

**PERFORMANCE OF FIELD CROPS
IN SOUTH CAROLINA - 1999**



**SCAFRS CIRCULAR 184
SECTION 3 - COTTON**

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and B. D. Stancil

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FOREWORD

This publication has been developed to provide cotton performance data for growers, extension personnel, seed producers, seed dealers, and other agricultural workers and agencies. These results should help growers select the most profitable hybrids for individual farm conditions and management programs.

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SECTION III

PERFORMANCE OF COTTON CULTIVARS AND STRAINS IN SOUTH CAROLINA - 1999

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INTRODUCTION

The South Carolina Agricultural Experiment Station conducts tests to determine the relative performance of selected cotton cultivars and advanced strains. This is done on an annual basis so cultivar performance can be evaluated under a range of environmental conditions.

This publication reports the results of tests conducted at two locations in 1999 with multiple-year and multiple-location averages when available. Performance data for lint yield and lint percentage for the cultivars and strains evaluated in 1999 are reported. This information should be of value to cotton seed producers, ginners, buyers, agricultural Extension Agents, consultants, and other agriprofessionals.

Tests were conducted at the Edisto Research and Education Center, Blackville, S.C., and at the Pee Dee Research and Education Center, Florence, S.C. The soil type at Blackville was a Norfolk sandy loam, and at Florence it was a Norfolk fine sandy loam.

Detailed weather data for all trial sites is available in the notes section of this publication. In general yields in 1999 were poor due to drought conditions and high temperatures. Cultural practices used for each trial are listed on pages 5 and 6. Currently recommended cultural practices are used in our trials. The use of a specific fertilizer, herbicide, insecticide, or etc. does not imply an endorsement of that product by Clemson University.

PLOT TECHNIQUES

The advanced and preliminary cultivar evaluation tests have been split into early-mid and mid to full-season maturity classifications. Entry of a cultivar into a particular maturity classification is the choice of the originating organization. We are trying to provide growers with more precise information on relative cultivar maturity. As such, the Florence tests are managed in terms of timing of crop termination and harvest consistent with the two maturity classifications. Another advantage of not having all cultivars in the same trial is not to penalize very early or full-season cultivars when defoliant and boll-openers are applied to all cultivars in the trial on the same date. Both advanced trials have six replications while the preliminary test has four.

Cone seed-distributors mounted on a commercial tractor-drawn planter were used to plant at both locations. The plots were thinned to two plants per row foot if necessary and row lengths were trimmed to 35 ft. early in the season.

Commercial two-row spindle pickers were adapted and used for harvesting. One harvest was made at both Florence and Blackville.

Samples of harvested cotton were taken from four plots of each cultivar. Two plots of each were combined into one and ginned on a laboratory model gin to determine lint percentage. HVI fiber properties are determined on the lint samples obtained after ginning. Results of these tests are presented following the yield data.

¹ USDA Cotton Geneticist and Adjunct Professor of Agronomy, Professor of Entomology, Variety Test Coordinator, Agronomist, and Assistant Variety Test Coordinator.

DIFFERENCES IN YIELD

Experimental plots for testing a set of cultivars are treated as uniform as possible with respect to applications of fertilizer, insecticides, and other inputs. However, every factor that affects yield cannot be controlled in a trial. Therefore, yield differences among cultivars should be compared with a statistic that indicates the likelihood that the observed variation in yield is due to genetic differences.

The "least significant difference" (L.S.D.) calculated at the 10% level of probability is a statistic used here to separate cultivars in terms of performance characteristics. In order for two cultivars to be considered truly different for the characteristic in question, the difference between cultivars being compared must exceed the L.S.D. value. Choice of the 10% level of probability means that the L.S.D. will indicate a genetic difference no more than 10% of the time when there really is no difference. Thus we can expect at least 90% of the observed differences between cultivars to be true differences when they exceed the L.S.D. Coefficients of variation (C.V.'s) listed at the bottom of the tables reflect the relative precision with which the test was conducted. Relatively lower values indicate greater precision.

Confidence in the relative rankings of cultivars increases as the number of years tested at a given location increase. Confidence in the relative merits of cultivars also increases with an increase in the number of locations used to test in one year. Data thus collected can substitute to some degree for multiple-year data. However, it should be recognized that some condition at one location may cause an otherwise high performing cultivar to perform poorly at that location; e.g., a cultivar could produce the highest yield at Florence but produce poorly at Blackville because of susceptibility to a nematode. Also, relative performance of cultivars may differ at a given location under the varying weather conditions in different years.

Multiple-year location and coastal plain averages are included in this circular. These averages provide increased accuracy for estimating the relative genetic potential of cultivars under varying growing conditions. Multiple-year averages for single locations that differ markedly from the coastal plain averages should be carefully considered as they may indicate especially good adaptation of the cultivar to a limited area or a negative reaction to some factor or factors present in a particular area.

New tables for the 1999 circular include yields of a cultivar from the past four years in the same trial. We have included these data as a guide for growers to evaluate relative yield stability of a cultivar under the variable weather conditions across years. Evaluate relative yield stability of a cultivar by examining its yield ranking in a trial and how that rank varies over years. Use this procedure for the same trial at Pee Dee and the Edisto RECs in addition to the two location averages. The highest yielding cultivars with the least variation in rank within and over locations can be considered to have the best yield stability.

CHOICE OF CULTIVAR

Many factors govern the choice of a cotton cultivar. Although yield usually receives the first consideration, other characteristics which may be important are certain quality measurements and market acceptability. Resistance of cotton cultivars to fusarium wilt and rootknot nematodes is a primary consideration if maximum production is to be obtained, especially on certain coarse textured soils of the Coastal Plain. At this point in time there is no rootknot nematode resistant cultivar on the market.

Yield. Although many factors affect the ultimate value of cotton, yield is a primary consideration in farmer evaluation and acceptance of a cultivar. The yield data are expressed in pounds per acre of lint cotton.

Percent Lint affects the per acre yield of lint cotton and also the cost of harvesting and ginning. It is directly influenced by cultivar differences and seasonal conditions.

FIBER QUALITY

Knowledge of cotton quality is essential for growers to successfully market their cotton. Cotton buyers and manufacturers make wide use of various fiber tests to determine the value and end usage of a particular bale or lot of cotton. Sensitive laboratory instruments are now used to determine the quality and subsequent value of raw cotton fiber.

Included in this publication are fiber data measured with High Volume Instruments (HVI). The HVI measurements UHM length, uniformity index, fiber strength, and micronaire reading are discussed in this section.

Adjective descriptions for UHM length, uniformity index, strength, and micronaire, are given in the following discussions of these fiber properties. The descriptive terms and their corresponding numerical range should aid in interpreting the performance data reported for the various cultivars.

UHM Length

Upper half mean (UHM) length is the average length of the longest one-half of the fibers. HVI systems are calibrated to report staple length in one hundredths of an inch. The HVI staple length should closely approximate the classer's manual staple length and can be converted into 32nds by multiplying HVI length in inches times 32 and rounding to the nearest whole number.

Uniformity Index

HVI systems determine the length uniformity by dividing the mean fiber length (M) by the upper half mean length (M/UHM), therefore uniformity is the ratio of the average length of all the fibers to the average length of the longer half of the fibers. A uniformity of 86% or more is considered very high.

Descriptive designation	Uniformity Index
Very High	above 85
High	83-85
Average	80-82
Low	77-79
Very Low	below 77

Strength

Fiber strength is an important determinant of yarn strength and is a key property yarn manufacturers consider in bale selection. HVI machinery breaks a bundle of fibers to determine strength similar to that of the Stelometer. However, variables in sample preparation and mass determination among the instruments contribute to discrepancies in fiber strength of a variety measured with the different instruments. Also certain cultivars exhibit high HVI fiber strength that does not translate into yarn strength. While there seems little financial reward for growers to produce varieties with the highest fiber strength, it should be remembered that supplying our textile mills with high quality fiber would help maintain South Carolina cotton's market share.

Strength rating	1/8 inch gauge
Very Low	Grams/tex 20 & below
Low	21-23
Average	24-26
High	27-29
Very High	30 & above

Micronaire

Micronaire (MIC) reading is one of the fiber properties yarn manufacturers use to choose cotton bales for collection into groups (called a lay-down) to promote consistency of processing. High and low MIC readings are detrimental to yarn manufacture, hence the discounts in the marketing system. MIC reading is the result of resistance to airflow in the micronaire instrument of a 3.25 gram sample of fiber and is considered a measure of fineness or maturity. Fineness and maturity cannot both be estimated from a single value; therefore the two can be confounded.

Fineness is a relative measure of either the diameter of individual cotton fibers or the weight per unit length. Fine cottons produce stronger yarns, tend to increase neppiness, and require a reduced rate of processing.

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 a low appearance grade.

High MIC (>5.0) cotton is a significant problem in South Carolina. Unfortunately, the cultivar or genotype makes a smaller contribution to the properties of cotton fiber that contribute to MIC reading than does the growth environment. Hence, choosing a variety based on MIC reading in the attached tables to avoid a MIC discount is risky at best. We recommend that those who will do so anyway, consider multiple year MIC readings and averages. Ask your county agent for copies of fiber data from previous years and see how these values change with time.

The most recent updates to yield data for most Agronomic crops as well as recommended varieties can be obtained at the Variety Test Home Page at:

<http://cropweb.clemson.edu/>

PRODUCTION PRACTICES OF 1999 COTTON VARIETY TRIALS

Operation	Location: Florence	
Planting Date	5-10	
Fertilization	PPI	400#/ac 5-0-50 per soil test
Sidedress	46 units N from urea at squaring	
Herbicides	PPI PRE POST POST LAYBY	Prowl 3.3 EC 2.4 pt/ac Cotoran 4L 1 qt/ac Cotton-Pro + MSMA , 1 pt + 0.33 gal/ac Meturon 4L 1 qt/ac Meturon 4L 1 qt/ac
Fungicides	Ridomil PC 11G 7lbs/ac in furrow	
Insecticides	Temik 15G 5 lbs/ac (acts also as a nematocide at the 5lb rate) Karate 2 5 oz/ac (2 times) Tracer (3 times)	
Defoliation	Dropp 50 WP + Prep + Folex + crop oil, 0.10lb + 1.33 pt + 1 pt/ac (all trials)	
Harvest Date	11-15	
Comments	Two row plots 35'x 38" Plots hand thinned to 2 plants/ft Cultivated at 3" height by single sweep Weeds managed with herbicide regime All rates are broadcast per acre unless otherwise noted Complete weather data is included in the Notes section of this publication.	

PRODUCTION PRACTICES OF 1999 COTTON VARIETY TRIALS

Operation	Location: Blackville	
Planting Date	5-12	
Fertilization	PPI	1 ton/ac Lime 175#/ac 0-0-60 per soil test
Sidedress	30 units N from 25-S - 3 applications total 90 units 1.0 lb/ac Solubor - 2 foliar applications total 2 lb	
Herbicides	PPI PRE PDS PDS LAYBY	Prowl 3.3 EC 2. pt/ac Cottoran 4L 1 qt/ac + Staple 0.8 oz. /ac Staple 1.2 oz./ac + MSMA 1 pt/ac Bladex 1 qt./ac + MSMA 0.33 gal/ac Roundup Ultra 1 qt./ac (hooded sprayer) + Caparol 1qt./ac + MSMA 0.33 gal/ac
Nematicide	Telone II 3 gal./ac	
Insecticides	Temik 15G 5 lbs/ac (acts also as a nematicide at the 5lb rate) Orthene 75S 4.0 oz./ac (twice) Karate Z 1.8 oz/ac (three times)	
Growth Regulant	Pix 7.0 oz/aac	
Defoliation	Finish 1.5 pt/ac + Def 6 4.0 oz/ac	
Harvest Date	10-19	
Comments	Two row plots 35'x 38" Cultivated as needed Weeds managed with herbicide regime All rates are broadcast per acre unless otherwise noted Complete weather data is included in the Notes section of this publication.	

EXPERIMENTAL RESULTS

YIELD

	Page(s)
Coastal Plain – Pee Dee Research and Education Center, Florence, SC	
Early Maturity (Table 1 & 2)	8-9
Later Maturity (Table 3 & 4)	10-11
Coastal Plain – Edisto Research and Education Center, Blackville, SC	
Early Maturity (Table 5 & 6)	12-13
Later Maturity (Table 7 & 8)	14-15
Coastal Plain Averages	
Early Maturity (Table 9 & 10)	16-17
Later Maturity (Table 11 & 12)	18-19
Preliminary Trials	
Florence, SC - (Table 13 & 14)	20-21
Blackville, SC - (Table 15 & 16)	22-23
Coastal Plain Averages - (Table 17 & 18)	24-25

FIBER PROPERTIES

	Page(s)
Coastal Plain – Pee Dee Research and Education Center, Florence, SC	
Early Maturity (Tables 19-22)	26-29
Later Maturity (Tables 23 & 24)	30-31
Coastal Plain – Edisto Research and Education Center, Blackville, SC	
Early Maturity (Tables 25-28)	32-35
Later Maturity (Tables 29-31)	36-38
Preliminary Trials	
Florence, SC - Early (Table 32)	39
Florence, SC - Late (Table 33)	40
Blackville, SC - Early (Table 34)	41
Blackville, SC - Late (Table 35)	42

The most recent updates to yield data for most Agronomic crops as well as recommended varieties can be obtained at the Variety Test Home Page at:

<http://cropweb.clemson.edu/>

TABLE 1. COTTON CULTIVAR TRIAL - EARLY MATURITY - COASTAL PLAIN:
PEE DEE RESEARCH AND EDUCATION CENTER, FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES		3-YEAR AVERAGES		2-YEAR AVERAGES		RANK	1999 DATA	
		----1996-99----		----1997-99----		----1998-99----			LINT YIELD	LINT PERCENT
		LINT YIELD	LINT PERCENT	LINT YIELD	LINT PERCENT	LINT YIELD	LINT PERCENT			
(LB/A)	(%)	(LB/A)	(%)	(LB/A)	(%)	(LB/A)	(%)			
SURE-GROW	SG 125	903	40.8	795	40.5	628	40.3	4	571	40.1
SURE-GROW	SG 501	898	41.1	763	40.5	617	40.2	6	564	39.1
STONEVILLE	ST 474	897	42.4	770	42.1	579	41.8	10	540	41.6
DELTAPINE	DP 51 *	796	38.6	689	38.1	556	38.1	11	522	38.0
STONEVILLE	BXN47	-	-	788	42.0	579	41.5	12	521	41.3
PAYMASTER	PM 1220 BG/RR	-	-	713	41.1	519	41.4	15	506	40.9
SURE-GROW	SG 747	-	-	-	-	661	41.7	5	569	41.4
STONEVILLE	ST 373	-	-	-	-	605	41.3	23	428	41.0
SURE-GROW	SG 105	-	-	-	-	547	39.7	16	503	39.3
DELTAPINE	DP 5111	-	-	-	-	521	39.3	20	469	38.9
ACSI	E0052	-	-	-	-	511	41.7	22	447	42.0
PAYMASTER	PM 1330 BG	-	-	-	-	463	39.5	19	474	38.6
ACSI	FIBERMAX 963	-	-	-	-	458	39.3	21	448	38.8
PHYTOGEN	PSC 952	-	-	-	-	-	-	1	721	40.1
PHYTOGEN	PSC 636	-	-	-	-	-	-	2	692	39.3
PHYTOGEN	PSC 355	-	-	-	-	-	-	3	666	40.8
HCR	9257	-	-	-	-	-	-	7	563	38.4
HCR	9220	-	-	-	-	-	-	8	559	39.9
DELTAPINE	DP 428 B	-	-	-	-	-	-	9	558	39.4
PHYTOGEN	PSC 569	-	-	-	-	-	-	13	519	40.4
PAYMASTER	PM 1440	-	-	-	-	-	-	14	511	39.5
DELTAPINE	DP 425 RR	-	-	-	-	-	-	17	498	37.8
USDA	PD 94056	-	-	-	-	-	-	18	486	38.1
ACSI	FIBERMAX 819	-	-	-	-	-	-	24	403	41.2
AVERAGES		874	40.7	753	40.7	557	40.4		531	39.8
L.S.D. (.10)		67	-	NS	-	NS	-		117	-
C.V. (%)		11.1	-	14.0	-	18.4	-		23.1	-
STD. ERROR OF ENTRY MEAN									50.1	DF=115

(*) CHECK

TABLE 2. COTTON CULTIVAR TRIAL - EARLY MATURITY - COASTAL PLAIN:
PEE DEE RESEARCH AND EDUCATION CENTER, FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1999 AVG.	1998 AVG.		1997 AVG.		1996 AVG.	
		LINT YIELD (LB/A)	RANK OF20	LINT YIELD (LB/A)	RANK OF16	LINT YIELD (LB/A)	RANK OF16	LINT YIELD (LB/A)
PHYTOGEN	PSC 952	721	-	-	-	-	-	-
PHYTOGEN	PSC 636	692	-	-	-	-	-	-
PHYTOGEN	PSC 355	666	-	-	-	-	-	-
SURE-GROW	SG 125	571	5	686	8	1129	4	1388
SURE-GROW	SG 747	569	2	753	-	-	-	-
SURE-GROW	SG 501	564	7	670	12	1055	2	1507
HCR	9257	563	-	-	-	-	-	-
HCR	9220	559	-	-	-	-	-	-
DELTAPINE	DP 428 B	558	-	-	-	-	-	-
STONEVILLE	ST 474	540	11	619	4	1152	3	1470
DELTAPINE	DP 51 *	522	14	590	18	955	12	1278
STONEVILLE	BXN47	521	9	638	2	1205	-	-
PHYTOGEN	PSC 569	519	-	-	-	-	-	-
PAYMASTER	PM 1440	511	-	-	-	-	-	-
PAYMASTER	PM 1220 BG/RR	506	20	531	9	1102	-	-
SURE-GROW	SG 105	503	13	592	-	-	-	-
DELTAPINE	DP 425 RR	498	-	-	-	-	-	-
USDA	PD 94056	486	-	-	-	-	-	-
PAYMASTER	PM 1330 BG	474	22	453	-	-	-	-
DELTAPINE	DP 5111	469	16	573	-	-	-	-
ACSI	FIBERMAX 963	448	21	468	-	-	-	-
ACSI	E0052	447	15	575	-	-	-	-
STONEVILLE	ST 373	428	1	782	-	-	-	-
ACSI	FIBERMAX 819	403	-	-	-	-	-	-

(*) CHECK

TABLE 3. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN:
PEE DEE RESEARCH AND EDUCATION CENTER, FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES		3-YEAR AVERAGES		2-YEAR AVERAGES		RANK	1999 DATA	
		----1996-99----		----1997-99----		----1998-99----			LINT	LINT
		YIELD (LB/A)	PERCENT (%)	YIELD (LB/A)	PERCENT (%)	YIELD (LB/A)	PERCENT (%)		YIELD (LB/A)	PERCENT (%)
DELTAPINE	NUCOTN 35 B	1066	39.4	930	39.1	745	39.2	7	674	38.8
DELTAPINE	DP 51 *	997	39.0	880	38.6	724	38.6	14	601	38.4
SURE-GROW	SG 248	-	-	984	41.2	825	40.9	2	747	41.0
DELTAPINE	DP 5415 RR	-	-	947	39.7	739	39.4	11	636	39.1
DELTAPINE	NUCOTN 33 B	-	-	899	38.6	730	38.7	6	695	38.4
SURE-GROW	SG 821	-	-	895	39.6	744	39.5	10	638	39.7
DELTAPINE	DP 5690 RR	-	-	877	39.3	694	39.0	20	565	39.1
PAYMASTER	PM 1560 BG	-	-	824	41.5	554	41.5	24	501	41.1
USDA	PD 94042	-	-	-	-	805	42.0	1	760	41.9
ACSI	FIBERMAX 989	-	-	-	-	792	41.0	5	710	41.5
USDA	PD 94045	-	-	-	-	750	40.9	9	662	40.8
ACSI	IF 1000	-	-	-	-	714	41.0	23	539	41.0
ACSI	FIBERMAX 832	-	-	-	-	683	40.2	22	553	40.7
TERRA	292	-	-	-	-	627	36.2	21	553	35.6
HCR	9263	-	-	-	-	-	-	3	717	38.4
HCR	9240	-	-	-	-	-	-	4	711	41.9
ACSI	E0805	-	-	-	-	-	-	8	666	41.3
DELTAPINE	DP 5415	-	-	-	-	-	-	12	634	39.8
USDA	PD 94063	-	-	-	-	-	-	13	625	39.4
DELTAPINE	DP 458 BRR	-	-	-	-	-	-	15	595	40.9
DELTAPINE	DP 675	-	-	-	-	-	-	16	592	39.5
PAYMASTER	PM 1560 BG/RR	-	-	-	-	-	-	17	586	40.1
DELTAPINE	DP 655 BRR	-	-	-	-	-	-	18	586	38.5
DELTAPINE	DPX 9765	-	-	-	-	-	-	19	581	39.9
AVERAGES		1032	39.2	904	39.7	723	39.8		630	39.8
L.S.D. (.10)		NS	-	NS	-	96	-		106	-
C.V. (%)		11.5	-	11.0	-	14.5	-		17.5	-
STD. ERROR OF ENTRY MEAN									45.0	DF=115

(*) CHECK

TABLE 4. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN:
PEE DEE RESEARCH AND EDUCATION CENTER, FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1999 AVG.	1998 AVG.	1997 AVG.	1996 AVG.			
		LINT YIELD (LB/A)	RANK LINT OF20 YIELD (LB/A)	RANK LINT OF16 YIELD (LB/A)	RANK LINT OF16 YIELD (LB/A)	LINT	LINT	
USDA	PD 94042	760	8	849	-	-	-	-
SURE-GROW	SG 248	747	3	904	7	1302	-	-
HCR	9263	717	-	-	-	-	-	-
HCR	9240	711	-	-	-	-	-	-
ACSI	FIBERMAX 989	710	5	873	-	-	-	-
DELTAPINE	NUCOTN 33 B	695	21	765	20	1237	-	-
DELTAPINE	NUCOTN 35 B	674	16	815	8	1300	1	1476
ACSI	E0805	666	-	-	-	-	-	-
USDA	PD 94045	662	11	839	-	-	-	-
SURE-GROW	SG 821	638	7	851	24	1195	-	-
DELTAPINE	DP 5415 RR	636	10	842	2	1365	-	-
DELTAPINE	DP 5415	634	-	-	-	-	-	-
USDA	PD 94063	625	-	-	-	-	-	-
DELTAPINE	DP 51 *	601	9	847	26	1192	12	1347
DELTAPINE	DP 458 BRR	595	-	-	-	-	-	-
DELTAPINE	DP 675	592	-	-	-	-	-	-
PAYMASTER	PM 1560 BG/RR	586	-	-	-	-	-	-
DELTAPINE	DP 655 BRR	586	-	-	-	-	-	-
DELTAPINE	DPX 9765	581	-	-	-	-	-	-
DELTAPINE	DP 5690 RR	565	14	823	19	1245	-	-
TERRA	292	553	24	701	-	-	-	-
ACSI	FIBERMAX 832	553	17	812	-	-	-	-
ACSI	IF 1000	539	4	888	-	-	-	-
PAYMASTER	PM 1560 BG	501	25	607	3	1363	-	-

(*) CHECK

TABLE 5. COTTON CULTIVAR TRIAL - EARLY MATURITY - COASTAL PLAIN:
EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES		3-YEAR AVERAGES		2-YEAR AVERAGES		RANK	1999 DATA	
		-----1996-99-----		-----1997-99-----		-----1998-99-----			LINT	LINT
		YIELD (LB/A)	PERCENT (%)	YIELD (LB/A)	PERCENT (%)	YIELD (LB/A)	PERCENT (%)		YIELD (LB/A)	PERCENT (%)
SURE-GROW	SG 125	946	38.9	741	38.8	481	38.3	3	387	38.8
SURE-GROW	SG 501	866	40.2	654	40.3	451	40.4	5	385	40.7
DELTAPINE	DP 51	837	37.2	641	36.7	448	36.4	15	345	37.0
STONEVILLE	ST 474	833	41.1	634	41.2	403	40.6	20	304	40.7
PAYMASTER	PM 1220 BG/RR	-	-	742	39.9	513	39.0	7	377	39.7
STONEVILLE	BXN47	-	-	632	41.2	422	40.7	19	305	40.9
SURE-GROW	SG 747	-	-	-	-	533	40.2	1	433	40.6
SURE-GROW	SG 105	-	-	-	-	489	38.1	2	390	37.6
ACSI	E0052	-	-	-	-	485	39.0	21	302	41.1
ACSI	FIBERMAX 963	-	-	-	-	460	38.3	22	297	39.2
DELTAPINE	DP 5111	-	-	-	-	450	38.5	17	326	38.1
PAYMASTER	PM 1330 BG	-	-	-	-	433	37.3	18	319	39.0
STONEVILLE	ST 373	-	-	-	-	391	40.6	24	269	41.0
PHYTOGEN	PSC 355	-	-	-	-	-	-	4	386	40.0
HCR	9257	-	-	-	-	-	-	6	383	38.5
HCR	9220	-	-	-	-	-	-	8	371	39.0
USDA	PD 94056	-	-	-	-	-	-	9	370	37.5
PHYTOGEN	PSC 636	-	-	-	-	-	-	10	368	38.5
PHYTOGEN	PSC 952	-	-	-	-	-	-	11	362	40.1
DELTAPINE	DP 428 B	-	-	-	-	-	-	12	358	37.2
PAYMASTER	PM 1440	-	-	-	-	-	-	13	350	39.1
PHYTOGEN	PSC 569	-	-	-	-	-	-	14	347	40.7
DELTAPINE	DP 425 RR	-	-	-	-	-	-	16	338	36.7
ACSI	FIBERMAX 819	-	-	-	-	-	-	23	276	41.6
AVERAGES		870	39.4	674	39.7	458	39.0		348	39.3
L.S.D. (.10)		61	-	71	-	NS	-		57	-
C.V. (%)		11.4	-	14.6	-	15.4	-		17.1	-
STD. ERROR OF ENTRY MEAN									24.3	DF=115

(*) CHECK

TABLE 6. COTTON CULTIVAR TRIAL - EARLY MATURITY - COASTAL PLAIN:
EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1999 AVG.	1998 AVG.		1997 AVG.		1996 AVG.	
		LINT YIELD (LB/A)	RANK	LINT YIELD (LB/A)	RANK	LINT YIELD (LB/A)	RANK	LINT YIELD (LB/A)
SURE-GROW	SG 747	433	3	632	-	-	-	-
SURE-GROW	SG 105	390	7	587	-	-	-	-
SURE-GROW	SG 125	387	8	575	1	1261	1	1561
PHYTOGEN	PSC 355	386	-	-	-	-	-	-
SURE-GROW	SG 501	385	16	517	12	1061	4	1499
HCR	9257	383	-	-	-	-	-	-
PAYMASTER	PM 1220 BG/RR	377	2	649	4	1200	-	-
HCR	9220	371	-	-	-	-	-	-
USDA	PD 94056	370	-	-	-	-	-	-
PHYTOGEN	PSC 636	368	-	-	-	-	-	-
PHYTOGEN	PSC 952	362	-	-	-	-	-	-
DELTAPINE	DP 428 B	358	-	-	-	-	-	-
PAYMASTER	PM 1440	350	-	-	-	-	-	-
PHYTOGEN	PSC 569	347	-	-	-	-	-	-
DELTAPINE	DP 51	345	12	551	16	1025	8	1427
DELTAPINE	DP 425 RR	338	-	-	-	-	-	-
DELTAPINE	DP 5111	326	10	574	-	-	-	-
PAYMASTER	PM 1330 BG	319	13	546	-	-	-	-
STONEVILLE	BXN47	305	14	538	14	1053	-	-
STONEVILLE	ST 474	304	18	502	10	1097	7	1429
ACSI	E0052	302	1	667	-	-	-	-
ACSI	FIBERMAX 963	297	4	623	-	-	-	-
ACSI	FIBERMAX 819	276	-	-	-	-	-	-
STONEVILLE	ST 373	269	17	513	-	-	-	-

(*) CHECK

TABLE 7. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN:
EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES		3-YEAR AVERAGES		2-YEAR AVERAGES		RANK	1999 DATA	
		-----1996-99----- LINT YIELD (LB/A)	LINT PERCENT (%)	-----1997-99----- LINT YIELD (LB/A)	LINT PERCENT (%)	-----1998-99----- LINT YIELD (LB/A)	LINT PERCENT (%)		LINT YIELD (LB/A)	LINT PERCENT (%)
DELTAPINE	NUCOTN 35 B	963	38.1	740	37.8	543	37.5	1	394	37.9
DELTAPINE	DP 51 *	838	37.4	610	37.3	383	36.9	17	301	37.1
PAYMASTER	PM 1560 BG	-	-	685	39.6	453	38.9	18	299	39.6
SURE-GROW	SG 821	-	-	673	39.0	433	38.6	5	339	38.2
DELTAPINE	DP 5690 RR	-	-	659	39.1	420	39.0	8	324	38.8
SURE-GROW	SG 248	-	-	640	40.0	417	39.7	7	328	39.8
DELTAPINE	NUCOTN 33 B	-	-	611	38.1	411	37.8	20	281	38.5
DELTAPINE	DP 5415 RR	-	-	568	39.2	344	38.8	15	305	38.7
USDA	PD 94042	-	-	-	-	478	41.0	14	314	40.8
ACSI	FIBERMAX 832	-	-	-	-	448	40.6	23	244	40.4
USDA	PD 94045	-	-	-	-	448	39.8	11	319	39.3
TERRA	292	-	-	-	-	416	36.2	3	350	36.5
ACSI	IF 1000	-	-	-	-	405	40.5	4	349	40.5
ACSI	FIBERMAX 989	-	-	-	-	382	40.9	21	281	40.7
HCR	9263	-	-	-	-	-	-	2	367	39.0
ACSI	E0805	-	-	-	-	-	-	6	331	39.2
DELTAPINE	DP 675	-	-	-	-	-	-	9	324	38.8
DELTAPINE	DPX 9765	-	-	-	-	-	-	10	324	37.0
USDA	PD 94063	-	-	-	-	-	-	12	316	37.7
HCR	9240	-	-	-	-	-	-	13	316	41.5
DELTAPINE	DP 655 BRR	-	-	-	-	-	-	16	303	38.9
DELTAPINE	DP 458 BRR	-	-	-	-	-	-	19	286	38.7
DELTAPINE	DP 5415	-	-	-	-	-	-	22	281	39.2
PAYMASTER	PM 1560 BG/RR	-	-	-	-	-	-	24	237	38.1
AVERAGES		900	37.8	648	38.8	427	39.1		313	39.0
L.S.D. (.10)		82	-	68	-	NS	-		52	-
C.V. (%)		12.2	-	15.5	-	18.0	-		17.5	-
STD. ERROR OF ENTRY MEAN									22.4	DF=115

(*) CHECK

TABLE 8. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN:
EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1999 AVG.	1998 AVG.	1997 AVG.	1996 AVG.			
		LINT YIELD (LB/A)	RANK LINT OF20 YIELD (LB/A)	RANK LINT OF16 YIELD (LB/A)	RANK LINT OF16 YIELD (LB/A)	LINT	LINT	
DELTAPINE HCR	NUCOTN 35 B 9263	394 367	1 -	691 -	9 -	1134 -	4 -	1633 -
TERRA ACSI	292 IF 1000	350 349	19 22	483 462	- -	- -	- -	- -
SURE-GROW ACSI	SG 821 E0805	339 331	11 -	527 -	4 -	1153 -	- -	- -
SURE-GROW DELTAPINE	SG 248 DP 5690 RR	328 324	14 13	505 516	13 7	1086 1138	- -	- -
DELTAPINE DELTAPINE	DP 675 DPX 9765	324 324	- -	- -	- -	- -	- -	- -
USDA USDA	PD 94045 PD 94063	319 316	6 -	577 -	- -	- -	- -	- -
HCR USDA	9240 PD 94042	316 314	- 4	- 643	- -	- -	- -	- -
DELTAPINE DELTAPINE	DP 5415 RR DP 655 BRR	305 303	25 -	383 -	25 -	1015 -	- -	- -
DELTAPINE PAYMASTER	DP 51 * PM 1560 BG	301 299	21 5	464 607	16 5	1065 1150	16 -	1522 -
DELTAPINE DELTAPINE	DP 458 BRR NUCOTN 33 B	286 281	- 10	- 541	- 27	- 1010	- -	- -
ACSI DELTAPINE	FIBERMAX 989 DP 5415	281 281	18 -	484 -	- -	- -	- -	- -
ACSI PAYMASTER	FIBERMAX 832 PM 1560 BG/RR	244 237	3 -	653 -	- -	- -	- -	- -

(*) CHECK

TABLE 9. COTTON CULTIVAR TRIAL - EARLY MATURITY - COASTAL PLAIN
 AVERAGES: BLACKVILLE AND FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES		3-YEAR AVERAGES		2-YEAR AVERAGES		RANK	1999 DATA	
		-----1996-99----- LINT YIELD (LB/A)	LINT PERCENT (%)	-----1997-99----- LINT YIELD (LB/A)	LINT PERCENT (%)	-----1998-99----- LINT YIELD (LB/A)	LINT PERCENT (%)		LINT YIELD (LB/A)	LINT PERCENT (%)
SURE-GROW	SG 125	925	40.0	768	39.8	554	39.5	5	479	39.6
SURE-GROW	SG 501	881	40.7	709	40.4	534	40.3	6	475	39.6
STONEVILLE	ST 474	864	41.8	702	41.7	491	41.3	16	422	41.3
DELTAPINE	DP 51 *	817	38.0	665	37.5	502	37.4	12	434	37.7
PAYMASTER	PM 1220 BG/RR	-	-	728	40.6	516	40.4	11	442	40.5
STONEVILLE	BXN47	-	-	710	41.6	500	41.2	18	413	41.2
SURE-GROW	SG 747	-	-	-	-	597	41.1	4	501	41.1
SURE-GROW	SG 105	-	-	-	-	518	39.1	10	447	38.7
STONEVILLE	ST 373	-	-	-	-	498	41.0	23	348	41.0
ACSI	E0052	-	-	-	-	498	40.6	21	375	41.7
DELTAPINE	DP 5111	-	-	-	-	485	39.0	19	398	38.6
ACSI	FIBERMAX 963	-	-	-	-	459	38.9	22	372	38.9
PAYMASTER	PM 1330 BG	-	-	-	-	448	38.6	20	397	38.8
PHYTOGEN	PSC 952	-	-	-	-	-	-	1	541	40.1
PHYTOGEN	PSC 636	-	-	-	-	-	-	2	530	39.0
PHYTOGEN	PSC 355	-	-	-	-	-	-	3	526	40.5
HCR	9257	-	-	-	-	-	-	7	473	38.4
HCR	9220	-	-	-	-	-	-	8	465	39.6
DELTAPINE	DP 428 B	-	-	-	-	-	-	9	458	38.6
PHYTOGEN	PSC 569	-	-	-	-	-	-	13	433	40.5
PAYMASTER	PM 1440	-	-	-	-	-	-	14	430	39.4
USDA	PD 94056	-	-	-	-	-	-	15	428	37.9
DELTAPINE	DP 425 RR	-	-	-	-	-	-	17	418	37.4
ACSI	FIBERMAX 819	-	-	-	-	-	-	24	340	41.3
AVERAGES		872	40.1	714	40.3	508	39.9		439	39.6
L.S.D. (.10)		32	-	48	-	72	-		75	-
C.V. (%)		11.3	-	14.2	-	17.3	-		21.9	-

(*) CHECK

TABLE 10. COTTON CULTIVAR TRIAL - EARLY MATURITY - COASTAL PLAIN
 AVERAGES: BLACKVILLE AND FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1999 AVG.	1998 AVG.		1997 AVG.		1996 AVG.	
		LINT YIELD (LB/A)	RANK	LINT OF20 YIELD (LB/A)	RANK	LINT OF16 YIELD (LB/A)	RANK	LINT OF16 YIELD (LB/A)
PHYTOGEN	PSC 952	541	-	-	-	-	-	-
PHYTOGEN	PSC 636	530	-	-	-	-	-	-
PHYTOGEN	PSC 355	526	-	-	-	-	-	-
SURE-GROW	SG 747	501	1	693	-	-	-	-
SURE-GROW	SG 125	479	5	630	2	1195	2	1492
SURE-GROW	SG 501	475	8	594	13	1058	1	1502
HCR	9257	473	-	-	-	-	-	-
HCR	9220	465	-	-	-	-	-	-
DELTAPINE	DP 428 B	458	-	-	-	-	-	-
SURE-GROW	SG 105	447	10	589	-	-	-	-
PAYMASTER	PM 1220 BG/RR	442	9	590	4	1151	-	-
DELTAPINE	DP 51 *	434	15	570	17	990	8	1368
PHYTOGEN	PSC 569	433	-	-	-	-	-	-
PAYMASTER	PM 1440	430	-	-	-	-	-	-
USDA	PD 94056	428	-	-	-	-	-	-
STONEVILLE	ST 474	422	16	561	7	1124	5	1445
DELTAPINE	DP 425 RR	418	-	-	-	-	-	-
STONEVILLE	BXN47	413	11	588	5	1129	-	-
DELTAPINE	DP 5111	398	14	573	-	-	-	-
PAYMASTER	PM 1330 BG	397	22	499	-	-	-	-
ACSI	E0052	375	6	621	-	-	-	-
ACSI	FIBERMAX 963	372	19	545	-	-	-	-
STONEVILLE	ST 373	348	4	648	-	-	-	-
ACSI	FIBERMAX 819	340	-	-	-	-	-	-

(*) CHECK

TABLE 11. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN
 AVERAGES: BLACKVILLE AND FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES		3-YEAR AVERAGES		2-YEAR AVERAGES		RANK	1999 DATA	
		----1996-99----		----1997-99----		----1998-99----			LINT YIELD	LINT PERCENT
		LINT YIELD (LB/A)	LINT PERCENT (%)	LINT YIELD (LB/A)	LINT PERCENT (%)	LINT YIELD (LB/A)	LINT PERCENT (%)			
DELTAPINE	NUCOTN 35 B	1015	38.8	835	38.5	644	38.4	4	534	38.4
DELTAPINE	DP 51 *	917	38.2	745	38.0	553	37.7	17	451	37.7
SURE-GROW	SG 248	-	-	812	40.6	621	40.3	2	537	40.4
SURE-GROW	SG 821	-	-	784	39.3	589	39.0	9	489	38.9
DELTAPINE	DP 5690 RR	-	-	768	39.2	557	39.0	18	445	39.0
DELTAPINE	DP 5415 RR	-	-	758	39.4	541	39.1	12	470	38.9
DELTAPINE	NUCOTN 33 B	-	-	755	38.4	570	38.3	10	488	38.5
PAYMASTER	PM 1560 BG	-	-	755	40.5	504	40.2	23	400	40.3
USDA	PD 94042	-	-	-	-	642	41.5	3	537	41.3
USDA	PD 94045	-	-	-	-	599	40.3	8	490	40.0
ACSI	FIBERMAX 989	-	-	-	-	587	40.9	7	495	41.0
ACSI	FIBERMAX 832	-	-	-	-	565	40.4	24	398	40.6
ACSI	IF 1000	-	-	-	-	560	40.8	20	444	40.7
TERRA	292	-	-	-	-	522	36.2	16	451	36.0
HCR	9263	-	-	-	-	-	-	1	542	38.7
HCR	9240	-	-	-	-	-	-	5	513	41.7
ACSI	E0805	-	-	-	-	-	-	6	498	40.4
USDA	PD 94063	-	-	-	-	-	-	11	470	38.6
DELTAPINE	DP 675	-	-	-	-	-	-	13	458	39.2
DELTAPINE	DP 5415	-	-	-	-	-	-	14	457	39.5
DELTAPINE	DPX 9765	-	-	-	-	-	-	15	453	38.5
DELTAPINE	DP 655 BRR	-	-	-	-	-	-	19	444	38.7
DELTAPINE	DP 458 BRR	-	-	-	-	-	-	21	441	39.8
PAYMASTER	PM 1560 BG/RR	-	-	-	-	-	-	22	411	39.1
AVERAGES		966	38.5	776	39.2	575	39.4		472	39.4
L.S.D. (.10)		81	-	70	-	88	-		NS	-
C.V. (%)		11.9	-	12.9	-	16.0	-		18.5	-

(*) CHECK

TABLE 12. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN
 AVERAGES: BLACKVILLE AND FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1999 AVG.	1998 AVG.		1997 AVG.		1996 AVG.	
		LINT YIELD (LB/A)	RANK OF20	LINT YIELD (LB/A)	RANK OF16	LINT YIELD (LB/A)	RANK OF16	LINT YIELD (LB/A)
HCR	9263	542	-	-	-	-	-	-
SURE-GROW	SG 248	537	8	705	7	1194	-	-
USDA	PD 94042	537	2	746	-	-	-	-
DELTAPINE	NUCOTN 35 B	534	1	753	4	1217	1	1554
HCR	9240	513	-	-	-	-	-	-
ACSI	E0805	498	-	-	-	-	-	-
ACSI	FIBERMAX 989	495	12	679	-	-	-	-
USDA	PD 94045	490	7	708	-	-	-	-
SURE-GROW	SG 821	489	10	689	13	1174	-	-
DELTAPINE	NUCOTN 33 B	488	18	653	26	1123	-	-
USDA	PD 94063	470	-	-	-	-	-	-
DELTAPINE	DP 5415 RR	470	21	612	11	1190	-	-
DELTAPINE	DP 675	458	-	-	-	-	-	-
DELTAPINE	DP 5415	457	-	-	-	-	-	-
DELTAPINE	DPX 9765	453	-	-	-	-	-	-
TERRA	292	451	24	592	-	-	-	-
DELTAPINE	DP 51 *	451	17	656	25	1129	16	1435
DELTAPINE	DP 5690 RR	445	15	669	8	1191	-	-
DELTAPINE	DP 655 BRR	444	-	-	-	-	-	-
ACSI	IF 1000	444	13	675	-	-	-	-
DELTAPINE	DP 458 BRR	441	-	-	-	-	-	-
PAYMASTER	PM 1560 BG/RR	411	-	-	-	-	-	-
PAYMASTER	PM 1560 BG	400	22	607	3	1257	-	-
ACSI	FIBERMAX 832	398	4	733	-	-	-	-

(*) CHECK

TABLE 13. PRELIMINARY COTTON TRIAL - EARLY MATURING CULTIVARS -
COASTAL PLAIN; PEE DEE RESEARCH AND EDUCATION CENTER,
FLORENCE, S.C.

		-----1999 DATA-----	
COMPANY OR BRAND NAME	VARIETY OR STRAIN	LINT YIELD (LB/A)	LINT PERCENT (%)
HCR	7061-39	613	40.7
DELTAPINE	DP 448 B	547	40.8
SURE-GROW	SG 125 BR	475	40.3
DELTAPINE	DP 429 RR	468	39.4
DELTAPINE	DP 422 BRR	462	40.0
STONEVILLE	ST X9902	460	40.9
DELTAPINE	DP 436 RR	447	38.7
DELTAPINE	DP 51 *	446	39.1
PAYMASTER	PMX 0425	420	40.7
STONEVILLE	ST X9901	396	42.7
SURE-GROW	SG 125 RR	395	41.7
DELTAPINE	DP 388	383	41.2
STONEVILLE	ST 474 *	380	43.7
HCR	9228	379	41.8
SURE-GROW	SG 501 BR	379	40.6
PAYMASTER	PMX 2609	376	40.5
HCR	7114-46	375	42.7
STONEVILLE	ST X9903	373	41.9
DELTAPINE	DP 409 BRR	369	40.6
DELTAPINE	DP 451 BRR	363	37.9
HCR	8445-5006	341	38.2
SURE-GROW	SG 125 *	320	41.6
PAYMASTER	PM 1218 BG/RR	318	43.2
AVERAGES		412	40.8
L.S.D. (.10)		NS	-
C.V. (%)		27.7	-
STD. ERROR OF ENTRY MEAN		57.1	DF=66

(*) CHECK

TABLE 14. PRELIMINARY COTTON TRIAL - LATER MATURING CULTIVARS -
COASTAL PLAIN; PEE DEE RESEARCH AND EDUCATION CENTER,
FLORENCE, S.C.

		-----1999 DATA-----	
COMPANY OR BRAND NAME	VARIETY OR STRAIN	LINT YIELD (LB/A)	LINT PERCENT (%)
STONEVILLE	ST 6M045	612	38.6
USDA	PD97101	597	36.9
HCR	7126	567	41.4
USDA	PD 95079	557	38.3
PHYTOGEN	HS 12	553	37.5
HCR	9310	551	39.3
USDA	PD 95034	524	37.9
USDA	PD 96001	517	36.3
PAYMASTER	PM 1560 BG *	514	39.2
PHYTOGEN	GA 161	442	38.0
DELTAPINE	NUCOTN 33 B *	424	36.9
TERRA	366	419	39.5
USDA	PD 96005	373	38.9
USDA	PD97019	362	39.5
DELTAPINE	DP 51 *	352	39.6
PHYTOGEN	PSC 413	348	39.3
AVERAGES		482	38.6
L.S.D. (.10)		NS	-
C.V. (%)		33.2	-
STD. ERROR OF ENTRY MEAN		80.1	DF=45

(*) CHECK

TABLE 15. PRELIMINARY COTTON TRIAL - EARLY MATURING CULTIVARS -
 COASTAL PLAIN; EDISTO RESEARCH AND EDUCATION CENTER,
 BLACKVILLE, S.C.

		-----1999 DATA-----	
COMPANY OR BRAND NAME	VARIETY OR STRAIN	LINT YIELD (LB/A)	LINT PERCENT (%)
HCR	7061-39	405	38.5
DELTAPINE	DP 448 B	396	38.6
SURE-GROW	SG 125 BR	368	40.1
DELTAPINE	DP 451 BRR	362	38.2
SURE-GROW	SG 125 *	349	41.4
PAYMASTER	PM 1218 BG/RR	348	40.1
PAYMASTER	PMX 0425	344	38.7
DELTAPINE	DP 436 RR	342	36.3
PAYMASTER	PMX 2609	339	39.7
SURE-GROW	SG 501 BR	333	39.4
HCR	8445-5006	331	38.3
DELTAPINE	DP 422 BRR	328	36.5
STONEVILLE	ST X9901	327	44.1
DELTAPINE	DP 409 BRR	309	38.6
SURE-GROW	SG 125 RR	308	39.7
HCR	9228	307	39.8
STONEVILLE	ST X9903	297	43.2
DELTAPINE	DP 388	293	38.1
DELTAPINE	DP 51 *	287	37.5
STONEVILLE	ST X9902	284	42.6
DELTAPINE	DP 429 RR	272	36.0
STONEVILLE	ST 474 *	259	41.6
HCR	7114-46	217	40.5
AVERAGES		322	39.4
L.S.D. (.10)		66	-
C.V. (%)		17.1	-
STD. ERROR OF ENTRY MEAN		27.6	DF=66

(*) CHECK

TABLE 16. PRELIMINARY COTTON TRIAL - LATER MATURING CULTIVARS -
COASTAL PLAIN; EDISTO RESEARCH AND EDUCATION CENTER,
BLACKVILLE, S.C.

		-----1999 DATA-----	
COMPANY OR BRAND NAME	VARIETY OR STRAIN	LINT YIELD (LB/A)	LINT PERCENT (%)
STONEVILLE	ST 6M045	344	40.0
HCR	7126	312	40.5
USDA	PD 96005	311	39.9
PHYTOGEN	HS 12	305	38.8
PHYTOGEN	GA 161	301	38.0
USDA	PD97101	300	38.7
PAYMASTER	PM 1560 BG *	294	40.1
DELTAPINE	DP 51 *	277	36.8
USDA	PD97019	269	40.8
USDA	PD 95079	264	38.7
HCR	9310	254	39.2
USDA	PD 96001	251	40.0
TERRA	366	247	37.3
DELTAPINE	NUCOTN 33 B *	242	37.9
USDA	PD 95034	231	37.6
PHYTOGEN	PSC 413	227	39.6
AVERAGES		277	39.0
L.S.D. (.10)		NS	-
C.V. (%)		20.5	-
STD. ERROR OF ENTRY MEAN		28.3	DF=45

(*) CHECK

TABLE 17. PRELIMINARY COTTON TRIAL - EARLY MATURING CULTIVARS -
COASTAL PLAIN AVERAGES: FLORENCE AND BLACKVILLE, S.C.

		-----1999 DATA-----	
COMPANY OR BRAND NAME	VARIETY OR STRAIN	LINT YIELD (LB/A)	LINT PERCENT (%)
HCR	7061-39	509	39.6
DELTAPINE	DP 448 B	471	39.7
SURE-GROW	SG 125 BR	422	40.2
DELTAPINE	DP 422 BRR	395	38.2
DELTAPINE	DP 436 RR	395	37.5
PAYMASTER	PMX 0425	382	39.7
STONEVILLE	ST X9902	372	41.7
DELTAPINE	DP 429 RR	370	37.7
DELTAPINE	DP 51 *	366	38.3
DELTAPINE	DP 451 BRR	363	38.1
STONEVILLE	ST X9901	362	43.4
PAYMASTER	PMX 2609	358	40.1
SURE-GROW	SG 501 BR	356	40.0
SURE-GROW	SG 125 RR	352	40.7
HCR	9228	343	40.8
DELTAPINE	DP 409 BRR	339	39.6
DELTAPINE	DP 388	338	39.6
HCR	8445-5006	336	38.2
SURE-GROW	SG 125 *	335	41.5
STONEVILLE	ST X9903	335	42.6
PAYMASTER	PM 1218 BG/RR	333	41.6
STONEVILLE	ST 474 *	319	42.6
HCR	7114-46	296	41.6
AVERAGES		367	40.1
L.S.D. (.10)		81	-
C.V. (%)		24.4	-

(*) CHECK

TABLE 18. PRELIMINARY COTTON TRIAL - LATER MATURING CULTIVARS -
 COASTAL PLAIN AVERAGES: FLORENCE AND BLACKVILLE, S.C.

		-----1999 DATA-----	
COMPANY OR BRAND NAME	VARIETY OR STRAIN	LINT YIELD (LB/A)	LINT PERCENT (%)
STONEVILLE	ST 6M045	478	39.3
USDA	PD97101	449	37.8
HCR	7126	440	41.0
PHYTOGEN	HS 12	429	38.1
USDA	PD 95079	410	38.5
PAYMASTER	PM 1560 BG *	404	39.6
HCR	9310	403	39.2
USDA	PD 96001	384	38.1
USDA	PD 95034	377	37.7
PHYTOGEN	GA 161	372	38.0
USDA	PD 96005	342	39.4
TERRA	366	333	38.4
DELTAPINE	NUCOTN 33 B *	333	37.4
USDA	PD97019	315	40.1
DELTAPINE	DP 51 *	314	38.2
PHYTOGEN	PSC 413	287	39.4
AVERAGES		379	38.8
L.S.D. (.10)		NS	-
C.V. (%)		31.7	-

(*) CHECK

TABLE 19. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (4-YEAR DATA 1996-99)

CULTIVAR OR STRAIN		UHM LENGTH (IN)	M/UHM UNIF. RATIO (PCT)	FIBER STRENGTH (G/TEX)	MIKE (READING)
DELTAPINE	DP 51	1.13	83.5	26.2	4.5
SURE-GROW	SG 501	1.11	83.3	32.3	4.5
SURE-GROW	SG 125	1.11	82.9	26.9	4.3
STONEVILLE	ST 474	1.09	82.8	28.2	4.7
AVERAGES		1.11	83.1	28.4	4.5
L.S.D. (.05)		NS	NS	1.0	NS
C.V. (%)		1.6	1.2	6.0	4.2

TABLE 20. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (3-YEAR DATA 1997-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 51	1.11	83.0	26.7	4.6
SURE-GROW	SG 501	1.10	83.2	32.7	4.5
SURE-GROW	SG 125	1.09	82.6	27.4	4.4
STONEVILLE	ST 474	1.09	82.5	28.6	4.7
STONEVILLE	BXN47	1.07	82.1	28.3	4.6
PAYMASTER	PM 1220 BG/RR	1.05	82.5	28.9	5.0
AVERAGES		1.08	82.6	28.8	4.6
L.S.D. (.05)		0.04	NS	1.6	NS
C.V. (%)		2.1	1.2	5.8	3.8

TABLE 21. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (2-YEAR DATA 1998-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 501	1.09	82.6	32.6	4.5
DELTAPINE	DP 51	1.09	82.1	27.2	4.7
SURE-GROW	SG 105	1.09	82.9	28.7	4.8
STONEVILLE	ST 373	1.08	81.8	26.6	4.3
SURE-GROW	SG 747	1.08	81.8	27.6	4.8
ACSI	E0052	1.07	81.6	29.0	4.9
PAYMASTER	PM 1330 BG	1.07	82.1	28.4	4.7
STONEVILLE	ST 474	1.07	81.8	28.4	4.9
SURE-GROW	SG 125	1.07	82.2	27.4	4.5
ACSI	FIBERMAX 963	1.06	81.5	31.8	4.6
STONEVILLE	BXN47	1.06	81.5	27.7	4.7
DELTAPINE	DP 5111	1.04	82.2	30.4	4.8
PAYMASTER	PM 1220 BG/RR	1.03	81.6	28.4	5.3
AVERAGES		1.07	82.0	28.8	4.7
L.S.D. (.05)		NS	NS	1.9	NS
C.V. (%)		2.0	1.2	5.0	4.7

TABLE 22. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
ACSI	FIBERMAX 819	1.09	82.4	30.5	4.5
SURE-GROW	SG 501	1.08	82.3	31.5	4.3
DELTAPINE	DP 51	1.08	81.9	26.7	4.4
PAYMASTER	PM 1330 BG	1.08	82.2	27.6	4.2
ACSI	E0052	1.07	81.4	29.6	4.6
USDA	PD 94056	1.07	82.1	29.6	4.3
SURE-GROW	SG 747	1.07	81.2	27.2	4.6
STONEVILLE	ST 373	1.07	81.3	26.3	4.2
SURE-GROW	SG 105	1.06	82.5	27.9	4.6
STONEVILLE	ST 474	1.06	81.5	28.0	4.8
DELTAPINE	DP 425 RR	1.06	82.0	27.4	4.5
PHYTOGEN	PSC 355	1.05	81.6	30.2	4.9
HRC	9257	1.05	81.7	29.2	4.4
ACSI	FIBERMAX 963	1.05	81.4	30.9	4.2
DELTAPINE	DP 428 B	1.04	81.3	26.4	4.4
PHYTOGEN	PSC 636	1.04	80.5	27.3	4.3
STONEVILLE	BXN47	1.04	80.9	26.7	4.6
SURE-GROW	SG 125	1.04	81.7	26.6	4.4
HRC	9220	1.04	81.5	27.4	4.3
PAYMASTER	PM 1220 BG/RR	1.03	81.4	28.0	4.9
DELTAPINE	DP 5111	1.03	81.9	30.1	4.6
PHYTOGEN	PSC 569	1.03	81.4	31.3	4.7
PHYTOGEN	PSC 952	1.02	81.8	28.5	4.7
PAYMASTER	PM 1440	1.02	80.1	28.6	4.8
AVERAGES		1.05	81.6	28.5	4.5
L.S.D. (.05)		0.03	NS	1.9	0.4
C.V. (%)		2.3	1.1	4.8	6.0

TABLE 23. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (2-YEAR DATA 1997 & 1999)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 248	1.13	82.7	31.2	4.5
DELTAPINE	NUCOTN 33 B	1.09	82.2	28.9	4.2
SURE-GROW	SG 821	1.08	82.5	30.0	4.5
DELTAPINE	DP 51	1.08	82.2	26.8	4.3
DELTAPINE	DP 5415 RR	1.07	81.6	30.1	4.4
DELTAPINE	NUCOTN 35 B	1.07	81.6	31.1	4.3
PAYMASTER	PM 1560 BG	1.05	82.4	29.6	4.4
DELTAPINE	DP 5690 RR	1.05	81.2	30.7	4.5
AVERAGES		1.09	82.8	29.3	4.4
L.S.D. (.05)		0.02	NS	1.5	NS
C.V. (%)		1.6	0.8	4.0	5.3

TABLE 24. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH (IN)	M/UHM UNIF. RATIO (PCT)	FIBER STRENGTH (G/TEX)	MIKE (READING)
ACSI	FIBERMAX 832	1.13	83.4	32.5	4.6
SURE-GROW	SG 248	1.13	82.7	31.2	4.5
ACSI	IF 1000	1.13	83.0	31.7	4.4
HRC	9263	1.12	83.2	32.1	4.6
USDA	PD 94063	1.11	82.1	31.6	4.1
ACSI	E0805	1.11	82.0	29.6	4.4
USDA	PD 94045	1.11	82.0	30.9	4.4
HRC	9240	1.10	82.2	29.0	4.3
USDA	PD 94042	1.10	82.6	31.3	4.5
TERRA	292	1.10	82.7	27.8	4.2
DELTAPINE	NUCOTN 33 B	1.09	82.2	28.9	4.2
ACSI	FIBERMAX 989	1.09	81.9	31.2	4.0
DELTAPINE	DP 5415	1.08	82.2	29.3	4.5
DELTAPINE	DP 675	1.08	81.8	31.6	4.3
SURE-GROW	SG 821	1.08	82.5	30.0	4.5
DELTAPINE	DP 51	1.08	82.2	26.8	4.3
PAYMASTER	PM 1560 BG/RR	1.07	81.6	28.8	4.1
DELTAPINE	DP 5415 RR	1.07	81.6	30.1	4.4
DELTAPINE	NUCOTN 35 B	1.07	81.6	31.1	4.3
DELTAPINE	DPX 9765	1.07	81.8	27.1	4.4
DELTAPINE	DP 458 BRR	1.06	81.4	28.0	4.6
DELTAPINE	DP 655 BRR	1.06	81.0	30.4	4.2
PAYMASTER	PM 1560 BG	1.05	82.4	29.6	4.4
DELTAPINE	DP 5690 RR	1.05	81.2	30.7	4.5
AVERAGES		1.09	82.1	30.0	4.3
L.S.D. (.05)		0.03	0.9	1.6	NS
C.V. (%)		1.9	0.8	3.7	5.9

TABLE 25. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (4-YEAR DATA 1996-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 51	1.09	82.7	26.4	4.2
SURE-GROW	SG 501	1.09	83.2	30.0	4.5
SURE-GROW	SG 125	1.09	83.1	25.2	4.2
STONEVILLE	ST 474	1.06	82.4	27.1	4.4
AVERAGES		1.08	82.8	27.2	4.3
L.S.D. (.05)		0.01	NS	1.4	NS
C.V. (%)		2.3	0.4	4.0	6.0

TABLE 26. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (3-YEAR DATA 1997-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 51	1.08	82.2	26.5	4.1
SURE-GROW	SG 501	1.08	82.8	30.7	4.5
SURE-GROW	SG 125	1.07	82.7	25.9	4.2
STONEVILLE	ST 474	1.05	82.1	27.8	4.5
STONEVILLE	BXN47	1.04	82.4	26.1	4.5
PAYMASTER	PM 1220 BG/RR	1.04	82.5	26.6	4.3
AVERAGES		1.06	82.4	27.3	4.3
L.S.D. (.05)		0.02	NS	1.5	NS
C.V. (%)		2.5	0.9	3.9	5.1

TABLE 27. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (2-YEAR DATA 1998-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 51	1.08	81.9	26.9	4.0
PAYMASTER	PM 1330 BG	1.08	81.8	27.2	3.9
SURE-GROW	SG 501	1.07	82.6	31.1	4.5
SURE-GROW	SG 125	1.06	81.7	25.9	4.1
ACSI	E0052	1.06	81.7	28.4	3.9
SURE-GROW	SG 105	1.05	81.4	26.9	4.3
ACSI	FIBERMAX 963	1.05	81.5	28.7	3.8
SURE-GROW	SG 747	1.05	81.5	25.3	4.3
STONEVILLE	ST 373	1.04	80.8	25.8	3.7
STONEVILLE	ST 474	1.04	81.5	27.8	4.3
PAYMASTER	PM 1220 BG/RR	1.04	81.9	26.6	4.0
STONEVILLE	BXN47	1.04	82.0	26.0	4.4
DELTAPINE	DP 5111	1.03	81.7	29.5	4.2
AVERAGES		1.05	81.7	27.4	4.1
L.S.D. (.05)		0.03	NS	2.5	NS
C.V. (%)		2.2	1.2	4.7	6.8

TABLE 28. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
USDA	PD 94056	1.04	80.6	29.5	3.9
DELTAPINE	DP 51	1.03	80.4	24.9	4.5
HRC	9257	1.03	81.1	29.0	4.2
DELTAPINE	DP 428 B	1.02	80.3	25.6	4.3
PAYMASTER	PM 1440	1.02	80.7	28.0	4.4
ACSI	FIBERMAX 819	1.02	81.1	29.0	4.9
SURE-GROW	SG 501	1.02	81.1	30.6	4.8
ACSI	E0052	1.01	80.7	28.6	4.6
PAYMASTER	PM 1330 BG	1.01	79.9	26.8	4.6
SURE-GROW	SG 747	1.01	80.6	25.5	4.6
PHYTOGEN	PSC 355	1.00	81.3	29.3	4.8
PHYTOGEN	PSC 952	1.00	80.8	27.8	4.7
STONEVILLE	ST 373	1.00	79.8	24.2	3.8
SURE-GROW	SG 125	1.00	81.2	25.5	4.5
STONEVILLE	ST 474	1.00	81.4	27.4	4.8
STONEVILLE	BXN47	0.99	81.4	25.9	4.8
ACSI	FIBERMAX 963	0.99	80.6	27.1	4.5
SURE-GROW	SG 105	0.99	80.0	25.4	4.5
DELTAPINE	DP 5111	0.98	80.9	27.5	4.4
PAYMASTER	PM 1220 BG/RR	0.98	80.1	25.3	4.3
PHYTOGEN	PSC 569	0.98	81.1	31.9	5.0
PHYTOGEN	PSC 636	0.97	79.6	24.4	4.4
DELTAPINE	DP 425 RR	0.96	80.6	26.6	4.7
HRC	9220	0.96	79.1	25.7	4.4
AVERAGES		1.00	80.6	27.1	4.5
L.S.D. (.05)		NS	NS	3.0	0.6
C.V. (%)		2.4	0.8	5.4	5.9

TABLE 29. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (3-YEAR DATA 1997-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 248	1.09	82.5	29.3	4.8
DELTAPINE	NUCOTN 35 B	1.07	81.9	31.0	4.4
DELTAPINE	NUCOTN 33 B	1.05	82.0	27.7	4.4
SURE-GROW	SG 821	1.04	81.6	28.1	4.5
DELTAPINE	DP 51	1.03	81.4	25.2	4.3
PAYMASTER	PM 1560 BG	1.03	82.3	28.9	4.4
DELTAPINE	DP 5415 RR	1.02	81.4	28.0	4.8
DELTAPINE	DP 5690 RR	1.02	81.2	30.1	4.8
AVERAGES		1.04	81.8	28.5	4.6
L.S.D. (.05)		0.03	0.7	1.7	NS
C.V. (%)		1.8	1.0	5.7	5.7

TABLE 30. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (2-YEAR DATA 1998-99)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 248	1.07	81.8	28.9	4.9
ACSI	FIBERMAX 832	1.06	81.1	29.9	4.6
USDA	PD 94045	1.05	81.1	28.6	4.4
DELTAPINE	NUCOTN 35 B	1.04	81.3	31.6	4.4
ACSI	IF 1000	1.04	81.2	31.0	4.8
USDA	PD 94042	1.04	80.7	28.6	4.6
TERRA	292	1.03	80.6	25.6	4.2
DELTAPINE	NUCOTN 33 B	1.03	81.6	27.9	4.5
SURE-GROW	SG 821	1.02	80.8	27.6	4.4
PAYMASTER	PM 1560 BG	1.02	81.5	29.0	4.4
ACSI	FIBERMAX 989	1.01	80.6	29.7	4.6
DELTAPINE	DP 51	1.01	80.7	25.0	4.2
DELTAPINE	DP 5415 RR	1.00	80.5	28.4	4.9
DELTAPINE	DP 5690 RR	1.00	80.5	29.9	4.9
AVERAGES		1.03	81.0	28.6	4.6
L.S.D. (.05)		0.04	NS	1.6	NS
C.V. (%)		2.0	1.0	5.6	5.1

TABLE 31. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
ACSI	FIBERMAX 832	1.04	80.6	30.0	4.7
USDA	PD 94045	1.03	80.5	29.0	4.5
SURE-GROW	SG 248	1.03	81.4	29.1	5.2
ACSI	IF 1000	1.02	81.7	32.3	5.2
USDA	PD 94042	1.02	80.1	29.1	4.7
TERRA	292	1.01	80.8	25.9	4.6
USDA	PD 94063	1.01	79.6	27.1	4.7
ACSI	E0805	1.00	79.9	28.5	4.9
DELTAPINE	NUCOTN 35 B	1.00	80.8	32.1	5.1
HRC	9240	1.00	79.7	27.2	4.8
HRC	9263	0.99	81.3	31.2	5.5
SURE-GROW	SG 821	0.99	80.4	28.1	4.7
ACSI	FIBERMAX 989	0.99	80.8	30.2	4.9
DELTAPINE	DP 675	0.99	80.8	31.8	5.2
DELTAPINE	NUCOTN 33 B	0.99	81.1	27.9	5.0
DELTAPINE	DP 458 BRR	0.99	80.5	27.5	5.3
DELTAPINE	DPX 9765	0.99	80.2	25.1	4.6
PAYMASTER	PM 1560 BG/RR	0.99	79.8	27.4	4.4
DELTAPINE	DP 5415 RR	0.99	80.5	28.9	5.2
PAYMASTER	PM 1560 BG	0.98	80.9	28.5	4.8
DELTAPINE	DP 51	0.98	80.3	24.6	4.5
DELTAPINE	DP 5690 RR	0.98	80.4	30.6	5.2
DELTAPINE	DP 5415	0.97	80.8	27.4	5.3
DELTAPINE	DP 655 BRR	0.96	80.3	28.8	4.9
AVERAGES		1.00	80.5	28.6	4.9
L.S.D. (.05)		0.03	NS	2.4	0.3
C.V. (%)		2.3	1.0	5.8	4.7

TABLE 32. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY PRELIMINARY PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM	M/UHM	FIBER	
		LENGTH	UNIF. RATIO	STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
HCR	7061-39	1.10	81.4	30.0	4.8
DELTAPINE	DP 51	1.06	81.4	27.6	4.9
DELTAPINE	DP 448 B	1.05	82.0	30.0	4.9
DELTAPINE	DP 422 BRR	1.05	81.2	27.2	4.5
DELTAPINE	DP 451 BRR	1.05	82.1	27.0	4.9
STONEVILLE	ST X9901	1.05	81.6	28.0	4.9
DELTAPINE	DP 409 BRR	1.04	81.5	26.5	4.6
STONEVILLE	ST X9903	1.04	81.5	28.4	4.7
DELTAPINE	DP 436 RR	1.04	82.0	27.8	4.9
PAYMASTER	PMX 2609	1.04	80.3	30.4	5.5
HCR	8445-5006	1.03	82.5	31.1	4.7
PAYMASTER	PMX 0425	1.03	81.7	27.7	4.8
SURE-GROW	SG 125	1.03	81.5	27.2	4.5
HCR	7114-46	1.03	80.7	25.9	4.9
STONEVILLE	ST X9902	1.02	81.1	29.6	5.1
DELTAPINE	DP 429 RR	1.02	80.4	27.0	4.5
SURE-GROW	SG 125 BR	1.02	81.9	27.6	4.6
SURE-GROW	SG 125 RR	1.02	81.0	27.0	4.6
HCR	9228	1.01	80.4	29.6	4.5
STONEVILLE	ST 474	1.01	81.4	28.9	5.0
SURE-GROW	SG 501 BR	1.01	82.2	30.8	4.9
DELTAPINE	DP 388	1.00	81.5	28.4	4.5
PAYMASTER	PM 1218 BG/RR	1.00	82.3	28.1	5.3
AVERAGES		1.03	81.4	28.3	4.8
L.S.D. (.05)		0.04	NS	2.0	0.3
C.V. (%)		1.9	0.8	3.5	3.1

TABLE 33. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY PRELIMINARY PERFORMANCE TEST - COASTAL PLAIN -
 PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
HCR	9310	1.14	82.7	29.6	4.6
USDA	PD 96001	1.14	82.5	29.7	3.8
PHYTOGEN	GA 161	1.13	82.3	32.4	3.9
PHYTOGEN	HS 12	1.12	82.3	32.4	4.9
USDA	PD 95079	1.11	84.4	31.9	4.3
USDA	PD 95034	1.10	82.5	31.3	4.2
DELTAPINE	NUCOTN 33 B	1.09	82.8	28.2	4.0
TERRA	366	1.09	81.1	26.4	4.9
STONEVILLE	ST6M045	1.09	82.3	30.2	4.3
USDA	PD97019	1.09	80.8	30.7	4.7
HCR	7126	1.08	81.3	28.8	4.5
PAYMASTER	PM 1560 BG	1.08	82.5	28.6	4.1
DELTAPINE	DP 51	1.07	81.3	28.3	4.5
USDA	PD97101	1.07	82.6	31.2	4.2
USDA	PD 96005	1.06	82.1	30.7	4.5
PHYTOGEN	PSC 413	1.04	82.3	28.8	4.6
AVERAGES		1.09	82.2	29.9	4.3
L.S.D. (.05)		0.06	NS	2.8	NS
C.V. (%)		2.4	1.0	4.3	12.6

TABLE 34. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 EARLY MATURITY PRELIMINARY PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 448 B	1.04	81.3	27.6	4.7
DELTAPINE	DP 436 RR	1.02	81.7	24.5	4.7
DELTAPINE	DP 409 BRR	1.01	80.5	26.4	3.9
HCR	7061-39	1.01	80.2	27.5	4.5
DELTAPINE	DP 451 BRR	1.01	81.0	25.0	4.7
HCR	8445-5006	1.01	80.4	27.9	4.2
SURE-GROW	SG 125	1.01	80.8	25.1	4.5
STONEVILLE	ST 474	1.00	80.6	26.4	5.2
DELTAPINE	DP 422 BRR	1.00	79.6	25.3	4.1
DELTAPINE	DP 51	0.99	80.6	25.2	4.5
PAYMASTER	PMX 2609	0.98	80.4	26.7	4.9
DELTAPINE	DP 429 RR	0.98	79.3	25.4	4.1
PAYMASTER	PM 1218 BG/RR	0.98	80.2	24.8	4.6
SURE-GROW	SG 125 BR	0.98	80.4	26.3	4.8
HCR	9228	0.97	79.6	28.2	3.9
DELTAPINE	DP 388	0.96	79.4	24.2	4.1
PAYMASTER	PMX 0425	0.96	79.4	23.3	4.5
HCR	7114-46	0.96	79.5	23.2	4.3
STONEVILLE	ST X9901	0.96	79.3	24.3	5.0
SURE-GROW	SG 501 BR	0.96	80.9	28.2	5.0
STONEVILLE	ST X9902	0.95	79.5	24.2	4.9
STONEVILLE	ST X9903	0.95	80.4	24.7	4.8
SURE-GROW	SG 125 RR	0.93	80.3	24.5	4.3
AVERAGES		0.98	80.2	25.6	4.5
L.S.D. (.05)		0.05	NS	2.8	0.4
C.V. (%)		2.3	1.1	5.3	3.8

TABLE 35. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS -
 LATER MATURITY PRELIMINARY PERFORMANCE TEST - COASTAL PLAIN -
 EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C.
 (1999 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
PHYTOGEN	GA 161	1.05	80.8	30.5	4.4
USDA	PD 96005	1.05	80.7	29.2	4.5
HCR	9310	1.04	80.7	29.9	5.3
USDA	PD 95079	1.04	81.2	30.2	4.5
USDA	PD97101	1.04	82.2	34.5	4.9
PHYTOGEN	PSC 413	1.02	80.2	27.6	4.5
DELTAPINE	NUCOTN, 33 B	1.01	80.7	27.7	4.9
USDA	PD97019	1.01	80.1	28.1	4.7
USDA	PD 95034	1.00	80.4	30.5	4.6
DELTAPINE	DP 51	1.00	81.2	24.7	4.6
HCR	7126	1.00	80.4	28.5	5.1
PHYTOGEN	HS 12	1.00	80.1	31.6	5.2
TERRA	366	1.00	81.6	25.5	4.7
USDA	PD 96001	1.00	80.1	27.7	4.7
PAYMASTER	PM 1560 BG	0.99	80.7	28.5	5.0
STONEVILLE	ST6M045	0.97	81.4	28.8	5.3
AVERAGES		1.01	80.8	28.9	4.8
L.S.D. (.05)		NS	NS	3.7	0.5
C.V. (%)		3.0	0.9	6.0	4.6