

1980 Mississippi Cotton Variety Tests

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1980 Mississippi Cotton Variety Tests

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1980 Mississippi Cotton Variety Tests

The cotton variety testing program in Mississippi is conducted to determine the relative performance of available varieties in different environments and to distribute the information to cotton producers throughout the state. The Mississippi Agricultural and Forestry Experiment Station does recommend varieties suggests that individual producers select a new variety on the basis of test results and then grow a small acreage to determine its adaptability and performance.

A major factor affecting yield and quality of cotton is the variety planted: however. yield earliness of a given variety can be influenced by seed quality, planting date, cultural practices, fertilization, irrigation, weather, weed control and insect control. Yield usually receives first consideration, but other agronomic proper-

selecting a cotton variety. Maturity becomes more important as one goes from the southern to the northern part of the state, particularly when planting is delayed. High seed viability and good seedling vigor help to insure uniform and adequate stands under adverse conditions. Reaction to diseases and insects merits additional consideration because several prevalent diseases can reduce yield of susceptible varieties.

Tests are conducted at various locations throughout the state but do not encompass all environmental conditions, disease and insect situations, soil differences and present throughout the state. The significant variety by location interactions measured in 1979 and evaluated in all Delta en-1980 indicate that varieties res-

ties also may be important when different locations. Observations of individual tests suggest that rainfall distribution, temperature, maturity, insect control and fertilization are important determinants of variety response.

The 1980 cotton variety tests were conducted in four Delta environments (Sumner, Tunica and two test sites at Stoneville) and three hill area environments (Holly Springs, Verona and Mississippi State).

Each entry was randomized and replicated six times. Yield determinations were based on the weight of cotton harvested from two-row plots. Determinations of lint percentage, boll size, seed rainfall distributions that may be index and fiber properties were made from hand-picked samples.

The same 15 varieties were vironments and 12 of the 15 were pond differently when grown in evaluated in the hill environments.

RESULTS

The test at Stoneville on a Bosket very fine sandy loam was planted April 21. Excessive rain and cool temperatures immediately after planting resulted in slow stand establishment. This was followed by dry weather throughout the year, which resulted in the test being irrigated twice (July 11 and August 4). The test was harvested twice and lint yields ranged from 775 to 1053 lbs/acre. Maturity at

Delta, 1980

ranged from 81 to 91% (Table 1). The Tunica test was planted May 1 on a Dundee sandy loam and good stands were obtained. The test was harvested on October 22 and lint yields ranged from 494 to 661 lbs/acre (Table 2). Varieties at this location produced shorter plants, shorter fiber, and lower yields than at the other locations.

first harvest on September 16

The Sumner test on a Dubbs sandy loam was planted April 30.

The test was harvested twice, and earliness at first harvest on October 8 ranged from 80 to 93%. Lint yields ranged from 658 to 794 lbs/acre (Table 3). Yields at Sumner were about 40% lower than in 1979 as a result of inadequate moisture and reduced boll size. Average boll size in 1979 was 5.49 (83 bolls per pound) compared to 4.31 (105 bolls per pound) in 1980. High temperatures caused pollen sterility that resulted in flat-sided bolls with a reduced number of locks. The occurrence of flat-sided bolls ranged from 14 to 42%, which appeared to cause a delay in maturity but did not significantly affect variety performance. The percentage of flat-sided bolls was lowest for Deltapine 61 and highest for McNair 235, but lint yield of the two varieties was practically identical.

soil was planted April 23. The test was irrigated on July 11 and harvested on October 7. Lint yields ranged from 539 to 736 lbs/acre (Table 4). The occurrence of flatsided bolls ranged from 7 to 26%, compared to the range of 5 to 33% for the Stoneville test on sandy loam soil, and the difference apparently occurred because the Stoneville tests were irrigated and the Sumner test was not. McNair 235 had the highest percentage of flat-sided bolls at all locations.

Average yield of the 15 varieties that were tested in the four Delta environments in 1980 ranged from 626 to 781 lbs/acre, and maturity at first harvest ranged from 81 to 91% (Table 5). Lint yield and boll size were lower in 1980 than in 1979. Lint yield in 1979 ranged from 779 to 1002 lbs/acre, and it took 83 bolls for a pound of cotton in 1979, 101 The test at Stoneville on a mixed bolls for a pound of cotton in 1980.

Delta; two-year and three-year averages

Average lint yield of the 13 varieties grown in eight Delta environments over a two-year period (1979-80) ranged from 741 to

888 lbs/acre (Table 6). Earliness at first harvest ranged from 77 to 85%.

Average lint yield of the 11 varieties grown in 11 Delta en-

vironments over the three-year period (1978-80) ranged from 836 to 939 lbs/acre (Table 7). Maturity at first harvest ranged from 78 to 83%.

HILL AREA, 1980

The test site on a Grenada silt loam at Holly Springs was limed in the spring and 13-13-13 (600 lbs/acre rate) was applied in the bottom of a middle buster furrow before rebedding. The test was planted May 2 and no additional nitrogen was applied. Five insecticide applications were made from May 21 to August 22. Rainfall from May through August totaled about 12.8 inches.

The test was harvested twice, and maturity at first harvest on September 23 ranged from 74 to 83%. Lint yields ranged from 690 to 887 lbs/acre (Table 8).

The Verona test on a Catalpa clay loam was fertilized (60-34-68 lbs/acre) before planting on May 14. A sidedress application of 30-0-0/acre was made, and five insecticide applications were made for control of the boll weevil and the

boll worm. The test was harvested on October 16, and lint yields ranged from 457 to 617 lbs/acre (Table 9).

The test at Mississippi State on a Leeper clay loam was planted April 22 and harvested September 15. Lint yields ranged from 1029 to 1168 lbs/acre (Table 10).

Hill Area; one-year, two-year and three-year averages

Average lint yield of the 12 varieties grown in the three hill-area environments in 1980 ranged from 756 to 853 lbs/acre (Table 11). Yields of the nine varieties grown at the three locations for two years (1979-80) ranged from 668 to 792

lbs/acre, and the average yields of the eight varieties grown at the three locations for three years (1978-80) ranged from 733 to 783 lbs/acre. The three-year average yield of each variety was highest at Mississippi State, intermediate at Holly Springs and lowest at Verona.

Average lint yields and earliness of the varieties tested at Holly Springs for two, three and four years are presented in Table 12.

Table 1. Results of 1980 Cotton Variety Test on a Bosket very fine sandy loam soil at Stoneville, MS.

	LBS	LINT PE	R ACRE Percent			Boll			FIBER PROP	ERTIES		Plant
		First	first	Lint	Seed	size	Leng		Strength	Elonga-	Micro-	heigh
	Total	pick	pick	percent	index	grams	2.5%	50%	g/tex	tion	naire	(in.)
DES 422	1053	903	86	37.4	10.2	4.54	1.15	. 57	20.09	5.4	4.6	35.6
DES 56	1040	889	85	37.5	10.2	4.48	1.15	.59	21.72	5.3	4.7	36.9
DES 422-8	1003	872	87	37.5	9.8	4.67	1.13	.59	21.58	5.0	4.9	34.1
Deltapine 61	997	876	88	37.0	10.7	4.96	1.19	.63	20.87	6.3	5.2	40.6
McNair 235	992	830	84	36.7	10.5	4.61	1.13	.57	21.43	5.2	4.7	36.5
Stoneville 213	982	860	87	37.5	10.6	4.58	1.16	.59	19.60	5.8	5.1	37.9
Stoneville 825	967	878	91	36.2	10.5	4.68	1.14	.56	18.83	5.1	5.0	38.6
Deltapine 41	954	848	89	41.3	8.8	4.30	1.15	.59	19.39	5.4	4.7	34.8
Deltapine 26	914	788	86	39.7	9.9	4.36	1.15	.59	21.29	5.6	5.0	39.9
Stoneville 506	910	807	89	34.9	11.1	4.60	1.16	.59	21.36	5.5	5.1	34.9
Deltapine 55	907	784	86	38.1	9.7	4.76	1.18	.60	19.88	5.0	4.7	35.
Coker 304	844	721	85	36.4	11.0	4.77	1.18	.60	20.38	5.0	4.6	36.
Coker 3131	833	674	81	37.9	11.8	4.42	1.15	.59	20.66	6.0	4.8	38.
Coker 315	823	694	84	36.8	10.7	4.81	1.20	.61	21.79	5.2	4.8	39.
Coker 310	775	675	87	35.2	11.3	5.10	1.18	.58	21.15	5.0	4.6	39.
C.V.	8.0											•
LSD .05	85											

Planted: April 21, 1980

Harvested: September 16 and October 20, 1980

Irrigated: July 11 and August 4, 1980

Table 2. Results of 1980 Cotton Variety Test on a Dundee sandy loam soil at Tunica, MS.

				 _					
				Boll	-		FIBER PROP	ERTIES	
•	LBS LINT PER ACRE	Lint	Seed	size	Leng	th	Strength	Elonga-	Micro-
· · · · · · · · · · · · · · · · · · ·	Total	percent	index	grams	2.5%	50%	g/tex	tion	naire
v							4	•	
Stoneville 825	661	40.0	10.1	4.58	1.06	.51	18.75	5.0	5.4
Stoneville 213	625	39.5	10.1	4.85	1.07	•53	19.39	5.3	5.2
Deltapine 26	611	41.9	9.4	4.69	1.07	.54	20.17	5.3	5.6
DES 56	609	39.4	10.1	4.62	1.07	.53	19.67	5.4	5.2
Coker 3131	607	40.9	11.3	4.53	1.06	.54	20.24	6.2	5.0
DES 422	604	40.6	9.5	4.61	1,05	.53	18.32	5.3	4.9
Deltapine 61	583	38.7	10.4	5.08	1.08	.54	19.96	6.1	5.6
Coker 315	561	39.1	11.1	5.16	1.11	.56	20.45	5.9	5.0
Coker 304	559	38.2	11.3	5.40	1.11	.57	21.02	5.1	5.0
Deltapine 41	557	42.1	9.2	4.48	1.07	.54	19.39	5.0	5.1
Deltapine 55	551	41.3	9.2	4.74	1.07	.54	18.25	5.2	5.0
DES 422-8	549	39.7	9.7	4.44	1.05	•53.	19.74	5.1	5.4
Stoneville 506	547	38.4	10.4	4.26	1.07	.52	18.53	5.3	5.1
Coker 310	527	37.6	10.6	5.66	1.11	.55	19.74	5.1	4.9
McNair 235	494	39.3	9.9	4.72	1.07	.54	20.17	5.0	5.0
c.v.	13.8								
LSD .05	91			. •					

Planted: May 1, 1980

Harvested: October 22, 1980

Table 3. Results of 1980 Cotton Variety Test on a Dubbs sandy loam soil at Sumner, MS.

	LBS	LINT PE	R ACRE	_	,					•	
		,	Percent	:		Boll			FIBER PRO	PERTIES	
			· first	Lint	Seed	size	Leng		Strength	Elonga-	Micro-
	Total	pick	pick	percent	index	grams	2.5%	50%	g/tex '	tion	naire
Stoneville 213	794	703	89	37.2	10.8	4.38	1.14	58	21.17	6.5	5.2
Stoneville 825	789	725	92	37.9	10.5	3.97	1.12	.55	19.66	5.0	4.9
Coker 3131	784	636	81	37.7	12.0	4.27	1.15	.59	20.31	6.6	4.7
Deltapine 26	782	702	90	39.7	9.3	4.17	1.11	.56	21.75	6.2	5.1
DES 422	770	662	86	37.9	10.0	3.97	1.14	.60	19.30	5.7	4.6
DES 56	765	630	82	36.6	10.7	4.16	1.15	.60	21.53	6.2	4.9
Deltapine 61	764	705	92	36.4	10.4	4.67	1.16	.58	20.88	7.6	5.1
McNair 235	756	604	80	37.3	10.4	4.12	1.13	.61	21.38	5.4	5.0
DES 422-8	735	615	84	36.7	10.9	4.14	1.16	.62	21.17	5.7	4.9
Stoneville 506	722	669	93	35.2	11.1	4.20	1.16	.59	20.81	6.0	4.6
Deltapine 41	703	633	90	40.0	9.0	3.95	1.14	.58	21.03	5.2	4.6
Deltapine 55	693	633	<i>-</i> 91	38.0	9.8	4.08	1.15	.55	20.16	6.1	4.5
Coker 315	685	632	. 92	35.1	11.9	4.57	1.20	.61	22.18	5.6	4.3
Coker 304	667	605-	91	34.2	11.9	4.81	1.22	.62	22.47	6.0	4.3
Coker 310	658	599	91	34.3	12.2	4.95	1.19	.59	22.11	6.0	4.5
c.v.	8.3			•							
LSD .05	69										

Planted: April 30, 1980

Harvested: October 8 and 23, 1980

Table 4. Results of 1980 Cotton Variety Test on a mixed soil at Stoneville, MS.

				Bol1			FIBER PROP	ERTIES	
	LBS LINT PER ACRE	Lint	Seed	size	Leng	th	Strength	Elonga-	Micro-
	Total	percent	index.	grams	2.5%	50%	g/tex	tion	naire
				2.02	1 1/	ĖΔ	10 74	7.1	5.0 [′]
Deltapine 41	736	43.1	8.3	3.83	1.14	.59	19.74		5.0
Stoneville 506	719	36.9	10.1	4.12	1.13	.55	20.31	7.5	
Stoneville 825	709	38.7	10.0	3.90	1.09	.55	18.82	5.5	5.1
Deltapine 26	705	41.5	8.8	4.09	1.11	.58	21.30	6.3	5.2
Deltapine 61	.692	39.8	9.7	4.55	1.14	.60	21.37	8.1	5.2
DES 422	667	39.3	9.6	3.89	1.14	.58	20.24	6.4	4.9
DES 56	662	38.4	10.3	3.99	1.13	.58	22.30	7.4	5.0
Coker 315	639	39.3	9.7	4.43	1.16	.61	20.88	6.0	4.8
Stoneville 213	628	39.1	9.9	4.15	1.12	.59	19.67	7.6	5.2
Deltapine 55	628	40.3	9.3	4.03	1.12	.57	19.46	7.2	4.7
McNair 235	573	38.1	10.5	3.80	1.12	.58	22.72	6.5	4.9
DES 422-8	570	38.5	9.8	3.97	1.15	.61	20.95	6.5	5.0
	560	37.8	10.3	4.45	1.16	.60	21.87	6.7	4.7
Coker 304	544	37.0	10.5	4.60	1.18	.61	22.72	6.2	4.7
Coker 310	539	40.1	10.7	4.17	1.13	.60	21.37	6.9	4.7
Coker 3131	233	40*7	10.7	7141					
c.v.	13.8								
LSD .05	101								
	·								·

Planted: April 23, 1980 Harvested: October 7, 1980 Irrigated: July 11, 1980

Table 5. Average performance of 15 cotton varieties in four Delta environments $\frac{1}{2}$ in 1980.

	LBS LINT	PER ACRE Percent			Boll			FIBER PROPE	RTIES	
		first	Lint	Seed	size	Leng	gth	Strength	Elonga-	Micro-
	Total	pick	percent	index	grams	2.5%	50%	g/tex	tion	nair <u>e</u>
			20.2	10.2	4.28	1.10	. 54	19.01	5,1	5.1
Stoneville 825	781	91	38.2	10.3		1.10	.57	19.49	5.7	4.7
DES 422	773	86	38.8	9.8	4.24			21.30	6.1	4.9
DES 56	769	84	37.9	10.3	4.33	1.12	.57		7.0	5.3
Deltapine 61	759	90	38.0	10.3	4.81	1.14	.59	20.77		5.2
Stoneville 213	757	88	38.3	10.3	4.49	1.12	.57	19.96	6.3	
Deltapine 26	753	88	40.7	9.3	4.32	1.11	.57	21.13	5,8	5.2
Deltapine 41	737	89	41.6	8.8	4.14	1.12	.57	19.89	5.7	4.8
Stoneville 506	724	91	36.3	10.7	4.29	1.13	.56	20.25	6.1	4.9
DES 422-8	714	85	38.1	10.0	4.30	1.12	.59	20.86	5.6	5.0
McNair 235	704	82	37.8	10.3	4.31	1.11	.57	21.42	5.5	4.9
	695	88	39.4	9.5	4.40	1.13	.56	19.44	5.9	4.7
Deltapine 55	695 691	81	39.1	11.4	4.35	1.12	.58	20.64	6.4	4.8
Coker 3131		88 0.t	37.6	10.8	4.74	1.17	.60	21.32	5.7	4.7
Coker 315	677			11.1	4.86	1.17	.60	21.43	5.7	4.6
Coker 304	657	88	36.6			1.16	.58	21.43	5.6	4.7
Coker 310	626	89	36.0	11.1	5.08	1.10	٥٠.	21.77	5.0	
LSD .05	43					,				

1/ Four environments - Stoneville 2, Tunica 1, Summer 1.

Table 6. Performance of 13 cotton varieties grown in eight Delta environments $\frac{1}{2}$, 1979-80 average.

Ĺ.	BS LINT P	Percent			Boll			FIBER PROPI	ERTIES		Plant 2
	Total ·	first pick	Lint percent	Seed index	size grams	Leng 2.5%	50%	Strength g/tex	Elonga-	Micro- naire	height (in.)
DES 422	888	84	38.9	10.2	4.70	1.13	.57	19.18	7.2	4.5	39.9
Stoneville 825	873	81	38.0	10.8	4.77	1.12	.56	18.98	6.2	4.9	43.9
DES 56	864	82	37.9	10.6	4.80	1.13	.57	20.61	7.5	4.7	41.4
Deltapine 41	849	82	41.4	9.2	4.73	1.13	.57	19.76	7.0	4.6	40.4
Stoneville 506	837	85	36.9	11.0	4.82	1.13	57	19.48	7.5	4.6	39.2
Stoneville 213	804	80	37.8	10.7	5.00	1.13	.57	19.22	7.6	4.9	43.4
Deltapine 55	802	82	39.5	9.9	4.93	1.13	.56	18.81	7.2	4.5	42.0
McNair 235	799	80	37.9	10.7	4.87	1.12	.58	20.54	6.4	4.7	40.5
Deltapine 61	796	79	38.3	10.5	5.25	1.14	.58	20.02	8.4	4.9	46.4
Deltapine 26	791	77	40.3	9.8	4.74	1.12	.57	20.28	7.4	4.9	45.7
Coker 315	771	80	38.3	10.8	5.15	1.19	.60	20.76	6.5	4.6	45.0
Coker 304	754	81	37.4	11.1	5.30	1.18	.60	20.83	6.6	4.5	44.0
Coker 310	741	82	36.9	11.3	5.43	1.18	.59	20.81	6.7	.4.5	44.4
c.v.	6.9		1.80	3.30	3.00	1.20		2.90	•	2.82	
LSD .05	54		0.70	0.34	0.15	0.01		0.57		0.13	

^{1/} Eight environments - Stoneville 4, Tunica 2, Sumner 2.

Table 7. Performance of 11 cotton varieties grown in 11 Delta environments $\frac{1}{2}$, 1978-80 average.

•	LBS LINT	Per ACRE			Boll			FIBER PROP	ERTIES	
	Total	first pick	Lint percent	Seed index	size grams	Leng 2.5%	gth 50%	Strength g/tex	Elonga- tion	Micro- naire
DES 56	939	83	β7 . 9	10.7	4.87	1.14	.58	20.26	7.7	4.7
Stoneville 825	927	82	38.0	10.9	4.90	1.13	.56	18.83	6.3	4.9
Deltapine 41	923	. 83	41.3	9.3	4.83	1.14	.57	19.79	7.1	4.6
McNair 235	912	81	38.2	10.8	5.01	1.13	.58	20.20	6.5	4.7
Deltapine 26	896	78	40.5	10.0	4.85	1.12	.57	20.06	7.5	4.9
Stoneville 213	884	80	37.6	10.9	5.13	1.13	.57	19.06	7.7	4.9
Deltapine 61	878	79	38.2	10.5	5.34	1.15	.58	20.00	8.8	4.9
Deltapine 55	877	83	39.5	10.0	4.99	1.14	.56	18.77	7.4	4.5
Coker 315	856	80	38.4	10.9	5.21	1.19	.60	20.60	6.9	4.6
Coker 310	840	82	37.1	11.4	5.54	1.19	.59	20.65	6.8	4.5
Coker 304	836	81	37.4	11.2	5.38	1.18	.59	20.80	6.7	4.5

^{1/} Eleven environments - Stoneville 5, Tunica 3, Sumner 3.

^{2/} Plant height at Stoneville.

Table 8. Results of 1980 Cotton Variety Test on a Grenada silt loam soil at Holly Springs, MS.

	LBS	LINT PE	R ACRE	_							
			Percent			Boll			FIBER PRO	PERTIES	
		First	first	Lint	Seed	size	Leng	gth .	Strength	Elonga-	Micro-
	Total	pick	pick	percent	index	grams	2.5%	50%	g/tex	tion	naire
McNair 235	887	741	83	38.8	10.4	4.83	1.12	.54	21.87	5.5	5.1
Coker 315	774	639	82	39.3	11.0	4.91	1.14	.56	21.37	5.7	5.3
Deltapine 41	762	594	78	42.6	9.5	4.48	1.11	.53	20.59	6.0	5.7
Stoneville 825	762	623 .	82	38.9	10.5	4.85	1.09	.52	19.45	5.0	5.8
DES 422	748	610	82	39.8	10.0	4.99	1.11	.53	20.31	5.2	5.1
DES 56	747	618	83	39.0	10.5	4.38	1.14	.57	20.87	6.7	5.1
Stoneville 213	746	584	78	38.9	10.7	4.82	1.10	.54	20.38	7.2	5.6
Coker 310	724	568	78	38.6	11.2	5.04	1.12	.53	20.09	5.4	5:2
Coker 3131	708	527	74	41.2	11.8	4.48	1.11	.53	20.37	6.8	5.2
Stoneville 506	708	589	83	36.5	11.7	4.62	1.14	.55	20.66	6.3	5.3
Deltapine 61	699	535	76	38.4	10.9	4.64	1.10	.53	20.24	7.9	5.8
Deltapine 55	690	545	79	39.6	10.1	4.72	1.11	.53	20.37	6.2	5.3
c.v.	8.0										
LSD .05	69										

Planted:

May 2, 1980 September 23 and October 16, 1980 Harvested:

600 pounds 13-13-13 Fertilizer:

Table 9. Results of 1980 Cotton Variety Test on a Catalpa silty clay soil at Verona, MS.

				Boll			FIBER PROP	ERTIES	
	LBS LINT PER ACRE	Lint	Seed	size	Leng		Strength	Elonga-	Micro-
	Total	percent	index	grams	2.5%	50%	g/tex	tion	naire
Deltapine 41	617	42.8	8.5	4.24	1.10	.52	19.60	5.4	4.9
Deltapine 61	611	40.4	10.0	4.90	1.11	.55	20.45	7.2	5.6
DES 56	602	40.1	9.6	4.55	1.13	.53	19.03	6.5	4.9
Stoneville 825	594	40.5	10.1	4.26	1.09	.51	17.11	5.4	5.2
Stoneville 506	584	40.2	9.8	4.28	1.11	.50	17.96	6.3	4.6
DES 422	547	41.6	9.4	4.36	1.10	.52	17.46	5.9	4.7
Stoneville 213	509	39.8	9.9	4.90	1.11	54	19.24	6.6	5.4
Coker 3131	505	42.0	10.6	4.73	1.09	.51	19.03	7.1	4.7
McNair 235	504	39.9	9.9	4.49	1.10	.51	18.10	5.8	5.0
Coker 315	486	39.5	10.3	5.07	1.15	.55	20.52	5.7	4.6
Deltapine 55	462	42.7	9.0	4.40	1.08	-52	17.46	5.6	4.9
Coker 310	457	38.2	10.6	4.83	1.13	.54	20.44	6.1	4.8
c.v.	14.3								
LSD .05	97								

Planted: May 14, 1980 Harvested: October 16, 1980

Table 10. Results of 1980 Cotton Variety Test on Leeper silty clay loam soil at Mississippi State, MS.

			Boll			FIBER PROP	ERTIES	
	LBS LINT PER ACRE	Lint	size	Leng	gth	Strength	Elonga-	Micro
	Total	percent	grams	2.5%	50%	g/tex	tion	naire
Coker 310	1168	37.8	5.44	1.19	.57	23.64	6.7	5.1
McNair 235	1167	38.5	5.31	1.15	.56	22.64	7.1	5.4
Coker 3113	1157	40.5	5.96	1.12	.55	21.39	7.4	5.2
Coker 315	1154	39.4	5.11	1.15	.55	21.83	6.7	5.3
Deltapine 41	1138	40.2	4.92	1.13	.56	23.06	7.6	5.6
Deltapine 55	1117	39.2	5.40	1.16	.55	20.65	7.3	5.6
Stoneville 213	1107	36.6	5.78	1.16	.55	20.90	7.9	5.6
Stoneville 506	1101	36.4	5.33	1.19	. 58	22.71	8.4	5.3
Stoneville 825	1065	37.2	5.28	1.17	.55	21.76	6.3	5.6
DES 422	1047	37.6	5.12	1.16	.56	22.35	7.6	5.0
Deltapine 61	1033	36.4	5.67	1.15	.56	22.27	8.7	6.0
DES 56	1029	36.4	4.59	1.19	.58	21.53	7.9	5.2
c.v.	7.5					•		
LSD .05	96							

Planted: April 22, 1980 Harvested: September 15, 1980

Average lint yield of the varieties grown in three hill-area environments for one, two and three Table 11. years. DES Stv. DP DP DP Coker McNair DES Stv. Coker Stv. Coker 3-Yr. Ave. (1878-80) Verona 3-Yr. Ave. (1978-80) Holly Springs 3-Yr. Ave. (1978-80) Miss. State 1056 1081 3-Yr. Ave. (1978-80) 3 Locations 2-Yr. Ave. (1979-80) 3 Locations 1-Yr. Ave. (1980) 3 Locations

*Verona, Holly Springs, Mississippi State.

Table 12. Average lint yield and earliness of the varieties grown for two, three and four years at Holly Springs.

	2-YEAR AV	E. 1979-80	3-YEAR AV	E. 1978-80	4-YFAR AV	E. 1977-80
· .	Lint per acre	Percent first pick	Lint per acre	Percent first pick	Lint per acre	Percent first pick
				lbs		
DES 56	702	77	787	73	774	73
Coker 310	708	73	781	66	746	68
Deltapine 55	659	73	770	66	744	67
Stoneville 213	659	70	742	64	724	65
Deltapine 61	603	65	702	64	683	69
Stoneville 825	703	75	782	68		
Deltapine 41	708	72	773	65		
Coker 315	710	73	751	. 66		
McNair 235	815	80				

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In conformity with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, Dr. T. K. Martin, Vice President, 610 Allen Hall, P. O. Drawer J, Mississippi State, Mississippi 39762, office telephone number 325-3221, has been designated as the responsible employee to coordinate efforts to carry out responsibilities and make investigation of complaints relating to nondiscrimination.

Lithograph Central Duplicating Mississippi State University