

Missouri Crop Performance

1980



Cotton

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TABLE OF CONTENTS

COMPARING VARIETIES-----	3
EXPERIMENTAL PROCEDURES-----	3
Entries-----	4
Field Plot Design-----	4
Plot Management-----	4
Data Recorded-----	4
Micronaire-----	4
Length-----	5
Strength-----	5
Elongation-----	5
RESULTS-----	6
Clarkton (Table 1-2)-----	8
Portageville (Table 3-4)-----	10
Senath (Table 5-6)-----	12
Summary (Table 7-8)-----	14
Cotton Seed Company Addresses-----	16

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MISSOURI CROP PERFORMANCE

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This report is a contribution of the Department of Agronomy, University of Missouri Agricultural Experiment Station, which reports on Research Project 363. The work was supported in part by funds from the Missouri Seed Improvement Association and fees from the companies submitting varieties for evaluation.

Cotton variety tests became part of the University of Missouri's crop performance testing program in 1978. These tests are conducted to provide a reliable, unbiased, up-to-date source of information which will permit valid comparisons among the varieties evaluated.

COMPARING VARIETIES

In each trial, the "top yielding varieties" have been identified. These varieties are those which did not yield significantly less than the highest yielding variety in the test. They are denoted in the tables by an asterisk (*) next to their yields. Thus, by going down a column, the highest yielding varieties in a trial can be readily identified. By going across, the relative performance of a variety during several years or at several locations can be evaluated. From the standpoint of yield, the most desirable varieties will be those which are among the "top yielding" varieties (that is, have an asterisk) the greatest number of times.

Although yield usually receives first consideration, other agronomic characteristics may be equally important when selecting a cotton variety. For southeastern Missouri, maturity, seedling vigor, and reaction to diseases are among the additional characteristics which deserve careful consideration. Late maturing varieties can be injured by early fall frost, particularly when planting is delayed. High seed viability and good seedling vigor help insure uniform and adequate stands under occasionally adverse conditions. Several prevalent diseases can markedly reduce final yield of susceptible varieties. Thus, all the information presented in this report should be considered when selecting a variety.

The Missouri Agricultural Experiment Station does not make specific recommendations for varieties. It is suggested that the farmers growing a new variety for the first time consider the information contained in this report and then grow a small acreage to determine adaptability. This should be the practice for all new varieties regardless of origin.

EXPERIMENTAL PROCEDURES

Three locations were selected to represent the soil diversity in the cotton growing area of southeastern Missouri. These locations were the University of Missouri's Rhodes Farm near Clarkton (sandy soil), the Delta Research Center near Portageville (clay soil), and the David Andrews farm near Senath (loam soil). The Clarkton test was on a site infested with fusarium wilt and root knot nematode. Locations of the sites are shown on Figure 1.

Entries

All producers of cotton seed were eligible to enter varieties in the 1980 evaluation plots. Participation was voluntary and no control was exercised by the program over which or how many varieties were entered. However, to help finance the evaluation program, a fee of forty dollars per location was charged for each entry entered by the seed producer. A total of 16 cotton varieties were compared in 1980.

Field Plot Design

Individual entries were planted in four-row plots with four replications. Arrangement of plots within the field followed a lattice design. Each plot had a row length of 38 feet and a between-row spacing of 38 inches. The two center rows were used for all yield and quality information.

Plot Management

The tests were planted and harvested with commercial equipment. On University properties, rate of fertilizer application was equal to, or above, that recommended by the University of Missouri's Soil Testing Laboratory. On farmer fields, fertilizer application was at the discretion of the farm operator. Treflan and Cotoran were used for weed control at all locations. Additionally, at all sites hand weeding was done as required. Planting rate was 6 seeds per foot of row on all soil types. Dates of planting and harvest are given in the heading of individual tables.

Data Recorded

Seedling vigor notes were taken soon after emergence to give a relative indication of survival capabilities of the young plants. Seedling vigor was rated on a scale of 1 to 5 with 1 indicative of high vigor and 5 indicative of low vigor. The total number of plants in the center two rows of each plot were counted and converted to number of plants per acre. At maturity, height, lodging, and yield were measured. Height was taken as the average distance in inches from the soil surface to the top of the plant. Lodging, which gives the degree of erectness, was scored on a scale of 1 to 5 with 1 indicating that all plants were erect (no lodging) and 5 indicating that 80 percent, or more, of the plants were lodged. Yield was measured in total pounds of lint per acre. This value was calculated by multiplying the gin percentage (lint percentage) by the total seed cotton yield. Fiber quality characteristics were determined for each variety utilizing lint cotton samples from two replications at test location. These characteristics and their importance are described below. Their values were determined by Starlab, Inc., Knoxville, Tennessee.

- A. Micronaire: The micronaire test provides a combined measure of maturity and fineness of cotton fibers. Fiber maturity is a relative measure of the cell-wall development throughout the entire length of the cotton fiber. Immature fibers result in decreased rates of processing, dyeing problems, and the production of yarns and fabrics with low appearance grade. Fineness is a relative measure of either the diameter of individual cotton fibers or the weight per unit length. Fine cottons produce stronger yarns but require a reduced rate of processing.

In the test, air is passed through a compressed sample of cotton fiber. The rate of flow through

the sample follows a relationship between diameter or thickness of the textile fibers and the air resistance they provide. Finer fibers result in greater resistance and, therefore, a lesser air flow. Value recorded can be interpreted as follows:

4.9 and above = coarse fibers
 3.5 to 4.8 = premium range
 3.4 and below = fine and often immature

- B. Length: Long-fibered cottons are desirable because fiber length relates positively to yarn strength, spinning of finer yarns, and high speed processing. The 2.5 percent span length measures the length in inches spanned by 2.5 percent of the fibers. The 50 percent span length is another measurement of fiber quality. This measures the length in inches spanned by 50 percent of the fiber.
- C. Elongation: Cottons having high fiber elongation values have less end breakage during the weaving process than those with low values. The elongation figure is expressed in percent elongation at the breaking point. The following designations will aid in the interpretation of the elongation values.

Descriptive Designation	Fiber Elongation
	--Percent--
Very low	5.3 and below
Low	5.4 - 6.2
Average	6.3 - 7.1
High	7.2 - 8.0
Very high	8.1 and above

- D. Strength: Yarn strength and ease of manufacturing are correlated positively with strong-fibered cottons. The following chart categorizes strength readings and aids in the interpretation of strength values.

Strength Rating	1/8-inch Gauge
	--grams/tex--
Very high	Above 24.9
High	23.0 - 24.9
Average	21.0 - 22.9
Low	19.0 - 20.9
Very low	Below 19.0

RESULTS

Sixteen cotton varieties were evaluated at 3 locations in southeastern Missouri during 1980. The trial locations were selected to represent the soil diversity in the cotton growing area of the state. Due to the hot, dry conditions during the season, yields averaged only 560 pounds per acre and varied little from location-to-location. However, only at Senath was the yield less than in the previous year. At the other locations, 1979 test yields were low due to late establishment (replanting) and generally dry conditions which retarded early growth. Conditions during 1980 and cotton performance at each location are briefly described below.

Clarkton: The trial at this location was grown on a sandy soil with a high degree of fusarium wilt and root-knot nematode. Irrigation was used due to the extreme lack of moisture. Total lint yield ranged from 560 to 767 pounds per acre with an average of 653 (Table 1). Significant differences among varieties were observed for lodging, vigor and lint percentage, but these tended to be smaller than at the other locations.

Delta Center, Portageville: This trial was grown on a sharkey clay soil, representative of the large majority of clay soil in southeast Missouri. It replaced the test previously grown near Frailey and was not irrigated during the year. Stands were, on the average, similar to those at the other two locations, but crop development was less as indicated by an average plant height of only 22 inches. Total lint yield ranged from 261 to 561 pounds per acre with an average of 475 (Table 3).

Senath: The soil at this location is a deep loam soil. The availability of water was very low at this site in 1980. Extreme heat caused some sterilization. This trial was not irrigated. Total lint yield averaged 552 pounds per acre (53% of the 1979 yield level) with a range of from 385 to 682 pounds per acre (Table 5).

Average performance of 16 varieties over all tests is given in Table 7. There was a tendency for those varieties which did well in past years to do poorly this season. The stress conditions experienced may have prevented those varieties with the highest yield potential to express their yielding ability. Further, poor weather conditions of the season prevented satisfactory separation of the varieties tested on the basis of yield. Even though experimental conditions were quite uniform, differences between varieties were much smaller than would normally be expected.

Several quality characteristics were affected by the growing conditions of 1980. Lint percentage and fiber elongation were reduced as compared to previous years and micronaire was increased. Average staple length and fiber strength were similar to those recorded in 1979. Data on fiber characteristics are summarized in Tables 2 (Clarkton), 4 (Delta Research Center), and 6 (Senath).



FIG. 1, TEST SITE LOCATIONS

TABLE 1. YIELD PERFORMANCE OF COTTON VARIETIES GROWN NEAR CLARKTON, MISSOURI
 IN 1978-80.
 PLANTED: 7 MAY 1980. HARVESTED: 23 OCTOBER AND 10 NOVEMBER 1980.

BRAND/VARIETY	STAND (PL/A)	LOD- GING (1-5)	VIGOR (1-5)	HGT. (IN)	LINT (%)	TOTAL LINT (LBS/ACRE)		
						1980	1979	1978
MO73-1203	40701	2.5	1.3	33	35.0	767**	--	--
DELTAPINE 41	37894	1.5	1.5	34	40.0	725*	--	--
DELCOT 311	34860	1.8	2.0	35	35.0	723*	--	--
DELTAPINE 55	40142	2.0	1.0	32	37.0	717*	327	607
QUAL. SEED 137	37033	1.5	1.8	35	35.5	704*	--	--
MO63-2771B	39886	2.5	1.3	35	37.0	690*	380*	--
COKER 310	39705	1.5	2.0	38	35.0	658*	415*	689
COKER 3113	39025	2.0	2.0	33	36.5	655*	--	--
COKER 304	39478	1.5	1.0	35	32.0	639*	384*	686
BRYCO BRYCOT 155	38890	2.0	1.3	36	35.5	633*	--	--
MO75-711	37350	1.8	1.5	33	35.0	632*	--	--
MO71-1125	36898	2.3	1.5	35	35.5	614*	--	--
STONEVILLE 213	38663	1.3	2.0	36	35.5	605	288	552
COKER 315	37894	1.3	2.3	36	36.0	576	338	--
BRYCO VAIL 7	36852	1.3	1.8	36	35.5	571	275	562
DELTAPINE 61	38709	1.5	2.3	34	34.0	560	348	705*
MEAN	38397	1.8	1.6	35	35.6	653	350	636
LSD.05	NS	0.7	0.7	NS	2.9	161	64	111
C.V. %	7.4	29.0	33.2	7.8	3.5	17.3	13.1	15.1

-- DATA NOT AVAILABLE.

** HIGHEST YIELDING VARIETY IN THE TEST.

* VARIETY WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING VARIETY IN THE TEST.

NS OBSERVED DIFFERENCES FOR A GIVEN CHARACTERISTIC ARE NOT SIGNIFICANT AT THE 5% LEVEL.

TABLE 2. FIBER CHARACTERISTICS OF COTTON VARIETIES GROWN NEAR CLARKTON,
MISSOURI IN 1980.
PLANTED: 7 MAY 1980. HARVESTED: 23 OCTOBER AND 10 NOVEMBER 1980.

BRAND/VARIETY	MICRO- NAIRE	STAPLE LENGTH		ELONGATION	STRENGTH
		(50%)	(2.5%)	(%)	(G/TEX)
BRYCO BRYCOT 155	5.05	0.56	1.17	7.88	22.8
BRYCO VAIL 7	4.65	0.53	1.15	5.13	20.1
COKER 304	4.40	0.55	1.21	5.75	22.2
COKER 310	4.00	0.54	1.16	5.75	23.2
COKER 315	4.30	0.53	1.18	6.25	23.0
COKER 3113	3.60	0.53	1.12	7.50	21.9
DELCOT 311	3.85	0.53	1.14	7.38	25.3
DELTAPINE 41	4.70	0.53	1.15	6.38	22.7
DELTAPINE 55	4.15	0.53	1.16	6.88	22.0
DELTAPINE 61	4.60	0.54	1.17	7.38	22.7
MO63-2771B	3.85	0.56	1.18	6.38	23.4
MO71-1125	4.10	0.55	1.14	7.00	23.8
MO73-1203	3.85	0.57	1.22	6.50	23.6
MO75-711	4.40	0.55	1.16	7.13	24.4
QUAL. SEED QS-137	4.25	0.56	1.18	6.88	21.3
STONEVILLE 213	4.95	0.54	1.16	6.25	21.0
MEAN	4.29	0.55	1.17	6.68	22.7
LSD.05	0.37	NS	0.02	0.58	1.7
C.V. %	5.76	2.26	1.07	5.78	4.9

NS OBSERVED DIFFERENCES FOR A GIVEN CHARACTERISTIC ARE NOT SIGNIFICANT AT THE 5% LEVEL.

TABLE 3. YIELD PERFORMANCE OF COTTON VARIETIES GROWN ON THE DELTA RESEARCH CENTER NEAR PORTAGEVILLE IN 1980 AND NEAR FRAILEY IN 1978-79. PLANTED: 6 MAY 1980. HARVESTED: 6 NOVEMBER 1980.

BRAND/VARIETY	STAND (PL/A)	LOD- GING (1-5)	VIGOR (1-5)	HGT. (IN)	LINT (%)	TOTAL LINT (LBS/ACRE)		
						1980	1979	1978
COKER 3113	44232	1.5	1.0	21	41.5	561**	--	--
COKER 310	33140	1.0	1.3	24	38.0	548**	328	624
DELCOT 311	32370	1.0	1.8	27	37.0	525*	--	--
COKER 304	42376	1.3	1.0	22	36.8	521*	493*	739*
MO75-711	45590	1.0	1.3	25	39.0	507*	--	--
STONEVILLE 213	41244	1.0	1.0	21	38.5	503*	196	765*
DELTAPINE 61	40067	1.0	1.0	22	38.5	492*	226	478
DELTAPINE 41	38980	1.0	1.3	21	41.5	485*	--	--
DELTAPINE 55	36943	1.3	1.3	20	38.5	482**	252	656
COKER 315	39750	1.0	1.5	21	39.0	476*	352	--
QUAL. SEED QS-137	37260	1.3	1.5	21	38.5	476*	--	--
BRYCO VAIL 7	39071	1.0	1.3	21	38.0	471*	--	--
MO63-2771B	38346	1.0	1.3	21	38.0	440	--	--
BRYCO BRYCOT 155	36128	1.0	1.0	21	37.5	438	--	--
MO71-1125	39659	1.0	1.0	23	38.0	417	--	--
MO73-1203	37169	1.3	1.0	21	35.0	261	--	--
MEAN	38895	1.1	1.2	22	38.3	475	320	695
LSD.05	5821	NS	NS	1.3	NS	99	64	238
C.V. %	10.5	26.7	12.0	2.3	32.8	14.5	14.3	24.2

-- DATA NOT AVAILABLE.

** HIGHEST YIELDING VARIETY IN THE TEST.

* VARIETY WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING VARIETY IN THE TEST.

NS OBSERVED DIFFERENCES FOR A GIVEN CHARACTERISTIC ARE NOT SIGNIFICANT AT THE 5% LEVEL.

TABLE 4. FIBER CHARACTERISTICS OF COTTON VARIETIES GROWN ON THE DELTA RESEARCH CENTER NEAR PORTAGEVILLE, MISSOURI IN 1980. PLANTED: 6 MAY 1980. HARVESTED: 6 NOVEMBER 1980.

BRAND/VARIETY	MICRO- NAIRE	STAPLE LENGTH		ELONGATION	STRENGTH
		(50%)	(2.5%)	(%)	(G/TEX)
BRYCO BRYCOT 155	5.50	0.56	1.15	8.00	22.4
BRYCO VAIL 7	5.20	0.53	1.14	5.50	19.1
COKER 304	4.70	0.55	1.19	5.88	23.2
COKER 310	4.75	0.53	1.17	5.75	22.3
COKER 315	4.90	0.54	1.18	5.38	23.0
COKER 3113	5.05	0.57	1.16	6.50	22.2
DELCOT 311	4.85	0.54	1.12	7.75	23.8
DELTAPINE 41	5.30	0.53	1.13	6.25	21.8
DELTAPINE 55	4.90	0.53	1.15	6.38	19.9
DELTAPINE 61	5.20	0.54	1.17	7.75	22.0
MO63-2771B	4.65	0.55	1.15	6.88	22.7
MO71-1125	4.95	0.54	1.14	6.13	22.3
MO73-1203	4.70	0.59	1.20	6.63	24.8
MO75-711	4.95	0.54	1.15	6.75	23.4
QUAL. SEED QS-137	4.90	0.54	1.14	6.88	19.4
STONEVILLE 213	5.35	0.52	1.11	6.75	21.0
MEAN	4.99	0.54	1.15	6.57	22.1
LSD.05	0.24	NS	0.03	0.66	1.7
C.V. %	3.22	3.21	1.59	6.75	5.1

NS OBSERVED DIFFERENCES FOR A GIVEN CHARACTERISTIC ARE NOT SIGNIFICANT AT THE 5% LEVEL.

TABLE 5. YIELD PERFORMANCE OF COTTON VARIETIES GROWN NEAR SENATH, MISSOURI
 IN 1979-80.
 PLANTED: 7 MAY 1980. HARVESTED: 6 OCTOBER 1980.

BRAND/VARIETY	STAND (PL/A)	LOD- GING (1-5)	VIGOR (1-5)	HGT. (IN)	LINT (%)	TOTAL LINT (LBS/ACRE)		
						1980	1979	1978
BRYCO VAIL 7	41017	1.3	1.3	33	41.0	682**	828	--
DELTAPINE 41	40021	1.0	1.3	31	41.5	678*	--	--
COKER 310	38844	1.8	1.5	34	34.5	633*	1067	--
COKER 315	35675	1.0	2.0	33	36.5	617*	1151*	--
DELTAPINE 55	40338	1.5	1.0	32	36.0	596*	1030	--
STONEVILLE 213	41606	1.3	1.3	33	36.5	588*	1079	--
DELTAPINE 61	42013	1.8	1.5	32	36.0	579*	1032	--
COKER 304	40157	1.0	1.0	33	34.0	573*	1099	--
DELCOT 311	36898	1.5	1.3	37	35.0	548*	--	--
QUAL. SEED 137	43734	1.3	1.3	32	33.0	535	--	--
BRYCO BRYCOT 155	39614	2.0	1.3	30	35.5	523	--	--
MO63-2771B	37486	2.3	1.8	33	36.0	517	1217*	--
COKER 3113	42330	1.0	1.5	32	39.0	512	--	--
MO73-1203	40746	2.5	1.3	32	35.0	459	--	--
MO71-1125	40972	1.3	1.3	35	35.5	402	--	--
MO75-711	40836	1.0	1.0	32	33.5	385	--	--
MEAN	40143	1.5	1.3	33	36.2	552	1035	--
LSD.05	NS	0.7	NS	3.3	1.8	143	128	--
C.V. %	3.0	32.6	33.3	7.1	2.8	18.4	8.7	--

-- DATA NOT AVAILABLE.

** HIGHEST YIELDING VARIETY IN THE TEST.

* VARIETY WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING VARIETY IN THE TEST.

NS OBSERVED DIFFERENCES FOR A GIVEN CHARACTERISTIC ARE NOT SIGNIFICANT AT THE 5% LEVEL.

TABLE 6. FIBER CHARACTERISTICS OF COTTON VARIETIES GROWN NEAR SENATH,
MISSOURI IN 1980.
PLANTED: 7 MAY 1980. HARVESTED: 6 OCTOBER 1980.

BRAND/VARIETY	MICRO- NAIRE	STAPLE LENGTH		ELONGATION	STRENGTH
		(50%)	(2.5%)	(%)	(G/TEX)
BRYCO BRYCOT 155	4.70	0.54	1.16	6.88	21.5
BRYCO VAIL 7	4.85	0.53	1.13	5.63	20.1
COKER 304	4.05	0.53	1.16	6.00	22.4
COKER 310	3.85	0.52	1.16	5.83	22.3
COKER 315	4.25	0.53	1.15	5.75	21.8
COKER 3113	4.70	0.54	1.13	6.63	21.4
DELCOT 311	3.90	0.56	1.17	7.38	24.8
DELTAPINE 41	4.75	0.52	1.14	6.00	21.7
DELTAPINE 55	4.15	0.53	1.16	6.25	21.4
DELTAPINE 61	5.25	0.54	1.17	7.00	21.6
MO63-2771B	4.35	0.55	1.17	6.75	23.8
MO71-1125	4.75	0.54	1.16	6.25	21.8
MO73-1203	4.30	0.57	1.20	6.75	23.7
MO75-711	4.15	0.53	1.15	6.50	23.5
QUAL. SEED QS-137	4.25	0.53	1.12	7.13	21.7
STONEVILLE 213	5.05	0.52	1.13	6.38	21.6
MEAN	4.46	0.54	1.16	6.45	22.2
LSD.05	0.48	NS	NS	NS	1.3
C.V. %	7.14	2.71	1.68	10.29	4.0

NS OBSERVED DIFFERENCES FOR A GIVEN CHARACTERISTIC ARE NOT SIGNIFICANT AT THE 5% LEVEL.

TABLE 7. YIELD PERFORMANCE OF COTTON VARIETIES GROWN AT 3 SOUTHEAST MISSOURI LOCATIONS (CLARKTON, PORTAGEVILLE, AND SENATH) IN 1980.

BRAND/VARIETY	1980 -- 3 LOCATION AVERAGE					TOTAL LINT (LBS/ACRE)			
	STAND	LOD- GING	VIGOR	HGT.	LINT	CLARK	PORTE	SENTH	MEAN
	(PL/A)	(1-5)	(1-5)	(IN)	(%)				
DELTAPINE 41	38965	1.2	1.3	29	41.0	725*	485*	678*	629**
COKER 310	37230	1.4	1.6	32	35.8	658*	548*	633*	613*
DELCOT 311	34709	1.4	1.7	33	35.7	723*	525*	548*	599*
DELTAPINE 55	39267	1.6	1.1	28	37.2	717*	482*	596*	592*
COKER 304	40670	1.3	1.0	30	34.3	639*	521*	573*	578*
COKER 3113	41863	1.5	1.5	29	39.0	655*	561**	512	576*
BRYCO VAIL 7	38980	1.2	1.4	30	38.2	571	471*	682**	575*
QUAL. SEED QS-137	39342	1.3	1.5	29	35.7	704*	476*	535	572*
STONEVILLE 213	40504	1.2	1.4	30	36.8	605	503*	588*	565*
COKER 315	37773	1.1	1.9	30	37.2	576	476*	617*	556*
MO63-2771B	38573	1.9	1.4	30	37.0	690*	440	517	549
DELTAPINE 61	40263	1.4	1.6	29	36.2	560	492*	579*	544
BRYCO BRYCOT 155	38211	1.7	1.2	29	36.2	633*	438	523	531
MO75-711	41259	1.3	1.3	30	35.8	632*	507*	385	508
MO73-1203	39539	2.1	1.2	29	35.0	767**	261	459	496
MO71-1125	39176	1.5	1.3	31	36.3	614*	417	402	478
MEAN	39145	1.4	1.4	30	36.7	653	475	552	560
LSD .05	2901	0.5	0.4	2.0	2.1	161	99	143	77
C.V. %	9.3	43.6	36.8	8.0	6.9	17.3	14.5	18.4	16.0

** HIGHEST YIELDING VARIETY IN THE TEST.

* VARIETY WHICH DID NOT YIELD SIGNIFICANTLY LESS THAN THE HIGHEST YIELDING VARIETY IN THE TEST.

TABLE 8. SUMMARY PERFORMANCE OF COTTON VARIETIES GROWN AT THREE MISSOURI LOCATIONS (CLARKTON, PORTAGEVILLE, AND SENATH) IN 1980.

BRAND/VARIETY	THREE LOCATION AVERAGE				
	MICRO- NAIRE	STAPLE LENGTH		ELONGATION	STRENGTH
		(50%)	(2.5%)	(%)	(G/TEX)
BRYCO BRYCOT 155	5.08	0.55	1.16	7.58	22.2
BRYCO VAIL 7	4.90	0.53	1.14	5.42	19.8
COKER 304	4.38	0.55	1.18	5.88	22.6
COKER 310	4.20	0.53	1.16	5.79	22.6
COKER 315	4.48	0.54	1.17	5.79	22.6
COKER 3113	4.45	0.54	1.14	6.88	21.9
DELCOT 311	4.20	0.55	1.14	7.50	24.7
DELTAPINE 41	4.92	0.52	1.14	6.21	22.1
DELTAPINE 55	4.40	0.53	1.16	6.50	21.1
DELTAPINE 61	5.02	0.54	1.17	7.38	22.1
MO63-2771B	4.28	0.55	1.17	6.83	23.3
MO71-1125	4.60	0.54	1.15	6.46	22.6
MO73-1203	4.28	0.58	1.21	6.63	24.1
MO75-711	4.50	0.54	1.16	6.79	23.8
QUAL. SEED QS-137	4.47	0.54	1.15	6.96	20.8
STONEVILLE 213	5.12	0.53	1.14	6.46	21.2
MEAN	4.58	0.54	1.16	6.57	22.3
LSD.05	0.38	0.02	0.03	0.53	1.1
C.V. %	7.10	2.68	2.00	6.82	4.1

TABLE 9. NAME OF COTTON ENTRIES AND SEED SOURCE EVALUATED IN 1980.

BRAND	VARIETY	SEED SOURCE
BRYCO	BRYCOT 4, VAIL 7	BRYCO, P.O. BOX C, LEACHVILLE AR. 72438
COKER	304, 310, 315, 3113	COKER PEDIGREE SEED CO., HARTSVILLE, SC. 29550
DELTAPINE	41, 55, 61	DELTA & PINE LAND CO., SCOTT MS 38772
QUALITY SEED	QS-137	QUALITY SEED CO., PO BOX 13388 MEMPHIS, TN 38113
STONEVILLE	213	STONEVILLE PEDIGREED SEED CO., STONEVILLE, MS 38776
	DELCOT 311, M071-1125, M075-711, M073-1203, M063-277-1B	ENTERED BY STATE RESEARCH STATIONS AND CENTERS