

Mimeographed Circular M-296

March 1958

1957 COTTON VARIETY TEST RESULTS

by

John M. Green, Norman Justus, E. S. Oswald,
J. W. Simmons, O. H. Williams and R. L. Guthrie

AGRONOMY DEPARTMENT



1957 Cotton Variety Test Results

by

John M. Green, Norman Justus, E. S. Oswalt, J. W. Simmons, O. H. Williams and
R. L. Guthrie, Agronomy Department

Cotton variety tests planted in 1957 included three planted for stripper harvest in Central and Western Oklahoma, five under dry land conditions for hand harvest, and six under irrigation for hand harvest. The irrigated test at Hollis was not harvested due to a skippy stand. All tests were replicated.

Stripper tests consisted of four row plots 100 feet long, the two center rows being harvested with a two-row John Deere Stripper.

Hand harvested tests consisted of four row plots 50 feet long. The two center rows were harvested for yield determination. Bulk samples of each variety were taken to the laboratory for determining lint per cent and staple.

In general, conditions for cotton production were favorable. However, the early maturing varieties had a definite advantage due to the short growing season. Care should be taken in interpreting short-term variety comparisons. More attention should be given to the average results at each location, and the most confidence should be placed in results with varieties tested three or more years. Average results have been adjusted for seasonal effects when varieties have been tested for different numbers of years at a location.

It is a pleasure to acknowledge the assistance of the following cooperators:
Dale McClain, Elk City; Bryan Gentry, Hobart; J. W. Haynie, Tipton; Carol Smith, Sickles;
W. B. Allen & Son, Kemp; and Samuel Roberts Noble Foundation, Ardmore.

CHICKASHA

TABLE 1. Location, soil type, and other information on the 1957 stripper-harvested tests.

<u>Nearest Town</u>	<u>Soil Type*</u>	<u>Planted</u>	<u>Harvested</u>	<u>Other</u>
Chickasha	Silty clay loam.	May 28	Nov. 24	5 insecticide treatments
Hobart	Reinach very fine sandy loam.	June 24	Dec. 6	Dry-land no insecticides
Elk City	Dill fine sandy loam	June 16	Dec. 9	Dry-land no insecticides

*Soil classification by H. M. Galloway, SCS Soil Surveyor.

TABLE 2. 1957 and average data on varieties in a stripper-harvested test at Chickasha.

<u>Variety</u>	<u>Net yield Lint per A.</u>	<u>Staple in 32's</u>	<u>Lint %</u>	<u>Lint Losses in %</u>	
				<u>Pre-Harvest</u>	<u>Harvest</u>
Anton 99	578	31	28.3	0.3	3.1
Lankart 57	549	31	28.9	0.3	1.7
Lockett 88	545	29	29.1	0.5	2.2
Lockett No. 1	545	30	28.8	1.1	2.0
M55-201	539	31	27.9	1.1	2.5
Blightmaster	535	31	25.8	0.0	2.2
Lankart 611	530	31	27.3	0.3	1.2
Western Stormproof	526	32	28.4	0.1	1.5
Northern Star No. 11	523	30	26.0	1.2	1.4
Lockett 88-3004-54	507	31	28.1	0.6	1.4
Parrott	504	30	26.3	1.9	4.1
Watson's Stormproof	477	31	24.9	0.4	2.4
Harper R-4	466	31	25.1	1.6	2.6
Paymaster 101	456	31	26.7	0.9	5.1

	<u>Years tested</u>	<u>Average Results</u>			
Western Stormproof	4	405	27.2	1.9	2.9
Lockett No. 1	4	403	27.0	3.1	3.1
Northern Star # 11	4	402	26.2	2.5	3.6
Lankart 611	4	401	26.2	0.9	2.4
Parrott	4	392	26.7	3.0	3.7

HOBART

TABLE 3. 1957 and average data on varieties in a stripper-harvested test at Hobart.

Variety	Net yield Lint per A.	Staple in 32's	Lint %	Lint Losses in %	
				Pre-Harvest	Harvest
Lankart 57	465	31	21.6	0.1	2.4
Lankart 611	392	31	21.3	0.0	2.5
Paymaster 101	368	31	21.1	0.0	3.4
Western Stormproof	356	31	20.1	0.0	2.4
Northern Star No. 11	341	30	19.2	0.1	2.5
Parrott	335	32	19.9	0.1	3.7
Lockett 88	331	30	19.8	0.1	4.0
Harper R-4	298	31	17.1	0.1	2.7
Blightmaster	294	30	19.9	0.4	3.0
Lockett No. 1	290	30	18.1	0.1	3.8
Watson Stormproof	285	32	18.1	0.3	2.3
Lockett 88-3004-54	271	31	16.2	0.3	2.4

ELK CITY

TABLE 4. 1957 and average data on varieties tested in a stripper-harvested test at Elk City.

Variety	Net yield Lint per A.	Staple in 32's	Lint %	Lint Losses in %	
				Pre-Harvest	Harvest
Lankart 611	422	31	26.9	1.2	2.0
Lockett 88-3004-54	412	31	29.9	3.9	3.4
Western Stormproof	359	31	28.2	1.4	2.5
Parrott	356	29	25.6	7.3	4.0
Harper R-4	338	29	25.6	5.2	3.4
Lockett 88	331	30	28.3	3.7	2.8
Watson Stormproof	321	31	26.4	4.7	2.4
Lockett No. 1	313	29	27.6	10.6	2.6
Lankart 57	310	30	24.3	2.7	2.1
Blightmaster	310	30	26.2	6.6	3.5
Paymaster 101	307	30	26.7	6.0	4.8
Northern Star No. 11	286	31	27.3	4.1	3.6

Average Results

Variety	Years tested	Net yield Lint per A.	Staple in 32's	Lint %	Average Results	
					Pre-Harvest	Harvest
Lankart 57	5	283	31	25.5	1.1	2.4
Parrott	5	262	32	24.1	3.8	6.3
Western Stormproof	3	262	31	25.1	1.1	4.0
Lockett No. 1	5	248	30	23.0	2.5	4.5
Lankart 611	5	238	31	23.5	1.2	4.3

Average Results

Variety	Years tested	Net yield Lint per A.	Staple in 32's	Lint %	Average Results	
					Pre-Harvest	Harvest
Lankart 611	6	280	31	26.1	3.6	2.5
Western Stormproof	4	280	31	29.0	3.0	3.2
Parrott	6	274	29	27.4	6.7	4.7
Lockett No. 1	6	254	30	26.9	6.1	3.7
Lankart 57	6	249	30	27.8	4.6	3.4

TABLE 5. Location, soil type, and other information on hand harvested tests grown under irrigation in 1957.

<u>Nearest Town</u>	<u>Soil Type</u>	<u>Planted</u>	<u>Harvested</u>	<u>Irrigation</u>	<u>Other</u>
Chickasha	Reinach silt loam	June 8	Oct. 18 Nov. 23	5 times 9" total	5 insecticide treatments.
Tipton	Tipton silt loam	June 13	Nov. 16 Nov. 29	4 times 12" total	4 sprays 1 dust
Altus	Foard clay loam	June 10	Oct. 30 Dec. 2	5 times 15" total	7 insecticide treatments.
Sickles	Vanoss loam (sand)	May 28	Oct. 28 Nov. 30	4 times 9" total	2 sprays
Bryan County, Red River Bottom		June 10	Dec. 1	3 times 8" total	12 insecticide treatments (4 sprays, 8 dusts) 400# 0-16-8 and 150# NH ₃ (nitrogen)

CHICKASHA

TABLE 6. 1957 and average data on varieties tested under irrigation at Chickasha.

<u>Variety</u>	<u>Yield</u> <u>Lint/A.</u>	<u>Staple</u> <u>in 32's</u>	<u>Lint %</u>		<u>Grams</u> <u>per Boll</u>	<u>% 1st</u> <u>Harvest</u>
			<u>Picked</u>	<u>Pulled</u>		
Hi Bred	678	30	40.1	31.8	6.5	57.9
Lankart 57	673	32	38.7	28.9	8.1	49.4
Stoneville 62	639	32	38.1	29.2	6.3	43.9
D & PL Fox	636	33	35.1	26.5	5.8	41.2
Lankart 611	636	32	37.0	28.0	6.9	48.4
Paymaster 54	635	32	38.4	29.3	6.6	62.8
Fox 0253	592	33	36.7	27.7	5.9	32.0
Austin	577	33	36.9	27.9	6.6	35.7
Stoneville 7	556	34	37.2	28.1	5.1	27.8
Northern Star #11	544	32	37.0	28.2	7.2	43.1
Paymaster 105	542	31	35.3	24.5	6.4	40.9
Acala 4-42	540	34	38.4	27.7	7.3	36.6
Empire	526	33	36.4	27.2	7.3	38.5
Acala 1517-C	511	34	36.6	27.2	7.1	38.8
Lockett No. 1	493	31	38.5	30.0	6.4	35.6
Deltapine Smoothleaf	488	33	39.0	29.0	5.5	35.9
Webb	481	33	37.4	28.2	7.7	41.5
Western Stormproof	474	31	39.3	30.6	6.6	38.1
Lockett 88	466	31	38.9	29.7	6.1	29.0
Blightmaster	413	33	36.5	27.7	6.6	44.0
Acala 44	407	33	36.5	27.0	7.8	44.9
Acala 44-W.R.	407	34	36.4	26.0	7.9	29.6
Parrott	390	31	36.4	28.2	7.1	46.5
Deltapine 15	329	33	38.3	28.1	5.6	41.4
Acala 1517-B.R.	251	34	35.5	26.8	6.7	39.6

Average Results

	<u>Years</u> <u>tested</u>		
Paymaster 54	3	745	53.0
Hi Bred	3	743	48.8
Stoneville 62	3	738	45.2
Lankart 57	3	736	40.5
D & PL Fox	3	703	41.0
Lankart 611	3	700	42.6
Empire	3	679	36.9
Northern Star No. 11	3	652	40.3
Lockett No. 1	3	632	31.7
Acala 4-42	3	624	34.5
Parrott	3	605	37.8
Deltapine 15	3	603	34.1
Western Stormproof	3	580	28.7

TIFTON

TABLE 7. 1957 and average data on varieties tested under irrigation at Tipton.

<u>Varieties</u>	<u>Lbs. Lint per A.</u>	<u>Grams per Boll</u>	<u>% Harvested 1st Harvest</u>
Paymaster 54	614	31	79.7
Acala 4-42	488	33	55.5
Lankart 57	467	31	68.2
Acala 44	440	33	58.0
Acala	433	32	54.1
Webb	431	32	63.1
D & PL Fox	427	30	80.5
Western Stormproof	388	30	65.3
Acala 1517-C	385	34	56.6
Deltapine 15	379	31	68.4
Stoneville 62	376	32	68.6
Lankart 611	360	31	66.3
Northern Star # 11	358	32	68.8
Empire	346	32	61.0
Parrott	325	31	69.6
Acala 1517 B.R.	284	33	49.5
Lockett No. 1	253	31	52.4
Lockett 88	215	30	48.9

Average Results

	<u>Years tested</u>		
Paymaster 54	3	638	19.8
Deltapine 15	3	493	54.3
D & PL Fox 3	3	491	71.6
Lankart 57	3	475	58.4
Western Stormproof	3	471	49.2
Lankart 611	3	465	60.8
Acala 4-42	3	456	46.8
Parrott	3	447	55.7
Stoneville 62	3	442	60.5
Lockett No. 1	3	430	49.0
Empire 3	3	394	57.0
		69.8	

ALTUS

TABLE 8. 1957 and average data on varieties tested under irrigation at Altus.

Variety	Yield Lint/A.	Staple in 32's	Lint %		Grams per Boll	% lst Harvest
			Picked	Pulled		
Paymaster 54	803	31	35.9	26.0	6.3	35.0
Paymaster 105	623	31	31.9	21.9	7.2	17.8
Acala 1517-C	610	32	34.1	23.5	6.9	12.4
Deltapine Smoothleaf	603	32	35.5	26.3	5.6	22.7
Acala 4-42	591	32	35.9	23.8	7.6	15.0
Hi-Bred	555	32	36.7	28.3	6.9	36.2
Lankart 57	551	32	33.5	23.9	7.9	23.5
Northern Star 11	541	32	33.4	24.4	6.7	26.1
Acala 44	538	32	34.4	24.1	7.4	11.4
Lankart 611	534	34	33.6	23.7	6.5	22.9
Deltapine 15	530	33	34.8	25.8	6.2	22.0
Austin	525	33	33.6	25.0	7.1	18.9
Webb	513	32	32.9	22.8	7.9	14.9
Stoneville 62	507	33	34.7	25.9	6.5	27.7
Parrott	495	32	33.4	24.7	6.9	21.9
D & FL Fox	488	32	31.3	23.0	5.8	23.9
Fox 0253	470	34	33.1	23.4	5.9	17.2
Blightmaster	456	32	34.4	25.0	5.0	24.7
Western Stormproof	445	32	35.4	25.8	6.5	16.0
Acala 44 WR	436	32	32.2	20.4	7.3	07.7
Dixie King	429	33	33.6	23.7	7.7	09.7
Stoneville 7	406	32	32.7	23.0	5.6	13.2
Acala 1517 BR	404	34	33.0	23.2	7.2	14.1
Deltapine Staple	398	32	32.1	21.8	6.2	11.1
Empire	394	34	32.4	22.6	7.3	13.1
Lockett # 1	357	31	34.6	24.4	6.2	13.9
Lockett # 83	251	33	34.2	23.9	5.3	09.7

Average Results

	Years tested						
Paymaster 54-B	5	351	30	38.1	28.2	6.7	63.5
Western Stormproof	4	775	31	38.9	29.3	6.8	53.8
Deltapine 15	5	769	33	37.6	27.0	6.1	50.4
Hi-Bred	4	768	29	39.2	29.9	6.9	64.4
D & FL Fox	5	762	32	34.6	25.2	5.9	55.0
Stoneville 62	5	747	32	36.5	27.2	6.3	57.2
Lockett No. 1	5	740	30	37.4	27.5	6.2	47.4
Acala 1517-C	4	731	34	34.7	24.7	6.8	50.6
Lankart 57	5	719	31	36.9	26.2	7.9	47.7
Parrott	5	710	31	37.8	27.6	6.7	53.8
Acala 4-42	3	709	33	38.3	26.8	7.3	50.2
Lankart 611	5	699	32	36.1	25.9	7.5	53.7
Empire	5	624	33	34.9	24.6	7.3	46.5

SICKLES

TABLE 9. 1957 and average data on varieties tested under irrigation at Sickles.

Variety	Yield Lint/A.	Staple in 32's	Lint %		% lst Harvest
			Picked	Pulled	
Paymaster 54	655	32	37.1	27.9	42.8
Lankart 57	526	33	37.7	27.6	20.5
Stoneville 62	518	32	37.6	28.6	32.4
Northern Star No. 11	507	34	36.0	27.6	36.7
Lankart 611	489	33	36.1	27.0	33.9
Parrott	464	32	39.1	28.9	28.0
D & PL Fox	415	34	35.8	26.3	25.1
Western Stormproof	384	32	38.9	29.0	17.1
Acala 1517-C	382	36	35.9	25.6	27.0
Empire	374	32	35.4	25.8	25.8
Lockett 88	325	31	38.3	28.2	19.1
Deltapine 15	321	34	38.2	27.2	22.2
Acala 44	320	33	37.1	26.8	23.0
Acala 4-42	294	35	37.1	26.0	24.9
Lockett No. 1	281	33	37.1	28.4	23.2
Webb	273	33	36.8	25.9	18.1
Acala 44 WR	259	35	33.4	23.1	19.9
Acala 1517 BR	259	36	38.7	28.8	28.4

Average Results

	Years tested		
Paymaster 54	3	547	53.3
Stoneville 62	3	453	45.5
Lankart 611	3	448	47.1
Lankart 57	3	412	38.8
Parrott	3	406	52.2
Northern Star # 11	3	396	39.7
D & PL Fox	3	367	43.2
Western Stormproof	3	358	39.5
Deltapine 15	3	345	46.0
Empire	3	326	45.3
Acala 4-42	3	309	41.8
Lockett No. 1	3	303	49.1

DURANT

TABLE 10. 1957 and average data on varieties tested under irrigation in Bryan County.

<u>Variety</u>	<u>Yield Lint/A.</u>	<u>Staple in 32's</u>	<u>Lint %</u>	
			<u>Picked</u>	<u>Pulled</u>
Acala 44	634	32	36.0	28.1
Acala 4-42	537	32	36.5	27.8
Stoneville 62	533	31	33.7	26.3
D & PL Fox	528	31	32.8	25.2
Acala 44 WR	481	32	32.7	24.9
Acala 1517-C	474	32	34.3	26.5
Deltapine 15	471	33	35.7	27.8
Empire	407	32	31.2	23.7
M 57-207	403	32	28.9	22.4
Stoneville 7	388	31	33.2	26.1
Acala 1517 BR	310	33	32.8	25.4

Average Results

	<u>Years tested</u>		
Stoneville 62	2	906	32
D & PL Fox	2	897	32
Acala 44	2	895	33
Deltapine 15	2	887	33
Acala 4-42	2	826	33
Acala 1517-C	2	813	34
Empire	2	740	33

MANGUM

TABLE 11. Location, soil type, and other information concerning hand-harvested dry land tests in 1957.

<u>Nearest Town</u>	<u>Soil Type</u>	<u>Planted</u>	<u>Harvested</u>	<u>Other</u>
Mangum	Deep Sand	June 10	Oct. 30	Dry land 2 sprays (insecticide)
Pocassett	Upland Clay	June 13	Oct. 28 Nov. 25	2 sprays
Perkins	Very fine sandy loam	May 28	Oct. 1 Nov. 16	4 sprays 4 dusts
Madill	Blackland	June 10	Sept. 30 Dec. 5	200# 7-14-7 1 spray
Lone Grove	Deep sand	June 10	Oct. 4 Nov. 26	200# 5-10-5

TABLE 12. 1957 and average data on varieties tested on dry land at Mangum.

<u>Variety</u>	<u>Yield Lint/A.</u>	<u>Staple in 32's</u>	<u>Lint %</u>		<u>% 1st Harvest</u>
			<u>Picked</u>	<u>Pulled</u>	
Lankart 611	432	31	38.2	28.3	54.7
Lankart 57	427	30	39.6	27.9	53.7
Hi-Bred	402	30	39.8	29.8	67.1
Paymaster 101	353	30	37.7	27.3	64.5
Northern Star No. 11	340	30	27.1	36.5	66.0
Western Stormproof	332	30	39.2	29.0	57.8
Webb	313	31	37.8	26.6	52.0
Lockett No. 1	298	30	38.0	28.0	36.1
Wacona	290	30	34.2	25.2	53.2
Lockett 88	271	31	38.9	28.2	33.0
Parrott	271	31	36.8	27.0	58.1

POCASSETT

TABLE 13. 1957 data on varieties tested on dry land at Pocasset.

Variety	Yield Lint/A.	Staple in 32's	Lint %		% 1st Harvest
			Picked	Pulled	
Lankart 611	126	28	38.0	28.7	82.3
Lockett 88	121	27	37.2	27.5	84.6
Western Stormproof	119	27	38.8	28.4	80.6
Paymaster 101	118	28	39.2	30.7	81.7
Northern Star	110	28	39.9	31.2	83.1
Parrott	109	28	37.1	28.0	82.8
Lockett No. 1	101	27	35.7	27.2	80.5
Lankart 57	100	27	38.9	30.0	94.7
Wacona	99	28	39.6	30.6	92.4
Hi-Bred	97	27	38.3	28.4	83.7
Webb	93	31	39.1	29.6	90.0

PERKINS

TABLE 14. 1957 data on varieties tested on dry land at Perkins.

Variety	Yield Lint/A.	% 1st Harvest
Pope	385	50.0
Lankart 611	368	55.8
Parrott	367	51.9
Western Stormproof	365	42.9
Austin	329	59.3
Acala 44	320	44.8
Lankart 57	311	32.7
Stoneville 62	309	36.2
D & PL Fox	284	50.6
Deltapine 15	276	22.4
Empire	273	48.4

MADILL

TABLE 15. 1957 and average data on varieties tested on dry land at Madill.

Variety	Yield Lint/A.	Staple in 32's	Lint %		% 1st Harvest
			Picked	Pulled	
Lankart 57	366	30	38.6	28.5	60.5
Lankart 611	356	30	38.0	28.1	72.0
Hi-Bred	340	28	39.4	30.1	75.5
Pope	339	29	38.8	28.0	75.7
Parrott	332	30	40.7	29.1	72.8
Western Stormproof	331	30	42.2	32.0	50.4
Stoneville 62	316	30	37.8	27.5	73.3
Deltapine 15	305	30	41.0	29.0	38.7
Acala 44	300	32	38.5	28.3	59.4
D & PL Fox	283	31	36.0	26.0	74.5
Austin	275	32	36.2	26.3	82.0
Empire	246	32	36.0	25.8	72.0

Average Results

	Years tested					
Lankart 611	4	278	30	37.8	27.0	80.4
Parrott	4	277	29	40.0	28.6	77.1
Lankart 57	4	277	29	38.9	27.2	70.1
Hi-Bred	4	258	28	39.1	28.5	83.4
Stoneville 62	4	253	30	37.1	26.2	84.0
D & PL Fox	4	232	31	35.4	23.5	85.3
Deltapine 15	4	229	31	38.5	25.1	67.0
Empire	4	223	31	35.8	25.0	79.9

LONE GROVE

TABLE 16. 1957 and average data on varieties tested on dryland at Lone Grove.

<u>Variety</u>	<u>Yield Lint/A.</u>	<u>Staple in 32's</u>	<u>Lint %</u>		<u>% 1st Harvest</u>
			<u>Picked</u>	<u>Pulled</u>	
Stoneville 62	481	30	37.8	27.5	59.3
Parrott	471	30	41.0	29.3	46.9
Lankart 57	467	31	39.0	27.8	45.2
Pope	455	28	40.5	28.8	48.9
Lankart 611	433	31	38.6	27.2	49.8
Austin	420	31	38.1	27.4	45.6
Hi-Bred	415	27	41.1	30.1	46.7
D & PL Fox	405	32	36.2	25.4	43.4
Empire	393	30	38.2	27.0	46.9
Western Stormproof	348	31	40.6	29.8	41.1
Deltapine 15	331	31	40.0	27.3	34.4
Acala 44	329	30	37.4	25.7	35.2

Average Results

	<u>Years tested</u>			
Parrott	3	346	29	77.7
Stoneville 62	3	331	29	80.4
Hi-Bred	3	329	26	78.1
Lankart 57	3	304	29	68.5
Lankart 611	3	297	29	76.6
D & PL Fox	3	287	31	74.1
Empire	3	283	30	75.2
Deltapine 15	3	266	30	66.6
Western Stormproof	3	227	28	66.3