PERFORMANCE OF FIELD CROPS IN SOUTH CAROLINA - 1998

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SECTION 3 - COTTON

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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 - 1998

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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 1998 with multiple-year and multiple-location averages when available. Performance data for lint yield and lint percentage for the cultivars and strains evaluated in 1998 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 1998 were poor due to drought conditions and high temperatures. Cultural practices used for each trial are listed on pages 5 and 6. In general, 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 defoliants 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.

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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.

Our cotton trials are normally conducted with randomized complete block experimental designs. However, in 1998 we chose to try some incomplete block designs in an effort to increase the precision with which varietal yield differences can be estimated. Varietal yield means from these incomplete block designs are adjusted by a statistical process specific to incomplete block designs. Therefore, we present tables of variety yield means that reflect this statistical adjustment. Multiple year and location averages, however, are computed with unadjusted means because of the need for a common experimental design.

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 1998 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 will help maintain South Carolina cotton's market share.

Strength rating	1/8 inch gauge
	Grams/tex
Very Low	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 1998 COTTON VARIETY TRIALS

Operation	Test*	Location: **Florence**
Planting Date	AdvE AdvL PreE PreL	5-5 5-5 5-5 5-6
Fertilization PPI	AdvE AdvL PreE PreL	300#/ac 7-0-30 per soil test
Sidedress	All	62 units N from urea at squaring
Herbicides PPI PRE PDS LAYBY	All	Prowl 3.3 EC 2.4 pt/ac Meturon 4L 1 qt/ac Meturon 4L + MSMA 6, 1 qt + 0.33 gal/ac Cotoran 4L 1 qt/ac
Fungicides	All	Ridomil PC 11G 7lbs/ac in furrow
Insecticides	All	Temik 15G 5 lbs/ac (acts also as a nematicide at the 5lb rate) Decis 1.5 EC 2 oz/ac Baythrodid 2 5 oz/ac Tracer
Defoliation	AdvE PreE AdvL PreL	9-8 Dropp Ultra + Prep + crop oil, 0.13lb + 1.33 pt + 1 pt/ac (all trials) 9-8 9-25 9-25
Harvest Date	AdvE PreE AdvL PreL	9-24 9-24 10-15 10-15
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.	

* AdvE - Advanced Early Maturity Trial
AdvL - Advanced Later Maturity Trial
PreE - Preliminary Early Maturity Trial
PreL - Preliminary Later Maturity Trial

PRODUCTION PRACTICES OF 1998 COTTON VARIETY TRIALS

Operation	Test*	Location: **Blackville**
Planting Date	All	5-14
Harvest Date	Early	10-19
	Late	10-29

The Cultural Pratices for the Blackville location were not available at publication. They will be presented in full when they become available at the Variety Test Home Page at:

http://cropweb.clemson.edu/

EXPERIMENTAL RESULTS

YIELD

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FIBER PROPERTIES

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Florence, SC - Early (Table 33 & 34)	40-41
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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 ----1995-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	3-YEAR AVERAGES ----1996-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	2-YEAR AVERAGES ----1997-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	------1998 DATA------ RANK	LINT YIELD (LB/A)	LINT PERCENT (%)
SURE-GROW	SG 501	973	42.7	1024	42.5	862	42.0	7	670	42.5
SURE-GROW	SG 125	971	41.6	1028	41.4	908	41.0	5	686	40.7
STONEVILLE	ST 474	960	42.6	1031	42.9	885	42.5	11	619	42.0
DELTAPINE	51	875	39.3	899	39.0	772	38.2	14	590	38.3
STONEVILLE	BXN47	-	-	-	-	922	42.6	9	638	41.8
PAYMASTER	PM1244 RR	-	-	-	-	907	41.9	6	682	41.9
USDA	PD 93007	-	-	-	-	842	39.5	19	537	39.4
PAYMASTER	PM1220 RR	-	-	-	-	826	40.8	10	633	41.0
DELTAPINE	DP 32B	-	-	-	-	823	40.0	18	561	40.6
PAYMASTER	PM1220 BG/RR	-	-	-	-	817	41.4	20	531	42.5
STONEVILLE	BG 4740	-	-	-	-	762	43.6	23	439	43.4
STONEVILLE	ST 373	-	-	-	-	-	-	1	782	42.1
SURE-GROW	SG 747	-	-	-	-	-	-	2	753	42.4
SURE-GROW	SG 890	-	-	-	-	-	-	3	729	42.7
AGRIPRO	AP7115	-	-	-	-	-	-	4	700	41.7
PAYMASTER	PM1266	-	-	-	-	-	-	8	663	40.8
AGRIPRO	AP6102	-	-	-	-	-	-	12	608	37.5
SURE-GROW	SG 105	-	-	-	-	-	-	13	592	40.5
DELTAPINE	DP 20 B	-	-	-	-	-	-	15	575	41.2
DELTAPINE	DP 5111	-	-	-	-	-	-	16	573	40.3
PHYTOGEN	PSC 556	-	-	-	-	-	-	17	573	40.1
ACSI	FIBERMAX 963	-	-	-	-	-	-	21	468	40.4
PAYMASTER	PM1330 BG	-	-	-	-	-	-	22	453	41.3
AVERAGES		944	41.6	995	41.4	848	41.2		611	41.1
L.S.D. (.10)		76	-	90	-	125	-		94	-
C.V. (%)		10.2	-	10.1	-	12.8	-		16.1	-
STD. ERROR OF ENTRY MEAN									40.2	DF=110

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	1998 AVG. LINT YIELD (LB/A)	1997 RANK OF20	1997 AVG. LINT YIELD (LB/A)	1996 RANK OF16	1996 AVG. LINT YIELD (LB/A)	1995 RANK OF16	1995 AVG. LINT YIELD (LB/A)
STONEVILLE	ST 373	782	-	-	-	-	-	-
SURE-GROW	SG 747	753	-	-	-	-	-	-
SURE-GROW	SG 890	729	-	-	-	-	-	-
AGRIPRO	AP7115	700	-	-	-	-	-	-
SURE-GROW	SG 125	686	8	1129	4	1388	4	818
PAYMASTER	PM1244 RR	682	7	1132	-	-	-	-
SURE-GROW	SG 501	670	12	1055	2	1507	2	838
PAYMASTER	PM1266	663	-	-	-	-	-	-
STONEVILLE	BXN47	638	2	1205	-	-	-	-
PAYMASTER	PM1220 RR	633	15	1020	-	-	-	-
STONEVILLE	ST 474	619	4	1152	3	1470	8	771
AGRIPRO	AP6102	608	-	-	-	-	-	-
SURE-GROW	SG 105	592	-	-	-	-	-	-
DELTAPINE	51	590	18	955	12	1278	5	810
DELTAPINE	DP 20 B	575	-	-	-	-	-	-
DELTAPINE	DP 5111	573	-	-	-	-	-	-
PHYTOGEN	PSC 556	573	-	-	-	-	-	-
DELTAPINE	DP 32B	561	11	1084	-	-	-	-
USDA	PD 93007	537	6	1147	-	-	-	-
PAYMASTER	PM1220 BG/RR	531	9	1102	-	-	-	-
ACSI	FIBERMAX 963	468	-	-	-	-	-	-
PAYMASTER	PM1330 BG	453	-	-	-	-	-	-
STONEVILLE	BG 4740	439	10	1086	-	-	-	-

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 ----1995-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	3-YEAR AVERAGES ----1996-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	2-YEAR AVERAGES ----1997-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	------1998 DATA------ RANK	LINT YIELD(#) (LB/A)	LINT PERCENT (%)
DELTAPINE	DP 51	1114	39.7	1129	39.3	1020	38.9	9	847	38.9
PHYTOGEN	GEORGIA KING	1094	42.2	1157	41.9	1019	42.0	23	747	41.0
AGRIPRO	HS46	1080	41.1	1132	40.6	1057	40.3	12	838	39.6
AGRIPRO	HS44	1057	40.0	1118	39.6	1008	39.3	20	767	38.3
PAYMASTER	PM 1560	-	-	1272	41.5	1176	41.6	1	938	41.1
DELTAPINE	DP NUCOTN 35 B	-	-	1197	39.7	1057	39.5	16	815	40.0
DELTAPINE	DP 5415 RR	-	-	-	-	1103	40.4	10	842	40.2
SURE-GROW	SG 248	-	-	-	-	1103	41.4	3	904	40.6
SURE-GROW	SG 180	-	-	-	-	1058	39.6	13	836	39.5
DELTAPINE	DP 90 B	-	-	-	-	1035	40.0	22	760	39.4
DELTAPINE	DP 5690 RR	-	-	-	-	1034	39.5	14	823	38.7
SURE-GROW	SG 821	-	-	-	-	1023	39.6	7	851	39.0
DELTAPINE	DP NUCOTN 33 B	-	-	-	-	1001	38.9	21	765	39.5
PAYMASTER	PM 1560 BG	-	-	-	-	985	41.9	25	607	42.3
PHYTOGEN	PSC 952	-	-	-	-	-	-	2	914	40.8
ACSI	IF 1000	-	-	-	-	-	-	4	888	41.1
FIBERMAX	989	-	-	-	-	-	-	5	873	40.1
PHYTOGEN	PSC 636	-	-	-	-	-	-	6	856	39.2
USDA	PD94042	-	-	-	-	-	-	8	849	42.1
USDA	PD94045	-	-	-	-	-	-	11	839	41.1
AGRIPRO	AP4103	-	-	-	-	-	-	15	823	39.0
FIBERMAX	832	-	-	-	-	-	-	17	812	39.3
AGRIPRO	APX7104	-	-	-	-	-	-	18	802	39.0
FIBERMAX	975	-	-	-	-	-	-	19	785	41.3
TERRA	292	-	-	-	-	-	-	24	701	37.3
AVERAGES		1086	40.7	1168	40.4	1048	40.2		819	39.9
L.S.D. (.10)		87	-	80	-	129	-		82	-
C.V. (%)		12.0	-	8.0	-	8.6	-		10.5	-
STD. ERROR OF ENTRY MEAN									35.1	DF=120

1998 YIELD IS AN RCBS ANALYSIS OF A 5X5 BALANCED LATTICE

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	1998 AVG. LINT YIELD(#) (LB/A)	1997 RANK OF29	AVG. LINT YIELD (LB/A)	1996 RANK OF17	AVG. LINT YIELD (LB/A)	1995 RANK OF17	AVG. LINT YIELD (LB/A)
PAYMASTER	PM 1560	938	1	1413	2	1465	-	-
PHYTOGEN	PSC 952	914	-	-	-	-	-	-
SURE-GROW	SG 248	904	7	1302	-	-	-	-
ACSI	IF 1000	888	-	-	-	-	-	-
FIBERMAX	989	873	-	-	-	-	-	-
PHYTOGEN	PSC 636	856	-	-	-	-	-	-
SURE-GROW	SG 821	851	24	1195	-	-	-	-
USDA	PD94042	849	-	-	-	-	-	-
DELTAPINE	DP 51 *	847	26	1192	12	1347	2	1069
DELTAPINE	DP 5415 RR	842	2	1365	-	-	-	-
USDA	PD94045	839	-	-	-	-	-	-
AGRIPRO	HS46	838	13	1276	15	1283	13	925
SURE-GROW	SG 180	836	12	1281	-	-	-	-
DELTAPINE	DP 5690 RR	823	19	1245	-	-	-	-
AGRIPRO	AP4103	823	-	-	-	-	-	-
DELTAPINE	DP NUCOTN 35 B	815	8	1300	1	1476	-	-
FIBERMAX	832	812	-	-	-	-	-	-
AGRIPRO	APX7104	802	-	-	-	-	-	-
FIBERMAX	975	785	-	-	-	-	-	-
AGRIPRO	HS44	767	17	1250	13	1337	17	876
DELTAPINE	DP NUCOTN 33 B	765	20	1237	-	-	-	-
DELTAPINE	DP 90 B	760	6	1309	-	-	-	-
PHYTOGEN	GEORGIA KING	747	10	1291	3	1434	14	904
TERRA	292	701	-	-	-	-	-	-
PAYMASTER	PM 1560 BG	607	3	1363	-	-	-	-

(#) 1998 YIELD IS AN RCBS ANALYSIS OF A 5X5 BALANCED LATTICE

TABLE 5. ADVANCED COTTON TRIAL - LATER MATURING CULTIVARS - COASTAL PLAIN; PEE DEE RESEARCH AND EDUCATION CENTER, FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD(#) (LB/A)	1998 DATA LINT PERCENT (%)
PAYMASTER	PM 1560	950	41.1
PHYTOGEN	PSC 952	905	40.8
SURE-GROW	SG 248	902	40.6
ACSI	IF 1000	891	41.1
USDA	PD94042	861	42.1
FIBERMAX	989	860	40.1
SURE-GROW	SG 180	852	39.5
PHYTOGEN	PSC 636	852	39.2
USDA	PD94045	845	41.1
DELTAPINE	DP 51	844	38.9
DELTAPINE	DP 5415 RR	844	40.2
DELTAPINE	DP 5690 RR	834	38.7
AGRIPRO	AP4103	833	39.0
SURE-GROW	SG 821	831	39.0
AGRIPRO	HS46	821	39.6
DELTAPINE	DP NUCOTN 35 B	802	40.0
FIBERMAX	832	801	39.3
AGRIPRO	APX7104	783	39.0
AGRIPRO	HS44	782	38.3
PHYTOGEN	GEORGIA KING	782	41.0
FIBERMAX	975	776	41.3
DELTAPINE	DP NUCOTN 33 B	773	39.5
DELTAPINE	DP 90 B	740	39.4
TERRA	292	698	37.3
PAYMASTER	PM 1560 BG	618	42.3
AVERAGES		819	39.9
L.S.D. (.10)		76	-
C.V. (%)		9.6	-
STD. ERROR OF THE MEAN		32.2	DF=96

(#) YIELDS ADJUSTED BY LATTICE ANNALYSIS FOR 5X5 BALANCED LATTICE

TABLE 6. 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 ----1995-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	3-YEAR AVERAGES ----1996-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	2-YEAR AVERAGES ----1997-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	------1998 DATA------ RANK	LINT YIELD (LB/A)	LINT PERCENT (%)
SURE-GROW	125	1110	39.1	1132	39.0	918	38.9	8	575	37.9
SURE-GROW	501	1035	40.0	1026	40.0	789	40.1	16	517	40.2
STONEVILLE	ST 474	984	41.2	1009	41.3	799	41.5	18	502	40.5
DELTAPINE	51	973	37.0	1001	37.3	788	36.6	12	551	35.8
PAYMASTER	PM1220 BG/RR	-	-	-	-	925	39.9	2	649	38.2
PAYMASTER	PM1244 RR	-	-	-	-	888	40.2	11	555	39.4
DELTAPINE	DP 32B	-	-	-	-	847	37.2	5	608	35.3
USDA	PD 93007	-	-	-	-	816	38.0	15	527	37.4
STONEVILLE	BXN47	-	-	-	-	795	41.3	14	538	40.5
PAYMASTER	PM1220 RR	-	-	-	-	770	40.8	22	483	40.3
STONEVILLE	BG 4740	-	-	-	-	655	40.8	19	495	40.3
DELTAPINE	DP 20 B	-	-	-	-	-	-	1	667	37.0
SURE-GROW	SG 747	-	-	-	-	-	-	3	632	39.8
ACSI	FIBERMAX 963	-	-	-	-	-	-	4	623	37.5
AGRIPRO	AP7115	-	-	-	-	-	-	6	606	38.9
SURE-GROW	SG 105	-	-	-	-	-	-	7	587	38.7
SURE-GROW	SG 890	-	-	-	-	-	-	9	574	39.7
DELTAPINE	DP 5111	-	-	-	-	-	-	10	574	38.9
PAYMASTER	PM1330 BG	-	-	-	-	-	-	13	546	35.7
STONEVILLE	ST 373	-	-	-	-	-	-	17	513	40.2
PAYMASTER	PM1266	-	-	-	-	-	-	20	494	39.6
AGRIPRO	AP6102	-	-	-	-	-	-	21	485	36.8
PHYTOGEN	PSC 556	-	-	-	-	-	-	23	469	39.3
AVERAGES		1026	39.3	1042	39.4	817	39.6		555	38.6
L.S.D. (.10)		69	-	78	-	128	-		68	-
C.V. (%)		11.0	-	10.4	-	12.9	-		12.8	-
STD. ERROR OF ENTRY MEAN									28.9	DF=110

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

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 AVG. LINT YIELD (LB/A)	1997 RANK OF20	1997 AVG. LINT YIELD (LB/A)	1996 RANK OF16	1996 AVG. LINT YIELD (LB/A)	1995 RANK OF16	1995 AVG. LINT YIELD (LB/A)
DELTAPINE	DP 20 B	667	-	-	-	-	-	-
PAYMASTER	PM1220 BG/RR	649	4	1200	-	-	-	-
SURE-GROW	SG 747	632	-	-	-	-	-	-
ACSI	FIBERMAX 963	623	-	-	-	-	-	-
DELTAPINE	DP 32B	608	11	1086	-	-	-	-
AGRIPRO	AP7115	606	-	-	-	-	-	-
SURE-GROW	SG 105	587	-	-	-	-	-	-
SURE-GROW	SG 125	575	1	1261	1	1561	2	1045
SURE-GROW	SG 890	574	-	-	-	-	-	-
DELTAPINE	DP 5111	574	-	-	-	-	-	-
PAYMASTER	PM1244 RR	555	2	1222	-	-	-	-
DELTAPINE	51	551	16	1025	8	1427	8	888
PAYMASTER	PM1330 BG	546	-	-	-	-	-	-
STONEVILLE	BXN47	538	14	1053	-	-	-	-
USDA	PD 93007	527	8	1105	-	-	-	-
SURE-GROW	SG 501	517	12	1061	4	1499	1	1064
STONEVILLE	ST 373	513	-	-	-	-	-	-
STONEVILLE	ST 474	502	10	1097	7	1429	6	906
STONEVILLE	BG 4740	495	20	815	-	-	-	-
PAYMASTER	PM1266	494	-	-	-	-	-	-
AGRIPRO	AP6102	485	-	-	-	-	-	-
PAYMASTER	PM1220 RR	483	13	1058	-	-	-	-
PHYTOGEN	PSC 556	469	-	-	-	-	-	-

TABLE 8. 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 ----1995-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	3-YEAR AVERAGES ----1996-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	2-YEAR AVERAGES ----1997-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	------1998 DATA------ RANK	LINT YIELD(#) (LB/A)	LINT PERCENT (%)
PHYTOGEN	GEORGIA KING	1059	40.9	1078	41.3	782	41.2	9	550	40.6
AGRIPRO	HS44	1052	38.7	1063	39.1	763	38.9	20	470	38.6
AGRIPRO	HS46	1021	39.7	1076	40.0	787	39.5	8	558	38.8
DELTAPINE	DP 51	1004	37.3	1017	37.7	764	37.4	21	464	36.6
DELTAPINE	DP NUCOTN 35 B	-	-	1152	38.2	912	37.8	1	691	37.0
PAYMASTER	PM 1560	-	-	1117	40.6	860	40.4	17	488	40.2
PAYMASTER	PM 1560 BG	-	-	-	-	878	39.7	5	607	37.6
DELTAPINE	DP 90 B	-	-	-	-	849	37.7	2	678	37.1
SURE-GROW	SG 821	-	-	-	-	840	39.9	11	527	39.5
DELTAPINE	DP 5690 RR	-	-	-	-	827	39.3	13	516	39.5
SURE-GROW	SG 248	-	-	-	-	796	40.1	14	505	39.7
SURE-GROW	SG 180	-	-	-	-	778	38.3	15	502	37.7
DELTAPINE	DP NUCOTN 33 B	-	-	-	-	775	37.6	10	541	36.5
DELTAPINE	DP 5415 RR	-	-	-	-	699	39.7	25	383	39.2
FIBERMAX	832	-	-	-	-	-	-	3	653	41.0
USDA	PD94042	-	-	-	-	-	-	4	643	41.6
USDA	PD94045	-	-	-	-	-	-	6	577	40.8
PHYTOGEN	PSC 952	-	-	-	-	-	-	7	571	41.5
AGRIPRO	AP4103	-	-	-	-	-	-	12	524	38.4
PHYTOGEN	PSC 636	-	-	-	-	-	-	16	501	37.5
FIBERMAX	989	-	-	-	-	-	-	18	484	41.4
TERRA	292	-	-	-	-	-	-	19	483	35.7
ACSI	IF 1000	-	-	-	-	-	-	22	462	40.6
AGRIPRO	APX7104	-	-	-	-	-	-	23	409	38.3
FIBERMAX	975	-	-	-	-	-	-	24	398	40.0
AVERAGES		1034	39.1	1084	39.4	808	39.1		527	39.0
L.S.D. (.10)		NS	-	109	-	129	-		91	-
C.V. (%)		12.7	-	11.5	-	14.7	-		18.0	-
STD. ERROR OF ENTRY MEAN									38.9	DF=120

(#) 1998 YIELD IS AN RCBS ANALYSIS OF A 5X5 BALANCED LATTICE

TABLE 9. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN: EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 AVG. LINT YIELD(#) (LB/A)	1997 RANK OF29	1997 AVG. LINT YIELD (LB/A)	1996 RANK OF17	1996 AVG. LINT YIELD (LB/A)	1995 RANK OF17	1995 AVG. LINT YIELD (LB/A)
DELTAPINE	DP NUCOTN 35 B	691	9	1134	4	1633	-	-
DELTAPINE	DP 90 B	678	23	1020	-	-	-	-
FIBERMAX	832	653	-	-	-	-	-	-
USDA	PD94042	643	-	-	-	-	-	-
PAYMASTER	PM 1560 BG	607	5	1150	-	-	-	-
USDA	PD94045	577	-	-	-	-	-	-
PHYTOGEN	PSC 952	571	-	-	-	-	-	-
AGRIPRO	HS46	558	24	1016	3	1653	14	858
PHYTOGEN	GEORGIA KING	550	26	1013	1	1669	3	1005
DELTAPINE	DP NUCOTN 33 B	541	27	1010	-	-	-	-
SURE-GROW	SG 821	527	4	1153	-	-	-	-
AGRIPRO	AP4103	524	-	-	-	-	-	-
DELTAPINE	DP 5690 RR	516	7	1138	-	-	-	-
SURE-GROW	SG 248	505	13	1086	-	-	-	-
SURE-GROW	SG 180	502	18	1055	-	-	-	-
PHYTOGEN	PSC 636	501	-	-	-	-	-	-
PAYMASTER	PM 1560	488	1	1232	6	1630	-	-
FIBERMAX	989	484	-	-	-	-	-	-
TERRA	292	483	-	-	-	-	-	-
AGRIPRO	HS44	470	17	1057	2	1662	2	1018
DELTAPINE	DP 51	464	16	1065	16	1522	8	963
ACSI	IF 1000	462	-	-	-	-	-	-
AGRIPRO	APX7104	409	-	-	-	-	-	-
FIBERMAX	975	398	-	-	-	-	-	-
DELTAPINE	DP 5415 RR	383	25	1015	-	-	-	-

(#) 1998 YIELD IS AN RCBS ANALYSIS OF A 5X5 BALANCED LATTICE

TABLE 10. ADVANCED COTTON TRIAL - LATER MATURING CULTIVARS - COASTAL PLAIN; EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD(#) (LB/A)	1998 DATA LINT PERCENT (%)
DELTAPINE	DP NUCOTN 35 B	687	37.0
FIBERMAX	832	681	41.0
DELTAPINE	DP 90 B	654	37.1
USDA	PD94042	639	41.6
USDA	PD94045	585	40.8
PHYTOGEN	PSC 952	583	41.5
PAYMASTER	PM 1560 BG	575	37.6
AGRIPRO	HS46	567	38.8
DELTAPINE	DP NUCOTN 33 B	557	36.5
SURE-GROW	SG 821	546	39.5
PHYTOGEN	GEORGIA KING	528	40.6
AGRIPRO	AP4103	523	38.4
PAYMASTER	PM 1560	520	40.2
SURE-GROW	SG 180	508	37.7
DELTAPINE	DP 5690 RR	503	39.5
PHYTOGEN	PSC 636	502	37.5
SURE-GROW	SG 248	499	39.7
AGRIPRO	HS44	484	38.6
FIBERMAX	989	460	41.4
ACSI	IF 1000	454	40.6
TERRA	292	452	35.7
DELTAPINE	DP 51 *	432	36.6
AGRIPRO	APX7104	424	38.3
FIBERMAX	975	419	40.0
DELTAPINE	DP 5415 RR	405	39.2
AVERAGES		527	39.0
L.S.D. (.10)		79	-
C.V. (%)		15.7	-
STD. ERROR OF ENTRY MEAN		33.8	DF=96

(#) YIELDS ADJUSTED BY LATTICE ANNALYSIS FOR 5X5 BALANCED LATTICE

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

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES ----1995-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	3-YEAR AVERAGES ----1996-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	2-YEAR AVERAGES ----1997-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	------1998 DATA------ RANK	LINT YIELD (LB/A)	LINT PERCENT (%)
SURE-GROW	125	1044	40.3	1083	40.2	913	39.9	5	630	39.3
SURE-GROW	501	1005	41.3	1025	41.2	826	41.0	8	594	41.3
STONEVILLE	ST 474	972	41.9	1020	42.1	842	42.0	16	561	41.2
DELTAPINE	51	926	38.2	953	38.1	780	37.4	15	570	37.0
PAYMASTER	PM1244 RR	-	-	-	-	898	41.0	7	618	40.7
PAYMASTER	PM1220 BG/RR	-	-	-	-	871	40.7	9	590	40.3
STONEVILLE	BXN47	-	-	-	-	859	42.0	11	588	41.1
DELTAPINE	DP 32B	-	-	-	-	835	38.6	12	585	38.0
USDA	PD 93007	-	-	-	-	829	38.8	20	532	38.4
PAYMASTER	PM1220 RR	-	-	-	-	798	40.8	17	558	40.6
STONEVILLE	BG 4740	-	-	-	-	709	42.2	23	467	41.8
SURE-GROW	SG 747	-	-	-	-	-	-	1	693	41.1
AGRIPRO	AP7115	-	-	-	-	-	-	2	653	40.3
SURE-GROW	SG 890	-	-	-	-	-	-	3	652	41.2
STONEVILLE	ST 373	-	-	-	-	-	-	4	648	41.1
DELTAPINE	DP 20 B	-	-	-	-	-	-	6	621	39.1
SURE-GROW	SG 105	-	-	-	-	-	-	10	589	39.6
PAYMASTER	PM1266	-	-	-	-	-	-	13	579	40.2
DELTAPINE	DP 5111	-	-	-	-	-	-	14	573	39.6
AGRIPRO	AP6102	-	-	-	-	-	-	18	547	37.1
ACSI	FIBERMAX 963	-	-	-	-	-	-	19	545	38.9
PHYTOGEN	PSC 556	-	-	-	-	-	-	21	521	39.7
PAYMASTER	PM1330 BG	-	-	-	-	-	-	22	499	38.5
AVERAGES		987	40.4	1020	40.4	833	40.4		583	39.8
L.S.D. (.10)		44	-	40	-	106	-		133	-
C.V. (%)		10.7	-	10.2	-	12.8	-		17.7	-

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

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 AVG. LINT YIELD (LB/A)	1997 RANK OF20	1997 AVG. LINT YIELD (LB/A)	1996 RANK OF16	1996 AVG. LINT YIELD (LB/A)	1995 RANK OF16	1995 AVG. LINT YIELD (LB/A)
SURE-GROW	SG 747	693	-	-	-	-	-	-
AGRIPRO	AP7115	653	-	-	-	-	-	-
SURE-GROW	SG 890	652	-	-	-	-	-	-
STONEVILLE	ST 373	648	-	-	-	-	-	-
SURE-GROW	SG 125	630	2	1195	2	1492	2	932
DELTAPINE	DP 20 B	621	-	-	-	-	-	-
PAYMASTER	PM1244 RR	618	3	1177	-	-	-	-
SURE-GROW	SG 501	594	13	1058	1	1502	1	951
PAYMASTER	PM1220 BG/RR	590	4	1151	-	-	-	-
SURE-GROW	SG 105	589	-	-	-	-	-	-
STONEVILLE	BXN47	588	5	1129	-	-	-	-
DELTAPINE	DP 32B	585	11	1085	-	-	-	-
PAYMASTER	PM1266	579	-	-	-	-	-	-
DELTAPINE	DP 5111	573	-	-	-	-	-	-
DELTAPINE	51	570	17	990	8	1368	7	849
STONEVILLE	ST 474	561	7	1124	5	1445	8	839
PAYMASTER	PM1220 RR	558	14	1039	-	-	-	-
AGRIPRO	AP6102	547	-	-	-	-	-	-
ACSI	FIBERMAX 963	545	-	-	-	-	-	-
USDA	PD 93007	532	6	1126	-	-	-	-
PHYTOGEN	PSC 556	521	-	-	-	-	-	-
PAYMASTER	PM1330 BG	499	-	-	-	-	-	-
STONEVILLE	BG 4740	467	19	951	-	-	-	-

TABLE 13. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN AVERAGES: BLACKVILLE AND FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	4-YEAR AVERAGES ----1995-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	3-YEAR AVERAGES ----1996-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	2-YEAR AVERAGES ----1997-98---- LINT YIELD (LB/A)	LINT PERCENT (%)	------1998 DATA------ RANK	LINT YIELD (LB/A)	LINT PERCENT (%)
PHYTOGEN	GEORGIA KING	1077	41.5	1117	41.6	900	41.6	19	649	40.8
DELTAPINE	DP 51	1059	38.5	1073	38.5	892	38.2	17	656	37.8
AGRIPRO	HS44	1055	39.4	1090	39.3	886	39.1	20	618	38.4
AGRIPRO	HS46	1051	40.4	1104	40.3	922	39.9	9	698	39.2
PAYMASTER	PM 1560	-	-	1195	41.0	1018	41.0	6	713	40.7
DELTAPINE	DP NUCOTN 35 B	-	-	1175	39.0	985	38.6	1	753	38.5
SURE-GROW	SG 248	-	-	-	-	949	40.8	8	705	40.1
DELTAPINE	DP 90 B	-	-	-	-	942	38.8	5	719	38.3
PAYMASTER	PM 1560 BG	-	-	-	-	932	40.8	22	607	39.9
SURE-GROW	SG 821	-	-	-	-	931	39.7	10	689	39.3
DELTAPINE	DP 5690 RR	-	-	-	-	930	39.4	15	669	39.1
SURE-GROW	SG 180	-	-	-	-	918	39.0	16	669	38.6
DELTAPINE	DP 5415 RR	-	-	-	-	901	40.0	21	612	39.7
DELTAPINE	DP NUCOTN 33 B	-	-	-	-	888	38.3	18	653	38.0
USDA	PD94042	-	-	-	-	-	-	2	746	41.9
PHYTOGEN	PSC 952	-	-	-	-	-	-	3	743	41.1
FIBERMAX	832	-	-	-	-	-	-	4	733	40.1
USDA	PD94045	-	-	-	-	-	-	7	708	40.9
PHYTOGEN	PSC 636	-	-	-	-	-	-	11	679	38.4
FIBERMAX	989	-	-	-	-	-	-	12	679	40.8
ACSI	IF 1000	-	-	-	-	-	-	13	675	40.8
AGRIPRO	AP4103	-	-	-	-	-	-	14	673	38.7
AGRIPRO	APX7104	-	-	-	-	-	-	23	606	38.7
TERRA	292	-	-	-	-	-	-	24	592	36.5
FIBERMAX	975	-	-	-	-	-	-	25	591	40.6
AVERAGES		1060	39.3	1126	40.0	928	39.6		673	39.4
L.S.D. (.10)		44	-	74	-	103	-		142	-
C.V. (%)		12.3	-	9.8	-	11.3	-		13.5	-

TABLE 14. COTTON CULTIVAR TRIAL - LATER MATURITY - COASTAL PLAIN AVERAGES: BLACKVILLE AND FLORENCE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 AVG. LINT YIELD (LB/A)	1997 RANK OF20	1997 AVG. LINT YIELD (LB/A)	1996 RANK OF16	1996 AVG. LINT YIELD (LB/A)	1995 RANK OF16	1995 AVG. LINT YIELD (LB/A)
DELTAPINE	DP NUCOTN 35 B	753	4	1217	1	1554	-	-
USDA	PD94042	746	-	-	-	-	-	-
PHYTOGEN	PSC 952	743	-	-	-	-	-	-
FIBERMAX	832	733	-	-	-	-	-	-
DELTAPINE	DP 90 B	719	15	1164	-	-	-	-
PAYMASTER	PM 1560	713	1	1323	3	1548	-	-
USDA	PD94045	708	-	-	-	-	-	-
SURE-GROW	SG 248	705	7	1194	-	-	-	-
AGRIPRO	HS46	698	22	1146	13	1468	17	891
SURE-GROW	SG 821	689	13	1174	-	-	-	-
PHYTOGEN	PSC 636	679	-	-	-	-	-	-
FIBERMAX	989	679	-	-	-	-	-	-
ACSI	IF 1000	675	-	-	-	-	-	-
AGRIPRO	AP4103	673	-	-	-	-	-	-
DELTAPINE	DP 5690 RR	669	8	1191	-	-	-	-
SURE-GROW	SG 180	669	14	1168	-	-	-	-
DELTAPINE	DP 51	656	25	1129	16	1435	2	1016
DELTAPINE	DP NUCOTN 33 B	653	26	1123	-	-	-	-
PHYTOGEN	GEORGIA KING	649	20	1152	2	1552	9	954
AGRIPRO	HS44	618	19	1153	6	1500	10	947
DELTAPINE	DP 5415 RR	612	11	1190	-	-	-	-
PAYMASTER	PM 1560 BG	607	3	1257	-	-	-	-
AGRIPRO	APX7104	606	-	-	-	-	-	-
TERRA	292	592	-	-	-	-	-	-
FIBERMAX	975	591	-	-	-	-	-	-

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

COMPANY OR BRAND NAME	VARIETY OR STRAIN	-----1998 DATA----- LINT YIELD(#) (LB/A)	LINT PERCENT (%)
USDA	PD 94056	761	38.8
PHYTOGEN	PSC 355	724	40.9
ACSI	E0052	717	42.6
USDA	PD 94068	703	39.4
SURE-GROW	SG 125 *	682	40.9
DELTAPINE	DPX 8C27	665	42.9
STONEVILLE	ST-474 *	654	42.3
NCSU	NC 72	647	39.4
PAYMASTER	PM 1242 RR	633	40.1
PAYMASTER	PM 1210	629	42.9
PHYTOGEN	TX 224	619	40.0
ACSI	E0033	610	41.7
AGRIPRO	APX 7114	604	40.4
AGRIPRO	APX 9220	603	40.0
DELTAPINE	DP 51 *	601	38.7
PAYMASTER	PM 1218 BG/RR	588	42.6
PHYTOGEN	TX 121	587	39.0
DELTAPINE	DP 428 B	579	39.0
DELTAPINE	DP 425 RR	572	38.2
PHYTOGEN	PSC 262	562	38.3
PAYMASTER	PM 1215 BG	545	41.0
TERRA	257 RR	536	40.4
ACSI	FIBERMAX 819	513	41.9
PHYTOGEN	TX 300	446	39.6
PHYTOGEN	TX 141	422	38.6
AVERAGES		608	40.8
L.S.D. (.10)		87	-
C.V. (%)		11.0	-
STD. ERROR OF PRY MEAN		36.6 DF=56	

(*) CHECK VARIETY
(*) YIELDS ARE ADJUSTED BY LATTICE ANALYSIS FOR A 5X5 PARTALLY BALANCED LATTICE

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

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD (LB/A)	1998 DATA LINT PERCENT (%)
UGA	GA 94-325	725	39.0
AGRIPRO	APX 9263	723	37.2
ACSI	E0805	718	39.8
PHYTOGEN	PSC 569	698	38.5
DELTAPINE	DPX 9725	698	40.0
DELTAPINE	DPX 9775	689	39.2
DELTAPINE	DP 458 BRR	682	38.5
USDA	PD 94063	668	38.2
AGRIPRO	APX 9257	661	38.8
DELTAPINE	DPX 9765	657	38.1
PAYMASTER	PM 1580 RR	655	39.8
PAYMASTER	PM 1440	652	39.5
AGRIPRO	APX 9240	652	41.2
DH	C-SL-5	651	38.2
DELTAPINE	DP 655 BRR	647	38.6
DH	F-SML-2	645	37.7
PAYMASTER	PM 9307-0802	643	39.2
DELTAPINE	DP 51 *	642	37.8
USDA	PD 94069	642	38.3
ACSI	E0131	628	39.2
UGA	GA 93-B	625	37.9
UGA	GA 93-299	624	39.8
ACSI	E0781	622	40.2
USDA	PD 94071	621	37.7
DELTAPINE	NUCOTN 33 B *	620	37.4
UGA	GA 94-894	620	39.0
ACSI	E0222	607	41.4
USDA	PD 94079	603	38.3
ACSI	E1100	569	37.1
UGA	GA 93-317	566	37.3
UGA	GA 92-161	545	36.1
PAYMASTER	PM 1560 BG *	530	40.9
TERRA	366	520	37.8
UGA	GA 95-155	504	36.8
AVERAGES		634	38.6
L.S.D. (.10)		100	-
C.V. (%)		13.3	-
STD. ERROR OF ENTRY MEAN		42.3 DF=99	

* CHECK VARIETY

TABLE 17. PRELIMINARY COTTON TRIAL - EARLY MATURING CULTIVARS - COASTAL PLAIN; EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD (LB/A)	1998 DATA LINT PERCENT (%)
PAYMASTER	PM 1218 BG/RR	636	39.5
PHYTOGEN	PSC 355	623	40.4
DELTAPINE	DP 428 B	610	35.4
ACSI	E0052	594	41.1
ACSI	FIBERMAX 819	558	40.5
NCSU	NC 72	537	38.6
AGRIPRO	APX 9220	536	37.9
DELTAPINE	DP 51 *	525	36.3
SURE-GROW	SG 125 *	521	38.9
PAYMASTER	PM 1215 BG	519	37.1
PAYMASTER	PM 1242 RR	516	40.3
PHYTOGEN	TX 224	515	38.8
ACSI	E0033	510	40.2
USDA	PD 94056	503	37.5
TERRA	257 RR	497	40.5
DELTAPINE	DP 425 RR	484	37.4
PHYTOGEN	PSC 262	472	37.1
PHYTOGEN	TX 121	469	37.6
STONEVILLE	ST-474 *	457	40.7
DELTAPINE	DPX 8C27	441	40.3
AGRIPRO	APX 7114	404	39.9
PHYTOGEN	TX 141	399	35.8
PHYTOGEN	TX 300	371	38.3
USDA	PD 94068	368	37.8
PAYMASTER	PM 1210	352	42.7
AVERAGES		497	38.8
L.S.D. (.10)		67	-
C.V. (%)		11.5	-
STD. ERROR OF EVERY MEAN		28.5	DF=72

(#) YIELD IS AN RCBS ANALYSIS OF A 5X5 PARTALLY BALANCED LATTICE
* CHECK VARIETY

TABLE 18. PRELIMINARY COTTON TRIAL - LATER MATURING CULTIVARS - COASTAL PLAIN; EDISTO RESEARCH AND EDUCATION CENTER, BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD (LB/A)	1998 DATA LINT PERCENT (%)
PAYMASTER	PM 1560 BG *	608	37.4
DELTAPINE	DP 655 BRR	606	37.8
PHYTOGEN	PSC 569	597	41.0
DELTAPINE	DP 458 BRR	581	37.9
ACSI	E0222	542	40.9
ACSI	E1100	525	42.6
DELTAPINE	NUCOTN 33 B *	525	36.5
ACSI	E0131	524	40.4
ACSI	E0805	503	40.6
UGA	GA 94-325	494	39.1
UGA	GA 94-894	490	39.3
DELTAPINE	DPX 9725	488	40.6
ACSI	E0781	488	42.3
USDA	PD 94069	483	38.9
AGRIPRO	APX 9257	478	38.7
PAYMASTER	PM 9307-0802	475	39.8
DELTAPINE	DPX 9765	474	40.1
USDA	PD 94079	470	38.3
USDA	PD 94071	461	39.8
DELTAPINE	DP 51 *	459	37.4
PAYMASTER	PM 1440	452	39.7
AGRIPRO	APX 9263	452	39.2
DH	C-SL-5	443	37.7
UGA	GA 92-161	440	38.7
UGA	GA 93-299	440	39.1
USDA	PD 94063	436	41.1
PAYMASTER	PM 1580 RR	415	40.7
TERRA	366	414	38.4
UGA	GA 93-317	412	38.7
AGRIPRO	APX 9240	381	40.2
UGA	GA 95-155	378	37.4
DELTAPINE	DPX 9775	350	39.4
UGA	GA 93-B	317	40.3
DH	F-SML-2	312	38.1
AVERAGES		468	39.3
L.S.D. (.10)		110	-
C.V. (%)		20.0	-
STD. ERROR OF ENTRY MEAN		46.8	DF=99

(*) CHECK VARIETY

TABLE 19. PRELIMINARY COTTON TRIAL - EARLY MATURING CULTIVARS - COASTAL PLAIN AVERAGES: FLORENCE AND BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD (LB/A)	1998 DATA LINT PERCENT (%)
PHYTOGEN	PSC 355	682	40.6
ACSI	E0052	659	41.9
USDA	PD 94056	634	38.2
NCSU	NC 72	610	39.0
PAYMASTER	PM 1218 BG/RR	603	41.1
STONEVILLE	ST-474 *	601	41.5
ACSI	FIBERMAX 819	598	41.2
PHYTOGEN	TX 224	588	39.4
SURE-GROW	SG 125 *	585	39.9
DELTAPINE	DP 51 *	577	37.5
DELTAPINE	DP 428 B	569	37.2
PAYMASTER	PM 1215 BG	567	39.0
PAYMASTER	PM 1242 RR	562	40.2
ACSI	E0033	560	40.9
DELTAPINE	DPX 8C27	552	41.6
AGRIPRO	APX 9220	551	38.9
USDA	PD 94068	531	38.6
PHYTOGEN	PSC 262	520	37.7
TERRA	257 RR	515	40.4
PHYTOGEN	TX 121	509	38.3
DELTAPINE	DP 425 RR	495	37.8
PAYMASTER	PM 1210	495	42.8
AGRIPRO	APX 7114	437	40.2
PHYTOGEN	TX 141	407	37.2
PHYTOGEN	TX 300	402	38.9
AVERAGES		552	39.6
L.S.D. (.10)		124	-
C.V. (%)		17.7	-

(*) CHECK VARIETY

TABLE 20. PRELIMINARY COTTON TRIAL - LATER MATURING CULTIVARS - COASTAL PLAIN AVERAGES: FLORENCE AND BLACKVILLE, S.C.

COMPANY OR BRAND NAME	VARIETY OR STRAIN	1998 DATA LINT YIELD (LB/A)	1998 DATA LINT PERCENT (%)
PHYTOGEN	PSC 569	648	39.7
DELTAPINE	DP 458 BRR	631	38.2
DELTAPINE	DP 655 BRR	627	38.2
ACSI	E0805	610	40.2
UGA	GA 94-325	609	39.0
DELTAPINE	DPX 9725	593	40.3
AGRIPRO	APX 9263	587	38.2
ACSI	E0131	576	39.8
ACSI	E0222	575	41.1
DELTAPINE	NUCOTN 33 B *	572	36.9
AGRIPRO	APX 9257	570	38.7
PAYMASTER	PM 1560 BG *	569	39.1
DELTAPINE	DPX 9765	566	39.1
USDA	PD 94069	563	38.6
PAYMASTER	PM 9307-0802	559	39.5
ACSI	E0781	555	41.2
UGA	GA 94-894	555	39.1
PAYMASTER	PM 1440	552	39.6
USDA	PD 94063	552	39.7
DELTAPINE	DP 51 *	551	37.6
ACSI	E1100	547	39.9
DH	C-SL-5	547	38.0
USDA	PD 94071	541	38.7
USDA	PD 94079	536	38.3
PAYMASTER	PM 1580 RR	535	40.2
UGA	GA 93-299	532	39.5
DELTAPINE	DPX 9775	520	39.3
AGRIPRO	APX 9240	516	40.7
UGA	GA 92-161	493	37.4
UGA	GA 93-317	489	38.0
DH	F-SML-2	479	37.9
UGA	GA 93-B	471	39.1
TERRA	366	467	38.1
UGA	GA 95-155	441	37.1
AVERAGES		551	39.0
L.S.D. (.10)		105	-
C.V. (%)		16.2	-

(*) CHECK VARIETY

TABLE 21. 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 1995-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	51	1.15	83.7	26.0	4.5
SURE-GROW	SG 125	1.14	83.0	26.1	4.2
SURE-GROW	SG 501	1.12	83.2	32.2	4.6
STONEVILLE	ST 474	1.10	82.7	27.5	4.5
AVERAGES		1.13	83.2	27.9	4.4
L.S.D. (.05)		0.02	NS	1.4	0.2
C.V. (%)		1.9	1.2	3.6	3.6

TABLE 22. 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 1996-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	51	1.16	84.5	25.9	4.6
SURE-GROW	SG 125	1.15	83.8	27.0	4.3
SURE-GROW	SG 501	1.13	84.0	32.8	4.7
STONEVILLE	ST 474	1.11	83.7	28.4	4.6
AVERAGES		1.14	84.0	28.5	4.5
L.S.D. (.05)		0.03	NS	1.2	NS
C.V. (%)		1.8	1.4	4.4	3.8

TABLE 23. 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 1997-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	51	1.15	84.1	26.8	4.9
USDA	PD 93007	1.15	83.2	32.3	4.1
SURE-GROW	SG 125	1.14	83.5	28.2	4.4
SURE-GROW	SG 501	1.13	84.0	33.8	4.8
STONEVILLE	BG 4740	1.11	83.2	30.0	4.9
STONEVILLE	ST 474	1.11	83.5	29.3	4.7
DELTAPINE	DP 32B	1.11	82.9	30.0	4.9
STONEVILLE	BXN47	1.10	83.3	30.0	4.6
PAYMASTER	PM1220 RR	1.10	84.0	29.9	4.8
PAYMASTER	PM1220 BG/RR	1.08	83.5	29.7	5.1
PAYMASTER	PM1244 RR	1.06	82.3	30.2	4.8
AVERAGES		1.11	83.4	30.0	4.7
L.S.D. (.05)		0.05	NS	2.3	NS
C.V. (%)		1.6	1.2	4.4	2.9

TABLE 24. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN - PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
AGRIPRO	AP6102	1.19	84.2	35.6	4.9
PHYTOGEN	PSC 556	1.15	82.8	32.3	4.2
PAYMASTER	PM1266	1.14	82.8	28.5	4.8
SURE-GROW	SG 105	1.14	83.8	30.5	5.2
SURE-GROW	SG 890	1.14	83.1	29.1	4.8
SURE-GROW	SG 125	1.13	83.2	29.0	4.7
USDA	PD 93007	1.13	83.1	33.5	4.4
SURE-GROW	SG 501	1.13	83.3	34.6	5.0
STONEVILLE	ST 373	1.12	82.7	27.1	4.5
DELTAPINE	51	1.11	82.6	28.2	5.4
SURE-GROW	SG 747	1.10	83.0	28.6	5.3
STONEVILLE	ST 474	1.09	82.4	29.3	5.1
PAYMASTER	PM1220 RR	1.09	82.7	30.9	5.2
STONEVILLE	BXN47	1.09	82.7	29.7	4.9
ACSI	FIBERMAX 963	1.08	81.8	33.7	5.4
DELTAPINE	DP 5111	1.08	82.8	31.1	5.2
AGRIPRO	AP7115	1.08	81.8	29.0	5.1
STONEVILLE	BG 4740	1.08	82.6	29.1	5.8
DELTAPINE	DP 20 B	1.07	81.9	27.8	5.6
DELTAPINE	DP 32B	1.07	81.8	30.8	5.7
PAYMASTER	PM1330 BG	1.07	81.9	29.9	5.6
PAYMASTER	PM1244 RR	1.05	81.5	31.1	5.1
PAYMASTER	PM1220 BG/RR	1.03	81.9	29.2	6.0
AVERAGES		1.10	82.6	30.4	5.1
L.S.D. (.05)		0.03	NS	2.6	0.3
C.V. (%)		1.4	0.9	4.1	3.2

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 1995-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 125	1.13	83.4	24.5	4.0
DELTAPINE	51	1.12	83.0	26.2	3.9
SURE-GROW	SG 501	1.12	83.6	29.4	4.3
STONEVILLE	ST 474	1.08	82.7	26.8	4.1
AVERAGES		1.11	83.2	26.7	4.1
L.S.D. (.05)		0.02	NS	1.1	NS
C.V. (%)		2.2	0.6	3.5	5.7

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 1996-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 501	1.12	84.0	29.8	4.4
DELTAPINE	51	1.12	83.4	26.9	4.1
SURE-GROW	SG 125	1.12	83.7	25.1	4.2
STONEVILLE	ST 474	1.08	82.7	27.0	4.3
AVERAGES		1.11	83.4	27.2	4.2
L.S.D. (.05)		0.02	NS	1.5	NS
C.V. (%)		2.1	0.4	4.2	5.6

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 1997-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
USDA	PD 93007	1.12	83.3	29.2	3.8
SURE-GROW	SG 501	1.12	83.7	30.8	4.3
DELTAPINE	51	1.11	83.1	27.4	3.9
SURE-GROW	SG 125	1.11	83.5	26.1	4.1
DELTAPINE	DP 32B	1.09	83.2	27.6	4.1
STONEVILLE	ST 474	1.08	82.4	28.0	4.4
STONEVILLE	BXN47	1.07	83.0	26.2	4.4
PAYMASTER	PM1220 BG/RR	1.07	83.8	27.3	4.3
STONEVILLE	BG 4740	1.07	83.0	26.5	4.1
PAYMASTER	PM1220 RR	1.07	84.3	28.5	4.4
PAYMASTER	PM1244 RR	1.05	83.8	28.4	4.1
AVERAGES		1.10	83.4	27.8	4.2
L.S.D. (.05)		0.03	NS	1.7	NS
C.V. (%)		2.2	0.9	3.3	4.2

TABLE 28. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - EARLY MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN - EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 890	1.15	83.6	25.8	3.8
PAYMASTER	PM1330 BG	1.14	83.8	27.6	3.2
AGRIPRO	AP6102	1.14	82.5	31.0	4.1
DELTAPINE	51	1.14	83.5	28.9	3.6
PAYMASTER	PM1266	1.14	82.2	26.6	3.5
SURE-GROW	SG 501	1.13	84.2	31.7	4.2
PHYTOGEN	PSC 556	1.12	81.5	27.3	3.9
SURE-GROW	SG 105	1.12	82.9	28.4	4.1
USDA	PD 93007	1.12	81.7	29.5	3.6
SURE-GROW	SG 125	1.12	82.3	26.3	3.8
DELTAPINE	DP 32B	1.11	83.3	29.1	3.5
ACSI	FIBERMAX 963	1.11	82.4	30.4	3.2
DELTAPINE	DP 20 B	1.11	82.7	28.2	3.2
PAYMASTER	PM1220 BG/RR	1.10	83.7	28.0	3.8
STONEVILLE	BG 4740	1.09	83.0	26.7	3.8
PAYMASTER	PM1220 RR	1.09	83.8	29.1	4.1
STONEVILLE	ST 373	1.09	81.9	27.5	3.6
STONEVILLE	ST 474	1.09	81.5	28.3	3.9
AGRIPRO	AP7115	1.08	81.3	28.6	3.6
STONEVILLE	BXN47	1.08	82.7	26.1	4.0
SURE-GROW	SG 747	1.08	82.4	25.1	4.1
DELTAPINE	DP 5111	1.08	82.6	31.5	4.1
PAYMASTER	PM1244 RR	1.06	83.6	28.4	3.7
AVERAGES		1.10	82.7	28.3	3.7
L.S.D. (.05)		0.04	NS	2.1	0.4
C.V. (%)		1.9	1.2	3.6	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. (4-YEAR DATA 1995-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 51	1.12	83.2	25.5	3.8
AGRIPRO	HS46	1.12	82.7	28.6	3.9
AGRIPRO	HS44	1.11	82.7	29.1	4.3
PHYTOGEN	GEORGIA KING	1.10	82.6	28.6	3.9
AVERAGES		1.11	82.8	28.0	4.0
L.S.D. (.05)		NS	NS	1.0	0.3
C.V. (%)		2.5	1.3	2.2	5.0

TABLE 30. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN - EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C. (3-YEAR DATA 1996-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP NUCOTN 35 B	1.12	83.0	29.8	4.0
AGRIPRO	HS44	1.10	82.4	29.2	4.4
DELTAPINE	DP 51	1.10	83.0	25.5	4.0
PHYTOGEN	GEORGIA KING	1.09	82.2	28.5	4.0
AGRIPRO	HS46	1.09	82.3	28.4	4.1
PAYMASTER	PM 1560	1.09	82.3	26.8	4.1
AVERAGES		1.10	82.5	28.0	4.1
L.S.D. (.05)		NS	NS	1.7	NS
C.V. (%)		2.3	1.2	2.2	5.0

TABLE 31. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN - EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C. (2-YEAR DATA 1997-98)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 248	1.14	83.6	29.5	4.5
DELTAPINE	DP NUCOTN 35 B	1.12	82.8	30.2	3.9
DELTAPINE	DP NUCOTN 33 B	1.11	83.0	27.5	3.9
SURE-GROW	SG 180	1.11	83.3	29.2	4.3
AGRIPRO	HS44	1.09	82.2	29.4	4.5
DELTAPINE	DP 90 B	1.09	82.9	29.9	3.8
DELTAPINE	DP 51	1.09	82.4	25.7	4.1
SURE-GROW	SG 821	1.08	82.8	28.1	4.4
AGRIPRO	HS46	1.08	81.7	28.0	4.2
PHYTOGEN	GEORGIA KING	1.08	81.9	28.1	4.2
PAYMASTER	PM 1560 BG	1.08	83.7	29.2	4.1
PAYMASTER	PM 1560	1.07	81.8	26.7	4.3
DELTAPINE	DP 5415 RR	1.06	82.4	27.2	4.4
DELTAPINE	DP 5690 RR	1.06	82.0	29.5	4.4
AVERAGES		1.09	82.6	28.4	4.2
L.S.D. (.05)		0.04	1.0	2.4	NS
C.V. (%)		2.4	1.2	3.8	4.7

TABLE 32. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - LATER MATURITY CULTIVAR PERFORMANCE TEST - COASTAL PLAIN - EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
SURE-GROW	SG 248	1.14	82.6	28.4	4.2
DELTAPINE	DP NUCOTN 33 B	1.13	82.5	27.9	3.4
DELTAPINE	DP NUCOTN 35 B	1.11	81.9	30.9	3.5
SURE-GROW	SG 180	1.11	82.2	28.2	4.0
DELTAPINE	DP 90 B	1.11	81.8	30.3	3.5
FIBERMAX	832	1.11	82.2	29.5	4.4
AGRIPRO	AP4103	1.10	81.2	28.8	4.3
USDA	PD94045	1.10	82.1	27.8	4.3
PAYMASTER	PM 1560 BG	1.09	82.9	29.9	3.5
PHYTOGEN	PSC 636	1.09	80.8	26.2	3.7
USDA	PD94042	1.09	82.0	27.6	4.4
AGRIPRO	HS44	1.09	80.9	28.4	4.4
FIBERMAX	975	1.09	80.2	26.8	3.9
DELTAPINE	DP 51	1.08	81.4	25.6	3.7
SURE-GROW	SG 821	1.08	81.6	26.6	3.9
ACSI	IF 1000	1.07	80.5	29.0	4.2
TERRA	292	1.07	80.4	25.2	3.7
FIBERMAX	989	1.06	80.2	28.7	4.1
AGRIPRO	HS46	1.06	80.1	27.2	4.2
PHYTOGEN	GEORGIA KING	1.06	81.0	26.8	4.0
AGRIPRO	APX7104	1.05	80.6	27.0	4.1
DELTAPINE	DP 5690 RR	1.05	80.9	28.6	4.2
PAYMASTER	PM 1560	1.05	80.3	26.2	4.1
DELTAPINE	DP 5415 RR	1.04	80.6	27.6	4.2
PHYTOGEN	PSC 952	1.04	82.0	27.5	4.4
AVERAGES		1.08	81.3	27.8	3.8
L.S.D. (.05)		NS	NS	2.5	0.4
C.V. (%)		2.6	1.1	4.3	5.3

TABLE 33. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - COASTAL PLAIN, PRELIMINARY CULTIVAR PERFORMANCE TEST, EARLY MATURING, PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
NCSU	NC 72	1.16	84.2	34.9	4.4
ACSI	FIBERMAX 819	1.14	83.7	32.3	5.0
TERRA	257 RR	1.14	82.9	30.4	5.4
PHYTOGEN	TX 121	1.13	82.8	32.8	5.1
USDA	PD 94056	1.13	83.5	33.6	4.6
USDA	PD 94068	1.13	82.7	33.8	5.2
ACSI	E0052	1.12	83.2	33.0	5.4
ACSI	E0033	1.12	82.9	30.8	5.0
PHYTOGEN	PSC 262	1.11	82.3	27.9	4.9
PHYTOGEN	PSC 355	1.11	83.3	31.1	5.0
PHYTOGEN	TX 224	1.10	82.0	29.3	4.6
SURE-GROW	SG 125 *	1.10	83.1	28.8	4.8
DELTAPINE	DP 51 *	1.10	82.0	29.4	5.2
STONEVILLE	ST-474 *	1.09	82.4	29.8	5.2
PHYTOGEN	TX 141	1.08	81.3	28.0	5.1
DELTAPINE	DP 428 B	1.08	82.8	28.2	5.7
AGRIPRO	APX 9220	1.07	82.5	28.1	4.7
PAYMASTER	PM 1215 BG	1.07	81.5	28.8	5.5
DELTAPINE	DP 425 RR	1.07	82.5	30.5	5.4
PAYMASTER	PM 1242 RR	1.07	82.6	31.9	5.4
PHYTOGEN	TX 300	1.07	81.6	28.2	5.0
AGRIPRO	APX 7114	1.06	81.1	28.2	5.6
PAYMASTER	PM 1210	1.06	81.4	27.3	4.7
DELTAPINE	DPX 8C27	1.05	81.6	29.0	5.4
PAYMASTER	PM 1218 BG/RR	1.04	82.0	29.3	5.9
AVERAGES		1.09	82.4	30.2	5.1
L.S.D. (.05)		0.03	NS	2.5	0.6
C.V. (%)		1.5	1.1	4.0	6.0

TABLE 34. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - COASTAL PLAIN, PRELIMINARY CULTIVAR PERFORMANCE TEST, LATER MATURING, PEE DEE RESEARCH & EDUCATION CENTER, FLORENCE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
UGA	GA 92-161	1.18	82.1	31.7	4.2
ACSI	E1100	1.17	83.9	32.0	4.1
DH	C-SL-5	1.16	83.4	32.1	4.5
AGRIPRO	APX 9263	1.16	83.9	32.5	4.7
AGRIPRO	APX 9240	1.15	81.6	30.5	4.6
USDA	PD 94071	1.15	82.3	30.9	4.2
ACSI	E0805	1.15	82.5	31.2	3.9
DH	F-SML-2	1.15	82.5	29.3	3.9
UGA	GA 94-894	1.15	83.1	32.6	4.3
ACSI	E0131	1.14	83.5	33.8	4.2
UGA	GA 93-299	1.13	83.8	35.0	4.7
UGA	GA 94-325	1.13	81.9	30.4	4.0
ACSI	E0222	1.12	82.5	34.6	4.3
DELTAPINE	DPX 9765	1.12	81.9	29.0	3.9
UGA	GA 93-317	1.12	82.1	33.9	4.0
USDA	PD 94079	1.12	82.6	33.6	4.1
USDA	PD 94069	1.12	82.1	31.3	4.2
DELTAPINE	DP 655 BRR	1.11	82.0	33.8	4.1
DELTAPINE	DPX 9775	1.11	82.4	34.9	4.5
USDA	PD 94063	1.11	82.2	31.0	4.2
UGA	GA 93-B	1.11	81.8	30.5	4.4
DELTAPINE	DP 458 BRR	1.10	81.6	31.7	4.5
TERRA	366	1.10	82.5	27.1	4.5
ACSI	E0781	1.09	80.2	31.3	4.0
DELTAPINE	DP 51 *	1.09	81.6	27.6	4.6
PAYMASTER	PM 9307-0802	1.09	81.1	28.0	3.7
AGRIPRO	APX 9257	1.08	81.6	30.7	3.9
PAYMASTER	PM 1440	1.08	81.6	30.4	4.3
UGA	GA 95-155	1.08	81.6	32.1	4.1
DELTAPINE	NUCOTN 33 B *	1.08	81.2	31.6	4.3
DELTAPINE	DPX 9725	1.07	81.6	29.7	4.6
PAYMASTER	PM 1580 RR	1.06	81.5	30.4	4.5
PHYTOGEN	PSC 569	1.06	81.0	32.0	4.5
PAYMASTER	PM 1560 BG *	1.05	82.8	31.0	4.9
AVERAGES		1.11	82.5	31.4	4.2
L.S.D. (.05)		0.04	1.5	2.6	NS
C.V. (%)		1.6	0.9	4.0	7.9

TABLE 35. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - COASTAL PLAIN, PRELIMINARY CULTIVAR PERFORMANCE TEST, EARLY MATURING, EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
ACSI	E0052	1.16	83.3	32.1	3.9
NCSU	NC 72	1.14	83.5	31.5	3.8
ACSI	FIBERMAX 819	1.14	83.3	31.5	4.2
PAYMASTER	PM 1215 BG	1.13	83.8	28.1	3.6
DELTAPINE	DP 428 B	1.12	82.9	26.4	3.1
PHYTOGEN	TX 141	1.12	82.0	27.2	3.3
ACSI	E0033	1.11	81.2	28.7	4.1
PHYTOGEN	PSC 262	1.11	82.1	27.1	3.7
SURE-GROW	SG 125 *	1.11	83.0	26.0	3.9
USDA	PD 94068	1.10	82.0	30.3	3.7
PHYTOGEN	TX 300	1.10	81.2	28.2	3.8
PHYTOGEN	PSC 355	1.09	83.2	31.0	4.6
USDA	PD 94056	1.09	81.2	29.5	3.9
PHYTOGEN	TX 121	1.09	81.2	30.5	3.6
TERRA	257 RR	1.09	82.3	27.7	4.6
DELTAPINE	DP 51 *	1.08	81.4	25.8	4.1
PAYMASTER	PM 1218 BG/RR	1.08	82.1	28.1	3.9
AGRIPRO	APX 7114	1.07	81.3	27.0	4.0
DELTAPINE	DP 425 RR	1.07	82.5	26.9	4.0
PAYMASTER	PM 1242 RR	1.07	82.7	28.6	4.0
STONEVILLE	ST-474 *	1.07	82.1	26.4	4.1
AGRIPRO	APX 9220	1.06	81.6	27.4	4.0
DELTAPINE	DPX 8C27	1.06	81.9	25.9	4.5
PHYTOGEN	TX 224	1.06	81.7	29.8	3.7
PAYMASTER	PM 1210	1.03	82.0	25.6	3.7
AVERAGES		1.09	82.2	28.3	3.9
L.S.D. (.05)		0.04	1.5	2.2	0.3
C.V. (%)		2.0	0.9	3.7	4.2

TABLE 36. COTTON FIBER PROPERTIES - HIGH VOLUME INSTRUMENT ANALYSIS - COASTAL PLAIN, PRELIMINARY CULTIVAR PERFORMANCE TEST, LATER MATURING, EDISTO RESEARCH & EDUCATION CENTER, BLACKVILLE, S.C. (1998 DATA)

CULTIVAR OR STRAIN		UHM LENGTH	M/UHM UNIF. RATIO	FIBER STRENGTH	MIKE
		(IN)	(PCT)	(G/TEX)	(READING)
DELTAPINE	DP 655 BRR	1.13	82.4	29.3	3.4
UGA	GA 94-894	1.13	82.3	28.6	3.8
ACSI	E0131	1.12	82.7	31.2	4.0
ACSI	E0805	1.12	81.6	27.1	3.6
ACSI	E0222	1.12	82.7	33.8	4.3
DELTAPINE	NUCOTN 33 B *	1.12	82.0	27.1	3.4
DH	C-SL-5	1.11	81.5	29.0	4.1
PAYMASTER	PM 1560 BG *	1.11	82.9	27.2	3.5
UGA	GA 92-161	1.11	81.3	28.1	4.1
ACSI	E1100	1.11	82.2	28.5	4.7
DELTAPINE	DP 458 BRR	1.11	82.2	28.1	3.6
USDA	PD 94079	1.11	81.6	29.4	3.7
DH	F-SML-2	1.10	82.4	26.5	3.6
AGRIPRO	APX 9240	1.10	81.9	27.1	3.9
DELTAPINE	DPX 9725	1.09	81.9	28.2	4.1
UGA	GA 94-325	1.09	81.3	26.8	3.7
AGRIPRO	APX 9257	1.09	82.8	27.0	3.8
AGRIPRO	APX 9263	1.09	81.8	27.7	4.3
DELTAPINE	DP 51 *	1.09	81.1	24.3	3.9
UGA	GA 93-B	1.09	80.6	28.4	4.0
USDA	PD 94063	1.09	81.8	28.0	3.8
DELTAPINE	DPX 9775	1.08	81.8	29.3	3.8
UGA	GA 93-317	1.08	81.7	31.1	3.8
UGA	GA 95-155	1.08	81.4	29.8	3.8
PAYMASTER	PM 1580 RR	1.07	81.2	27.4	3.9
DELTAPINE	DPX 9765	1.06	81.1	25.6	4.2
TERRA	366	1.06	80.3	24.2	3.7
PAYMASTER	PM 9307-0802	1.06	80.4	25.0	3.5
USDA	PD 94069	1.06	80.3	26.8	3.9
PAYMASTER	PM 1440	1.05	81.2	26.4	4.0
UGA	GA 93-299	1.05	80.7	29.2	4.1
USDA	PD 94071	1.05	80.8	26.8	3.8
PHYTOGEN	PSC 569	1.04	81.1	28.0	4.4
ACSI	E0781	1.04	79.5	28.2	4.0
AVERAGES		1.09	81.5	27.9	3.9
L.S.D. (.05)		0.05	NS	2.2	0.4
C.V. (%)		2.4	1.2	3.9	5.6

SOURCES OF SEED FOR COTTON CULTIVAR AND STRAINS - 1998

ORIGINATOR AND/OR SEED SOURCE	COMPANY, BRAND NAME, OR VARIETY DESIGNATION
ACSI Memphis, TN	Fibermax, CSI
Agripro Seed Co. Memphis Tennessee	HS, HYX
Deltapine Seed Co. Scott, Mississippi	Deltapine, DES 119, DP, NUCOTN
North Carolina State University Raliegh, North Carolina	NC
Paymaster Cottonseed. Tupelo, Mississippi	PM
Phytogen Seed Co. Leland, Mississippi	PSC, TX
Stoneville Pedigreed Seed Co., Inc. Memphis Tennessee	Stoneville, KC, LA887, BXN
Sure-Grow Seed, Inc. Centre, Alabama	Sure-Grow, SGX
Terra International, Inc. Memphis, TN	Terra
University Of Georgia Coastal Plain Experiment Station Tifton, Georgia	UGA
USDA-ARS South Carolina Agricultural Experiment Station Florence, SC	PD