0
Acala SJ-1		49.7	48.3	46.7			48.8
Lankart 611			49.4		47.3	47.3	47.7
Delcot 277			44.6		45.7	49.5	46.3
Paymaster 101-B				46.8	49.0	50.4	49.3
HyBee 100A				44.6	47.9	48.9	47.7
Dunn 118				41.2	47.7	49.5	46.7
Paymaster 111-A				43.5	46.9	47.7	46.6
Coker 312				42.8	46.1	47.5	46.1

Table 44. Fiber length uniformity of varieties tested 5 years on dryland at Mangum

Variety	Uniformity index, %						
	1968	1969	1970	1971	1972	1973*	Average
Paymaster 202	49.3	47.9	49.3	47.8	47.2		48.3
Lankart 3840	45.8	46.7	47.3	45.8	48.5		46.8
Lankart 57	45.2	46.4	46.5	45.4	49.4		46.6
Lankart LX 571	46.6	46.9	45.7	45.3	48.4		46.6
Lockett 4789-A	44.6	44.5	44.3	48.1	43.2		44.9
Yearly average	46.3	46.5	46.6	46.5	47.3		46.6

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 45. Fiber length uniformity of varieties tested 3 or 4 years on dryland at Mangum

Variety	Uniformity index, %						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	44.2	46.1		46.6	50.0		46.7
Lockett 4789	43.5		47.4	47.1	47.7		46.4
Lockett BXL	44.1		46.6	44.4	47.1		45.5
Tamcot 788		46.6	46.4	46.3	47.0		46.5
Stripper Cala-S		46.2	47.1	44.9	45.5		45.8
Paymaster 101-A	47.0	48.6	49.5				48.5
Dunn 56C	45.8	45.0	48.3				46.5
Westburn	45.6	45.5	44.7				45.4
Coker 4104	43.9	47.3	43.4				45.0
Paymaster 111	44.8	48.7		47.6			47.2
Stoneville 7A	42.3	43.8		45.1			43.9
Stripper Cala-N		48.5	48.0		49.3		48.4
Lankart 611		46.8	48.6		45.6		46.8
Tamcot 24		45.3	46.7		48.1		46.5
Prolific Stormproof		48.1		47.8	48.0		47.8
Coker 310		45.6		45.0	43.0		44.4
Paymaster 111-A			47.2	45.4	46.7		46.2
Westburn 70			46.0	45.3	46.8		45.8

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 46. Fiber length uniformity of varieties tested 5 years on dryland at Chickasha

Variety	Uniformity index, %						
	1968	1969	1970*	1971	1972	1973	Average
Paymaster 202	52.9	49.0		43.5	47.4	47.6	48.1
Lankart 57	49.8	48.4		42.9	48.4	47.4	47.4
Lankart 3840	50.8	47.6		46.5	45.4	44.2	46.9
Lockett 4789-A	49.6	48.1		46.2	44.9	44.6	46.7
Coker 201	49.3	47.0		46.4	46.2	43.5	46.5
Lankart LX 571	51.1	48.7		43.8	45.1	42.4	46.2
Yearly average	50.6	48.1		44.9	46.2	45.0	47.0

*Test was not harvested due to severe drouth damage.

Table 47. Fiber length uniformity of varieties tested 3 or 4 years on dryland at Chickasha

Variety	Uniformity index, %						
	1968	1969	1970*	1971	1972	1973	Average
Lockett 4789	50.8			44.4	46.8	45.3	47.2
Lockett BXL	48.8			41.4	45.9	44.8	45.6
Prolific Stormproof		47.4		45.9	45.9	44.7	46.9
Stripper Cala-S		46.8		44.3	42.9	44.6	45.6
Tamcot 788		46.6		42.2	43.1	44.6	45.1
Coker 310		45.6		41.6	46.2	41.0	44.6
Paymaster 111	51.8	47.6		44.3			47.0
Stoneville 7A	47.0	46.3		45.0			45.2
Lankburn	47.5	46.0				44.9	45.2
Lankart 611		48.1			47.0	46.6	47.8
Stripper Cala-N		45.8			44.2	45.9	45.9
Paymaster 101-B				46.4	44.5	48.9	48.2
Dunn 119				43.9	48.6	45.9	47.8
Paymaster 111-A				44.2	46.2	45.9	47.1
Deltapine 16				44.8	46.6	44.3	46.9
Quapaw				41.8	47.2	45.6	46.5
HyBee 200A				43.1	46.2	43.7	46.0
Coker 5110				44.7	44.3	43.2	45.7
Westburn 70				43.5	44.9	42.3	45.2

*Test was not harvested due to severe drouth damage.

Table 48. Fiber coarseness of varieties tested 6 years under irrigation at Altus

Variety	Micronaire, micrograms/inch						
	1968	1969	1970	1971	1972	1973	Average
Paymaster 202	3.7	3.7	4.3	3.4	4.4	4.9	4.1
Lankart 3840	3.5	3.7	4.2	2.7	3.6	4.8	3.8
Deltapine 16	3.4	3.4	4.3	2.9	3.9	4.6	3.8
Stoneville 213	3.6	3.5	4.2	2.7	4.0	4.5	3.8
Coker 201	3.3	3.3	4.4	3.0	4.0	4.6	3.8
Lockett BXL	3.2	3.3	4.6	2.8	3.8	4.7	3.7
Lockett 4789	3.1	3.2	3.7	2.6	3.7	4.5	3.5
Stoneville 7A	2.9	3.2	3.6	2.7	3.9	4.2	3.4
Lockett 4789-A	2.9	3.1	3.7	2.7	3.7	3.9	3.3
Yearly average	3.3	3.4	4.1	2.8	3.9	4.5	3.7

Table 49. Fiber coarseness of varieties tested 3 to 5 years under irrigation at Altus

Variety	Micronaire, micrograms/inch						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	3.4	4.2		3.0	4.2	4.8	4.0
Deltapine 45A	3.4	3.5		2.9	3.7	4.6	3.7
Tamcot 788		3.4	3.9	3.0	3.4	4.3	3.6
Stripper Cala-S		3.1	4.1	3.1	3.7	3.8	3.5
Lankart 57	3.4	4.1	4.5	2.7			4.0
Paymaster 111	3.3	3.3	4.5	2.9			3.8
Coker 310			4.3	2.9	4.3	4.4	3.9
Coker 5110			3.9	2.8	3.7	4.0	3.5
Westburn 70			3.6	2.6	3.5	3.2	3.1
Paymaster 101-A	3.3	3.8	3.9				3.8
Dunn 56C	3.2	3.2	4.2				3.6
Coker 4104	3.0	3.1	3.8				3.4
Westburn	2.9	3.1	3.5				3.3
Paymaster 18		3.8	5.8	4.1			4.8
Acala SJ-1		3.3	4.2	2.5			3.6
Lankart 611			4.2		3.9	3.9	3.5
Delcot 277			3.9		3.8	3.9	3.4
Paymaster 101-B				3.1	4.3	4.4	3.9
Dunn 118				3.1	3.8	4.3	3.7
Coker 312				3.0	3.8	4.1	3.6
Paymaster 111-A				2.9	3.9	4.2	3.6
HyBee 100A				2.9	3.6	4.1	3.5

Table 50. Fiber coarseness of varieties tested 6 years under irrigation at Chickasha

Variety	Micronaire, micrograms/inch						
	1968	1969	1970	1971	1972	1973	Average
Lankart 3840	3.7	4.7	5.0	4.0	4.8	4.6	4.5
Coker 201	3.7	4.9	4.9	4.5	4.5	4.4	4.5
Paymaster 202	3.8	4.7	4.8	3.8	4.5	4.6	4.4
Stoneville 213	3.1	4.4	5.2	4.6	4.4	4.5	4.4
Deltapine 16	3.2	4.5	5.0	4.3	4.7	4.3	4.3
Lockett 4789-A	3.4	4.4	4.8	3.6	4.2	4.0	4.1
Stoneville 7A	2.9	4.3	4.8	4.2	4.2	3.9	4.1
Lockett BXL	3.3	4.7	4.5	3.5	4.2	4.3	4.1
Lockett 4789	3.1	4.5	4.6	3.5	4.2	3.9	4.0
Yearly average	3.4	4.6	4.9	4.0	4.4	4.3	4.2

Table 51. Fiber coarseness of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	Micronaire, micrograms/inch						
	1968	1969	1970	1971	1972	1973	Average
Lankart LX 571	3.6	4.9		3.8	4.8	4.8	4.4
Deltapine 45A	3.2	4.6		4.2	4.5	4.1	4.2
Stripper Cala-S		4.2	4.5	3.6	3.8	3.9	3.8
Tamcot 788		4.1	4.2	3.2	4.2	4.2	3.7
Paymaster 111	3.8	4.9	4.6	3.9			4.3
Lankart 57	3.4	4.8	5.1	3.4			4.2
Coker 310			5.0	4.0	4.6	4.2	4.3
Coker 5110			4.3	3.9	4.3	4.0	3.9
Westburn 70			4.3	3.3	3.6	3.6	3.5
Paymaster 101-A	3.4	4.7	4.6				4.1
Dunn 56C	3.7	4.3	4.2				4.0
Coker 4104	3.2	4.3	4.4				3.9
Westburn	3.0	4.0	4.4				3.7
Paymaster 18		5.7	6.2	4.3			5.1
Acala SJ-1		4.5	4.6	4.0			4.1
Lankart 611			4.7		4.0	4.2	4.0
Delcot 277			4.4		4.3	3.9	3.9
HyBee 100A				4.1	4.6	4.4	4.3
Coker 312				4.2	4.4	4.5	4.3
Paymaster 101-B				3.7	4.6	4.5	4.2
Dunn 118				3.8	4.1	4.0	3.9
Paymaster 111-A				3.2	4.3	4.2	3.9

Table 52. Fiber coarseness of varieties tested 5 years on dryland at Mangum

Variety	Micronaire, micrograms/inch						
	1968	1969	1970	1971	1972	1973*	Average
Lankart 3840	4.5	4.8	5.1	4.7	4.7		4.8
Lankart LX 571	4.7	5.1	4.9	4.6	4.2		4.7
Paymaster 202	4.8	4.9	4.7	4.6	4.1		4.6
Lankart 57	3.7	4.9	4.4	4.4	4.1		4.3
Lockett 4789-A	4.0	4.3	4.5	4.1	3.4		4.1
Yearly average	4.3	4.8	4.7	4.5	4.1		4.5

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 53. Fiber coarseness of varieties tested 3 or 4 years on dryland at Mangum

Variety	Micronaire, micrograms/inch						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	4.2	4.8		4.4	4.7		4.6
Lockett BXL	3.8		4.4	4.2	3.8		4.2
Lockett 4789	3.6		4.8	4.1	4.0		4.2
Stripper Cala-S		4.4	4.4	4.3	4.0		4.3
Tamcot 788		4.2	4.0	3.9	4.0		4.0
Paymaster 101-A	4.2	4.6	5.0				4.5
Dunn 56C	3.9	4.1	4.7				4.1
Westburn	3.6	4.3	4.3				4.0
Coker 4104	3.6	4.4	4.2				4.0
Paymaster 111	3.9	4.8		4.7			4.4
Stoneville 7A	3.6	4.5		3.2			3.7
Stripper Cala-N		4.6	5.1		4.2		4.6
Lankart 611		4.7	4.6		4.5		4.6
Tamcot 24		3.8	4.2		3.8		3.9
Coker 310		5.0		4.8	4.4		4.8
Prolific Stormproof		4.5		4.8	4.1		4.5
Paymaster 111-A			4.8	4.2	4.1		4.4
Westburn 70			4.0	4.5	3.7		4.1

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 54. Fiber coarseness of varieties tested 5 years on dryland at Chickasha

Variety	Micronaire, micrograms/inch						
	1968	1969	1970*	1971	1972	1973	Average
Lankart 57	4.6	5.6		3.8	4.9	4.0	4.6
Paymaster 202	4.8	5.2		3.4	5.2	4.5	4.6
Lankart 3840	4.3	5.6		3.7	5.0	4.4	4.6
Coker 201	4.6	5.4		4.1	5.1	3.4	4.5
Lankart LX 571	4.5	5.2		3.9	4.8	3.8	4.4
Lockett 4789-A	4.4	4.9		3.8	4.6	3.7	4.3
Yearly average	4.5	5.3		3.8	4.9	4.0	4.5

*Test was not harvested due to severe drouth damage.

Table 55. Fiber coarseness of varieties tested 3 or 4 years on dryland at Chickasha

Variety	Micronaire, micrograms/inch						
	1968	1969	1970*	1971	1972	1973	Average
Lockett BXL	4.6			3.3	4.9	4.2	4.5
Lockett 4789	4.4			3.7	4.5	4.1	4.4
Coker 310		5.3		3.7	5.0	4.2	4.6
Prolific Stormproof		4.8		4.0	4.5	3.6	4.2
Stripper Cala-S		4.7		3.4	4.1	4.0	4.1
Tamcot 788		4.6		3.4	4.1	3.7	4.0
Paymaster 111	5.0	5.4		3.8			4.7
Stoneville 7A	4.1	5.4		3.9			4.4
Lankburn	4.1	5.3				4.1	4.4
Lankart 611		5.0			4.9	4.5	4.6
Lankhart 611		5.0			4.9	4.5	4.6
Stripper Cala-N		4.5			4.4	4.4	4.2
Paymaster 101-B				4.0	5.0	5.6	5.1
Deltapine 16				4.2	4.9	4.1	4.7
Dunn 119				3.5	5.4	4.5	4.7
HyBee 200A				4.1	5.3	4.0	4.7
Quapaw				3.8	5.1	3.9	4.5
Coker 5110				3.9	4.8	4.0	4.5
Paymaster 111-A				3.5	4.8	3.9	4.3
Westburn 70				3.6	3.9	3.2	3.8

*Test was not harvested due to severe drouth damage.

Table 56. Fiber strength of varieties tested 6 years under irrigation at Altus

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Lockett BXL	20.0	21.3	17.3	19.7	21.0	19.8	19.9
Deltapine 16	20.1	20.5	18.2	20.9	18.9	20.0	19.8
Paymaster 202	19.4	20.8	18.3	16.7	21.5	21.1	19.6
Lockett 4789-A	18.9	20.5	18.6	17.9	20.1	21.3	19.6
Coker 201	18.9	19.9	18.3	20.3	20.1	20.2	19.6
Stoneville 213	19.7	20.6	17.6	19.5	19.8	19.8	19.5
Lankart 3840	19.0	20.5	17.4	17.7	20.1	19.3	19.0
Lockett 4789	19.9	19.3	17.0	18.5	19.7	19.0	18.9
Stoneville 7A	18.6	19.2	17.3	18.2	20.0	19.3	18.8
Yearly average	19.4	20.3	17.8	18.8	20.1	20.0	19.4

Table 57. Fiber strength of varieties tested 3 to 5 years under irrigation at Altus

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	20.0	20.9		18.6	20.9	19.7	19.7
Lankart LX 571	18.8	19.4		16.7	18.0	18.8	18.0
Tamcot 788		22.0	17.7	18.0	21.2	22.9	20.4
Stripper Cala-S		19.9	17.6	17.9	20.6	20.4	19.3
Paymaster 111	20.9	19.5	16.7	19.4			19.5
Lankart 57	17.7	17.7	16.4	15.5			17.2
Coker 310			17.9	18.8	21.2	20.9	19.9
Coker 5110			18.2	18.8	21.2	20.2	19.8
Westburn 70			14.6	17.1	18.8	18.5	17.5
Dunn 56C	21.7	22.5	20.7				21.9
Coker 4104	21.5	20.3	17.9				20.1
Paymaster 101-A	19.1	20.1	17.3				19.1
Westburn	18.4	19.8	16.2				18.4
Acala SJ-1		23.1	23.0	19.5			22.3
Paymaster 18		18.8	15.9	16.2			17.4
Delcot 277			18.6		20.6	21.7	20.4
Lankart 611			17.1		18.0	18.9	18.1
Dunn 118				20.7	21.3	20.5	20.6
Coker 312				18.2	20.6	20.7	19.6
Paymaster 111-A				17.6	21.5	20.2	19.5
HyBee 100A				19.1	18.8	19.7	19.0
Paymaster 101-B				17.7	19.1	19.1	18.4

Table 58. Fiber strength of varieties tested 6 years under irrigation at Chickasha

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 16	21.3	21.1	19.6	19.1	19.8	22.2	20.5
Lockett 4789-A	20.3	21.0	18.0	18.2	21.0	20.4	19.8
Coker 201	20.4	20.3	18.8	18.5	20.2	20.6	19.8
Lockett BXL	20.1	20.8	18.3	19.2	20.3	20.1	19.8
Stoneville 213	20.4	20.1	17.6	18.3	20.7	21.1	19.7
Paymaster 202	20.5	20.3	18.2	18.3	20.7	19.8	19.6
Lankart 3840	20.5	21.1	18.4	17.0	21.3	19.4	19.6
Lockett 4789	19.0	20.2	17.9	17.4	21.2	19.6	19.2
Stoneville 7A	19.9	20.2	19.6	14.6	19.2	21.1	19.1
Yearly average	20.3	20.6	18.5	17.8	20.5	20.5	19.7

Table 59. Fiber strength of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	21.1	21.3		19.2	21.1	20.6	20.4
Lankart LX 571	19.0	19.7		17.1	18.9	18.9	18.5
Tamcot 788		22.9	19.8	19.5	21.6	22.6	21.4
Stripper Cala-S		20.5	18.5	18.0	20.8	20.0	19.7
Paymaster 111	20.8	21.0	17.6	17.9			19.7
Lankart 57	17.8	18.2	16.5	15.9			17.5
Coker 310			19.3	20.1	21.9	21.5	21.1
Coker 5110			17.7	17.3	19.7	21.3	19.4
Westburn 70			16.3	17.1	21.0	19.8	18.9
Dunn 56C	21.9	23.2	21.0				21.9
Coker 4104	21.6	20.1	19.3				20.2
Paymaster 101-A	19.9	19.4	19.4				19.5
Westburn	20.2	19.6	17.2				18.9
Acala SJ-1		24.3	22.8	21.4			23.6
Paymaster 18		18.2	15.4	16.8			17.5
Delcot 277			21.1		20.6	23.2	21.5
Lankart 611			16.7		20.0	19.4	18.6
Dunn 118				20.7	24.0	23.6	22.9
HyBee 100A				19.5	22.3	22.0	21.4
Coker 312				18.5	21.9	21.6	20.8
Paymaster 111-A				18.2	19.4	20.8	19.6
Paymaster 101-B				17.1	19.1	19.0	18.5

Table 60. Fiber strength of varieties tested 5 years on dryland at Mangum

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973*	Average
Paymaster 202	20.2	21.0	20.4	17.9	22.2		20.3
Lockett 4789-A	19.9	20.6	20.0	18.2	21.0		19.9
Lankart 3840	19.8	21.5	18.8	17.7	20.9		19.7
Lankart LX 571	18.6	21.5	16.8	20.1	21.5		19.7
Lankart 57	17.1	19.2	15.3	16.8	19.5		17.6
Yearly average	19.1	20.8	18.3	18.1	21.0		19.5

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 61. Fiber strength of varieties tested 3 or 4 years on dryland at Mangum

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	19.3	20.6		18.3	26.1		20.8
Lockett BXL	19.1		17.7	17.7	20.3		19.1
Lockett 4789	18.7		17.4	18.3	19.7		18.9
Tamcot 788		21.5	19.8	23.4	27.2		22.9
Stripper Cala-S		20.6	18.6	19.7	23.4		20.5
Dunn 56C	20.5	23.0	20.9				21.6
Coker 4104	20.6	21.5	19.8				20.7
Paymaster 101-A	18.8	21.3	16.8				19.1
Westburn	18.7	20.1	16.2				18.4
Paymaster 111	18.9	21.4		18.6			19.8
Stoneville 7A	18.9	18.7		17.9			18.7
Tamcot 24		25.2	22.8		27.0		24.5
Stripper Cala-N		21.6	19.4		21.9		20.4
Lankart 611		18.5	15.9		20.9		17.9
Coker 310		22.4		22.4	23.3		22.2
Prolific Stormproof		18.9		18.6	22.2		19.4
Paymaster 111-A			20.4	21.3	21.8		21.5
Westburn 70			15.9	19.2	21.0		19.1

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 62. Fiber strength of varieties tested 5 years on dryland at Chickasha

Variety	1/8″ gauge stelometer, grams-force/tex						
	1968	1969	1970*	1971	1972	1973	Average
Paymaster 202	21.8	21.2		18.0	21.2	20.7	20.6
Lockett 4789-A	21.0	20.4		19.5	21.6	19.7	20.4
Coker 201	20.7	20.1		18.0	21.3	19.4	19.9
Lankart 3840	21.4	20.8		15.5	21.3	20.1	19.8
Lankart 57	17.8	18.2		16.1	20.4	24.5	19.4
Lankart LX 571	19.4	19.6		16.5	19.7	20.3	19.1
Yearly average	20.4	20.1		17.3	20.9	20.8	19.9

*Test was not harvested due to severe drouth damage.

Table 63. Fiber strength of varieties tested 3 or 4 years on dryland at Chickasha

Variety	1/8" gauge stelometer, grams-force/tex						
	1968	1969	1970*	1971	1972	1973	Average
Lockett BXL	20.7			14.3	23.1	21.2	19.9
Lockett 4789	20.0			17.1	20.9	19.5	19.4
Coker 310		20.9		20.4	23.3	22.2	21.8
Tamcot 788		23.3		16.7	23.4	21.0	21.2
Stripper Cala-S		19.9		15.2	19.1	20.9	18.9
Prolific Stormproof		18.0		14.6	19.4	18.9	17.9
Paymaster 111	21.6	20.3		16.1			20.0
Stoneville 7A	19.7	18.9		14.9			18.5
Lankburn	19.5	18.4				24.0	20.1
Stripper Cala-N		19.8			20.1	20.0	19.3
Lankart 611		18.6			21.8	18.8	19.0
Dunn 119				19.7	25.4	23.1	23.0
Deltapine 16				18.9	23.4	20.7	21.2
Paymaster 111-A				16.8	21.6	22.5	20.5
Coker 5110				17.3	21.9	21.0	20.3
Paymaster 101-B				15.5	22.2	20.6	19.7
Quapaw				17.1	23.1	17.9	19.6
Westburn 70				15.9	20.1	20.3	19.0
HyBee 200A				17.9	17.6	20.6	18.9

*Test was not harvested due to severe drouth damage.

Table 64. Fiber strength of varieties tested 6 years under irrigation at Altus

Variety	0" gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Lockett BXL	41.1	38.7	43.5	40.0	39.8	42.7	41.0
Paymaster 202	40.1	38.5	44.7	39.5	38.4	43.5	40.8
Lockett 4789-A	40.9	37.8	42.1	39.1	41.2	41.5	40.4
Lankart 3840	40.0	38.2	43.2	38.1	39.9	41.0	40.1
Lockett 4789	40.2	38.6	40.9	38.4	39.2	42.0	39.9
Stoneville 7A	40.0	38.6	41.3	39.9	40.0	39.5	39.9
Coker 201	39.4	36.7	43.4	37.2	39.5	41.6	39.6
Deltapine 16	38.5	36.6	39.5	38.1	37.9	40.5	38.5
Stoneville 213	39.2	37.6	39.4	34.9	38.1	37.3	37.8
Yearly average	39.9	37.9	42.0	38.4	39.3	41.1	39.8

Table 65. Fiber strength of varieties tested 3 to 5 years under irrigation at Altus

Variety	0" gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	39.0	37.5		36.7	38.6	38.1	38.5
Lankart LX 571	37.5	37.3		37.2	38.1	37.3	38.0
Tamcot 788		42.7	52.3	43.1	45.0	48.7	46.4
Stripper Cala-S		39.2	46.1	42.0	45.0	44.1	43.3
Paymaster 111	42.2	37.7	39.3	37.9			39.5
Lankart 57	35.2	32.7	34.8	33.2			34.2
Coker 310			39.9	38.7	38.4	42.2	39.4
Coker 5110			41.3	38.7	39.2	39.6	39.3
Westburn 70			39.4	36.9	38.6	39.6	38.2
Dunn 56C	42.2	40.1	45.8				42.6
Coker 4104	40.9	37.5	42.8				40.3
Paymaster 101-A	38.1	36.7	43.1				39.2
Westburn	39.1	36.0	38.5				37.7
Acala SJ-1		40.8	47.4	39.1			42.8
Paymaster 18		37.2	41.5	39.3			39.7
Delcot 277			43.4		39.9	40.3	40.2
Lankart 611			37.4		37.6	38.7	36.9
Dunn 118				41.7	45.3	44.0	43.9
Paymaster 111-A				39.9	41.1	41.6	41.1
Coker 312				39.3	38.7	40.1	39.6
Paymaster 101-B				38.2	38.9	41.1	39.6
HyBee 100A				38.9	38.1	37.6	38.4

Table 66. Fiber strength of varieties tested 6 years under irrigation at Chickasha

Variety	0" gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Stoneville 7A	41.4	41.2	42.6	41.3	40.7	41.2	41.4
Lankart 3840	40.5	40.4	40.5	38.9	43.3	42.8	41.1
Coker 201	40.6	40.7	41.6	40.2	41.2	41.0	40.9
Paymaster 202	39.5	40.8	41.5	40.6	40.2	40.1	40.5
Lockett 4789-A	39.6	40.3	41.1	40.8	40.2	39.2	40.2
Lockett BXL	38.2	39.6	40.9	38.9	39.1	40.1	39.5
Lockett 4789	38.9	40.9	40.1	37.1	39.2	39.6	39.3
Stoneville 213	36.9	38.4	38.6	39.9	39.9	39.5	38.9
Deltapine 16	37.4	38.3	39.3	38.0	37.4	37.5	38.0
Yearly average	39.2	40.1	40.7	39.5	40.1	40.1	40.0

Table 67. Fiber strength of varieties tested 3 to 5 years under irrigation at Chickasha

Variety	0″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973	Average
Deltapine 45A	38.6	38.9		40.1	37.5	41.2	39.5
Lankart LX 571	37.4	37.5		38.5	39.2	39.6	38.6
Tamcot 788		45.7	50.0	41.9	41.1	46.8	45.0
Stripper Cala-S		41.7	46.0	43.5	43.6	45.6	44.0
Paymaster 111	40.6	39.8	43.4	38.7			40.8
Lankart 57	34.7	34.3	34.0	32.6			34.0
Coker 310			40.5	42.0	40.7	41.9	41.2
Coker 5110			39.6	38.7	39.6	40.1	39.4
Westburn 70			39.0	34.1	39.3	38.7	37.7
Coker 4104	39.2	39.9	42.8				40.6
Dunn 56C	41.3	42.4	35.4				39.7
Paymaster 101-A	39.0	38.3	41.1				39.5
Westburn	38.6	36.9	38.7				38.1
Acala SJ-1		42.0	44.7	41.1			42.5
Paymaster 18		40.2	38.6	38.2			38.9
Delcot 277			41.3		38.9	42.1	40.5
Lankart 611			37.3		37.3	36.9	36.9
Dunn 118				46.5	45.8	45.1	45.9
Coker 312				40.6	43.2	41.4	41.8
Paymaster 111-A				41.1	40.7	42.0	41.4
HyBee 100A				38.2	39.8	40.2	39.5
Paymaster 101-B				37.6	37.3	40.8	38.7

Table 68. Fiber strength of varieties tested 5 years on dryland at Mangum

Variety	0″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973*	Average
Lankart 3840	40.9	40.8	42.5	44.3	43.8		42.5
Paymaster 202	41.4	40.4	44.8	43.2	41.1		42.2
Lockett 4789-A	40.0	37.9	41.5	43.7	42.0		41.0
Lankart LX 571	38.3	38.3	39.5	36.6	38.2		38.2
Lankart 57	35.8	36.6	38.0	33.4	33.6		35.5
Yearly average	39.3	38.8	41.3	40.2	39.7		39.9

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 69. Fiber strength of varieties tested 3 or 4 years on dryland at Mangum

Variety	0″ gauge stelometer, grams-force/tex						
	1968	1969	1970	1971	1972	1973*	Average
Coker 201	39.6	41.0		43.1	43.5		42.2
Lockett 4789	38.6		43.7	42.2	40.6		41.1
Lockett BXL	39.4		41.1	42.8	40.8		40.8
Tamcot 788		46.2	49.1	47.1	45.9		47.0
Stripper Cala-S		44.6	46.6	44.6	45.8		45.3
Dunn 56C	42.6	43.8	46.1				44.3
Paymaster 101-A	39.9	40.6	42.2				41.0
Coker 4104	40.2	39.7	41.9				40.7
Westburn	37.2	36.8	40.4				38.2
Paymaster 111	40.4	39.0		43.7			41.5
Stoneville 7A	41.7	41.6		39.5			41.4
Tamcot 24		48.3	51.4		43.1		47.6
Stripper Cala-N		44.7	44.8		41.9		43.8
Lankart 611		34.4	37.1		35.8		35.7
Coker 310		40.5		42.2	41.2		41.6
Prolific Stormproof		40.4		41.9	39.5		40.9
Paymaster 111-A			44.8	40.6	41.5		41.8
Westburn 70			38.9	37.1	37.4		37.3

*Test was not harvested due to uneven stands caused by wind-blown sand.

Table 70. Fiber strength of varieties tested 5 years on dryland at Chickasha

Variety	0″ gauge stelometer, grams-force/tex						
	1968	1969	1970*	1971	1972	1973	Average
Lankart 3840	43.7	44.9		42.2	46.5	43.4	44.1
Coker 201	41.9	43.9		45.4	47.2	37.6	43.2
Paymaster 202	42.6	45.8		42.8	45.9	38.6	43.1
Lockett 4789-A	40.8	44.7		44.0	46.1	37.3	42.6
Lankart LX 571	38.7	41.3		41.1	44.1	37.5	40.5
Lankart 57	35.4	38.6		40.0	38.4	42.6	39.0
Yearly average	40.5	43.2		42.6	44.7	39.5	42.1

*Test was not harvested due to severe drouth damage.

Table 71. Fiber strength of varieties tested 3 or 4 years on dryland at Chickasha

Variety	0" gauge stelometer, grams-force/tex						
	1968	1969	1970*	1971	1972	1973	Average
Lockett BXL	41.7			41.8	46.0	40.0	42.7
Lockett 4789	41.1			41.7	44.0	39.2	41.8
Tamcot 788		48.9		44.8	47.4	39.3	44.7
Stripper Cala-S		45.4		42.5	49.4	42.5	44.6
Prolific Stormproof		45.1		42.6	46.7	39.4	43.1
Coker 310		42.2		42.1	42.0	40.4	41.3
Paymaster 111	43.8	45.9		43.4			44.4
Stoneville 7A	42.7	43.3		43.0			43.0
Lankburn	38.5	40.2				42.1	41.3
Stripper Cala-N		45.6			48.9	42.5	45.3
Lankart 611		38.7			40.2	36.6	38.1
Dunn 119				47.2	54.4	47.1	49.4
Paymaster 111-A				44.1	50.0	41.1	44.9
Quapaw				48.3	50.2	34.9	44.3
Paymaster 101-B				44.4	48.9	39.8	44.2
Deltapine 16				40.7	43.2	39.2	40.9
Coker 5110				42.2	42.4	38.4	40.8
HyBee 200A				42.8	42.4	37.4	40.7
Westburn 70				37.5	38.9	35.3	37.1

*Test was not harvested due to severe drouth damage.

APPENDIX

Table A. Conversion of 2.5% span length into 32's of an inch and into fractional equivalents of inches

2.5% span length	Inches	
	In 32's	In fractions
.844	27	27/32
.875	28	7/8
.906	29	29/32
.938	30	15/16
.969	31	31/32
1.000	32	1 0/32
1.031	33	1 1/32
1.063	34	1 1/16
1.094	35	1 3/32
1.125	36	1 1/8
1.156	37	1 5/32
1.188	38	1 3/16
1.219	39	1 7/32
1.250	40	1 1/4

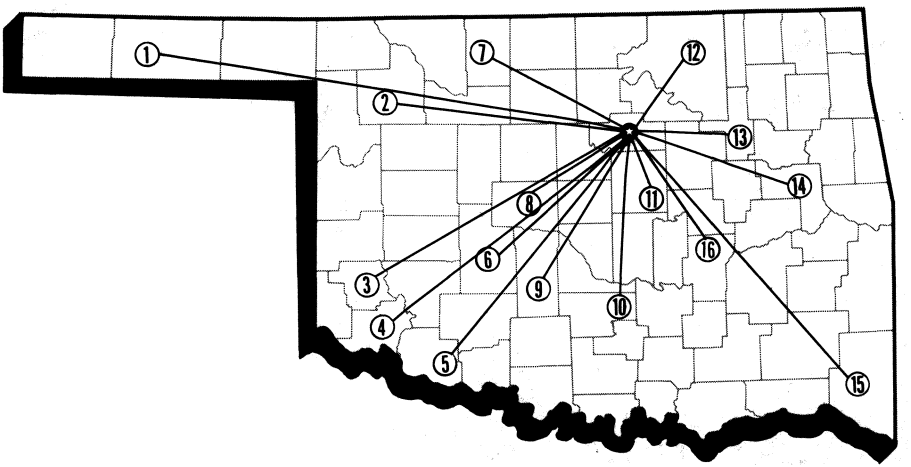
Table B. Conversion of 0″ gauge stelometer into thousands of pounds per square inch (PSI)

0″ gauge stelometer	PSI in 1000's	0″ gauge stelometer	PSI in 1000's
31.0	67.0	41.0	88.6
32.0	69.2	42.0	90.8
33.0	71.3	43.0	92.9
34.0	73.5	44.0	95.1
35.0	75.6	45.0	97.3
36.0	77.8	46.0	99.4
37.0	80.0	47.0	101.6
38.0	82.1	48.0	103.7
39.0	84.3	49.0	105.9
40.0	86.5	50.0	108.1

OKLAHOMA

Agricultural Experiment Station

System Covers the State



Main Station — *Stillwater, Perkins and Lake Carl Blackwell*

1. **Panhandle Research Station — *Goodwell***
2. **Southern Great Plains Field Station — *Woodward***
3. **Sandyland Research Station — *Mangum***
4. **Irrigation Research Station — *Altus***
5. **Southwest Agronomy Research Station — *Tipton***
6. **Caddo Research Station — *Ft. Cobb***
7. **North Central Research Station — *Lahoma***
8. **Ft. Reno Livestock Research Station — *El Reno***
9. **South Central Research Station — *Chickasha***
10. **Agronomy Research Station — *Stratford***
11. **Pecan Research Station — *Sparks***
12. **Veterinary Research Station — *Pawhuska***
13. **Vegetable Research Station — *Bixby***
14. **Eastern Pasture Research Station — *Muskogee***
15. **Kiamichi Field Station — *Idabel***
16. **Sarkeys Research and Demonstration Project—*Lamar***

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