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Mississippi Cotton Variety Tests in 1979

The Mississippi cotton variety testing program is a continuous evaluation of cotton varieties available from private companies and state agricultural experiment stations. The tests are conducted in the delta and hill areas of Mississippi to determine the relative performance of available varieties and to provide a guide to producers and other agricultural workers in selecting the best adapted varieties with the highest yield potential, earliness and fiber quality for their area. The 1979 trials 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 index and fiber properties were made from hand-picked samples. Fiber property evaluations were made in the USDA Cotton Fiber Laboratory at Knoxville, Tennessee and the MAFES Cotton Fiber Laboratory at Stoneville, Mississippi.

The same 17 varieties were evaluated in all delta tests, and two other varieties, Acala SJ-5 and Paymaster 303, were included in one Stoneville test and the Tunica test because they are part of a cooperative regional variety testing program. DES 422, HAS 7193, Deltapine 70, and Stoneville 506 were evaluated for the first time. Deltapine 41 previously was tested as Deltapine 7141.

Results

Delta, 1979

The Stoneville test on a Bosket very fine sandy loam soil was planted May 7. Excessive rain and cool temperatures after planting resulted in slow stand establishment. Excessive rain prevailed throughout the growing season and a major portion of the corp was set in August. The test was harvested twice and lint yields ranged from 217 to 1,252 lbs/acre (Table 1). Maturity at first harvest on October 8 ranged from 50 to 81%, and the earlier varieties generally produced the highest lint yields. This occurred because the crop matured later than usual, and the major portion of the crop was set in a short period of time.

The Sumner test was planted May 1 on a Dubbs sandy loam soil. This test was harvested twice, and earliness at first harvest on October 8 ranged from 64 to 78%. Lint yields ranged from 1,084 to 1,279 lbs/acre (Table 2). Varieties at this location were less vegetative than at Stoneville and Tunica. Yield at Sumner was not as closely associated with maturity as at the other locations.

Planting of the test at Tunica on a Dundee silt loam soil was delayed until May 16 because of excessive soil moisture and low temperatures. Good stands were obtained, but the crop matured very slowly and was harvested only once after a freeze on November 14. Lint yields ranged from 85 to 615 lbs/acre, with the earlier varieties generally producing the highest lint yields (Table 3). Many small immature bolls were destroyed by the freeze, particularly on the later-maturing varieties.

The test at Stoneville on a mixed soil was planted on April 18. Growing conditions were poor and a considerable amount of spot planting was done to secure good stands. This test was harvested twice, and earliness at first harvest on October 15 ranged from 81 to 87%. Lint yields ranged from 713 to 900 lbs/acre (Table 4). Maturity differences between varieties were less obvious than in other tests, but the earlier varieties tended to produce the highest lint yields.

Average yield of the 17 varieties that were tested in the four environments in 1979 ranged from 779 to 1,002 lbs/acre, and earliness at first harvest ranged from 71 to 82%. With one exception, the lowest lint yields were obtained from the latest-maturing varieties(Table 5).

Delta, Two-Year and Three-Year Averages

Average lint yields of the 13 varieties that have been grown in seven Delta environments over the two-year period (1978-79) ranged from 892 to 1,035 lbs/acre. Earliness at first harvest ranged from 73 to 83% (Table 6). Average lint yield of the ten varieties that have been tested in 11 Delta environments for three years (1977-1979) ranged from 946 to 1,048 lbs/acre, and maturity at first pick ranged from 76 to 84% (Table 7).

The test on a Leeper fine sandy loam at Mississippi State was planted on May 8. This test was harvested once on November 1, and lint yields ranged from 784 to 994 lbs/acre. (Table 8).

Planting on a Catalapa silty clay loam soil at Verona was delayed until May 17 due to unfavorable weather. This test was harvested once on November 5, and lint yields ranged from 287 to 457 lbs/acre (Table 9). This test received eight insecticide applications.

The test at Holly Srpings on a Grenada silt loam soil was planted on May 11. This test was harvested twice, and maturity at first harvest on October 24 ranged from 61 to 76%. Lint yields ranged from 486 to 744 lbs/acre (Table 10). A killing frost on October 14 reduced yields by damaging many unopened bolls. The test was sprayed once for thrips, once for fleahoppers and plant bugs and five times for worms. There appeared to be considerable plant bug and fleahopper damage but no worm or weevil damage.

Average lint yields of the 1 varieties grown in the three hil environments in 1979 ranged fron 555 to 732 lbs/acre (Table 11).

Holly Springs, Two-Year and Three-Year Averages

Average lint yield and earliness of the 11 varieties that have been grown for two years (1978-1979) and the seven varieties that have been grown for three years at Holly Springs (1977-1979) are presented in Table 12. Lint yields of the 11 varieties over the two-year period ranged from 724 to 819 lbs/acre, and maturity at first harvest ranged from 53 to 68%. Lint yields of th seven varieties over the three-yea period ranged from 700 to 78 lbs/acre, and maturity at firs harvest ranged from 60 to 70%.

Table 1. Results of the 1979 Cotton Variety Test on a Bosket very fine sandy loam soil at Stoneville, Miss.

	Lint Per Acre						Fiber Properties				
		First	Percent first	Lint	Seed	Boll size	Length		Strength	Elonga-	Micro-
	Total	pick	pick	percent	index	grams	2.5%	50%	g/tex	tion	naire
DES 422	1252	1006	80	39.4	10.0	5.17	1.13	.57	18.64	8.8	4.1
Deltapine 41	1240	926	75	42.0	9.7	5.53	1.15	.58	20.02	8.8	4.5
Stoneville 506	1215	979	81	38.4	11.0	5.41	1.11	.55	18.97	10.1	4.2
DES 56	1171	922	79	38.7	10.2	5.20	1.14	.59	19.93	8.5	4.3
Deltapine 55	1161	882	76	40.8	10.1	5.50	1.13	.54	18.41	8.7	4.2
Stoneville 825	1144	824	72	38.3	10.9	5.34	1.13	.56	19.12	8.1	4.6
DES 24	1066	809	76	38.0	11.4	5.49	1.16	.57	19.54	9.2	4.3
Coker 315	1065	726	68	40.2	10.4	5.55	1.18	.59	20.22	7.7	4.4
McNair 235	1063	823	77	39.3	10.5	5.41	1.12	.56	19.94	7.8	4.4
Deltapine 26	1054	711	67	41.7	9.7	5.27	1.10	.56	19.71	9.2	4.7
Coker 310	1036	775	75	39.6	11.2	5.49	1.17	.57	19.94	8.0	4.5
Deltapine 61	1030	662	64	39.8	10.4	5.74	1.13	.56	19.83	9.3	4.6
HAS 7193	1028	738	72	39.2	11.7	5.58	1.17	.60	21.00	9.3	4.4
Stoneville 213	1027	739	72	37.7	10.9	5.46	1.13	.58	18.15	9.3	4.5
Coker 304	1021	701	69	39.3	10.4	5.52	1.18	.60	19.95	7.2	4.3
Stoneville 256	1008	651	65	38.6	10.8	5.53	1.13	.57	19.44	7.9	4.8
Deltapine 70	1005	711	71	40.1	9.5	4.97	1.13	.57	20.09	8.4	4.4
Paymaster 303	728	485	67	37.0	11.9	5.81	1.08	.53	20.41	8.6	4.1
Acala SJ-5	217	108	50	37.1	11.6	5.31	1.13	.57	22.79	7.2	4.1
LSD .05	90										
C.V.	7.2										

Planted: May 7, 1979
Harvested: October 8 and November 5, 1979

Table 2. Results of the 1979 Cotton Variety Test on a Dubbs sandy loam soil at Sumner, Miss.

	Lint Per Acre					Boll	Fiber Properties				
		First	Percent first	Lint	Seed	size	Length		Strength	Elonga-	Micro-
	Total	pick	pick	percent	index	grams	2.5%	50%	g/tex	tion	naire
Deltapine 41	1279	908	71	41.0	9.5	5.37	1.15	.58	19.63	7.6	4.6
Coker 315	1268	909	72	39.4	10.8	5.80	1.23	.61	20.21	7.5	4.5
McNair 235	1261	940	74	38.5	11.3	5.35	1.15	.59	20.30	7.3	4.5
Coker 304	1255	959	76	38.4	11.6	5.84	1.19	.62	20.92	7.6	4.4
DES 422	1245	967	78	39.8	10.4	5.17	1.16	.59	19.25	8.7	4.4
DES 56	1236	960	78	38.5	10.7	5.25	1.15	.58	20.23	9.4	4.6
Stoneville 825	1234	843	68	38.5	11.8	5.28	1.14	.58	18.99	7.4	5.0
Deltapine 55	1219	891	73	40.5	10.3	5.47	1.15	.57	19.32	9.4	4.4
Coker 310	1200	876	73	37.2	11.8	6.02	1.22	.62	20.17	8.3	4.3
Deltapine 61	1197	827	69	39.6	10.4	5.70	1.17	.60	19.35	10.5	4.7
Stoneville 213	1153	795	69	38.3	11.2	5.46	1.15	.58	18.57	8.6	4.8
Stoneville 506	1153	837	73	37.7	11.5	5.40	1.15	.58	19.05	9.6	4.5
Deltapine 26	1150	734	64	39.4	10.6	5.23	1.14	.58	20.67	9.5	4.8
Deltapine 70	1134	803	71	39.1	9.6	4.92	1.16	.60	20.00	7.6	4.6
DES 24	1130	787	70	37.7	12.0	5.63	1.20	.61	20.50	8.4	4.6
HAS 7193	1100	793	72	38.5	12.1	5.87	1.22	.62	21.35	9.7	4.6
Stoneville 256	1084	722	67	38.0	11.6	5.48	1.15	.58	18.82	6.9	4.8
LSD .05	85										
C.V.	6.3										

Planted: May 1, 1979
Harvested: October 8 and October 30, 1979

Table 3. Results of the 1979 Cotton Variety Test on a Dundee sandy loam soil at Tunica, Miss.

	Lint/ Acre			Boll	Fiber Properties				
		Lint	Seed	size	Length		Strength	Elonga-	Micro-
	Total	percent	index	grams	2.5%	50%	g/tex	tion	naire
Stoneville 825	615	36.6	12.0	5.72	1.15	.58	18.66	7.2	4.6
DES 422	613	38.1	12.1	5.93	1.14	.55	17.82	8.4	4.2
DES 56	572	36.6	11.9	5.93	1.15	.58	19.41	9.1	4.1
HAS 7193	543	38.3	12.4	6.00	1.17	.58	20.44	10.2	4.3
Deltapine 41	540	40.7	10.3	5.72	1.15	.57	19.66	9.1	4.1
DES 24	539	37.4	12.6	6.21	1.19	.59	19.04	8.9	4.6
Stoneville 506	536	36.4	12.1	5.66	1.16	.59	18.24	8.2	3.9
McNair 235	453	36.5	12.0	5.93	1.16	.60	18.90	7.1	4.3
Deltapine 55	441	38.2	11.4	5.99	1.15	.56	17.08	8.3	4.1
Stoneville 213	417	36.3	11.8	6.03	1.13	.56	17.83	8.8	4.4
Deltapine 70	412	37.8	10.7	5.35	1.14	.58	19.17	8.3	4.4
Coker 310	403	37.1	12.1	6.40	1.20	.60	19.63	7.2	4.2
Coker 304	387	37.2	11.5	6.10	1.20	.60	19.89	7.8	4.1
Deltapine 26	340	37.9	11.1	5.51	1.13	.56	17.94	8.9	4.1
Coker 315	318	37.5	11.9	6.03	1.21	.62	19.30	7.6	4.1
Stoneville 256	312	35.5	11.6	5.91	1.14	.55	17.32	7.2	4.2
Deltapine 61	294	36.5	11.9	6.10	1.17	.59	19.10	9.2	4.3
Paymaster 303	234	35.5	12.8	6.66	1.10	.56	18.54	7.4	3.9
Acala SJ-5	85	35.9	12.6	6.33	1.16	.61	22.15	7.6	3.8
LSD .05	83								
C.V.	16.0								

Planted: May 16, 1979
Harvested: November 14, 1979

Table 4. Results of the 1979 Cotton Variety Test on a mixed soil at Stoneville, Miss.

	Lint Per Acre						Fiber Properties			
			Percent			Boll	Length				
	Total	First pick	first pick	Lint percent	Seed index	size grams	2.5%	50%	Strength g/tex	Elonga-tion	Micro-naire
DES 422	900	779	87	38.7	9.8	4.40	1.15	.57	19.74	8.7	4.3
Stoneville 506	896	781	87	37.3	10.5	4.91	1.12	.56	18.57	8.2	4.5
Stoneville 825	864	717	83	37.9	10.4	4.73	1.13	.56	18.98	6.1	4.9
DES 56	854	737	86	38.0	10.7	4.74	1.13	.55	20.12	8.9	4.6
DES 24	847	715	84	37.6	10.8	4.63	1.18	.60	20.32	7.5	4.6
Deltapine 55	820	700	85	39.2	9.9	4.90	1.12	.54	17.96	7.8	4.3
HAS 7193	815	674	83	37.4	11.2	5.35	1.14	.57	20.26	9.2	4.4
Deltapine 61	812	666	82	38.3	10.0	5.17	1.11	.54	18.82	9.9	4.8
Stoneville 213	804	667	83	37.1	10.6	5.07	1.14	.56	19.40	8.9	4.7
Coker 315	804	656	82	39.2	10.1	4.89	1.22	.62	21.04	6.8	4.6
McNair 235	798	672	84	37.9	10.5	5.03	1.11	.56	19.46	6.6	4.6
Deltapine 41	787	674	86	40.9	9.0	4.72	1.11	.55	19.23	7.8	4.5
Coker 310	782	652	83	37.1	10.8	5.25	1.22	.62	20.99	7.5	4.2
Deltapine 26	771	626	81	40.4	9.7	4.64	1.14	.59	19.38	8.1	4.7
Deltapine 70	755	623	82	38.5	9.0	4.28	1.14	.59	20.40	8.2	4.4
Coker 304	736	611	83	37.9	10.6	5.33	1.17	.57	20.18	7.3	4.5
Stoneville 256	713	584	82	37.9	10.6	5.06	1.12	.56	18.45	8.0	4.8
LSD .05	103										
C.V.	14.0										

Planted: April 18, 1979
Harvested: October 15 and November 6, 1979

Table 5. Average performance of 17 cotton varieties grown in four Delta environments[1] in 1979.

	Lint Per Acre					Fiber Properties				
		Percent			Boll	Length				
	Total	first pick	Lint percent	Seed index	size grams	2.5%	50%	Strength g/tex	Elonga-tion	Micro-naire
DES 422	1002	82	39.0	10.5	5.17	1.14	.57	18.86	8.6	4.3
Stoneville 825	964	74	37.8	11.3	5.27	1.14	.57	18.93	7.2	4.7
Deltapine 41	961	77	41.1	9.6	5.33	1.14	.57	19.63	8.3	4.4
DES 56	958	81	37.9	10.9	5.28	1.14	.57	19.92	9.0	4.4
Stoneville 506	950	80	37.4	11.3	5.34	1.13	.57	18.70	9.0	4.3
Deltapine 55	910	78	39.7	10.4	5.46	1.14	.55	18.19	8.5	4.3
DES 24	896	77	37.7	11.7	5.49	1.18	.59	19.85	8.5	4.5
McNair 235	894	78	38.0	11.1	5.43	1.13	.58	19.65	7.2	4.4
HAS 7193	817	76	38.3	11.8	5.70	1.17	.59	20.76	9.6	4.4
Coker 315	864	74	39.0	10.8	5.57	1.21	.61	20.19	7.4	4.4
Coker 310	855	77	37.7	11.5	5.79	1.20	.60	20.18	7.7	4.3
Stoneville 213	850	74	37.3	11.1	5.50	1.14	.57	18.49	8.9	4.6
Coker 304	850	76	38.2	11.0	5.75	1.18	.60	20.23	7.5	4.3
Deltapine 61	833	72	38.5	10.7	5.68	1.14	.57	19.27	9.7	4.6
Deltapine 26	829	71	39.8	10.3	5.16	1.13	.57	19.42	8.9	4.6
Deltapine 70	826	75	38.9	9.7	4.88	1.14	.58	19.91	8.1	4.4
Stoneville 256	779	71	37.5	11.1	5.49	1.13	.56	18.51	7.5	4.6
LSD .05	52									
C.V.	9.5									

[1]**Four environments - Stoneville 2, Tunica, and Sumner.**

Table 6. Performance of 13 cotton varieties grown in seven Delta environments[1], 1978-79 average.

	Lint Per Acre					Fiber Properties				
		Percent first	Lint	Seed	Boll Size	Length		Strength	Elonga-	Micro-
	Total	pick	percent	index	grams	2.5%	50%	g/tex	tion	naire
DES 56	1035	83	37.8	10.9	5.19	1.15	.58	19.66	8.6	4.5
McNair 235	1031	80	38.4	11.1	5.41	1.14	.58	19.49	7.1	4.6
Deltapine 41	1030	79	41.1	9.5	5.23	1.15	.57	19.74	8.0	4.5
Stoneville 825	1010	78	38.0	11.2	5.25	1.14	.57	18.73	6.9	4.8
Deltapine 55	992	80	39.5	10.4	5.32	1.15	.56	18.39	8.2	4.4
DES 24	979	79	37.6	11.8	5.53	1.18	.59	19.96	8.4	4.6
Deltapine 26	978	73	40.3	10.3	5.16	1.13	.57	19.46	8.5	4.7
Coker 310	962	78	37.7	11.5	5.81	1.20	.60	20.21	7.5	4.4
Coker 315	958	77	38.9	10.9	5.48	1.21	.60	20.18	7.6	4.5
Stoneville 213	957	76	37.2	11.2	5.21	1.14	.57	18.55	8.5	4.8
Deltapine 61	946	74	38.3	10.7	5.64	1.15	.58	19.56	9.7	4.7
Coker 304	938	78	37.9	11.2	5.58	1.19	.59	20.43	7.2	4.4
Stoneville 256	892	74	37.8	11.0	5.43	1.14	.56	18.37	7.0	4.7

[1]Seven environments - Stoneville 3, Sumner 2, Tunica 2.

Table 7. Performance of 10 cotton varieties grown in 11 Delta environments[1], 1977-79 average.

	Lint Per Acre					Fiber Properties				
		Percent first	Lint	Seed	Boll size	Length		Strength	Elonga-	Micro-
	Total	pick	percent	index	grams	2.5%	50%	g/tex	tion	naire
DES 56	1048	84	37.5	11.0	5.03	1.15	.57	19.16	8.1	4.5
Stoneville 825	1038	80	37.8	11.3	5.14	1.14	.56	18.51	6.7	4.8
Deltapine 26	1010	76	40.2	10.4	5.07	1.13	.56	19.50	7.9	4.8
DES 24	1009	81	37.4	11.8	5.45	1.18	.58	20.14	8.2	4.6
Deltapine 55	1005	82	39.4	10.2	5.17	1.15	.55	18.47	7.9	4.4
Coker 310	999	80	37.4	11.6	5.75	1.20	.59	19.94	7.2	4.4
Stoneville 213	979	79	37.1	11.2	5.20	1.14	.56	18.46	8.2	4.7
Deltapine 61	975	77	38.2	10.7	5.53	1.15	.57	19.63	9.4	4.7
Coker 304	956	80	37.7	11.4	5.51	1.19	.59	20.16	7.0	4.4
Stoneville 256	946	76	37.7	11.2	5.33	1.14	.55	18.36	6.7	4.7

[1]Eleven environments - Stoneville 5, Sumner 3, Tunica 3.

Table 8. Results of the 1979 Cotton Variety Test on a Leeper fine sandy loam soil at Mississippi State Miss.

	Lint/ Acre		Boll size	Fiber Properties				
				Length		Strength	Elonga-	Micro-
	Total	Lint percent	grams	2.5%	50%	g/tex	tion	naire
McNair 235	994	41.8	5.0	1.11	.56	22.84	6.6	4.6
Deltapine 26	992	44.5	5.0	1.09	.55	21.75	7.1	4.9
Stoneville 825	975	41.4	4.7	1.11	.54	21.31	6.7	4.6
DES 56	944	41.0	4.6	1.14	.57	22.55	7.6	4.7
DES 24	933	40.4	5.2	1.15	.56	23.20	8.1	4.6
Coker 315	916	41.1	5.4	1.17	.58	22.62	7.1	4.7
Stoneville 256	894	41.0	5.1	1.12	.56	21.31	7.0	4.9
Deltapine 55	872	42.6	4.9	1.14	.57	21.89	7.5	4.6
Deltapine 41	869	44.0	4.9	1.13	.55	21.82	7.7	4.5
Deltapine 61	865	41.6	5.2	1.12	.57	21.31	9.5	4.8
HAS 7193	847	41.6	5.2	1.15	.56	22.98	8.7	4.4
Stoneville 213	842	40.2	4.9	1.10	.54	20.15	7.8	4.7
Coker 304	836	41.4	5.2	1.18	.58	22.84	7.0	4.2
Coker 310	784	40.6	5.6	1.15	.55	22.84	6.5	4.6
LSD .05	112							

Planted: May 8, 1979
Harvested: November 1, 1979

Table 9. Results of the 1979 Cotton Variety Test on a Catalpa silty clay loam soil at Verona, Miss.

	Lint/ Acre			Boll size	Fiber Properties				
					Length		Strength	Elonga-	Micro-
	Total	Lint percent	Seed index	grams	2.5%	50%	g/tex	tion	naire
McNair 235	457	41.3	10.6	5.94	1.14	.58	23.42	7.2	4.9
DES 24	405	41.1	10.9	5.71	1.18	.60	22.84	8.1	4.8
DES 56	389	40.6	10.5	5.76	1.14	.57	22.11	7.7	4.7
Coker 304	383	41.3	10.7	6.21	1.19	.61	24.36	6.4	4.7
Coker 310	354	40.0	10.3	6.34	1.19	.58	23.35	6.8	4.6
Stoneville 213	353	40.0	10.6	5.90	1.12	.57	20.08	8.1	5.1
Deltapine 26	345	41.8	10.4	5.73	1.13	.57	21.16	7.7	4.8
Deltapine 55	332	42.0	10.4	5.71	1.13	.55	21.75	7.8	4.6
Deltapine 41	315	44.4	8.9	4.98	1.15	.58	22.18	7.7	4.4
Stoneville 825	312	40.4	11.3	5.70	1.15	.57	21.97	6.2	5.2
Stoneville 256	300	41.0	10.8	6.35	1.14	.57	21.10	6.3	5.3
Deltapine 61	294	39.7	11.4	6.48	1.18	.60	21.82	7.8	5.0
HAS 7193	288	39.9	12.2	6.34	1.19	.60	23.27	8.9	5.1
Coker 315	287	40.8	10.4	6.32	1.22	.61	23.79	6.7	4.7
LSD .05	59								
C.V.	13.4								

Planted: May 17, 1979
Harvested: November 5, 1979

Table 10. Results of the 1979 Cotton Variety Test on a Grenada silt loam soil at Holly Springs, Miss.

	Lint Per Acre						Fiber Properties				
			Percent			Boll	Length		Strength	Elonga-	Micro-
	Total	First pick	first pick	Lint percent	Seed index	size grams	2.5%	50%	g/tex	tion	naire
McNair 235	744	568	76	39.4	10.8	5.98	1.12	.61	20.24	8.0	4.3
HAS 7193	699	488	70	39.6	11.5	6.68	1.15	.60	20.69	9.6	4.5
Coker 310	692	479	69	39.9	10.2	6.36	1.17	.61	20.37	7.7	4.3
Coker 304	689	465	67	39.6	10.4	6.08	1.15	.61	19.92	8.3	4.3
DES 24	686	449	65	38.7	11.3	6.19	1.14	.58	20.21	9.2	4.5
DES 56	657	464	71	38.1	10.9	5.80	1.13	.58	18.90	9.7	4.2
Deltapine 41	655	442	67	43.2	10.7	6.21	1.11	.57	19.62	9.3	4.5
Coker 315	647	418	65	41.3	11.2	6.60	1.15	.60	20.56	8.2	4.4
Stoneville 825	645	442	68	37.5	11.0	5.91	1.10	.57	18.73	8.2	4.5
Deltapine 55	628	423	67	40.8	10.5	6.55	1.13	.57	18.15	9.4	4.4
Stoneville 213	572	356	62	36.6	10.9	6.58	1.11	.57	18.08	9.3	4.5
Stoneville 256	563	387	69	38.5	11.0	6.50	1.10	.57	18.60	7.8	4.6
Deltapine 61	507	319	63	38.4	11.8	6.72	1.13	.61	18.82	10.8	4.7
Deltapine 26	486	297	61	40.4	10.9	6.14	1.11	.57	19.10	9.6	4.5
LSD .05	74										
C.V.	15.0										

Planted: May 11, 1979
Harvested: October 24 and November 5, 1979

Table 11. Average performance of 14 cotton varieties grown in three Hill environments[1] in 1979.

	Lint/ Acre			Boll	Fiber Properties				
					Length		Strength	Elonga-	Micro-
	Total	Lint percent	Seed index	size grams	2.5%	50%	g/tex	tion	naire
McNair 235	732	40.8	10.7	5.64	1.13	.58	22.16	7.3	4.6
DES 24	675	40.1	11.1	5.70	1.16	.58	22.08	8.5	4.6
DES 56	663	39.9	10.7	5.38	1.14	.57	21.18	8.4	4.5
Stoneville 825	644	39.8	11.1	5.40	1.12	.56	20.67	7.0	4.8
Coker 304	636	40.8	10.5	5.83	1.17	.60	22.37	7.2	4.4
Coker 315	617	41.0	10.8	6.11	1.18	.60	22.32	7.3	4.6
Deltapine 41	613	43.8	9.8	5.36	1.13	.57	21.20	8.2	4.5
HAS 7193	611	40.4	11.8	6.07	1.16	.59	22.31	9.1	4.7
Deltapine 55	611	41.8	10.4	5.72	1.13	.56	20.59	8.2	4.5
Coker 310	610	40.2	10.3	6.10	1.17	.58	22.18	7.0	4.5
Deltapine 26	608	42.2	10.6	5.62	1.11	.56	20.67	8.1	4.7
Stoneville 213	589	38.9	10.7	5.79	1.11	.56	19.44	8.4	4.8
Stoneville 256	586	40.1	10.9	5.98	1.12	.57	20.34	7.0	4.9
Deltapine 61	555	39.9	11.6	6.13	1.14	.59	20.65	9.4	4.8

[1]Three environments - Holly Springs, Mississippi State, Verona.

Table 12. Average lint yield and earliness of 11 cotton varieties at Holly Springs, Miss., 1977-79.

	1977		1978		1979		2-yr ave 1978-79		3-yr ave 1977-79	
	Lint per acre	Percent first pick	Lint per acre	Percent first pick	Lint per acre	Percent first pick	Lint per acre	Percent first pick	Lint per acre	Percent first pick
DES 56	732	75	958	64	657	71	807	68	782	70
Coker 304	664	73	948	54	689	67	819	61	767	65
Deltapine 55	667	67	991	53	628	67	810	60	762	62
DES 24	680	69	901	57	686	65	794	61	756	64
Coker 310	640	74	927	51	692	69	810	60	753	65
Stoneville 213	668	69	909	52	572	62	741	57	716	61
Stoneville 256	652	63	884	49	563	69	724	59	700	60
Stoneville 825	---	---	939	55	645	68	792	62	---	---
Deltapine 41	---	---	902	50	655	67	779	59	---	---
Coker 315	---	---	832	52	647	65	740	59	---	---
Deltapine 26	---	---	962	44	486	61	724	53	---	---

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