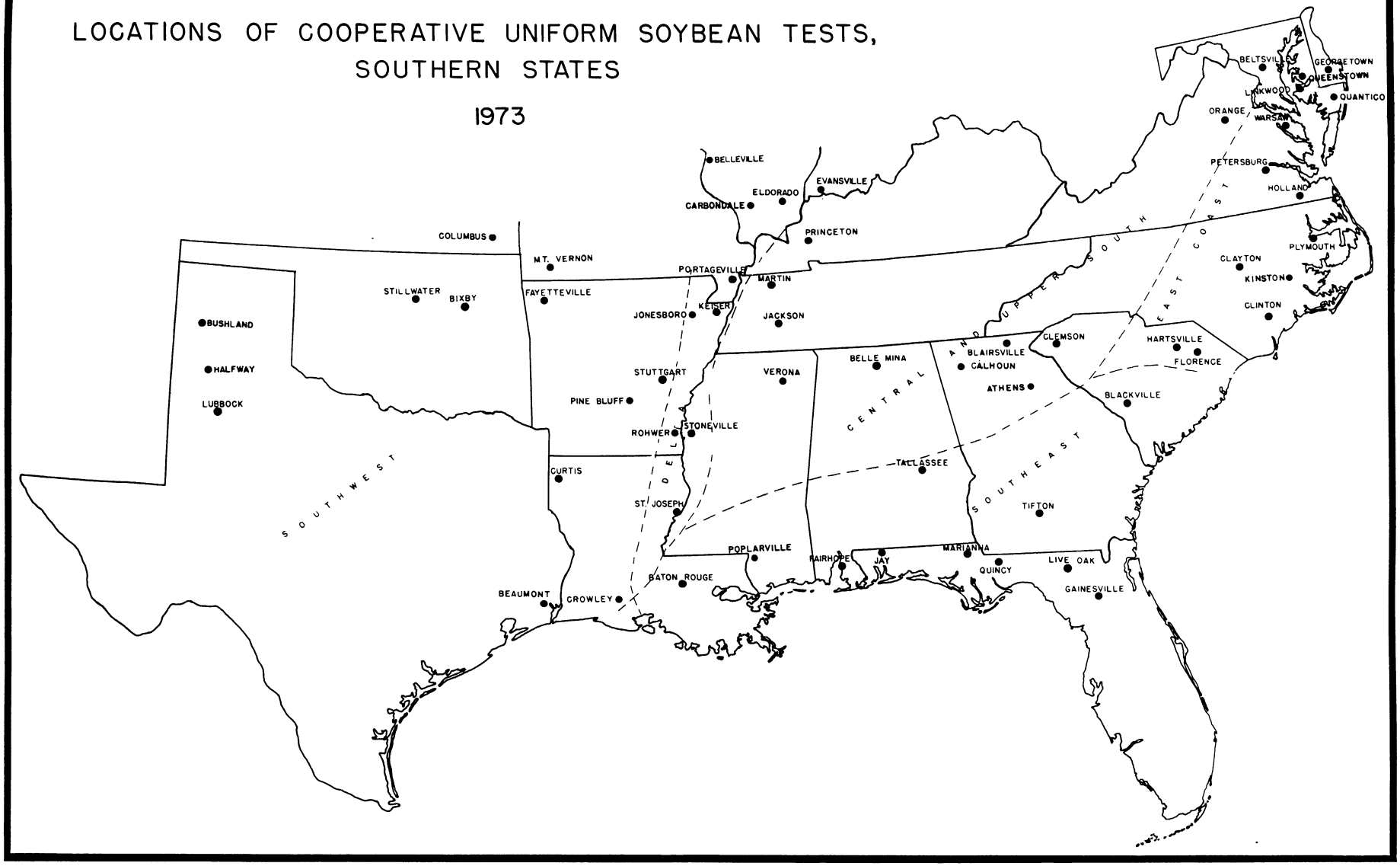
THE UNIFORM SOYBEAN TESTS
SOUTHERN STATES
1973

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
COOPERATING WITH
STATE AGRICULTURAL EXPERIMENT STATIONS
SOUTHERN REGION
STONEVILLE, MISSISSIPPI

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES

1973



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1973

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INTRODUCTION

The Soybean Production Research Program has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs are conducted at three locations, Stoneville, Mississippi; Raleigh, North Carolina; and Gainesville, Florida. After promising new strains are developed at these breeding centers, or by any other cooperating agency, they are advanced to the preliminary and uniform regional tests, conducted in cooperation with research workers in the Southeastern States. This testing program enables the breeder to evaluate new strains under a wide variety of conditions, and permits new strains to be put into production in a minimum amount of time.

Ten uniform test groups have been established to evaluate the better strains developed in the breeding programs. The groups 00 through IV are adapted in the northern part of the United States, and the groups IV-S through VIII are grown in the southern part. Within their area of adaptation, there is a maturity range of 12 to 18 days within each maturity class. The best standard varieties available of each maturity class are used as check varieties with which to compare new strains as to seed yield, chemical composition, maturity, height, lodging, seed quality, and reaction to diseases. For the groups grown in the southern area, the major check varieties are: Kent, Essex, Mack, Forrest, Pickett 71, Lee 68, Bragg, Hutton, and Hardee. At Stoneville, Mississippi, where all maturity classes will mature, the approximate maturity dates of these varieties, when planted furing the first half of May, are: Kent, September 8; Essex, September 25; Mack and Forrest, October 1; Pickett 71 and Lee 68, October 16; Bragg, October 22; Hutton, Novemberl; and Hardee, November 6.

A wide range of soil and climatic conditions exist in the regions. As an aid in recognizing regional adaptation, the region has been subdivided into five rather broad areas which still represent a wide range of soil types. These are: (1) the East Coast, consisting of the Coastal Plain and Tidewater areas of the eastern shore of Maryland, Virginia, North Carolina, and the upper half of South Carolina; (2) the Southeast, consisting primarily of the Coastal Plain soils of the Gulf Coast area, but also including similar soil from South Carolina southward; (3) the Upper and Central South, including the Piedmont and loessal hill soils east of the Mississippi River; (4) the Delta area, composed of the alluvial soils along the Mississippi River from southern Missouri, southward; and (5) the Southwest, comprising Arkansas and Louisiana (outside the Delta), and Oklahoma and Texas. In the Southwest area, the potential soybean-growing areas would include the alluvial river soils, the gulf coast of Louisiana and Texas, and the high plains of Texas. In this area, several of the tests receive supplemental irrigation. A map is included to illustrate the five production areas.

On nearly all of the soils other than the alluvial soils along the Mississippi River, Fertilization is essential for satisfactory soybean production. In the Western area, irrigation is necessary for successful production. A table showing soil types, soil test information, and rate of fertilization is included.

The soil test information is based upon analyses run by laboratories within the states. Different methods are used for extraction and reporting by the various laboratories. An attempt is being made to report phosphorus and potash on a high, medium, and low basis, since pounds per acre may have different meanings in accordance with the methods used. In most cases, soil samples were taken after the soybeans were mature.

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STRAIN IDENTIFICATION

The strains designated by number carry a letter prefix. This letter identifies where each strain was selected:

Co - Coker's Pedigreed Seed Co., Hartsville, South Carolina
D - Delta Branch Experiment Station and ARS, USDA
F - Florida Agricultural Experiment Station and ARS, USDA
Ga - Georgia Acricultural Experiment Station
L - Illinois Agricultural Experiment Station and ARS, USDA
La - Louisiana Agricultural Experiment Station
Md - Maryland Agricultural Experiment Station and ARS, USDA
N - North Carolina Agricultural Experiment Station and ARS, USDA
R - Arkansas Agricultural Experiment Station
S - Missouri Agricultural Experiment Station and ARS, USDA
Ts - Texas Agricultural Experiment Station
UD - Delaware Agricultural Experiment Station
V - Virginia Agricultural Experiment Station

Location of soybean nurseries along with soil type, soil analysis, and fertilization

Location	IV	V	VI	VII	VIII	Soil type	P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
East Coast											
Queenstown, Md.	1	1				Mattapex silt loam	H	VH	6.3	0-45-90	
Linkwood, Md.	1	1*	1			Sassafras sandy loam	H	H	5.8	0-45-90	49.0 - A
Quantico, Md.	1	1				Mattapex silt loam	M	H	6.0	40-80-80	42.8 - D
Georgetown, Del.	1	1*				Norfolk loamy sand	VH	M	6.3	40-40-40	39.4 - E
Warsaw, Va.	1	1*	1			Sassafras sandy loam	M	M	6.4	0-40-80	39.4 - E
Petersburg, Va.		1	1*			Marlboro f.s. loam	H	M	6.0	0-0-0	32.5 - E
Holland, Va.		1	1	1		Othelo L.F.S.	VH	M -	5.7	0-0-0	56.5 - E
Plymouth, N.C.		1*	1*	1		Bladen f.s. loam	H	H	5.9	0-40-80	51.1 - G
Kinston, N.C.			1	1*	1					0-40-80	56.0 - I
Clayton, N.C.			1	1		Norfolk sandy loam	H	M	6.0	0-40-80	22.7 - K
Florence, S.C.			1	1	1	Dunbar sandy loam				0-0-0	48.2 - I
Hartsville, S.C.			1	1	1	Norfolk sandy loam				18-54-108	60.2 - M
Southeast											
Blackville, S.C.(A)			1	1*	1	Varina loamy sand	M	M	6.0	0-45-90	43.0 - M
Blackville, S.C.(B)					1*	Ardilla loamy sand	M	M	6.0	0-45-90	29.9 - M
Tifton, Ga.	1	1	1	1	1	Tifton loamy sand	M	H	6.3	0-50-100	48.0 - M
Tallassee, Ala.				1*	1	Wickham f.s. loam	H	H	6.1	0-0-0	34.4 - M
Live Oak, Fla.				1*	1*	Klej fine sand				0-50-100	39.9 - K
Gainesville, Fla.				1	1*	Arredonda fine sand				0-40-80	37.4 - M
Marianna, Fla.				1	1	Red bay F.S.L.				20-60-60	43.2 - M
Quincy, Fla.			1	1	1*	Norfolk sandy loam	L	H	5.5	35-70-105	40.7 - K
Jay, Fla.			1*	1*	1*	Tifton f.s. loam	H	H		0-128-64	38.8 - J
Fairhope, Ala.			1	1	1	Malbis F.S.L.	H	H	6.4	0-56-56	48.7 - K
Baton Rouge, La			1	1	1*	Olivier silt loam	L	L	6.2	0-50-50	45.0 - G
Poplarville, Miss.				1	1					0-80-80	49.0 - K
Upper & Central South											
Orange, Va.	1	1				Starr sandy loam				12-72-72	47.0 - A
Blairsville, Ga.	1	1				Dyke clay loam	M	M	6.2	0-70-140	62.9 - E
Belleville, Ill.	1					Weir silt loam				0-0-0	60.2 - A
Eldorado, Ill.	1					Harco silt loam				15-45-60	35.0 - A
Carbondale, Ill.	1					Weir silt loam				0-50-150	39.9 - A
Princeton, Ky.	1	1				Crider silt loam	M	M	6.9	0-0-0	47.2 - A

Location	IV	V	VI	VII	VIII	Soil type	P_2O_5	K_2O	PH	Fertilizer[1]	Yield-adapted variety[2]
Martin, Tenn.	1	1				Collins silt loam	M	M	5.9	0-40-40	49.9 - F
Jackson, Tenn.		1	1			Memphis silt loam	H	H	6.8	0-0-0	42.0 - F
Belle Mina, Ala.		1	1*			Humphrey sandy loam					61.4 - E
Verona, Miss.		1	1			Leaper silt loam	H+	M	7.9	0-80-80	37.5 - J
Calhoun, Ga.		1	1	1		Leadvale silt loam	H	VH	6.2	0-50-100	26.9 - H
Athens, Ga.	1	1	1	1	1	Cecil sandy loam	VH	H	5.4	0-40-80	59.1 - L
Clemson, S.C.			1	1	1	Cecil sandy loam	H	M	6.3	0-0-0	40.0 - I
Delta											
Evansville, Ind.	1					Montgomery silty clay	M	H	5.7	22-70-130	31.5 - A
Portageville,Mo.(A)	1	1*	1*			Tiptonville silt loam	M	M	5.8	0-0-0	56.4 - F
Portageville,Mo.(B)	1	1	1			Sharkey clay	VH	VH	5.1	0-0-0	47.2 - G
Keiser, Ark.	1	1*	1*			Sharkey clay	M	H	6.1	0-0-0	45.3 - H
Stoneville,Miss.(A)		1	1*	1*		Bosket f.s.l.	M	M	6.7	0-0-0	47.9 - F
Stoneville,Miss.(B)	1	1*	1*	1*	1*	Sharkey clay	M	H	6.4	0-0-0	48.6 - G
Rohwer, Ark.			1	1		Perry clay	M	H	6.8	0-0-0	41.2 - G
St. Joseph, La.		1	1	1		Commerce silt loam	H	M	5.9	0-25-25	44.8
West											
Columbus, Kan.	1					Cherokee silt loam	M	M	6.3	20-50-40	25.1 - B
Mt. Vernon, Mo.	1	1				Huntington silt loam	H	H		0-0-0	56.8 - E
Pine Bluff, Ark.			1	1		Calloway silt loam				0-80-80	55.0 - G
Stuttgart, Ark.		1	1	1		Crowley silt loam	M	H	5.9	0-40-40	42.5 - J
Curtis, La.		1	1	1	1	Yahola very f.s.l.				0-0-0	51.9 - F
Bixby, Okla.	1	1	1			Reinoch silt loam	VH	VH	6.1	0-0-0	64.7 - F
Bushland, Tex.	1					Pullman silty clay loam				0-0-0	35.3 - B
Halfway, Tex.	1	1	1			Pullman clay loam	M	VH	8.2	0-0-0	42.3 - B
Lubbock, Tex.	1	1	1			Amarillo loam	M-	VH	7.2	0-0-0	55.6 - E
Beaumont, Tex.			1	1*	1*	Morrey silt loam	VL	L	6.3	0-60-30	34.5 - L
Crowley, La.			1	1	1	Crowley silt loam	L	L	5.8	0-60-30	38.7 - L

[1]Fertilizer applied converted to pounds N, P_2O_5, K_2O. For example: 400# of 2-12-12 equals 8-48-48.

[2]Varieties: A = Kent; B= Columbus; C = Hill; D = Mack; E = Essex; F = Forrest; G = Tracy; H = Davis; I = Lee 68; J = Pickett 71; K = Bragg; L = Ransom; M = Hutton; N = Hampton 266A.

*Preliminary nursery also grown.

METHODS

The uniform nurseries were planted in 4-row plots with 3 replications. All seed was packeted at Stoneville, Mississippi, for planting 19-foot rows. In most cases a 16-foot section was harvested from each of the two center rows. Randomized block designs are used for groups. Row widths at the different locations vary from 36 to 40 inches. An attempt was made to follow the best cultural and management practices in conducting these strain comparisons.

The preliminary nurseries were planted in 4-row plots with 2 replications at each of 4 to 8 locations.

Planting Rate: All strains were packeted for planting at the rate of 10 seeds per foot.

Yields are taken by harvesting a 16-foot length from the mid-section of each plot. Actual seed weights are recorded after the seed of strains have a uniform moisture content. A bushel weight of 60 pounds is used in determining bushels per acre.

Shattering notes, where taken, are on the border rows, 14 days after maturity. The estimates are recorded on a scale of 1 to 5 as follows:

1 - no shattering
2 - 1 to 3% shattered
3 - 4 to 8% shattered
4 - 9 to 19% shattered
5 - over 20% shattered

Chemical composition: Percent oil and percent protein was determined from representative locations. Percentage composition of the seed is expressed on a moisture-free basis. All chemical analyses are made at Urbana, Illinois.

Seed size for each strain was determined from a composite sample from all replications at a location. Seed size is reported for the locations where seed was analyzed for chemical composition and is reported as weight in grams per 100 seeds.

Lodging notes are recorded on a scale of 1 to 5 according to the following criteria:

1 - almost all plants erect
2 - either all plants leaning slightly, or a few plants down
3 - either all plants leaning moderatley, or 25 to 50% of the plants down
4 - either all plants leaning considerably, or 50 to 80% of the plants down
5 - all plants down badly

Height is determined as the average length of plants in a plot from the ground to the top extremity at time of maturity.

Maturity is taken as the date when the pods are dry and most of the leaves have dropped. Under most conditions, the stems are also dry. Maturity in all summaries is expressed as days earlier (-) or later (+) than a standard or reference variety. Reference varieties used from the different uniform tests are as follows: Group IV, Kent; Group V, Essex; Group VI, Lee 68; Group VII, Bragg; and Group VIII, Hampton 266A.

Seed quality is rated from 1 to 5 according to the following scale:

1 - very good; 2 - good; 3 - fair; 4 - poor; and 5 - very poor.

The factors considered in estimating seed quality are development of seed, wrinkling damage, and brightness. While the seed quality score indicates relative appearance of seed for the several varieties at one location, considerable difference can exist between factors responsible for the poorer grades in different locations.

Disease ratings are given on a scale of 1 to 5 as follows:

A. Foliar:

1 - immune to highly resistant
2 - lesions small and few in number
3 - lesions moderate in number and size
4 - lesions numerous and necrosis surround lesion
5 - leaves covered with lesions and much necrosis

B. Root and Stem:

1 - no plants killed
2 - 1 to 3% of plants killed
3 - 4 to 8% of plants killed
4 - 9 to 19% of plants killed
5 - over 20% of plants killed

In addition to percentage of plants killed, apparent plant vigor is considered in giving ratings for phytophthora rot.

C. Root-knot ratings are based upon degree of galling development on roots. All ratings were made from a special planting on a heavily infested field in west Florida, near the Jay station.

D. Purple stain ratings are given to seed samples on a scale of 1 to 5 as follows:

1 - no purple staining
2 - 1 to 3% purple staining
3 - 4 to 8% purple staining
4 - 9 to 19% purple staining
5 - over 20% purple staining

E. In some cases actual percentages are reported for purple stain development or seedcoat mottling.

Statistical analyses: Yield data are analyzed by analysis of variance. Differences necessary to indicate difference between strains (odds 19:1) are reported for each location and each area. Yield data from tests with extremely low yields or an extremely high co-efficient of variability are not included in calculating averages.

UNIFORM GROUP IV-S

1973

	Variety or strain	Parentage	Generation composited
1.	Kent	Lincoln x Ogden	F_7
2.	Columbus	C1069 x Clark	F_8
3.	Oksoy	Scott(6) x Blackhawk	F_6
4.	Clark 63	[Clark(5) x L49-4091] x [Clark(6) x Blackhawk]	13 F_3 lines
5.	D66-5566	D49-2491(4) x Hawkeye	F_8
6.	D67-3297	Hill(2) x PI 171,450	F_5
7.	S63-5328S	Lee x Scott	F_6
8.	V68-1242	PI 80837 x V63-76	F_5
9.	K1002	Wayne x [C1223(8) x Mukden]	F_6
10.	K1007	Bonus x Cutler	F_4
11.	L69L-208	Clark - dt_1 E_1 te x sel. from Hawkeye x Lee	F_3
12.	SL13	Clark - Ir Rps r x p(L12) x [Clark 63(7) x Kanrich]	10 F_4 lines

Background of strains used as parents:

C1069 is a selection from Lincoln x Ogden closely related to Kent.

L49-4091 is a bacterial pustule resistant selection from the F_3 of Lincoln(2) x Richland crossed with the F_1 of Lincoln x CNS.

D49-2491 is a sister line of Lee.

PI 171450 is a late-flowering strain of Group III maturity. It is considered a "summer type" at the 34° latitude level in Japan.

V63-76 is a selection from Hill x D53-354.

C1223 is a selection from C1070 x Adams. C1070 is a selection from Lincoln x Ogden.

Twenty-six IV-S nurseries were grown. Results from these nurseries are summarized in Tables 1 through 7. Table 1 gives a general summary of performance and characteristics of each of the strains. Two and three-year data are reported for seed yield, and oil and protein percentages.

Differences among strains for seed yield were significant at the 5% level of confidence at 19 locations. A combined analysis of variance for seed yield for locations within a production area showed differences among strains to be significant at the 5% level of confidence in the Upper and Central and Western regions.

Clark 63 had not been included in the IV-S nursery for several years but was again included. Clark 63 had the lowest mean yield in each production area, except that L69L-208, a determinate type having Clark as a parent, averaged lower in yield in the Delta and Western areas. The lower yield of L69L-208 in the Delta can perhaps be attributed to greater susceptibility to phytophthora rot.

The variety Columbus was tested for the second year. Columbus averaged 4 days later than Kent. Seed yield was slightly above that for Kent in the Delta and Western regions. Seed holding is definitely superior to that for Kent. Columbus has somewhat better seed quality than Kent and also showed less purple stain development. Oksoy had received limited testing prior to its release in Oklahoma. Seed yield is very similar to that for Kent. Oksoy holds its seed somewhat better than Kent and is resistant to bacterial pustule and phytophthora rot.

Only three strains had an average seed quality score of less than 2 -- D66-5566, D67-3297, and V68-1242. All three strains produced good seed yields. All three received low scores for purple stain.

S63-5328S has been included 4 years. It does not appear to have much advantage over Kent other than seed quality and bacterial pustule resistance. S63-5328S has rather appressed pubescence and shows considerable leaf hopper feeding.

None of the four strains included for the first time appeared to be outstanding.

Table 1. - General summary of performance for the strains in Uniform Group IV-S, 1973

	Kent	Columbus	Oksoy	Clark 63	D66-5566	D67-3297
Seed Yield - 1973						
East Coast	40.5	38.7	42.1	38.2	40.9	42.2
Upper & Central South	41.7	40.2	39.6	34.2-	41.1	40.1
Delta	32.4	31.3	34.9	30.0	34.0	33.5
West	44.3	44.1	43.0	37.5	42.9	42.6
- 1972-73						
East Coast	39.7	38.6			38.9	40.8
Upper & Central South	43.4	40.3			41.1	42.0
Delta	36.3	37.2			38.0	39.2
West	40.3	40.9			37.8	38.6
- 1971-73						
East Coast	40.1				38.7	41.6
Upper & Central South	46.9				42.5	43.5
Delta	35.1				36.2	37.9
West	38.4				37.4	37.6
Oil Content - 1973	23.5	22.4-	23.2	23.1	23.0	21.7-
- 1972-73	23.2	22.2			22.9	21.5
- 1971-73	22.7				22.5	21.3
Protein Content - 1973	40.5	41.6+	38.1-	40.3	41.1	39.0-
- 1972-73	40.5	41.4			40.9	39.3
- 1971-73	40.5				41.0	39.4
Seed size	16.9	15.6-	14.6-	15.4-	14.6-	13.2-
Maturity index	10-1	+4	+2	-7	0	+3
Seed quality	2.4	2.1	2.3	2.6	1.8	1.7
Height	32	36	36	33	22	29
Seed holding	3.0	1.0	2.0	1.0	1.0	1.0
Bacterial Pustule	S	S	R	R	R	R
Phytophthora rot	2.0	2.0	1.0	1.0	1.5	1.0
Purple stain (%)	15.0	2.0	8.0	16.8	3.5	1.0
Flower color	P	P	P	P	P	W
Pubescence color	T	T	G	T	T	T
Pod wall color	Br	Br	Br	Br	T	T
Growth type	I	I	I	I	D	D

Table 1. - (continued)

	S63-5328S	V68-1242	K1002	K1007	L69L-208	SL13
Seed Yield - 1973						
East Coast	42.8	40.0	39.4	38.8	39.2	40.2
Upper & Central South	40.9	41.7	41.0	39.4	36.0-	38.0
Delta	32.3	32.2	35.1	36.5	27.3-	34.3
West	41.7	45.8	43.8	42.6	33.2	39.9
- 1972-73						
East Coast	41.4	39.7				
Upper & Central South	43.7	44.4				
Delta	39.2	36.4				
West	37.9	39.1				
- 1971-73						
East Coast	41.4					
Upper & Central South	45.1					
Delta	38.2					
West	37.3					
Oil Content - 1973	22.9-	22.3-	22.6-	23.4	22.0-	22.3-
- 1972-73	22.8	22.3				
- 1971-73	22.6					
Protein Content - 1973	39.0-	40.0	40.6	40.7	41.1	41.3
- 1972-73	38.8	40.3				
- 1971-73	38.8					
Seed size	15.1-	17.9+	16.4	15.9-	15.0-	17.3
Maturity index	+2	+3	-2	-5	-4	-3
Seed quality	2.0	1.8	2.2	2.2	2.2	2.7
Height	35	22	38	37	23	37
Seed holding	2.5	1.0	2.0	2.0	2.5	1.0
Bacterial Pustule	R	S	S	S	S	R
Phytophthora rot	1.0	2.0	2.0	1.0	2.0	1.0
Purple stain (%)	10.5	1.4	18.0	18.0	5.5	21.0
Flower color	P	P	W	P	P	P
Pubescence color	G	G	G	T	G	T

Table 2. - Seed yield, in bushels per acre, for the strains in Uniform Group IV-S, 1973

Location	Kent	Columbus	Oksoy	Clark 63	D66-5566	D67-3297	S63-5328S
			East Coast				
Queenstown, Md.(A)*	52.4	44.0	47.9	49.7	48.5	45.7	48.6
Queenstown, Md.(B)	30.0	34.5+	31.2	28.5	32.5	37.1+	33.6+
Linkwood, Md.	49.0	44.6	48.2	45.2	42.8	45.1	50.6
Quantico, Md.	31.7	32.2	38.9+	34.3	38.2+	39.0+	40.0+
Georgetown, Del.	40.5	28.2-	39.1	37.7	41.9	38.9	38.7
Warsaw, Va.	38.6	40.4	41.5	40.3	42.5	39.2	39.9
Tifton, Ga.	54.4	52.1	53.4	43.3-	47.7-	54.2	54.2
Mean	40.5	38.7	42.1	38.2	40.9	42.2	42.8
			Upper and Central South				
Orange, Va.	47.0	43.4	46.3	36.2-	47.7	43.6	44.7
Blairsville, Ga.	36.5	42.3	34.4	31.1	44.1	45.8+	42.9
Athens, Ga.	25.7	29.5	33.7	25.4	32.5	31.6	33.5
Belleville, Ill.	60.2	48.5-	51.6-	47.3-	49.9-	47.3-	54.6
Eldorado, Ill.	35.0	35.2	36.0	30.7	37.5	34.4	35.0
Carbondale, Ill.	39.9	41.3	31.9-	26.4-	39.5	38.7	37.4
Princeton, Ky.	47.2	41.2-	43.2	43.2	36.5-	39.5-	38.2-
Mean	41.7	40.2	39.6	34.2-	41.1	40.1	40.9
			Delta				
Evansville, Ind.	31.4	32.5	39.4	34.0	42.0	34.1	33.0
Portageville, Mo.(A)	47.1	47.6	54.9+	43.9	49.8	49.4	53.4+
Portageville, Mo.(B)	21.5	22.2	16.2-	22.5	21.6	19.9	14.1-
Martin, Tenn.	46.3	44.0	48.3	39.9-	51.9+	50.0	48.5
Keiser, Ark.	27.4	27.7	33.1	26.3	25.9	30.5	26.1
Stoneville, Miss.(B)	20.6	13.6-	17.7	13.2-	13.0-	16.9	18.7
Mean	32.4	31.3	34.9	30.0	34.0	33.5	32.3
			West				
Columbus, Kan.	19.8	25.1	22.0	10.2-	25.5+	28.3+	22.0
Mt. Vernon, Mo.	53.8	56.2	54.2	35.4-	40.6	52.5	49.9
Bixby, Okla.	59.5	54.0	55.4	51.7	61.4	61.1	57.0
Bushland, Texas	39.7	35.3-	33.5-	42.5	37.2	24.2-	32.7-
Halfway, Texas	40.2	42.3	42.2	38.2	37.8	36.1	38.4
Lubbock, Texas	52.5	51.7	50.8	46.9-	54.7	53.5	50.1
Mean	44.3	44.1	43.0	37.5	42.9	42.6	41.7

*Data not received in time to be included in mean.

(+) - Strains yielding significantly more (odds 19:1 or greater) than Kent.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Kent.

Table 2. - (continued)

Location	V68-1242	K1002	K1007	L69L-208	SL13	L.S.D. (.05)	C.V. (%)
			East Coast				
Queenstown, Md.(A)*	44.5	48.1	48.0	49.5	45.1	N.S.	8
Queenstown, Md.(B)	36.1+	26.2-	30.2	30.8	31.4	3.5	6
Linkwood, Md.	51.5	45.4	44.0	48.0	46.5	N.S.	9
Quantico, Md.	35.6	33.2	33.1	36.6	35.3	6.5	11
Georgetown, Del.	40.1	39.4	36.7	43.4	40.0	4.9	10
Warsaw, Va.	41.8	42.4	40.5	41.6	41.5	N.S.	5
Tifton, Ga.	35.1-	49.7-	47.8-	34.6-	46.4-	3.6	4
Mean	40.0	39.4	38.8	39.2	40.2	N.S.	
			Upper and Central South				
Orange, Va.	51.6	50.9	41.3	32.8-	42.0	7.8	11
Blairsville, Ga.	44.2	34.8	36.6	32.5	36.9	8.2	13
Athens, Ga.	30.5	32.8	31.1	31.0	28.3	N.S.	19
Belleville, Ill.	46.9-	49.0-	52.7-	49.1-	44.0-	6.2	7
Eldorado, Ill.	38.4	34.8	36.1	34.2	35.0	5.2	9
Carbondale, Ill.	44.4	36.6	36.7	37.2	42.1	6.6	10
Princeton, Ky.	36.2-	48.3	41.2-	36.8-	37.8-	5.9	9
Mean	41.7	41.0	39.4	36.0-	38.0	4.1	
			Delta				
Evansville, Ind.	37.8	37.3	40.6	34.5	42.2	N.S.	17
Portageville, Mo.(A)	39.9-	40.4-	54.7+	41.2-	42.6	4.6	12
Portageville, Mo.(B)	20.4	29.4+	22.2	17.4	27.8	5.3	15
Martin, Tenn.	53.5+	48.0	49.5	43.7	41.1	5.3	7
Keiser, Ark.	31.4	39.1+	31.2	19.4-	29.3	7.3	15
Stoneville, Miss.(B)	10.2-	16.3	20.9	7.7-	22.6	5.7	21
Mean	32.2	35.1	36.5	27.3-	34.3	4.8	
			West				
Columbus, Kan.	29.7+	20.3	15.2	11.5-	13.4-	5.6	17
Mt. Vernon, Mo.	57.1	55.8	55.6	37.6-	46.5	11.0	15
Bixby, Okla.	58.8	51.1	54.3	56.4	56.6	N.S.	8
Bushland, Texas	32.8-	37.6	39.6	40.9	38.4	3.6	6
Halfway, Texas	42.2	44.9	42.1	38.3	36.7	N.S.	9
Lubbock, Texas	54.0	53.2	49.1	52.0	48.0-	3.7	4
Mean	45.8	43.8	42.6	33.2	39.9	N.S.	

Table 3. - Chemical composition and seed size for the strains in Uniform Group IV-S, 1973

Location	Kent	Columbus	Oksoy	Clark 63	D66-5566	D67-3297
			Oil Percentage			
Linkwood, Md.	22.7	22.6	22.6	23.1	22.4	21.7
Warsaw, Va.	23.6	22.4	23.7	24.9	23.3	21.9
Blairsville, Ga.	23.5	22.5	23.2	20.8	23.0	20.6
Carbondale, Ill.	22.1	21.1	23.0	21.9	23.1	21.8
Evansville, Ind.	23.5	22.4	22.8	22.5	22.5	21.5
Portageville, Mo.(A)	24.9	22.9	24.0	23.7	23.1	23.3
Bixby, Okla.	24.7	23.5	24.5	24.8	24.6	23.4
Halfway, Texas	22.6	21.5	21.8	23.0	22.1	19.6
Mean	23.5	22.4-	23.2	23.1	23.0	21.7-
			Protein Percentage			
Linkwood, Md.	41.6	43.0	39.6	41.3	43.6	40.9
Warsaw, Va.	41.4	43.0	38.8	39.6	41.5	40.9
Blairsville, Ga.	40.8	41.3	37.4	41.4	40.3	40.4
Carbondale, Ill.	41.6	43.2	37.9	40.8	39.9	36.6
Evansville, Ind.	39.7	39.8	36.8	40.3	40.4	38.3
Portageville, Mo.(A)	38.1	40.2	37.6	39.2	41.1	35.5
Bixby, Okla.	40.2	40.9	39.5	40.2	41.3	38.9
Halfway, Texas	40.8	41.0	36.9	39.4	40.6	40.1
Mean	40.5	41.6+	38.1-	40.3	41.1	39.0-
			Grams per 100 Seeds			
Linkwood, Md.	17.3	16.2	15.5	16.7	14.8	14.1
Warsaw, Va.	17.9	14.8	15.2	17.7	14.5	12.9
Blairsville, Ga.	18.0	18.0	15.0	17.0	16.0	14.0
Carbondale, Ill.	15.7	15.7	14.2	13.4	13.5	13.4
Evansville, Ind.	15.9	14.0	13.6	14.3	13.2	11.9
Portageville, Mo.(A)	12.0	12.0	12.0	11.0	11.0	10.0
Stoneville, Miss.(B)	14.4	11.7	12.6	13.3	12.7	10.2
Bixby, Okla.	20.0	18.9	17.2	17.3	17.6	17.0
Halfway, Texas	21.0	19.0	16.0	17.5	18.5	15.0
Mean	16.9	15.6-	14.6-	15.4-	14.6-	13.2-

Table 3. - (continued)

Location	S63-5328S	V68-1242	K1002	K1007	L69L-208	SL13	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	22.3	22.8	23.0	23.9	22.0	22.8	
Warsaw, Va.	23.0	22.2	23.2	24.2	23.4	23.2	
Blairsville, Ga.	22.3	21.7	21.3	22.2	21.0	21.2	
Carbondale, Ill.	21.9	21.9	22.8	22.5	21.4	21.4	
Evansville, Ind.	23.4	22.9	21.6	22.6	21.4	21.9	
Portageville, Mo.(A)	23.6	22.3	23.6	23.5	22.8	23.0	
Bixby, Okla.	24.3	23.1	23.9	24.3	22.7	23.2	
Halfway, Texas	22.1	21.1	21.6	23.6	21.5	22.0	
Mean	22.9-	22.3-	22.6-	23.4	22.0-	22.3-	0.6
			Protein Percentage				
Linkwood, Md.	40.9	40.2	41.0	41.2	42.8	42.2	
Warsaw, Va.	39.5	40.6	40.8	41.3	40.8	42.0	
Balirsville, Ga.	37.6	41.0	41.7	41.6	41.0	40.8	
Carbondale, Ill.	39.3	40.0	39.3	40.5	41.3	42.1	
Evansville, Ind.	37.7	39.1	42.4	41.5	41.2	41.0	
Portageville, Mo.(A)	38.6	40.0	38.5	39.8	40.0	39.4	
Bixby, Okla.	39.4	39.6	41.2	40.5	40.6	41.1	
Halfway, Texas	39.3	39.7	40.0	39.4	40.9	42.0	
Mean	49.0-	40.0	40.6	40.7	41.1	41.3	0.9
			Grams per 100 Seeds				
Linkwood, Md.	15.0	19.0	16.0	15.9	15.3	17.8	
Warsaw, Va.	15.2	18.3	17.8	16.9	15.3	19.0	
Blairsville, Ga.	15.0	22.0	18.0	18.0	16.0	18.0	
Carbondale, Ill.	18.8	18.8	14.3	15.4	14.4	16.5	
Evansville, Ind.	13.2	18.4	14.3	16.3	13.9	16.4	
Portageville, Mo.(A)	11.0	15.0	12.0	11.0	11.0	12.0	
Stoneville, Miss.(B)	11.4	15.4	14.0	12.5	12.7	14.1	
Bixby, Okla.	18.9	22.0	21.1	18.7	18.8	21.6	
Halfway, Texas	17.5	22.5	20.5	18.0	17.5	20.0	
Mean	15.1-	17.9+	16.4	15.9-	15.0-	17.3	0.9

Table 4. - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Unifrom Group IV-S, 1973

Location	Date planted	Kent matured	Columbus	Oksoy	Clark 63	D66-5566	D67-3297
			East Coast				
Queenstown, Md.(A)*	5-22	9-22	+2	0	-5	-3	+2
Queenstown, Md.(B)	6-27	10-9	+9	+3	-7	-1	+6
Linkwood, Md.	6-1	9-25	+10	+2	-2	+1	+7
Quantico, Md.	6-27	10-3	+4	+3	-6	+1	+4
Georgetown, Del.	5-31	9-26	+3	+4	-2	0	+5
Warsaw, Va.	6-3	9-25	+5	+4	-5	+1	+4
Tifton, Ga.	5-11	8-23	0	-3	-8	-3	+3
Mean		9-23	+5	+2	-5	0	+5
			Upper and Central South				
Orange, Va.	5-24	10-10	-1	+1	-19	-7	-4
Blairsville, Ga.	5-15	9-21	+8	+7	+2	-1	+2
Athens, Ga.	5-14	8-30	+5	-1	-4	0	+4
Belleville, Ill.	5-24	10-4	+6	+4	-7	-1	+4
Eldorado, Ill.	6-15	10-7	+3	-1	-10	+1	+5
Carbondale, Ill.	6-18	10-2	+4	+1	-5	+1	+6
Princeton, Ky.	5-21	9-20	+5	+4	-5	-3	+6
Mean		9-22	+4	+2	-7	-1	+3
			Delta				
Evansville, Ind.	6-26	10-11	+4	-3	-8	-1	+3
Portageville, Mo.(A)	5-14	9-27	+5	+3	-9	-7	-1
Portageville, Mo.(B)	6-26	10-15	+2	-1	-5	-1	+1
Martin, Tenn.	6-6	9-25	+5	+7	+3	-3	0
Keiser, Ark.	6-7	10-5	-1	+3	-12	-11	-8
Stoneville,Miss.(B)	5-16	9-7	+8	+6	-3	+8	+6
Mean		9-30	+4	+3	-6	-3	0
			West				
Columbus, Kan.	6-8	10-7	+3	0	-11	+1	+5
Bixby, Okla.	6-22	10-1	-1	-2	-3	0	+1
Halfway, Texas	6-4	10-2	0	0	-12	+10	+10
Lubbock, Texas	5-21	9-28	0	+1	-13	0	+5
Mean		10-2	0	0	-10	+3	+5

*Not included in mean

Table 4. - (continued)

Location	S63-5328S	V68-1242	K1002	K1007	L69L-208	SL13
		East Coast				
Queenstown, Md.(A)*	0	+3	-3	-7	-4	-3
Queenstown, Md.(B)	+4	+1	-2	0	-4	0
Linkwood, Md.	+4	+9	0	-1	-2	+1
Quantico, Md.	+4	+4	-4	-1	-4	-1
Georgetown, Del.	+5	+5	0	-2	-2	0
Warsaw, Va.	+8	+4	0	-1	-4	+1
Tifton, Ga.	-3	+5	-3	-8	-8	-3
Mean	+4	+5	-1	-2	-4	0
		Upper and Central South				
Orange, Va.	-9	-2	-11	-16	-14	-11
Blairsville, Ga.	+7	+3	0	+1	-1	0
Athens, Ga.	-2	+4	-5	-5	-4	-6
Belleville, Ill.	+5	+4	-1	-1	-4	-2
Eldorado, Ill.	-1	0	-5	-8	-5	-3
Carbondale, Ill.	+1	+4	-3	-4	-2	-1
Princeton, Ky.	+4	+4	-3	-3	-8	-3
Mean	0	+2	-4	-5	-5	-4
		Delta				
Evansville, Ind.	-2	+1	-7	-6	-2	-4
Portageville, Mo.(A)	+8	+3	+1	-5	-10	-1
Portageville, Mo.(B)	-1	-1	-2	-5	-2	-1
Martin, Tenn.	+5	+9	+5	-2	+5	+5
Keiser, Ark.	+3	-3	-7	-10	-12	-8
Stoneville, Miss.(B)	+6	+10	0	-1	-2	+3
Mean	+3	+3	-2	-5	-4	-1
		West				
Columbus, Kan.	+1	+1	-2	-10	-11	-2
Bixby, Okla.	-3	-1	-4	-6	-1	-4
Halfway, Texas	0	0	0	-8	0	-12
Lubbock, Texas	+1	+5	-2	-11	-3	-6
Mean	0	+1	-2	-9	-4	-6

*Not included in mean

Table 5. - Plant height for the strains in Uniform Group IV-S, 1973

Location	Kent	Columbus	Oksoy	Clark 63	D66-5566	D67-3297
			East Coast			
Queenstown, Md.(A)*	30	36	31	30	17	29
Queenstown, Md.(B)	37	39	38	36	33	35
Linkwood, Md.	39	43	42	38	31	37
Quantico, Md.	37	39	41	38	35	36
Georgetown, Del.	38	39	40	36	26	35
Warsaw, Va.	36	45	46	41	27	36
Tifton, Ga.	28	33	33	30	13	24
Mean	36	40	40	37	28	34
			Upper and Central South			
Orange, Va.	31	39	36	30	23	26
Blairsville, Ga.	34	39	37	34	24	33
Athens, Ga.	24	32	33	24	18	28
Belleville, Ill.	46	46	46	44	23	33
Eldorado, Ill.	33	35	33	32	22	29
Carbondale, Ill.	30	31	27	26	19	29
Princeton, Ky.	37	42	46	37	18	29
Mean	34	38	37	32	21	30
			Delta			
Evansville, Ind.	33	33	37	31	28	32
Portageville, Mo.(A)	30	37	34	31	17	24
Portageville, Mo.(B)	16	19	17	18	12	15
Martin. Tenn.	43	44	47	46	24	35
Keiser, Ark.	30	34	29	31	16	25
Stoneville, Miss.(B)	21	25	23	21	10	17
Mean	26	32	31	30	18	25
			West			
Columbus, Kan.	22	26	25	24	16	25
Mt. Vernon, Mo.	32	37	36	29	16	28
Bixby, Okla.	40	40	44	38	26	30
Bushland, Texas	32	35	37	32	24	26
Halfway, Texas	33	33	37	33	26	29
Lubbock, Texas	34	37	35	34	24	28
Mean	32	35	36	32	22	28

*Not included in mean

Table 5. - (continued)

Location	S63-5328S	V68-1242	K1002	K1007	L69L-208	SL13
			East Coast			
Queenstown, Md.(A)*	30	23	36	33	18	34
Queenstown, Md.(B)	40	35	39	39	32	37
Linkwood, Md.	44	34	44	43	31	44
Quantico, Md.	42	34	43	41	35	39
Georgetown, Del.	37	26	43	41	28	43
Warsaw, Va.	43	28	46	47	31	46
Tifton, Ga.	34	14	32	34	15	33
Mean	40	29	41	41	29	40
			Upper and Central South			
Orange, Va.	34	29	39	34	20	36
Blairsville, Ga.	36	24	40	38	25	39
Athens, Ga.	30	21	27	30	19	27
Belleville, Ill.	47	25	54	51	25	49
Eldorado, Ill.	33	26	37	38	26	37
Carbondale, Ill.	28	23	32	30	21	33
Princeton, Ky.	42	15	45	42	18	46
Mean	36	23	39	38	22	38
			Delta			
Evansville, Ind.	34	29	38	41	28	41
Portageville, Mo.(A)	39	18	41	35	17	34
Portageville, Mo.(B)	14	14	19	21	12	20
Martin, Tenn.	46	28	55	49	31	46
Keiser, Ark.	31	17	32	30	17	34
Stoneville, Miss.(B)	20	13	28	23	12	29
Mean	31	20	36	33	20	34
			West			
Columbus, Kan. 24	24	20	26	25	18	26
Mt. Vernon, Mo.	34	23	36	34	20	36
Bixby, Okla.	42	28	45	45	28	44
Bushland, Texas	35	27	37	38	23	37
Halfway, Texas	37	25	35	37	27	35
Lubbock, Texas	38	25	39	38	24	36
Mean	35	25	36	36	23	36

*Not included in mean

Table 6. - Lodging scores for the strains in Uniform Group IV-S, 1973

Location	Kent	Columbus	Oksoy	Clark 63	D66-5566	D67-3297
			East Coast			
Queenstown, Md.(A)	1.0	2.7	1.3	1.3	1.0	3.0
Queenstown, Md.(B)	2.0	3.5	3.5	4.0	4.5	4.0
Linkwood, Md.	2.3	4.7	3.0	3.7	4.0	4.0
Quantico, Md.	1.7	3.7	2.7	2.3	3.3	4.0
Georgetown, Del.	2.0	3.0	2.3	2.7	2.0	2.2
Warsaw, Va.	1.0	1.8	1.4	1.1	1.4	2.2
Tifton, Ga.	1.7	3.0	1.0	1.7	1.0	3.3
			Upper and Central South			
Orange, Va.	1.3	2.3	2.0	1.0	2.0	1.5
Blairsville, Ga.	1.5	3.0	2.2	2.2	1.5	3.5
Athens, Ga.	1.0	1.3	1.0	1.0	1.0	1.2
Belleville, Ill.	1.7	4.4	2.8	2.8	1.7	2.9
Eldorado, Ill.	1.0	1.1	1.0	1.0	1.3	2.1
Carbondale, Ill.	1.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Evansville, Ind.	1.0	1.3	1.0	1.0	1.7	1.8
Portageville, Mo.(A)	2.3	2.7	2.5	2.8	1.0	1.7
Portageville, Mo.(B)	1.5	2.2	1.2	1.2	1.2	1.7
Martin, Tenn.	3.0	4.0	1.0	4.0	1.0	4.0
Keiser, Ark.	1.0	2.0	1.0	2.0	1.0	1.0
Stoneville, Miss.(B)	1.0	1.7	1.3	1.3	1.0	1.0
			West			
Columbus, Kan.	1.0	1.0	1.0	1.0	1.0	1.5
Mt. Vernon, Mo.	1.0	1.0	1.0	1.0	1.0	1.6
Bixby, Okla.	2.0	2.3	2.0	2.0	1.7	2.0
Bushland, Texas	2.5	2.0	2.5	2.0	2.2	3.5
Halfway, Texas	1.7	1.7	2.0	1.7	1.7	2.3
Lubbock, Texas	2.0	1.7	2.7	1.5	2.0	2.5

Table 6. - (continued)

Location	S63-5328S	V68-1242	K1002	K1007	L69L-208	SL13
		East Coast				
Queenstown, Md.(A)	1.3	1.0	2.0	1.3	1.0	3.0
Queenstown, Md.(B)	4.0	3.0	3.0	3.5	1.5	4.5
Linkwood, Md.	4.3	3.0	4.0	3.0	2.3	4.0
Quantico, Md.	2.3	3.0	2.7	3.3	1.7	3.3
Georgetown, Del.	1.8	1.2	2.2	2.2	1.3	2.3
Warsaw, Va.	1.5	1.1	1.2	1.2	1.0	1.6
Tifton, Ga.	1.0	1.0	1.7	2.3	1.0	3.7
		Upper and Central South				
Orange, Va.	1.7	1.0	1.3	1.0	1.0	1.7
Blairsville, Ga.	2.3	1.2	3.2	1.8	1.2	1.7
Athens, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Belleville, Ill.	2.3	1.3	3.6	2.2	1.2	3.7
Eldorado, Ill.	1.0	1.0	1.0	1.0	1.0	1.0
Carbondale, Ill.	1.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	1.0	1.0	1.3	1.0	1.0	1.7
		Delta				
Evansville, Ind.	1.0	1.2	1.2	1.0	1.0	1.3
Portageville, Mo.(A)	2.3	1.2	3.3	2.3	1.0	3.2
Portageville, Mo.(B)	1.2	1.2	1.0	1.3	1.2	1.7
Martin, Tenn.	1.0	1.0	4.0	3.0	1.0	4.0
Keiser, Ark.	1.0	1.0	2.0	1.7	1.0	2.0
Stoneville, Miss.(B)	1.0	1.0	1.3	1.0	1.0	1.3
		West				
Columbus, Kan.	1.0	1.0	1.0	1.0	1.0	1.0
Mt. Vernon, Mo.	1.0	1.0	1.1	1.0	1.0	1.0
Bixby, Okla.	1.7	1.0	3.0	2.0	1.0	2.0
Bushland, Texas	2.5	1.7	2.2	2.0	1.5	2.0
Halfway, Texas	2.0	1.3	1.7	1.7	1.3	1.7
Lubbock, Texas	2.2	1.2	2.7	1.3	1.0	2.5

Table 7. - Seed quality scores for the strains in Uniform Group IV-S, 1973

Location	Kent	Columbus	Oksoy	Clark 63	D66-5566	D67-3297
			East Coast			
Queenstown, Md.(A)	3.0	2.0	2.0	3.0	2.0	2.0
Queenstown, Md.(B)	2.3	2.0	2.6	2.6	2.0	1.6
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	1.3	1.3	2.0	2.0	2.0	2.0
Georgetown, Del.	2.0	2.8	2.2	3.3	2.0	2.0
Warsaw, Va.	2.3	2.0	2.8	2.2	1.4	1.6
Tifton, Ga.	2.7	2.3	3.3	4.3	3.5	2.5
			Upper and Central South			
Orange, Va.	3.3	1.7	2.5	3.7	1.8	1.0
Blairsville, Ga.	2.0	2.0	2.5	2.5	1.5	1.5
Athens, Ga.	2.8	2.0	1.7	2.2	1.3	1.2
Belleville, Ill.	2.0	1.3	2.0	1.7	1.3	1.0
Eldorado, Ill.	2.5	2.0	2.0	2.0	1.0	1.8
Carbondale, Ill.	3.0	2.0	3.0	3.0	2.0	2.0
Princeton, Ky.	3.0	2.0	2.0	3.7	1.3	1.3
			Delta			
Evansville, Ind.	1.5	1.5	1.5	1.5	1.0	1.5
Portageville, Mo.(A)	2.3	2.7	2.3	2.7	2.3	1.5
Portageville, Mo.(B)	2.3	2.0	2.2	1.8	1.7	2.0
Martin, Tenn.	4.0	3.0	3.0	4.0	2.0	2.0
Keiser, Ark.	3.3	3.3	3.2	4.0	1.8	1.7
Stoneville, Miss.(B)	3.3	3.0	3.0	2.7	2.7	3.0
			West			
Columbus, Kan.	2.1	1.9	1.8	2.2	1.6	1.6
Mt. Vernon, Mo.	1.2	1.2	1.7	1.5	1.2	1.3
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Halfway, Texas.	2.0	2.0	2.0	2.0	2.0	2.0

Table 7. - (continued)

Location	S63 5328S	V68-1242	K1002	K1007	L69L-208	SL13
		East Coast				
Queenstown, Md.(A)	2.0	3.0	2.0	2.0	2.0	3.0
Queenstown, Md.(B)	2.3	2.3	2.3	2.0	3.3	2.3
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	3.0
Quantico, Md.	1.6	1.0	1.3	1.6	1.3	1.6
Georgetown, Del.	2.2	1.5	2.3	2.2	2.0	3.5
Warsaw, Va.	2.5	1.4	2.1	1.8	1.8	2.2
Tifton, Ga.	3.0	3.3	4.0	3.3	4.2	4.5
		Upper and Central South				
Orange, Va.	1.7	1.5	2.7	3.5	2.0	4.7
Blairsville, Ga.	2.0	2.0	2.5	2.5	2.5	2.0
Athens, Ga.	2.0	2.0	2.2	2.7	2.2	2.0
Belleville, Ill.	1.7	1.5	2.0	1.2	1.7	2.0
Eldorado, Ill.	1.7	1.7	1.7	2.3	1.8	2.5
Carbondale, Ill.	2.0	1.0	2.0	2.0	3.0	3.0
Princeton, Ky.	1.7	1.0	2.0	1.3	1.7	4.0
		Delta				
Evansville, Ind.	1.5	1.0	1.5	1.5	1.5	1.5
Portageville, Mo.(A)	2.3	2.5	2.3	2.3	2.5	2.3
Portageville, Mo.(B)	2.3	1.8	2.2	1.7	2.3	2.3
Martin, Tenn.	3.0	2.0	2.0	3.0	2.0	4.0
Keiser, Ark.	3.0	3.0	3.3	3.2	3.7	4.5
Stoneville, Miss.(B)	3.0	3.0	3.0	3.0	3.0	2.7
		West				
Columbus, Kan.	1.9	1.9	2.1	2.0	2.0	2.0
Mt. Vernon, Mo.	1.5	1.7	1.4	1.7	1.5	1.7
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Halfway, Texas	2.0	3.0	2.0	2.0	2.0	3.0

UNIFORM GROUP V

1973

	Variety or strain	Parentage	Generation composited
1.	Essex	Lee x S5-7075	F_6
2.	Forrest	Dyer x Bragg	F_5
3.	Mack	Lee recurrent parent; resist. C.N. & P.R.	
4.	S67-80	PI 85559 x Kent	
5.	V68-920	York x Dare	
6.	D70-2650	D65-3075 x Hood	F_5
7.	D70-5107	D65-3075 x D64-4636	F_5
8.	D70-5154	D65-3075 x D64-4636	F_5
9.	R70-176	R60-66 x R64-500	F_5
10.	R70-306	Davis x Lee 68	F_5
11.	V68-1171	PI 80837 x V63-76	
12.	V69-156	Hood x PI 80837	

Background of strains used as parents:

S5-7075 is a selection from N48-1248 x Perry which was grown in Uniform Group VI. N48-1248 has the same parentage as Hood.

D65-3075 is a selection from Hill(4) x PI 171442.

D64-4636 is a selection from Hill x D58-3311. D58-3311 is a bacterial pustule resistant selection from Jackson(4) x D49-2491.

R60-66 is a selection from Dortchsoy 67 x Lee.

R64-500 is a phytophthora rot resistant selection from Hill(6) x Arksoy.

V63-76 is a selection from Hill x D53-354.

Thirty Uniform Group V nurseries were grown. Results are summarized in Tables 8 through 14. Table 8 gives a general summary of performance along with characteristics of each of the strains. Two- and three-year data are also included for seed yield and for oil and protein content of the seed.

Differences among strains for seed yield were significant at 19 of the 30 locations. The combined analysis of variance for seed yield by production regions showed differences among strains to be significant in the East Coast, Upper and Central South, and Delta.

A separate planting was made near Jay, Florida, on soil heavily infested with root-knot nematodes, M. incognita var. acrita, for root-knot evaluations. Mottled seed ratings were made from seed produced at Halfway, Texas. Ratings for bacterial pustule, phytophthora rot, and downy mildew were made in the field at Stoneville. Shatter ratings are based upon information from several locations.

Three-year mean yields for Essex are 5 bushels per acre higher than for Forrest or Mack for the East Coast and Upper and Central South. In 1973, seed yield for Essex in the East Coast area was significantly greater than nine of the 12 strains included in the test.

Two strains, S67-80 and V68-920, have been grown 2 years. There does not appear to be any need to continue S67-80. V68-920 yielded well in the West.

Seven new strains were included. D70-2650 appeared to be the best of this group from the standpoint of seed yield and disease resistance. It did produce 22% mottled seed at Halfway, the highest for any strain in the group. V69-156 averaged lowest in seed yield in each area and was late maturing for this group.

Table 8. - General summary of performance for the strains in Uniform Group V, 1973

	Essex	Forrest	Mack	S67-80	V68-920	D70-2650
Seed Yield - 1973						
East Coast	45.3	40.2-	41.5-	39.1-	40.4-	42.9
Upper & Central South	44.1	40.4	40.3	38.0-	42.7	39.6-
Delta	44.2	46.3	43.2	42.4	44.3	46.3
West	46.2	48.2	45.2	43.9	48.3	45.8
- 1972-73						
East Coast	44.6	38.9	40.2	40.4	41.0	
Upper & Central South	44.9	39.2	39.6	38.0	42.4	
Delta	46.4	45.1	42.2	41.4	44.5	
West	45.4	44.9	44.4	42.3	47.9	
- 1971-73						
East Coast	46.9	41.6	41.4			
Upper & Central South	46.9	41.8	41.1			
Delta	43.5	42.2	39.0			
West	45.5	44.9	43.9			
Oil Content - 1973	23.0	23.4	23.8+	23.7+	23.1	22.5
- 1972-73	22.6	22.7	23.7	23.3	22.5	
- 1971-73	22.3	22.3	23.4			
Protein Content - 1973	40.9	38.5-	39.6-	39.8-	38.4-	40.5
- 1972-73	40.6	38.6	39.4	39.8	38.5	
- 1971-73	40.7	38.6	39.4			
Seed size	12.2	13.0	13.6+	14.3+	14.1+	12.8
Seed quality	1.7	1.8	1.9	1.9	1.8	1.6
Maturity index	10-1	+6	+5	+3	+3	+4
Height	28	34	34	29	32	30
Bacterial pustule	R	R	R	S	R	R
Phytophthora rot	2.0	1.0	1.0	1.0	1.0	1.0
Downy mildew	2.0	2.0	2.0	1.0	2.0	1.0
Mottled seed (%)	0	10.0	9.0	9.0	0	22.0
Root-knot nematode	5.0	1.5	3.0	1.5	3.0	1.0
Cyst nematode (race 3)	S	R	R	S	S	S
Shatter resistance	2.0	1.0	1.0	2.0	1.5	1.0
Flower color	P	W	P	P	S	W
Pubescence color	G	T	T	T	G	G
Pod wall color	T	T	T	Br	T	T

Table 8. - (continued)

	D70-5107	D70-5154	R70-176	R70-360	V68-1171	V69-156
Seed Yield - 1973						
East Coast	41.5-	40.8-	39.2-	39.9-	42.4	38.9-
Upper & Central South	39.9	38.1-	38.1-	37.9-	41.5	37.0-
Delta	45.1	46.8	42.5	44.9	41.4	39.3-
West	45.4	43.6	42.2	43.5	49.8	39.7
- 1972-73						
East Coast						
Upper & Central South						
Delta						
West						
- 1971-73						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1973	23.3	23.4	23.1	23.6	23.6	23.3
- 1972-73						
- 1971-73						
Protein Content - 1973	39.4-	38.6-	38.1-	39.7-	39.0-	39.6-
- 1972-73						
- 1971-73						
Seed size	12.3	12.8	10.9-	11.8	15.4+	16.9+
Seed quality	1.7	1.8	1.8	1.8	2.0	1.5
Maturity index	-1	0	-4	0	+2	+11
Height	33	31	32	33	29	29
Bacterial pustule	R	R	R	R	S	S
Phytophthora rot	1.0	1.0	1.0	1.0	1.5	2.0
Downy mildew	1.0	2.0	1.0	2.0	3.0	1.0
Mottled seed (%)	10.0	11.0	7.0	12.0	0	0
Root-knot nematode	5.0	5.0	4.0	4.0	3.5	4.5
Cyst nematode (race 3)	S	S	S	S	S	S
Shatter resistance	1.0	1.0	2.0	2.0	1.5	2.0
Flower color	W	W	P	P	P	W
Pubescence color	T	G	G	G	G	G
Pod wall color	T	T	T	T	T	T

Table 9. - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1973

Location	Essex	Forrest	Mack	S67-80	V68-920	D70-2650	D70-5107
			East Coast				
Queenstown, Md.(A)*	44.3	44.8	39.9	39.4	48.6	43.8	45.9
Queenstown, Md.(B)	43.2	41.4	39.1	35.9-	37.0	43.6	35.2-
Linkwood, Md.	43.0	42.0	39.4	39.1	40.3	42.6	40.9
Quantico, Md.	34.9	37.9	42.8+	34.6	36.2	43.4+	44.8+
Georgetown, Del.	39.4	35.6	36.7	35.5	38.8	32.2	34.0
Warsaw, Va.	39.4	39.0	37.3	35.1	38.7	36.5	38.8
Petersburg, Va.	32.5	18.8-	26.1-	26.6-	23.9-	25.7-	28.3-
Holland, Va.	56.5	43.0-	49.5-	47.2-	46.9-	53.4	50.1-
Plymouth, N.C.	53.4	49.6	44.9	43.0	46.7	51.0	43.6
Tifton, Ga.	65.8	54.7-	57.8-	55.0-	55.1-	57.5-	57.5-
Mean	45.3	40.2-	41.5-	39.1-	40.4-	42.9	41.5-
			Upper and Central South				
Blairsville, Ga.	62.9	49.0-	57.3	48.6-	59.1	55.9	49.5-
Athens, Ga.	44.7	40.2	36.2-	39.0	46.4	41.2	42.6
Calhoun, Ga.	22.3	24.8	27.0	24.3	23.5	23.6	19.0
Belle Mina, Ala.	61.4	45.8-	46.0-	50.1-	52.5-	48.6-	48.5-
Princeton, Ky.	38.2	40.9	44.2	39.7	39.1	44.6	42.5
Martin, Tenn.	53.0	49.9	47.3	42.0-	49.2	44.2-	52.1
Jackson, Tenn.	35.5	42.0	37.4	33.3	37.0	31.5	29.1
Verona, Miss.	34.4	30.8	27.2	26.8	34.7	27.1	35.7
Mean	44.1	40.4	40.3	38.0-	42.7	39.6-	39.9
			Delta				
Portageville, Mo.(A)	53.6	56.4	52.7	54.3	55.0	56.7+	50.8
Portageville, Mo.(B)	37.5	35.2	35.7	34.5	38.2	36.5	44.4
Keiser, Ark.	33.1	40.8+	33.7	34.9	42.4+	42.4+	40.9+
Stoneville, Miss.(A)	43.2	47.9	39.4	41.8	38.4	43.4	35.6
Stoneville, Miss.(B)	47.2	47.7	51.7	45.2	50.1	49.7	50.9
St. Joseph, La.	50.5	50.0	46.1	43.7	41.8	49.2	48.0
Mean	44.2	46.3	43.2	42.4	44.3	46.3	45.1
			West				
Mt. Vernon, Mo.	56.8	52.3	54.3	45.0-	58.2	49.8	55.7
Stuttgart, Ark.	28.8	39.0+	36.4	34.7	40.0+	43.8+	38.3+
Curtis, La.	26.5	51.9+	41.5+	34.3	36.3	40.6+	26.8
Bixby, Okla.	67.2	64.7	52.6-	59.5	62.3	56.8-	63.4
Halfway, Texas	42.3	30.0-	39.4	39.9	41.5	38.1	38.1
Lubbock, Texas	55.6	51.4	46.7-	49.7-	51.2	45.8-	50.2-
Mean	46.2	48.2	45.2	43.9	48.3	45.8	45.4

*Data received too late to be included in mean.

(+) - Strains yielding significantly more (odds 19:1 or greater) than Essex.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Essex.

Table 9. - (continued)

Location	D70-5154	R70-176	R70-306	V68-1171	V69-156	L.S.D. (.05)	C.V. (%)
			East Coast				
Queenstown, Md.(A)*	49.7	49.4	45.8	50.1	40.1	7.5	10
Queenstown, Md.(B)	38.7	36.3	38.2	38.3	39.2	7.2	11
Linkwood, Md.	43.4	40.6	38.8	44.8	37.1	N.S.	9
Quantico, Md.	30.1	31.5	37.2	36.0	39.1	7.2	12
Georgetown, Del.	31.1	35.7	31.7	37.1	36.8	N.S.	13
Warsaw, Va.	36.8	36.8	38.3	39.0	37.7	N.S.	6
Petersburg, Va.	26.6-	24.0-	20.0-	26.4-	28.6-	3.7	9
Holland, Va.	47.5-	49.0-	46.8-	46.9-	46.3-	3.6	4
Plymouth, N.C.	55.9	46.7	51.5	54.1	48.2	N.S.	10
Tifton, Ga.	57.5-	52.4-	56.2-	59.0-	36.9-	4.6	5
Mean	40.8-	39.2-	39.9-	42.4	38.9-	3.3	
			Upper and Central South				
Blairsville, Ga.	48.8-	48.2-	50.5-	55.8	53.6-	8.3	9
Athens, Ga.	34.5-	35.1-	36.6-	37.0-	33.0-	7.1	11
Calhoun, Ga.	18.9	19.5	18.7	26.2	20.5	N.S.	22
Belle Mina, Ala.	53.3-	48.2-	51.6-	53.4-	43.7-	4.2	5
Princeton, Ky.	39.5	44.0	33.8	41.1	37.9	6.5	9
Martin, Tenn.	47.6	47.1	43.0-	53.3	47.1	6.4	8
Jackson, Tenn.	31.4	34.2	32.1	34.9	30.9	N.S.	13
Verona, Miss.	30.7	28.4	36.5	30.5	29.5	N.S.	16
Mean	38.1-	38.1-	37.9-	41.5	37.0-	3.4	
			Delta				
Portageville, Mo.(A)	59.3+	48.4-	55.0	52.2	41.6-	2.9	6
Portageville, Mo.(B)	41.2	33.0	29.3	33.2	37.8	N.S.	16
Keiser, Ark.	42.1+	35.4	40.6+	32.4	42.0+	7.0	11
Stoneville, Miss.(A)	41.9	47.5	39.8	37.7	37.3	N.S.	13
Stoneville, Miss.(B)	47.6	45.8	55.4	47.6	35.9-	9.1	11
St. Joseph, La.	48.6	45.0	49.1	45.4	41.3	N.S.	15
Mean	46.8	42.5	44.9	41.4	39.3-	4.4	
			West				
Mt. Vernon, Mo.	44.9-	46.9-	53.6	56.2	48.7	9.6	15
Stuttgart, Ark.	39.0+	37.8+	38.3+	40.1+	28.8	8.6	14
Curtis, La.	38.6+	23.2	31.8	41.5+	34.5	11.7	19
Bixby, Okla.	54.8-	58.0-	54.7-	62.9	48.5-	7.8	8
Halfway, Texas	34.5-	37.2	33.7-	42.1	28.5-	8.7	14
Lubbock, Texas	49.6-	49.8-	48.6-	56.2	48.9-	5.3	6
Mean	43.6	42.2	43.5	49.8	39.7	N.S.	

*Data received too late to be included in mean.

Table 10. - Chemical composition and seed size for the strains in Uniform Group V, 1973

Location	Essex	Forrest	Mack	S67-80	V68-920	D70-2650
		Oil Percentage				
Linkwood, Md.	21.9	21.4	22.2	21.4	20.6	21.3
Warsaw, Va.	23.9	24.1	24.2	25.4	24.2	23.7
Plymouth, N.C.	21.4	22.5	21.8	21.9	20.8	21.2
Calhoun, Ga.	22.4	23.5	24.8	23.4	24.3	23.3
Jackson, Tenn.	24.1	24.7	26.9	25.7	24.5	24.1
Portageville, Mo.(A)	22.4	22.8	22.8	22.3	23.3	21.6
Keiser, Ark.	24.0	24.1	24.6	24.8	23.4	22.6
Stoneville, Miss.(B)	23.6	25.2	25.7	25.0	23.6	23.4
Stuttgart, Ark.	25.0	24.7	23.9	26.4	25.8	24.3
Halfway, Texas	21.2	20.9	21.1	21.0	20.7	19.9
Mean	23.0	23.4	23.8+	23.7+	23.1	22.5
		Protein Percentage				
Linkwood, Md.	43.6	40.6	40.9	42.1	41.7	42.0
Warsaw, Va.	41.5	37.7	39.5	38.9	38.0	40.8
Plymouth, N.C.	43.8	40.4	41.9	42.3	41.1	43.5
Calhoun, Ga.	39.3	36.7	38.2	38.2	34.6	36.8
Jackson, Tenn.	38.9	37.9	38.3	39.0	38.1	41.1
Portageville, Mo.(A)	41.3	39.5	40.1	40.6	39.2	42.2
Keiser, Ark.	41.2	38.1	40.0	39.2	38.7	40.2
Stoneville, Miss. (B)	38.4	36.9	36.3	38.2	36.7	37.4
Snuttgart, AMk.	40.9	38.6	39.7	40.3	37.5	39.0
Halfway, Texas	40.4	38.8	40.7	39.6	38.1	41.9
Mean	40.9	38.5-	39.6-	39.8-	38.4-	40.5
		Grams per 100 Seeds				
Linkwood, Md.	13.9	13.8	15.7	15.9	15.0	15.4
Warsaw, Va.	12.8	13.1	14.8	15.1	13.4	15.9
Plymouth, N.C.	14.1	11.6	13.0	13.8	13.4	12.2
Calhoun, Ga.	11.3	11.2	12.6	13.0	11.9	11.6
Jackson, Tenn.	10.1	13.1	14.6	14.8	14.7	13.7
Portageville, Mo.(A)	9.0	11.0	12.0	12.0	14.0	10.0
Keiser, Ark.	12.3	11.0	13.0	14.3	14.7	11.7
Stoneville, Miss.(B)	12.4	12.2	14.2	15.3	14.1	12.0
Stuttgart, Ark.	11.7	10.3	11.0	12.3	13.0	11.0
Halfway, Texas	14.5	22.5	15.0	16.5	16.5	14.5
Mean	12.2	13.0	13.6+	14.3+	14.1+	12.8

Table 10. - (continued)

Location	D70-5107	D70-5154	R70-176	R70-306	V68-1171	V69-156	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	21.2	21.5	21.3	22.0	21.9	21.7	
Warsaw, Va.	24.5	24.9	22.9	24.8	25.2	23.7	
Plymouth, N.C.	20.8	21.6	22.8	22.3	22.3	23.1	
Calhoun, Ga.	24.3	23.4	23.1	24.1	23.3	23.7	
Jackson, Tenn.	24.4	24.0	23.8	24.6	24.4	23.3	
Portageville, Mo.(A)	23.9	24.1	23.4	22.8	23.3	22.3	
Keiser, Ark.	24.4	23.9	23.9	24.6	23.1	24.0	
Stoneville, Miss.(B)	24.0	23.9	24.5	24.1	24.0	23.9	
Stuttgart, Ark.	25.6	25.8	24.2	24.7	26.5	26.9	
Halfway, Texas	20.2	20.7	20.9	21.5	21.6	20.1	
Mean	23.3	23.4	23.1	23.6	23.6	23.3	0.6
			Protein Percentage				
Linkwood, Md.	41.8	40.0	39.5	40.7	40.7	40.8	
Warsaw, Va.	38.6	38.4	38.0	39.2	38.8	39.7	
Plymouth, N.C.	42.5	41.0	40.5	43.8	41.5	42.7	
Calhoun, Ga.	36.3	37.0	37.5	38.1	36.7	36.0	
Jackson, Tenn.	40.0	39.4	37.6	38.1	39.3	40.6	
Portageville, Mo.(A)	40.1	37.9	38.1	41.2	41.0	39.5	
Keiser, Ark.	38.8	37.5	38.6	40.1	38.9	40.1	
Stoneville, Miss.(B)	37.0	37.2	35.1	37.5	36.3	38.3	
Stuttgart, Ark.	38.3	38.4	38.2	38.4	38.0	38.4	
Halfway, Texas	40.5	39.2	38.3	39.7	38.8	40.0	
Mean	39.4-	38.6-	38.1-	39.7-	39.0-	39.6-	0.7
			Grams per 100 Seeds				
Linkwood, Md.	14.4	14.3	11.1	11.7	16.0	16.7	
Warsaw, Va.	13.7	13.6	12.0	12.5	15.6	21.2	
Plymouth, N.C.	12.7	14.5	11.2	12.5	15.0	15.9	
Calhoun, Ga.	10.6	10.8	9.4	11.1	14.5	16.0	
Jackson, Tenn.	10.8	11.6	9.6	10.4	15.1	19.0	
Portageville, Mo.(A)	10.0	11.0	10.0	11.0	12.0	15.0	
Keiser, Ark.	12.0	12.0	10.7	12.3	17.0	15.7	
Stoneville, Miss.(B)	12.8	13.5	10.5	12.1	15.6	15.2	
Stuttgart, Ark.	11.0	11.7	9.7	10.3	13.7	15.0	
Halfway, Texas	15.0	15.0	14.5	14.5	19.0	19.0	
Mean	12.3	12.8	10.9-	11.8	15.4+	16.9+	1.1

Table 11. - Relative maturity, days earlier (-) or later (+) than Essex, for the strains in Uniform Group V, 1973

Location	Date planted	Essex matured	Forrest	Mack	S67-80	V68-920	D70-2650
		East Coast					
Queenstown, Md.(A)*	5-22	9-30	+7	+6	+4	+6	+7
Queenstown, Md.(B)	6-27	10-25	+12	+9	+2	+3	+5
Linkwood, Md.	6-1	10-6	+2	+2	-1	0	+7
Quantico, Md.	6-14	10-17	+9	+7	+2	+4	+5
Georgetown, Del.	5-31	10-6	+7	+6	+5	+4	+6
Warsaw, Va.	6-3	10-4	+10	+8	+3	+3	+9
Petersburg, Va.	5-22	10-2	+8	+4	-2	-2	0
Holland, Va.	5-14	9-28	+10	+11	+11	+6	+6
Plymouth, N.C.	5-16	10-2	0	0	-2	+2	-4
Tifton, Ga.	5-11	9-3	+6	+5	+2	+2	+3
Mean		10-4	+7	+6	+2	+2	+4
		Upper and Central South					
Blairsville, Ga.	5-15	10-9	+6	+2	+1	0	+1
Athens, Ga.	5-14	9-10	+3	-1	+2	+3	+2
Calhoun, Ga.	6-12	10-2	+4	+2	+2	-4	+3
Belle Mina, Ala.	5-10	9-21	-2	-3	-2	0	-1
Princeton, Ky.	5-21	9-26	+13	+13	+5	+7	+11
Martin, Tenn.	6-6	10-10	+3	-3	-3	-6	+2
Jackson, Tenn.	5-17	9-21	+14	+11	+13	+12	+10
Verona, Miss.		9-23	+5	+1	+1	+2	-4
Mean		9-27	+6	+3	+2	+2	+3
		Delta					
Portageville, Mo.(A)	5-14	10-8	+7	+9	+9	+8	+7
Portageville, Mo.(B)	6-26	10-21	0	0	-1	-2	0
Keiser, Ark.	6-7	10-9	+3	-2	+2	0	-2
Stoneville, Miss.(A)	5-16	9-17	+10	+7	+6	+5	+6
Stoneville, Miss.(B)	5-16	9-24	+6	+7	+7	+6	+5
St. Joseph, La.	5-30	9-2	+18	+15	+12	+3	+8
Mean		9-29	+7	+6	+6	+3	+4
		West					
Stuttgart, Ark.	6-7	9-25	+6	+7	+8	+9	+5
Curtis, La.	5-8	9-27	+3	+1	-1	+3	+11
Bixby, Okla.	6-22	10-6	+3	+4	+1	+3	+2
Halfway, Texas	6-4	10-14	+6	+6	+6	-2	+6
Lubbock, Texas	5-21	10-8	+4	+5	+2	+3	+4
Mean		10-4	+4	+5	+3	+3	+6

*Not included in mean.

Table 11 - (continued)

Location	D70-5107	D70-5154	R70-176	R70-306	D68-1171	V69-156
		East Coast				
Queenstown, Md.(A)*	+1	0	0	+4	+6	+16
Queenstown, Md.(B)	+2	+1	-1	+1	0	+4
Linkwood, Md.	-1	0	-1	0	+5	+10
Quantico, Md.	+3	+3	+1	+4	+1	+9
Georgetown, Del.	0	0	0	0	+3	+12
Warsaw, Va.	+1	+1	-2	+1	+1	+13
Petersburg, Va.	+12	0	-4	-4	-2	+8
Holland, Va.	+5	-2	-2	0	+6	+11
Plymouth, N.C.	-8	+2	-10	0	+4	0
Tifton, Ga.	+1	+2	-7	-4	+3	+14
Mean	+2	+1	-3	0	+2	+9
		Upper and Central South				
Blairsville, Ga.	0	0	-1	-1	-1	-1
Athens, Ga.	0	-1	-3	-1	0	+29
Calhoun, Ga.	-4	-4	-10	-5	-3	+11
Belle Mina, Ala.	-4	-1	-5	-3	-2	+5
Princeton, Ky.	+5	-1	-1	+3	+3	+17
Martin, Tenn.	0	-2	-8	-9	+2	+4
Jackson, Tenn.	0	+2	+1	+5	+8	+26
Verona, Miss.	-1	-4	-5	+3	+1	+20
Mean	0	-1	-4	-1	+1	+14
		Delta				
Portageville, Mo.(A)	-6	-5	-5	+6	+10	+12
Portageville, Mo.(B)	0	0	-7	-2	-1	-1
Keiser, Ark.	-5	-3	-5	-3	-1	+9
Stoneville, Miss.(A)	-1	+1	-5	+2	+4	+21
Stoneville, Miss.(B)	-3	-1	-8	0	0	+15
St. Joseph, La.	+10	0	-1	0	+3	+26
Mean	-1	-1	-5	0	+3	+14
		West				
Stuttgart, Ark.	+1	+4	-2	+2	+8	+14
Curtis, La.	+4	+3	-7	+2	+10	+15
Bixby, Okla.	-1	+4	0	-1	-1	+1
Halfway, Texas	+1	+1	-2	+1	-2	+6
Lubbock, Texas	+2	-1	0	-1	0	+4
Mean	+1	+2	-2	0	+3	+8

Table 12. - Plant height for the strains in Uniform Group V, 1973

Location	Essex	Forrest	Mack	S67-80	V68-920	D70-2650
		East Coast				
Queenstown, Md.(A)*	29	35	35	31	36	30
Queenstown, Md.(B)	34	36	35	35	37	36
Linkwood, Md.	33	40	38	37	43	33
Quantico, Md.	34	38	38	36	38	37
Georgetown, Del.	30	39	43	34	40	33
Warsaw, Va.	37	43	40	36	41	38
Petersburg, Va.	27	36	40	31	30	32
Holland, Va.	32	35	37	30	36	33
Plymouth, N.C.	31	37	37	30	33	33
Tifton, Ga.	23	27	28	23	25	23
Mean	31	37	37	32	36	33
		Upper and Central South				
Blairsville, Ga.	33	37	38	33	35	35
Athens,Ga.	23	32	33	29	32	28
Calhoun, Ga.	23	32	31	28	27	27
Belle Mina, Ala.	28	34	34	32	34	30
Princeton, Ky.	27	38	40	27	38	32
Martin, Tenn.	34	43	39	35	40	36
Jackson, Tenn.	30	45	40	36	36	35
Verona, Miss.	21	25	26	21	23	20
Mean	27	36	35	30	33	30
		Delta				
Portageville, Mo.(A)	27	27	28	27	31	30
Portageville, Mo.(B)	16	16	16	16	17	16
Keiser, Ark.	25	23	30	23	24	25
Stoneville, Miss.(A)	32	36	37	27	35	34
Stoneville, Miss.(B)	23	27	29	23	25	26
St. Joseph, La.	23	19	23	21	24	24
Mean	24	25	27	23	26	26
		West				
Mt. Vernon, Mo.	33	34	31	29	35	29
Stuttgart, Ark.	20	31	30	25	26	28
Curtis, La.	22	33	29	20	22	24
Bixby, Okla.	33	36	33	27	36	33
Halfway, Texas	35	37	35	30	31	35
Lubbock, Texas	32	36	35	29	33	32
Mean	29	35	32	27	31	30

*Data received too late to be included in mean.

Table 12. - (continued)

Location	D70-5107	D70-5154	R70-176	R70-306	V68-1171	V69-156
		East Coast				
Queenstown, Md.(A)*	34	33	34	34	30	30
Queenstown, Md.(B)	36	35	36	35	35	36
Linkwood, Md.	38	38	37	37	37	36
Quantico, Md.	37	37	36	35	35	37
Georgetown, Del.	34	33	39	35	30	34
Warsaw, Va.	42	42	40	43	37	39
Petersburg, Va.	34	35	29	33	29	25
Holland, Va.	34	31	33	37	30	32
Plymouth, N.C.	35	34	31	37	31	31
Tifton, Ga.	28	27	27	27	21	15
Mean	35	35	34	35	32	32
		Upper and Central South				
Blairsville, Ga.	37	35	35	36	35	34
Athens, Ga.	33	28	29	29	31	25
Calhoun, Ga.	39	26	21	26	27	23
Belle Mina, Ala.	34	34	33	34	30	28
Princeton, Ky.	34	32	32	36	27	31
Martin, Tenn.	40	34	35	36	37	36
Jackson, Tenn.	38	36	39	42	32	40
Verona, Miss.	24	25	23	26	22	20
Mean	35	31	31	33	30	30
		Delta				
Portageville, Mo.(A)	28	27	34	34	25	26
Portageville, Mo.(B)	21	17	17	15	15	16
Keiser, Ark.	26	24	28	27	20	24
Stoneville, Miss.(A)	37	35	36	35	29	30
Stoneville, Miss.(B)	29	27	29	31	24	23
St. Joseph, La.	28	25	26	28	23	19
Mean	28	26	28	28	23	23
		West				
Mt. Vernon, Mo.	35	28	32	33	30	31
Stuttgart, Ark.	29	26	31	29	24	26
Curtis, La.	26	25	25	26	24	17
Bixby, Okla.	32	25	34	33	33	31
Halfway, Texas	33	33	37	36	31	33
Lubbock, Texas	33	32	35	34	30	31
Mean	31	28	32	32	29	28

*Data received too late to be included in mean.

Table 13. - Lodging scores for the strains in Uniform Group V, 1973

Location	Essex	Forrest	Mack	S67-80	V68-920	D70-2650
		East Coast				
Queenstown, Md.(A)	2.7	3.0	4.7	3.7	3.0	3.3
Queenstown, Md.(B)	2.5	4.0	4.0	3.5	3.0	3.5
Linkwood, Md.	3.3	3.3	4.7	4.0	3.0	4.0
Quantico, Md.	1.5	4.2	4.0	3.5	3.0	4.0
Georgetown, Del.	2.5	2.3	2.2	2.0	1.7	1.8
Warsaw, Va.	1.7	2.2	3.8	1.9	1.7	3.0
Petersburg, Va.	1.0	2.0	3.0	1.0	1.0	2.0
Holland, Va.	1.2	1.7	4.2	1.8	1.5	2.2
Plymouth, N.C.	2.0	2.0	3.0	2.7	2.7	2.7
Tifton, Ga.	1.0	2.0	2.7	1.3	1.3	1.3
		Upper and Central South				
Blairsville, Ga.	1.5	2.2	3.2	1.8	2.2	4.0
Athens, Ga.	1.0	1.5	1.7	1.2	1.0	1.2
Calhoun, Ga.	1.0	1.2	2.0	1.7	1.0	1.0
Belle Mina, Ala.	1.0	2.2	2.5	1.5	2.0	2.5
Princeton, Ky.	1.0	1.0	2.3	1.0	1.0	1.0
Martin, Tenn.	1.0	1.0	1.0	2.0	1.0	2.0
Jackson, Tenn.	1.0	1.0	2.0	1.0	1.0	1.0
		Delta				
Portageville, Mo.(A)	1.5	3.0	3.5	2.2	1.7	2.7
Portageville, Mo.(B)	1.2	1.5	1.7	1.5	1.2	1.5
Keiser, Ark.	1.0	1.0	2.0	1.0	1.0	1.0
Stoneville, Miss.(A)	2.0	2.3	3.0	2.0	2.0	2.3
Stoneville, Miss.(B)	2.0	2.0	2.3	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
		West				
Mt. Vernon, Mo.	1.4	1.9	3.0	2.4	2.2	2.4
Stuttgart, Ark.	1.0	2.2	3.3	2.2	1.0	1.5
Curtis, La.	1.0	2.0	2.3	1.3	1.0	1.3
Bixby, Okla.	1.0	1.3	2.3	2.3	1.0	1.7
Halfway, Texas	2.0	3.0	3.3	2.3	2.3	2.6
Lubbock, Texas	1.7	3.0	3.0	3.5	2.2	1.8

Table 13. - (continued)

Location	D70-5107	D70-5154	R70-176	R70-306	V68-1171	V69-156
		East Coast				
Queenstown, Md.(A)	3.3	4.0	3.0	4.0	3.0	2.7
Queenstown, Md.(B)	3.5	3.5	3.0	3.5	3.0	3.0
Linkwood, Md.	4.0	4.0	4.0	4.0	3.3	3.3
Quantico, Md.	4.0	4.0	4.0	4.0	3.0	3.5
Georgetown, Del.	2.3	2.0	2.0	2.3	2.0	2.0
Warsaw, Va.	2.2	2.1	1.8	2.6	1.9	1.9
Petersburg, Va.	2.0	2.0	2.0	2.0	1.0	1.0
Holland, Va.	3.0	3.3	2.8	4.3	1.3	2.8
Plymouth, N.C.	2.7	2.3	2.7	3.0	2.0	1.7
Tifton, Ga.	2.3	2.0	1.3	2.3	1.0	1.0
		Upper and Central South				
Blairsville, Ga.	3.3	3.3	2.7	3.8	1.7	2.3
Athens, Ga.	1.3	1.0	1.0	1.2	1.0	1.0
Calhoun, Ga.	1.2	1.0	1.0	1.0	1.0	1.0
Belle Mina, Ala.	2.7	2.5	2.2	3.0	1.2	1.3
Princeton, Ky.	1.3	1.3	1.0	1.0	1.0	1.0
Martin, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
		Delta				
Portageville, Mo.(A)	1.8	2.0	2.8	3.8	2.2	2.3
Portageville, Mo.(B)	1.8	1.5	1.5	1.7	1.5	1.3
Keiser, Ark.	1.3	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss.(A)	2.0	2.3	2.3	2.7	2.0	2.3
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
		West				
Mt. Vernon, Mo.	3.0	2.2	2.4	2.4	2.1	2.4
Stuttgart, Ark.	3.0	2.3	2.7	3.0	1.0	1.2
Curtis, La.	1.3	1.3	1.7	1.3	1.3	1.0
Bixby, Okla.	2.0	3.0	1.7	2.3	1.0	1.3
Halfway, Texas	2.6	2.3	3.0	3.3	2.3	3.0
Lubbock, Texas	2.7	2.5	2.5	3.3	2.5	2.5

Table 14. - Seed quality scores for the strains in Uniform Group V, 1973

Location	Essex	Forrest	Mack	S67-80	V68-920	D70-2650
			East Coast			
Queenstown, Md.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Queenstown, Md.(B)	2.0	1.0	2.3	2.0	2.3	1.3
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	1.0	1.6	1.0	1.6	1.0	1.0
Georgetown, Del.	1.5	2.2	2.0	2.0	2.0	1.5
Warsaw, Va.	1.4	1.3	1.5	1.4	1.8	1.7
Petersburg, Va.	1.0	1.0	2.0	2.0	1.0	2.0
Holland, Va.	1.5	1.0	1.0	1.0	1.0	1.0
Plymouth, N.C.	2.0	1.5	1.5	1.5	1.5	1.5
Tifton, Ga.	2.5	3.7	2.8	2.5	2.2	1.7
			Upper and Central South			
Blairsville, Ga.	1.5	1.5	2.0	2.0	1.5	1.5
Athens, Ga.	1.2	1.5	1.2	1.0	1.5	1.3
Calhoun, Ga.	2.0	2.0	2.5	1.7	1.5	1.8
Princeton, Ky.	1.3	2.0	1.7	1.7	1.3	1.0
Martin, Tenn.	2.0	2.0	2.0	2.0	2.0	1.0
Jackson, Tenn.	2.0	2.0	2.0	2.0	2.5	1.0
			Delta			
Portageville, Mo.(A)	2.0	2.5	2.3	2.8	2.3	1.8
Portageville, Mo.(B)	1.8	2.0	2.3	2.3	2.3	1.8
Keiser, Ark.	2.0	1.8	1.8	1.8	2.7	1.7
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Mt. Vernon, Mo.	1.8	1.5	2.0	2.0	2.5	2.5
Stuttgart, Ark.	2.2	2.3	2.3	2.0	1.5	1.5
Curtis, La.	2.0	1.7	1.3	2.3	2.0	2.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Halfway, Texas	1.0	3.0	2.0	2.0	1.0	2.0

Table 14. - (continued)

Location	D70-5107	D70-5154	R70-176	R70-306	V68-1171	V69-156
		East Coast				
Queenstown, Md.(A)	2.0	2.0	2.0	2.0	3.0	2.0
Queenstown, Md.(B)	1.8	1.6	1.6	2.0	3.6	2.1
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	1.0	1.3	1.0	1.0	1.0	1.0
Georgetown, Del.	1.8	2.0	1.8	2.0	2.0	1.5
Warsaw, Va.	1.5	1.9	1.3	1.7	1.5	1.6
Petersburg, Va.	1.0	2.0	2.0	1.0	3.0	1.0
Holland, Va.	1.0	1.0	1.5	1.0	1.0	1.0
Plymouth, N.C.	1.5	1.5	2.0	2.0	1.5	1.5
Tifton, Ga.	2.7	2.8	2.2	2.7	2.8	3.7
		Upper and Central South				
Blairsville, Ga.	1.5	1.5	1.5	2.0	1.5	2.0
Athens, Ga.	1.7	1.5	1.5	1.5	3.0	2.5
Calhoun, Ga.	1.7	2.0	2.0	1.7	1.8	1.8
Princeton, Ky.	1.3	1.3	1.0	2.0	1.0	1.3
Martin, Tenn.	1.0	2.0	2.0	2.0	2.0	2.0
Jackson, Tenn.	2.0	1.5	2.0	1.0	3.0	2.0
		Delta				
Portageville, Mo.(A)	2.2	2.5	2.2	2.2	2.5	2.5
Portageville, Mo.(B)	2.0	2.2	2.2	2.2	2.2	2.3
Keiser, Ark.	1.7	1.2	2.3	1.7	3.3	1.8
Stoneville, Miss.(A)	2.3	2.3	2.3	2.3	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
		West				
Mt. Vernon, Mo.	2.0	1.7	1.2	2.0	1.8	2.0
Stuttgart, Ark.	2.7	2.0	2.0	2.7	2.8	3.2
Curtis, La.	1.3	2.0	1.7	2.0	1.3	1.5
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Halfway, Texas	2.0	1.0	2.0	2.0	2.0	2.0

PRELIMINARY GROUP V

1973

Preliminary Group V nurseries, including 34 experimental strains and the two check varieties Hill and Mack, were grown at seven locations. The parentage of these strains is reported in Table 15. Performance data are summarized in Tables 16 through 21.

Differences among strains for seed yield were significant at the 5% level of confidence at five of the seven locations. The combined analysis of variance also showed differences among strains to be significant. Five strains produced mean seed yields greater than that for Mack, but these differences were not significant. Mack and seven strains produced mean yields significantly greater than for Hill. All of these strains averaged 5 to 7 days later in maturity than Hill.

All strains held their seed well. Five strains had low ratings for root-knot, but only one of these, D70-5101, was in the higher yielding category. None show high susceptibility to phytophthora rot.

The strains N70-1549, R70-332, V71-775, R71-638, and D70-5101 appear to merit being advanced to Uniform Group V.

Table 15. - Parentage of the strains in Preliminary Group V, 1973

	Variety or strain	Parentage	Generation composited
1.	Hill		
2.	Mack		
3.	D70-5024	D63-6075 x D64-4636	F_5
4.	D70-5030	D63-6075 x D64-4636	F_5
5.	D70-5083	D63-6075 x D64-4636	F_5
6.	D70-5101	D63-6075 x D64-4636	F_5
7.	D70-5366	D63-6094 x (D62-6289 x Semmes)	F_5
8.	D71-3780	D67-24 x D65-2262	F_5
9.	D71-3849	D67-24 x D65-2262	F_5
10.	D71-3868	D67-24 x D65-2262	F_5
11.	D71-3965	D67-24 x D65-2262	F_5
12.	D71-4226	D65-2262 x D64-4636	F_5
13.	D71-4229	D65-2262 x D64-4636	F_5
14.	D71-4243	D65-2262 x D64-4636	F_5
15.	D71-4422	Dare x D65-3067	F_5
16.	D71-4462	Dare x D65-3067	F_5
17.	D71-4566	D65-3065 x D65-2553	F_5
18.	D71-4886	D65-2567 x D65-2553	F_5
19.	D71-5289	D65-6555 x D65-6647	F_5
20.	D71-5306	D65-6555 x D65-6647	F_5
21.	D71-6642	D65-6467 x D65-5790	F_5
22.	D71-6730	D65-6467 x D65-5790	F_5
23.	D71-7035	D64-4636 x D64-3937	F_5
24.	D72-8800	D64-3253(2) x D65-3168	Comp. 19 F_4 lines
25.	N69-5007	D63-6094 x D62-7816	F_5
26.	N70-1549	Dare x D65-6765	F_4
27.	R70-276	(Davis x Lee 68) x R60-66	F_5
28.	R70-332	(Davis x Lee 68) x R60-66	F_5
29.	R71-626	(Davis x Lee 68) x R60-66 (intermated)	F_4
30.	R71-638	(Davis x Lee 68) x R60-66 (intermated)	F_4
31.	V70-12	Delmar x V66-318	
32.	V71-487	Dare x V73-76	
33.	V71-500	Dare x V73-76	
34.	V71-653	Delmar x V66-318	
35.	V71-736	Dare x V66-318	
36.	V71-775	Delmar x V66-318	

Table 16. - General summary of performance for the strains grown in Preliminary Group V, 1973

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	R.K.	P.R.	D.M.	% P.S.
Hill	38.9	10-1	33	22.2	40.3	1.0	4.0	1.0	2.0	0.0
Mack	43.7+	+9	34	23.8+	40.5	1.0	4.0	1.0	1.0	1.5
D70-5024	41.4	+7	34	22.2	39.8	1.0	2.5	1.0	2.0	0.0
D70-5030	40.9	+6	34	22.7	40.2	1.0	2.5	1.0	1.0	0.0
D70-5083	36.7	+3	35	21.8	40.6	1.0	2.0	1.0	1.5	0.0
D70-5101	42.4	+9	34	22.3	39.6	1.0	2.0	1.0	1.0	0.0
D70-5366	40.5	+7	32	19.7-	45.3+	1.0	4.5	1.0	1.5	1.0
D71-3780	42.7+	+5	36	21.4-	40.3	2.0	2.3	1.0	1.5	0.0
D71-3849	39.6	+2	30	21.3-	40.7	1.0	4.0	1.0	2.0	0.0
D71-3868	41.7	+5	32	22.5	40.9	2.5	5.0	1.0	1.0	0.5
D71-3965	39.0	+2	34	22.1	41.2	1.0	5.0	1.0	1.0	0.0
D71-4226	37.9	+7	30	21.9	39.0-	1.0	3.0	1.0	2.0	0.0
D71-4229	38.0	+8	36	21.4-	42.1+	1.0	4.5	1.0	2.0	0.0
D71-4243	39.9	+5	35	21.8	40.7	1.0	2.0	1.0	3.0	0.0
D71-4422	39.7	0	35	24.0+	38.5-	1.0	4.5	1.0	2.0	1.0
D71-4462	39.6	+5	35	24.4+	38.7-	1.0	2.0	1.0	2.0	0.0
D71-4566	36.5	+4	33	21.9	40.8	1.5	4.0	1.0	3.0	1.5
D71-4886	37.2	+5	30	21.2-	42.2+	1.0	2.0	1.0	2.0	0.5
D71-5289	35.4	+6	33	18.8-	47.8+	1.0	4.0	1.0	1.0	0.0
D71-5306	34.8-	+8	37	19.1-	46.0+	1.0	4.0	1.0	1.0	1.0
D71-6642	38.0	+3	36	20.9-	43.2+	1.0	2.5	1.0	1.0	1.5
D71-6730	35.0-	+4	33	19.5-	44.5+	2.0	4.0	1.0	1.0	0.0
D71-7035	40.8	+6	35	21.8	41.4+	1.0	2.5	1.0	3.0	0.0
D72-8800	40.0	+7	31	21.2-	42.2+	1.0	4.5	1.0	2.5	0.0
N69-5007	41.7	+10	31	21.8	39.6	1.0	2.5	1.0	1.0	0.0
N70-1549	46.7+	+6	34	23.2+	39.7	1.0	4.5	1.0	3.0	0.0
R70-276	44.2+	+6	34	23.1+	38.9-	1.0	4.5	1.0	1.0	2.5
R70-332	45.8+	+7	34	23.8+	39.7	1.0	5.0	1.0	1.0	1.0
R71-626	42.5	+7	33	21.4-	41.4+	1.0	4.3	1.0	1.0	0.0
R71-638	44.7+	+8	34	22.9+	40.5	1.0	4.5	1.0	1.0	0.0
V70-12	42.6	+3	42	23.8+	41.7+	2.0	4.0	2.0	1.0	1.5
V71-487	39.7	+6	33	22.2	40.1	1.0	4.5	2.0	1.0	5.0
V71-500	41.6	+7	37	22.9+	39.7	1.0	4.0	2.0	2.0	0.0
V71-653	43.9+	+7	32	22.9+	40.3	1.0	3.5	1.0	1.5	0.5
V71-736	39.4	+5	32	23.7+	40.4	1.0	4.5	2.0	2.0	1.0
V71-775	45.5+	+6	41	23.4+	41.1	1.0	4.5	1.0	1.5	2.0
L.S.D.(.05)	3.8			0.7	1.0					
L.S.D.(.01)	5.0			1.0	1.4					

R.K. = root-knot ratings at Jay, Fla.
P.R. = phytophthora rot ratings at Stoneville, Miss.
D.M. = downy mildew ratings at Stoneville, Miss.
P.S. = purple stain at Warsaw, Va.

Table 17. - Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1973

Strain	George-town, Del.	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	36.0	38.4	34.0	41.2	43.8	32.5	46.4
Mack	42.1	38.8	33.9	45.9	54.4+	39.0	52.2
D70-5024	32.8	38.2	36.1	49.6+	47.4	33.3	52.7
D70-5030	36.8	36.9	34.8	45.3	49.7	33.5	49.7
D70-5083	36.0	36.2	31.4	40.1	29.8-	31.9	52.0
D70-5101	35.5	37.2	38.1	47.5	49.6	44.2	44.6
D70-5366	38.9	42.3	34.7	40.6	47.5	33.1	46.5
D71-3780	39.5	39.3	36.0	51.4+	50.1	33.4	49.5
D71-3849	37.4	37.7	28.8	41.9	48.2	35.4	48.0
D71-3868	41.9	42.8	38.3	42.0	46.3	32.6	48.2
D71-3965	36.2	37.1	30.5	38.7	46.5	35.4	48.7
D71-4226	28.0-	35.9	32.6	45.7	44.2	32.8	45.9
D71-4229	36.0	34.6	33.3	39.5	42.0	34.3	46.2
D71-4243	34.2	38.2	29.5	44.6	46.6	35.2	51.0
D71-4422	35.2	41.5	31.4	39.4	47.6	35.2	47.6
D71-4462	33.1	38.6	36.6	47.0	42.7	36.1	43.4
D71-4566	31.4	36.0	30.9	43.4	38.9	31.6	43.2
D71-4886	28.1-	34.2	31.7	41.0	45.3	37.4	43.0
D71-5289	31.2	36.2	29.6	41.0	41.9	27.1	41.3
D71-5306	27.9-	33.1	29.4	38.6	41.6	31.3	41.8
D71-6642	35.0	35.4	30.8	43.6	44.5	27.9	48.9
D71-6730	29.0-	31.1	26.8-	37.6	40.3	37.2	43.2
D71-7035	35.7	36.2	33.7	43.6	46.1	42.0	48.6
D72-8800	33.3	42.8	34.1	46.2	42.4	31.1	50.2
N69-5007	36.1	38.9	32.9	50.6+	46.1	41.0	46.0
N70-1549	41.9	44.3	42.9	57.0+	45.6	41.8	53.5
R70-276	38.5	39.9	36.1	56.0+	55.1+	29.2	55.0
R70-332	43.9+	36.3	34.9	50.8+	57.2+	40.9	56.8
R71-626	36.9	39.3	39.6+	55.0+	47.1	32.5	47.1
R71-638	40.8	40.2	40.3+	50.7+	53.7+	33.8	53.8
V70-12	41.1	48.4	40.3+	51.4+	43.0	28.5	45.5
V71-487	34.1	38.4	34.4	50.2+	45.7	29.6	45.7
V71-500	39.8	42.3	34.0	47.5+	48.6	33.9	45.4
V71-653	45.4	43.0	36.2	49.7+	49.2	33.1	51.1
V71-736	38.8	36.5	40.7	47.0	35.3	35.9	42.1
V71-775	40.2	52.8+	37.2	52.3+	40.7	43.6	51.9
L.S.D.(.05)	6.3	7.7	5.3	6.3	9.0	N.S.	N.S.
C.V.	9%	10%	7%	7%	10%	15%	9%

Table 18. - Oil percentages for the strains in Preliminary Group V, 1973

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	20.7	22.6	21.4	23.2	23.2
Mack	22.0	24.9	23.2	24.6	24.5
D70-5024	20.8	23.3	21.2	23.0	22.5
D70-5030	20.9	24.2	22.4	23.0	23.1
D70-5083	20.7	22.7	21.1	22.5	21.8
D70-5101	20.8	23.7	21.5	23.4	22.0
D70-5366	18.5	21.8	18.8	20.3	19.1
D71-3780	20.1	22.4	20.5	21.9	22.1
D71-3849	19.5	21.9	20.2	22.5	22.2
D71-3868	21.3	23.3	20.9	22.8	24.2
D71-3965	20.2	23.5	20.8	22.7	23.2
D71-4226	19.4	22.6	21.2	22.9	23.2
D71-4229	19.4	22.4	21.2	22.1	21.8
D71-4243	20.6	23.1	21.0	22.1	22.0
D71-4422	22.3	24.4	24.3	23.8	25.1
D71-4462	22.0	24.8	24.8	25.2	25.1
D71-4566	19.6	23.5	20.9	23.3	22.0
D71-4886	19.9	22.7	19.9	21.8	21.6
D71-5289	18.1	20.1	17.7	19.6	18.7
D71-5306	18.4	20.4	18.2	20.0	18.6
D71-6642	19.9	21.6	20.0	21.3	21.8
D71-6730	18.8	20.9	18.4	20.1	19.5
D71-7035	20.8	22.9	20.9	22.4	22.0
D72-8800	20.4	22.6	20.4	21.5	20.9
N69-5007	20.0	22.4	20.9	22.1	23.4
N70-1549	22.0	24.0	23.0	23.2	23.6
R70-276	21.9	24.6	22.1	23.0	23.7
R70-332	22.4	25.5	22.7	23.7	24.7
R71-626	20.9	23.5	20.4	21.4	21.0
R71-638	21.8	24.1	21.3	23.7	23.7
V70-12	22.0	24.6	23.5	24.0	25.0
V71-487	20.8	23.7	21.0	23.2	22.2
V71-500	21.2	23.5	22.3	24.0	23.6
V71-653	21.8	23.8	23.0	22.8	23.1
V71-736	21.1	24.4	23.6	23.8	25.6
V71-775	21.8	23.8	23.1	23.6	24.5

Table 19. - Protein percentages for the strains in Preliminary Group V, 1973

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	41.7	40.1	41.6	40.0	38.1
Mack	41.6	40.1	41.0	40.6	39.0
D70-5024	41.5	39.5	41.5	38.6	37.9
D70-5030	41.6	37.4	41.9	40.0	40.0
D70-5083	42.3	40.2	42.7	39.8	38.2
D70-5101	40.8	38.1	41.7	38.6	38.9
D70-5366	47.3	43.3	46.8	44.8	44.1
D71-3780	41.7	40.9	41.1	39.6	38.0
D71-3849	42.2	40.0	42.4	40.3	38.5
D71-3868	41.3	40.0	43.6	41.0	38.4
D71-3965	42.8	40.7	43.3	41.8	37.5
D71-4226	40.6	39.0	40.7	37.2	37.7
D71-4229	43.1	40.8	43.7	41.6	41.1
D71-4243	41.7	40.0	43.0	40.3	38.7
D71-4422	39.5	39.4	38.6	38.2	36.8
D71-4462	40.5	38.7	39.8	38.0	36.5
D71-4566	44.0	39.5	42.5	39.0	39.1
D71-4886	43.6	40.6	44.7	41.7	40.5
D71-5289	49.0	46.2	51.0	47.1	45.7
D71-5306	47.4	46.5	48.1	43.7	44.5
D71-6642	44.7	43.5	45.2	42.6	40.1
D71-6730	47.1	43.9	46.3	43.3	42.0
D71-7035	42.7	39.0	44.7	39.8	40.6
D72-8800	42.3	41.1	44.5	42.0	41.1
N69-5007	42.0	38.1	40.9	39.4	37.8
N70-1549	40.4	39.5	41.3	38.8	38.3
R70-276	40.7	37.8	41.5	36.8	37.7
R70-332	39.8	38.1	42.7	39.5	38.6
R71-626	43.1	39.1	44.1	40.2	40.4
R71-638	41.2	39.4	43.0	39.7	39.1
V70-12	44.1	41.5	43.9	40.2	38.6
V71-487	42.2	39.9	42.2	37.5	38.6
V71-500	42.1	39.4	42.1	37.0	38.1
V71-653	42.3	39.5	41.1	39.6	39.2
V71-736	42.9	39.5	42.0	39.4	38.3
V71-775	42.5	40.0	43.6	40.0	39.5

Table 20 - Plant height for the strains in Preliminary Group V, 1973

Strain	George-town, Del.	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	39	39	38	34	32	25	29
Mack	45	39	40	36	25	25	30
D70-5024	40	37	38	37	31	25	32
D70-5030	40	42	40	36	33	25	31
D70-5083	45	41	44	38	28	27	30
D70-5101	42	42	38	37	30	23	31
D70-5366	40	41	36	34	27	29	27
D71-3780	44	40	44	39	29	23	39
D71-3849	37	34	36	31	29	23	25
D71-3868	40	46	38	32	31	24	27
D71-3965	40	38	39	36	31	24	31
D71-4226	39	37	34	32	27	19	28
D71-4229	43	44	41	34	35	29	33
D71-4243	47	38	40	34	32	25	33
D71-4422	43	41	42	33	32	28	31
D71-4462	38	40	40	36	35	30	29
D71-4566	40	38	40	34	30	25	29
D71-4886	36	39	39	32	28	24	28
D71-5289	43	43	36	37	27	25	30
D71-5306	46	41	42	35	32	31	34
D71-6642	45	42	38	38	33	31	33
D71-6730	39	38	37	32	33	27	29
D71-7035	43	38	39	37	30	27	32
D72-8800	39	38	34	32	28	24	27
N69-5007	40	39	35	31	29	28	25
N70-1549	43	40	43	35	29	27	25
R70-276	39	40	36	36	33	27	31
R70-332	39	38	38	39	33	24	31
R71-626	38	37	38	35	31	24	31
R71-638	39	36	38	34	33	33	28
V70-12	48	43	42	44	44	32	seg
V71-487	39	38	40	36	31	25	28
V71-500	46	42	39	38	35	31	32
V71-653	42	40	40	34	29	21	25
V71-736	42	42	40	33	31	24	24
V71-775	46	45	39	45	47	30	42

Table 21. - Seed quality scores for the strains in Preliminary Group V, 1973

Strain	George-town, Del.	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage, ville, Mo.	Keiser, Ark.	Stone-vill, Miss.(B)
Hill	2.0	2.0	1.5	2.0	2.3	1.8	2.0
Mack	2.0	2.0	1.8	1.5	2.0	2.0	2.0
D70-5024	2.0	2.0	1.1	1.5	2.0	1.8	2.0
D70-5030	2.0	2.0	1.6	1.0	2.3	1.8	2.0
D70-5083	1.8	2.0	2.1	1.5	2.3	2.3	2.0
D70-5101	1.5	2.0	1.3	1.5	2.0	2.0	2.0
D70-5366	2.0	2.0	1.6	1.5	2.0	2.5	2.0
D71-3780	2.0	2.0	1.1	1.5	1.8	2.0	2.0
D71-3849	2.0	2.0	1.4	1.5	2.0	1.5	2.0
D71-3868	2.0	2.0	1.2	1.5	2.0	1.5	2.0
D71-3965	2.0	2.0	1.4	1.5	1.6	1.8	2.0
D71-4226	2.0	2.0	1.6	1.5	2.3	1.5	2.0
D71-4229	2.0	2.0	1.1	1.5	1.5	1.8	2.0
D71-4243	1.5	2.0	1.7	1.5	1.8	1.5	2.0
D71-4422	1.8	2.0	1.5	1.5	1.8	2.0	2.0
D71-4462	1.5	2.0	1.2	1.5	1.8	1.5	2.0
D71-4566	1.8	2.0	1.6	1.5	1.5	1.5	2.0
D71-4886	2.0	2.0	1.4	1.5	2.0	1.5	2.5
D71-5289	1.8	2.0	1.7	1.5	2.0	1.8	2.0
D71-5306	2.0	2.0	1.8	1.5	2.3	2.3	2.0
D71-6642	2.0	2.0	2.0	1.5	2.3	2.0	2.0
D71-6730	1.8	2.0	1.2	1.5	2.3	1.5	2.0
D71-7035	1.5	2.0	1.3	1.5	1.6	2.0	2.0
D72-8800	1.8	2.0	1.3	1.5	1.5	2.0	2.0
N69-5007	1.5	2.0	1.5	1.5	1.8	1.5	2.0
N70-1549	1.8	2.0	1.5	1.5	2.0	2.0	2.0
R70-276	1.8	2.0	2.0	1.5	1.8	1.5	2.0
R70-332	1.8	2.0	1.6	1.5	2.0	1.5	2.0
R71-626	1.8	2.0	1.5	1.5	2.3	1.8	2.0
R71-638	1.8	2.0	1.4	1.5	2.0	2.0	2.0
V70-12	2.3	2.0	1.8	2.0	2.3	3.3	2.5
V71-487	1.8	2.0	2.0	1.5	2.3	2.0	2.0
V71-500	1.8	2.0	1.8	1.5	1.8	2.0	2.0
V71-653	2.0	2.0	1.6	1.5	1.8	1.5	2.0
V71-736	1.5	2.0	1.5	1.5	1.5	1.5	2.0
V71-775	2.3	2.0	1.6	2.0	2.8	3.0	2.0

UNIFORM GROUP VI

1973

	Variety or strain	Parentage	Generation composited
1.	Lee 68	Lee(6) x Arksoy	Sel. F_3 lines
2.	Davis	D49-2573 x N45-1497	F_6
3.	Pickett 71	Pickett x P.R. resistant Lee	Comp. F_4 lines
4.	Tracy (D67-4601)	D61-618 x D60-9647	F_5
5.	R68-208	Davis x Lee 68	F_5
6.	D69-8201	Hood x Semmes	F_5
7.	D69-8205	Hood x Semmes	F_5
8.	D70-3115	D64-4636 x tawny pub. Pickett 71 type	F_5
9.	D70-3185	D64-4636 x tawny pub. Pickett 71 type	F_5
10.	N69-332	N55-47 x York	F_5
11.	R69-345	Semmes x R64-500	F_5
12.	Lee 74 (R69-1400)	Lee 68 x R66-1517	F_4

Background of strains used as parents:

D49-2573 is a selection from Roanoke x N45-745 similar in maturity to Hood, but taller.

N45-1497 is a high oil line selected from Ralsoy x Ogden which carries the Arksoy type resistance to phytophthora rot.

D61-618 is a phytophthora-rot-resistant selection from Hill(2) x PI 171442.

D60-9647 is a moderately high protein strain selected from FC31745 x D49-2510 which was included in Uniform Group VI 1963-65.

D64-4636 is a selection from Hill x D58-3311. D58-3311 is a bacterial pustule resistant strain selected from Jackson(4) x D49-2491.

N55-47 is a selection from Roanoke x Hawkeye.

R64-500 is a phytophthora-rot-resistant selection from Hill(6) x Arksoy.

R66-1517 is a root-knot nematode resistant strain selected from Lee(5) x FC33243.

Results from 35 Uniform Group VI nurseries are summarized in Tables 22 through 28. Table 22 gives a general summary of agronomic qualities, chemical composition of the seed, and field reaction to several diseases. Two- and three-year data are reported for seed yield, and oil and protein percentage.

Seed yield differences among strains were significant at the 5% level of confidence at 19 of the 35 locations. The combined analysis of variance for mean seed yield by production regions showed differences to be significant only in the West.

Two strains have been named and released for commercial production. D67-4601 has been named 'Tracy', and R69-1400 has been named 'Lee 74'. It is anticipated that Lee 74 should replace Lee 68. Production appears very similar for the two. Lee 74 has the same level of resistance to phytophthora rot as Lee 68, and in addition is more resistant to root-knot nematodes, M. incognita var. acrita. Tracy has rather dense foliage which aids in suppressing weeds such as tea weed, Sida spp, and is more tolerant to the herbicide 2,4-DB than other varieties commonly grown. It is more sensitive to the herbicide Sencor than most other commonly grown varieties.

One strain, R68-208, has been grown 3 years. It has produced top yields in the Southeast and West. Two strains, D69-8201 and D69-8205, have been grown 2 years. D69-8201 appears to be the better of these two. D69-8201 had the highest mean yield in the East Coast area for 1973, and also for the 2-year mean. It matures at the earlier range for Group VI.

Of the strains grown one year, D70-3115 appeared too early for Group VI at several locations. D70-3185, which combines resistance for cyst nematodes, root-knot nematodes, and phytophthora rot, averaged higher in yield than Pickett 71 in all but the Upper and Central South. N69-332 and R69-345 yielded well in all areas, but were not above the best varieties in any area. Both were free of mottled seed at Halfway, Texas.

Table 22. -General summary of the performance for the strains in Uniform Group VI, 1973

	Lee 68	Davis	Pickett 71	Tracy	R68-208	D69-8201
Seed Yield - 1973						
East Coast	40.2	40.4	38.0	39.8	42.5	43.0
Southeast	43.6	44.9	41.7	44.7	48.2	45.8
Upper & Central South	37.6	36.7	38.5	38.4	37.1	38.8
Delta	43.8	44.1	41.9	44.2	42.7	44.3
West	34.3	39.5+	36.5	40.3+	37.8+	37.9+
- 1972-73						
East Coast	38.8	38.9	36.9	41.0	41.6	41.9
Southeast	44.6	44.1	41.3	44.1	47.6	46.3
Upper & Central South	36.4	36.9	35.9	36.9	35.3	36.7
Delta	40.2	42.3	39.4	42.1	41.7	42.9
West	37.8	41.0	38.6	41.0	41.3	42.0
- 1971-73						
East Coast	36.5	38.2	35.2	40.0	40.1	
Southeast	43.0	44.3	42.2	43.3	45.7	
Upper & Central South	37.7	38.4	39.1	40.5	37.8	
Delta	38.2	41.0	38.6	40.9	40.3	
West	38.5	42.7	38.5	42.2	44.0	
Oil Content - 1973	23.1	23.5	22.9	20.9-	23.1	23.2
- 1972-73	22.6	23.1	22.4	20.9	22.8	22.8
- 1971-73	22.3	22.8	22.1	20.6	22.6	
Protein Content - 1973	41.6	39.7-	40.1-	43.7+	42.2	39.9-
- 1972-73	41.3	39.5	40.0	43.0	41.8	40.0
- 1971-73	41.3	39.8	40.1	43.1	42.0	
Seed size	14.2	15.0	13.1-	16.6+	16.2+	16.6+
Maturity index	10-17	-2	+1	-1	0	-5
Height	31	36	30	31	32	35
Shatter resistance	1.0	2.4	1.0	1.6	1.3	1.4
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Root-knot nematode	5.0	4.0	4.0	4.0	4.5	4.0
Cyst nematode (race 3)	S	S	R	S	S	S
Downy mildew	3.0	1.0	3.0	1.0	3.0	3.0
Mottled seed (%)	13.0	0	7.0	14.0	2.0	8.0
Flower color	P	W	P	W	P	P
Pubescence color	T	G	G	T	G	G
Pod wall color	T	T	T	T	T	T

Table 22. - (continued)

	D69-8205	D70-3115	D70-3185	N69-332	R69-345	Lee 74
Seed Yield - 1973						
East Coast	40.8	38.8	40.8	39.3	39.9	38.0
Southeast	46.1	45.1	45.7	44.4	45.1	44.9
Upper & Central South	34.7	35.7	37.9	37.6	35.5	39.6
Delta	44.9	41.3	43.4	39.7	44.5	43.3
West	36.5	34.2	40.2+	36.3	37.1	37.7
- 1972-73						
East Coast	40.0					
Southeast	47.1					
Upper & Central South	33.9					
Delta	42.7					
West	40.2					
- 1971-73						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1973	22.8	23.2	22.3-	23.1	22.1-	22.2-
- 1972-73	22.3					
- 1971-73						
Protein Content - 1973	40.8-	40.6-	42.1	40.5-	42.1	42.0
- 1972-73	40.6					
- 1971-73						
Seed size	16.3+	13.9	14.5	15.9+	15.6+	14.4
Maturity index	-6	-8	-1	-6	-5	+1
Height	31	30	35	30	32	32
Shatter resistance	2.0	1.6	1.2	2.3	1.2	1.0
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Root-knot nematode	3.0	2.0	1.5	3.5	3.0	2.0
Cyst nematode (race 3)	S	R	R	S	S	S
Downy mildew	3.0	3.0	2.0	3.0	3.0	3.0
Mottled seed (%)	33.0	9.0	16.0	0	0	13.0
Flower color	P	W	P	P	P	P
Pubescence color	G	T	T	G	T	T
Pod wall color	T	T	T	T	T	T

Table 23. - Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1973

Location	Lee 68	Davis	Pickett 71	D67-4601	R68-208	D69-8201	D69-8205
			East Coast				
Linkwood, Md.*	38.0	41.7	36.6	39.8	41.1	42.6	35.5
Warsaw, Va.	40.6	36.2	39.2	43.9	40.0	41.9	39.8
Petersburg, Va.	18.6	24.6+	22.9+	18.6	27.4+	29.8+	22.7+
Holland, Va.	46.8	42.5	43.4	47.5	50.7	44.6	48.5
Plymouth, N.C.	46.4	46.4	39.8-	51.1	52.9+	54.9+	49.2
Kinston, N.C.	56.0	48.9	44.2	46.7	51.7	58.6	51.9
Clayton, N.C.	13.3	20.6	19.8	15.3	15.2	13.6	16.8
Florence, S.C.	48.2	49.1	45.4	34.1	41.0	42.4	35.7
Hartsville, S.C.	50.6	54.3	48.0	52.3	56.5+	55.7+	54.0
Blackville, S.C.	43.8	40.9	39.7	49.1	47.0	45.4	48.4
Mean	40.2	40.4	38.0	39.8	42.5	43.0	40.8
			Southeast				
Tifton, Ga.	44.9	54.3+	42.5	48.1	55.2+	54.0+	56.2+
Quincy, Fla.	40.4	49.0+	43.6	47.8+	48.2+	45.2	41.9
Jay, Fla.	41.6	39.3	38.8	40.3	44.1	43.3	46.9
Fairhope, Ala.	46.5	43.3	44.9	42.4	47.1	44.2	43.9
Baton Rouge, La.	44.5	38.4-	38.4-	45.0	46.5	42.1	41.6
Mean	43.6	44.9	41.7	44.7	48.2	45.8	46.1
			Upper and Central South				
Athens, Ga.	53.8	47.6	52.4	49.9	50.8	50.3	45.0
Calhoun, Ga.	19.0	26.9	23.4	20.1	26.2	23.8	25.8
Belle Mina, Ala.	43.2	39.6	42.1	45.7	41.1	42.5	39.4
Clemson, S.C.	40.0	38.7	36.8	40.5	38.9	38.1	29.9-
Jackson, Tenn.	40.0	32.0	38.6	35.6	32.6	37.1	35.5
Vernona, Miss.	29.6	35.6	37.5	38.3	32.8	40.8	32.4
Mean	37.6	36.7	38.5	38.4	37.1	38.8	34.7
			Delta				
Portageville, Mo.(A)	54.7	49.6-	56.2	53.8	50.4-	51.2-	54.4
Portageville, Mo.(B)	45.0	48.2	43.3	47.2	45.9	40.5	44.8
Keiser, Ark.	38.4	45.3+	39.2	38.1	37.2	38.5	37.9
Stoneville, Miss.(A)	46.6	46.8	43.6	42.2-	46.9	51.3+	48.7
Stoneville, Miss.(B)	49.3	43.8	45.3	48.6	45.1	48.4	49.0
St. Joseph, La.	41.2	39.8	33.0-	40.6	42.6	45.9	44.0
Rohwer, Ark.	31.0	35.3	32.9	41.2+	30.9	34.6	35.5
Mean	43.8	44.1	41.9	44.2	42.7	44.3	44.9
			West				
Pine Bluff, Ark.	44.0	53.0	42.0	55.0	52.0	41.0	43.0
Stuttgart, Ark.	36.0	41.7	42.5	37.3	35.8	39.1	41.9
Curtis, La.	32.0	43.1	46.1	41.1	42.0	39.2	30.0
Crowley, La.	23.5	31.3+	27.6	25.7	23.0	23.2	25.5
Beaumont, Texas	23.5	26.4	22.0	32.5+	26.4	29.4	30.4+
Bixby, Okla.	52.2	57.3	52.6	61.1	58.6	62.7	61.4
Halfway, Texas	23.5	23.9	22.5	28.6	22.3	26.7	18.1
Lubbock, Texas	40.1	39.0	37.3	41.3	42.0	41.8	41.7
Mean	34.3	39.5+	36.5	40.3+	37.8+	37.9+	36.5

*Data received too late to be included in mean
(+) - Strains yielding significantly more (odds 19:1 or greater) than Lee 68.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Lee 68.

Table 23. - (continued)

Location	D70-3115	D70-3185	N69-332	R69-345	Lee 74	L.S.D. (.05)	C.V. (%)
			East Coast				
Linkwood, Md.*	37.1	42.3	43.0	37.8	35.2	5.4	8
Warsaw, Va.	34.6-	38.9	39.1	40.6	42.6	4.6	7
Petersburg, Va.	22.3+	30.5+	21.0	26.6+	24.4+	3.6	9
Holland, Va.	40.3-	48.7	45.3	38.5-	42.9	6.5	9
Plymouth, N.C.	47.0	50.6	50.9	48.0	41.4	5.5	7
Kinston, N.C.	54.5	52.4	55.9	50.5	45.5	N.S.	11
Clayton, N.C.	15.5	15.7	13.6	15.8	15.8	N.S.	21
Florence, S.C.	43.1	40.1	33.9	46.9	38.0	N.S.	15
Hartsville, S.C.	51.4	55.0	48.2	48.7	49.9	4.8	5
Blackville, S.C.	40.6	34.9-	45.5	43.3	41.3	5.9	8
Mean	38.8	40.8	39.3	39.9	38.0	N.S.	
			Southeast				
Tifton, Ga.	58.1+	48.3	59.3+	45.9	44.8	5.1	6
Quincy, Fla.	42.0	44.7	39.8	45.1	44.9	5.9	8
Jay, Fla.	40.1	43.4	40.6	46.6	43.9	N.S.	9
Fairhope, Ala.	42.4	46.5	42.2	43.7	44.6	N.S.	6
Baton Rouge, La.	43.0	45.6	40.2-	44.3	46.1	4.2	6
Mean	45.1	45.7	44.4	45.1	44.9	N.S.	
			Upper and Central South				
Athens, Ga.	49.0	46.9	43.3	50.0	54.3	N.S.	13
Calhoun, Ga.	17.4	27.1	25.0	20.4	26.7	N.S.	17
Belle Mina, Ala.	45.8	40.0	43.8	41.1	42.9	N.S.	12
Clemson, S.C.	39.2	39.9	40.0	34.4-	44.1	5.6	12
Jackson, Tenn.	32.4	34.4	34.4	36.0	37.0	N.S.	11
Verona, Miss.	30.5	39.1	39.2	31.0	32.7	N.S.	16
Mean	35.7	37.9	37.6	35.5	39.6	N.S.	
			Delta				
Portageville, Mo.(A)	52.8	50.6-	51.7	54.4	57.1	3.4	8
Portageville, Mo.(B)	40.8	44.0	45.6	44.6	44.9	N.S.	13
Keiser, Ark.	35.0	44.8+	40.1	43.8	39.1	5.7	9
Stoneville, Miss.(A)	47.5	46.3	44.0	46.9	47.5	3.9	5
Stoneville, Miss.(B)	44.8	44.4	36.1-	46.3	45.1	6.0	8
St. Joseph, La.	46.4	43.7	40.2	39.4	40.5	6.3	9
Rohwer, Ark.	22.0-	30.0	20.2-	36.0	29.0	6.4	12
Mean	41.3	43.4	39.7	44.5	43.3	N.S.	
			West				
Pine Bluff, Ark.	43.0	56.0	39.0	50.0	50.0	N.S.	14
Stuttgart, Ark.	41.6	40.1	40.1	37.3	38.7	N.S.	9
Curtis, La.	32.7	47.4	36.5	47.9	40.6	N.S.	24
Crowley, La.	22.3	28.0	29.2+	24.1	21.5	5.0	12
Beaumont, Texas	20.4	33.1+	22.4	23.5	34.5+	6.5	14
Bixby, Okla.	56.0	58.8	58.4	54.3	54.1	N.S.	8
Halfway, Texas	15.5	17.9	23.4	22.1	23.6	7.1	19
Lubbock, Texas	41.7	40.0	40.9	37.8	41.5	N.S.	5
Mean	34.2	40.2+	36.3	37.1	37.7	3.5	

Table 24. - Chemical composition and seed size for the strains in Uniform Group VI, 1973

Location	Lee 68	Davis	Pickett 71	D67-4601	R68-208	D69-8201
	Oil Percentage					
Warsaw, Va.	23.2	24.0	23.2	20.9	22.8	22.1
Kinston, N.C.	23.1	23.9	21.2	19.5	22.7	21.9
Jay, Fla.	23.3	23.2	22.1	20.8	23.0	23.0
Jackson, Tenn.	23.8	24.0	24.6	21.4	23.7	23.7
Portageville, Mo.(A)	22.9	22.4	22.4	20.8	22.9	22.2
Keiser, Ark.	22.9	23.9	23.1	20.1	23.4	23.7
Stoneville, Miss.(B)	24.2	24.2	24.5	21.8	24.6	26.3
Stuttgart, Ark.	24.6	26.3	25.0	24.8	25.1	25.3
Halfway, Texas	20.2	19.6	20.1	18.0	19.6	20.9
Mean	23.1	23.5	22.9	20.9-	23.1	23.2
	Protein Percentage					
Warsaw, Va.	40.9	39.7	40.6	42.4	42.7	41.0
Kinston, N.C.	42.5	40.6	41.0	47.0	43.4	40.9
Jay, Fla.	44.3	40.7	42.2	45.8	43.9	41.4
Jackson, Tenn.	40.4	37.7	39.7	43.2	42.9	39.8
Portageville, Mo.(A)	41.7	39.5	39.0	42.8	42.1	39.6
Keiser, Ark.	41.8	39.6	40.1	44.3	40.6	39.9
Stoneville, Miss.(B)	39.9	38.0	38.7	43.1	41.3	38.0
Stuttgart, Ark.	41.7	39.4	39.8	42.5	39.3	38.5
Halfway, Texas	41.4	42.2	40.2	42.5	43.5	40.0
Mean	41.6	39.7-	40.1-	43.7+	42.2	39.9-
	Grams per 100 Seeds					
Warsaw, Va.	15.4	18.0	14.8	20.0	20.5	19.9
Plymouth, N.C.	12.2	13.4	10.7	15.4	16.2	14.9
Kinston, N.C.	13.6	13.6	12.2	15.4	15.0	15.6
Jay, Fla.	15.0	14.0	14.0	13.0	13.0	16.0
Jackson, Tenn.	16.5	18.2	15.7	19.0	20.4	19.0
Portageville, Mo.(A)	15.0	15.0	12.0	17.0	16.0	15.0
Keiser, Ark.	12.7	14.3	12.0	16.7	15.0	16.0
Stoneville, Miss.(B)	13.4	13.6	12.0	16.4	16.2	16.4
Stuttgart, Ark.	12.7	16.3	12.7	16.3	15.0	16.0
Halfway, Texas	15.0	14.0	14.4	17.2	15.0	16.8
Mean	14.2	15.0	13.1-	16.6+	16.2+	16.6+

Table 24. - (continued)

Location	D69-8205	D70-3115	D70-3185	N69-332	R69-345	Lee 74	L.S.D. (.05)
	Oil Percentage						
Warsaw, Va.	21.7	23.4	22.0	23.1	22.4	21.9	
Kinston, N.C.	22.8	23.0	21.9	21.6	22.4	21.7	
Jay, Fla.	22.8	23.3	21.9	22.5	22.2	22.6	
Jackson, Tenn.	24.7	23.6	23.8	24.4	23.1	24.2	
Portageville, Mo.(A)	22.1	22.4	22.4	22.9	21.9	21.7	
Keiser, Ark.	23.0	24.2	22.8	23.9	21.9	22.4	
Stoneville, Miss.(B)	23.8	24.2	23.2	24.4	22.7	23.2	
Stuttgart, Ark.	24.8	24.7	23.4	25.2	23.4	23.0	
Halfway, Texas	19.5	20.0	19.1	19.6	19.1	19.4	
Mean	22.8	23.2	22.3-	23.1	22.1-	22.2-	0.6
	Protein Percentage						
Warsaw, Va.	41.4	40.5	41.2	41.0	42.0	42.8	
Kinston, N.C.	40.2	41.8	42.2	41.7	43.1	43.2	
Jay, Fla.	42.1	44.3	45.0	42.2	45.5	43.7	
Jackson, Tenn.	41.5	41.4	41.8	40.6	41.1	40.4	
Portageville, Mo.(A)	41.4	39.5	41.6	41.0	41.3	41.9	
Keiser, Ark.	40.5	39.8	42.2	39.7	42.3	42.1	
Stoneville, Miss.(B)	38.7	38.2	40.5	38.7	40.0	40.0	
Stuttgart, Ark.	40.2	38.3	41.8	38.6	41.8	42.0	
Halfway, Texas	41.6	41.5	42.3	40.9	42.2	42.1	
Mean	40.8-	40.6-	42.1	40.5-	42.1	42.0	0.8
	Grams per 100 Seeds						
Warsaw, Va.	18.6	13.9	15.8	17.4	17.1	16.4	
Plymouth, N.C.	14.8	13.4	14.5	14.6	13.5	12.2	
Kinston, N.C.	15.1	13.6	13.5	15.0	14.5	13.8	
Jay, Fla.	19.0	17.0	16.0	18.0	18.0	17.0	
Jackson, Tenn.	19.1	14.3	17.8	18.5	17.1	16.5	
Portageville, Mo.(A)	15.0	14.0	14.0	15.0	16.0	16.0	
Keiser, Ark.	14.7	12.0	12.0	16.7	15.0	12.3	
Stoneville, Miss.(B)	15.4	14.9	13.5	14.2	13.2	12.6	
Stuttgart, Ark.	15.7	11.3	13.0	13.0	15.3	13.0	
Halfway, Texas	15.7	15.0	14.7	16.6	16.4	13.7	
Mean	16.3+	13.9	14.5	15.9+	15.6+	14.4	1.1

Table 25. - Relative maturity data, days earlier (-) or later (+) than Lee 68, for the strains in Uniform Group VI, 1973

Location	Date planted	Lee 68 matured	Davis	Pickett 71	D67-4601	R68-208	D69-8201
		East Coast					
Linkwood, Md.*	6-1	10-17	+7	0	+2	+6	-1
Warsaw, Va.	6-3	10-28	+2	+2	+1	+5	0
Petersburg, Va.	5-22	10-22	-6	-2	-2	-6	-10
Holland, Va.	5-17	10-18	0	+6	+8	+8	-8
Plymouth, N.C.	5-16	10-20	0	0	-3	-3	-5
Kinston, N.C.	5-15	10-20	0	0	+2	+2	-8
Clayton, N.C.	5-26	10-12	+4	+4	+4	0	0
Florence, S.C.	5-15	10-22	-14	+4	0	-7	-16
Hartsville, S.C.	5-23	10-22	-6	+2	-2	-7	-8
Blackville, S.C.	5-16	10-8	+1	0	-2	-2	-3
Mean		10-19	-2	+2	+1	-1	-6
		Southeast					
Tifton, Ga.	5-11	9-27	-10	-1	-3	-3	-7
Quincy, Fla.	5-15	10-4	-3	-1	-2	-2	-7
Jay, Fla.	5-18	10-13	-6	-2	-8	-3	-8
Fairhope, Ala.	6-11	10-15	-3	0	-3	+2	-4
Baton Rouge, La.	5-18	10-17	-5	+5	-1	-1	-9
Mean		10-9	-5	0	-3	-1	-7
		Upper and Central South					
Athens, Ga.	5-14	10-11	-8	+1	-2	-1	-13
Calhoun, Ga.	6-12	10-19	0	+9	-3	+2	-3
Belle Mina, Ala.	5-10	10-4	-3	+1	-2	-2	-5
Clemson, S.C.	6-4	10-14	-2	0	-3	+2	0
Jackson, Tenn.	5-17	10-25	+7	+3	+1	+4	+3
Verona, Miss.		10-11	+1	+2	+1	0	+3
Mean		10-14	-1	+3	+1	+1	-3
		Delta					
Portageville, Mo.(A)	5-14	10-26	+1	+1	+1	0	-1
Portageville, Mo.(B)	6-26	10-31	+1	0	-1	+1	+1
Keiser, Ark.	6-7	10-26	-6	+2	-1	-1	-5
Stoneville, Miss.(A)	5-16	10-15	-3	-2	-1	-3	-7
Stoneville, Miss.(B)	5-17	10-16	-4	0	-2	-2	-6
St. Joseph, La.	5-31	10-10	-2	0	-9	-5	-6
Rohwer, Ark.	6-6	10-22	+7	-1	+4	+7	-2
Mean		10-21	-1	0	-1	0	-4
		West					
Pine Bluff, Ark.	5-14	10-10	0	+2	+2	+4	-9
Stuttgart, Ark.	6-7	10-18	-4	+3	+1	-3	-9
Curtis, La.	5-8	10-14	-2	+3	0	-4	-5
Crowley, La.	5-18	10-25	-23	0	0	-7	-25
Beaumont, Texas	6-18	10-25	-1	+3	-2	+4	-2
Bixby, Okla.	6-22	10-15	+3	+5	+1	0	+1
Halfway, Texas	6-4	10-25	0	0	+6	+5	0
Lubbock, Texas	5-21	10-19	+2	0	-3	0	+1
Mean		10-19	-3	+2	0	0	-6

*Data not received in time to be included in mean.

Table 25. - (continued)

Location	D69-8205	D70-3115	D70-3185	N69-332	R69-345	Lee 74
		East Coast				
Linkwood, Md.*	0	-6	+3	+1	-3	+1
Warsaw, Va.	-1	-12	-1	0	-9	+5
Petersburg, Va.	-16	-12	-2	-7	-7	0
Holland, Va.	+2	0	+6	+4	-6	+8
Plymouth, N.C.	-5	0	-4	0	-3	0
Kinston, N.C.	0	-10	0	0	-8	0
Clayton, N.C.	0	0	+4	0	0	+2
Florence, S.C.	-14	-7	+3	-16	-14	+3
Hartsville, S.C.	-10	-8	-4	-12	-8	0
Blackville, S.C.	-3	-11	0	-3	-3	+2
Mean	-5	-7	0	-4	-6	+2
		Southeast				
Tifton, Ga.	-9	-8	0	-12	-3	0
Quincy, Fla.	-8	+1	0	-12	-7	+4
Jay, Fla.	-13	-17	-3	-5	-8	+2
Fairhope, Ala.	-3	-5	0	-5	-6	0
Baton Rouge, La.	-8	-12	-1	-10	-8	+3
Mean	-8	-8	0	-9	-6	+2
		Upper and Central South				
Athens, Ga.	-13	-24	-2	-14	-7	+1
Calhoun, Ga.	-8	-5	+7	-12	0	+3
Belle Mina, Ala.	-6	-5	0	-6	-5	0
Clemson, S.C.	-9	-2	-9	+5	-10	+1
Jackson, Tenn.	-5	-21	-2	-15	-6	+5
Verona, Miss.	-4	-17	+3	-6	-5	-1
Mean	-9	-15	0	-10	-7	0
		Delta				
Portageville, Mo.(A)	+1	-1	0	0	0	+1
Portageville, Mo.(B)	0	-1	-1	-1	-2	+1
Keiser, Ark.	-7	-9	-3	-2	-8	+2
Stoneville, Miss.(A)	-9	-16	-2	-13	-7	-1
Stoneville, Miss.(B)	-6	-14	-2	-7	-5	0
St. Joseph, La.	-5	-5	-2	-12	-1	+9
Rohwer, Ark.	-2	-12	-7	0	-3	+1
Mean	-4	-8	-2	-7	-4	+2
		West				
Pine Bluff, Ark.	-9	-5	-9	-3	-3	+2
Stuttgart, Ark.	-5	-16	0	-11	-4	+1
Curtis, La.	-5	-6	-2	-2	-4	+2
Crowley, La.	-15	-15	0	-22	0	0
Beaumont, Texas	-1	-2	-2	-2	-1	0
Bixby, Okla.	+2	0	-1	-2	0	0
Halfway, Texas	0	0	0	+5	0	0
Lubbock, Texas	+1	-5	+1	-5	-4	-2
Mean	-4	-6	-2	-5	-2	0

Table 26. - Plant height for the strains in Uniform Group VI, 1973

Location	Lee 68	Davis	Pickett '71	D67-4601	R68-203	D69-8201
			East Coast			
Linkwood, Md.*	39	46	39	43	40	46
Warsaw, Va.	44	43	41	46	42	49
Petersburg, Va.	37	45	37	35	35	41
Holland, Va.	43	43	39	43	40	45
Plymouth, N.C.	37	43	35	42	38	42
Kinston, N.C.	33	41	29	35	37	37
Clayton, N.C.	25	31	25	29	23	27
Florence, S.C.	27	28	26	25	23	27
Hartsville, S.C.	40	33	39	33	37	39
Blackville, S.C.	29	26	25	34	30	31
Mean	35	37	33	36	34	38
			Southeast			
Tifton, Ga.	23	35	22	28	32	32
Quincy, Fla.	24	33	23	27	24	27
Jay, Fla.	33	36	31	35	33	37
Fairhope, Ala.	32	37	30	35	33	32
Baton Rouge, La.	32	35	27	33	30	36
Mean	29	35	27	32	30	33
			Upper and Central South			
Athens, Ga.	34	36	37	31	36	37
Calhoun, Ga.	26	31	26	27	25	30
Belle Mina, Ala.	33	42	33	39	35	40
Clemson, S.C.	31	36	30	37	31	36
Jackson, Tenn.	43	50	41	49	50	52
Verona, Miss.	30	34	28	36	27	30
Mean	33	38	33	37	34	38
			Delta			
Portageville, Mo.(A)	31	39	27	38	34	36
Portageville, Mo.(B)	25	27	20	27	21	23
Keiser, Ark.	27	36	21	31	26	28
Stoneville,Miss.(A)	33	43	30	39	38	39
Stoneville,Miss.(B)	29	36	26	35	31	33
St. Joseph, La.	40	34	35	40	35	40
Rohwer, Ark.	24	34	22	33	24	29
Mean	30	36	26	35	30	33
			West			
Pine Bluff, Ark.	33	39	34	34	31	34
Stuttgart, Ark.	36	36	34	35	31	37
Curtis, La.	20	38	23	29	28	30
Crowley, La.	20	24	17	23	20	23
Beaumont, Texas	20	20	23	23	18	26
Bixby, Okla.	26	33	29	32	35	35
Halfway, Texas	37	46	37	41	39	44
Lubbock, Texas	35	40	33	40	33	38
Mean	28	35	29	32	29	33

*Not included in mean.

Table 26. - (continued)

Location	D69-8205	D70-3115	D70-3185	N69-332	R69-345	Lee 74
		East Coast				
Linkwood, Md.*	40	37	42	39	38	41
Warsaw, Va.	43	37	45	40	39	43
Petersburg, Va.	33	30	38	35	34	38
Holland, Va.	40	40	45	42	43	42
Plymouth, N.C.	35	36	42	40	37	36
Kinston, N.C.	35	32	38	33	32	33
Clayton, N.C.	26	24	29	25	27	27
Florence, S.C.	20	23	28	22	26	28
Hartsville, S.C.	36	42	41	34	34	39
Blackville, S.C.	31	26	33	28	26	25
Mean	33	32	38	33	33	35
		Southeast				
Tifton, Ga.	28	24	29	27	23	24
Quincy, Fla.	25	22	26	25	24	25
Jay, Fla.	32	32	37	31	31	33
Fairhope, Ala.	30	29	37	32	32	31
Baton Rouge, La.	31	28	39	27	32	31
Mean	29	27	34	28	28	29
		Upper and Central South				
Athens, Ga.	32	29	35	28	34	39
Calhoun, Ga.	27	24	32	26	27	31
Belle Mina, Ala.	33	32	38	33	35	35
Clemson, S.C.	27	30	37	31	31	33
Jackson, Tenn.	48	44	52	48	49	48
Verona, Miss.	29	22	35	25	30	32
Mean	33	30	38	32	34	36
		Delta				
Portageville,Mo.(A)	37	31	38	38	36	32
Portageville,Mo.(B)	20	19	25	17	24	27
Keiser, Ark.	22	23	28	23	29	26
Stoneville,Miss.(A)	35	32	39	34	35	35
Stoneville,Miss.(B)	31	29	35	25	30	29
St. Joseph, La.	40	34	41	31	30	30
Rohwer, Ark.	27	27	29	22	31	27
Mean	30	28	34	27	31	29
		West				
Pine Bluff, Ark.	30	31	38	28	32	35
Stuttgart, Ark.	32	29	32	30	34	35
Curtis, La.	25	25	35	26	28	24
Crowley, La.	20	18	23	20	21	17
Beaumont, Texas	18	25	25	22	23	24
Bixby, Okla.	35	32	34	33	31	30
Halfway, Texas	40	39	45	38	39	39
Lubbock, Texas	37	35	37	38	36	34
Mean	30	29	34	29	31	30

Table 27. - Lodging scores for the strains in Uniform Group VI, 1973

Location	Lee 68	Davis	Pickett 71	D67-4601	R68-208	D69-8201
			East Coast			
Linkwood, Md.	5.0	4.3	4.0	4.3	3.0	3.0
Warsaw, Va.	3.1	2.9	3.4	3.2	1.4	1.6
Petersburg, Va.	3.0	2.0	4.0	3.0	1.0	2.0
Holland, Va.	4.8	5.0	4.7	4.8	2.8	2.2
Plymouth, N.C.	3.0	3.0	3.0	3.0	2.0	2.0
Kinston, N.C.	2.7	3.0	2.3	3.0	2.0	2.0
Clayton, N.C.	2.0	1.3	2.0	2.3	1.0	1.3
Florence, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	2.0	2.5	1.7	2.5	2.0	2.5
Blackville, S.C.	3.0	2.7	2.3	2.3	1.0	1.0
			Southeast			
Tifton, Ga.	2.0	2.0	2.3	1.3	1.3	1.7
Quincy, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	2.0	1.0	2.0	1.0	1.0
Baton Rouge, La.	2.0	1.3	1.3	1.3	1.0	1.0
			Upper and Central South			
Athens, Ga.	1.3	1.7	2.3	1.8	1.5	1.3
Calhoun, Ga.	1.3	1.2	1.3	1.0	1.0	1.0
Belle Mina, Ala.	2.7	3.8	2.8	3.5	2.3	2.0
Clemson, S.C.	2.3	1.8	1.8	2.0	1.8	1.8
Jackson, Tenn.	2.0	2.0	2.5	2.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	3.7	3.2	4.0	4.3	2.7	2.7
Portageville, Mo.(B)	2.2	2.2	2.0	2.0	1.5	1.5
Keiser, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss.(A)	3.0	3.7	2.7	3.3	2.0	3.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.7	2.0	2.0
St. Joseph, La.	3.0	3.0	2.0	3.0	1.0	3.0
Rohwer, Ark.	2.0	1.7	1.3	2.3	1.0	2.0
			West			
Pine Bluff, Ark.	2.0	1.0	3.0	1.0	3.0	1.0
Stuttgart, Ark.	3.5	2.2	3.7	3.0	1.0	1.8
Curtis, La.	1.0	3.3	1.3	2.0	1.3	1.3
Beaumont, Texas	1.0	1.0	1.0	1.0	1.0	2.0
Bixby, Okla.	3.3	2.0	2.7	2.0	1.0	1.3
Halfway, Texas	3.3	3.0	3.6	4.0	2.0	2.0
Lubbock, Texas	3.5	2.5	3.7	2.5	1.7	2.0

Table 27. - (Continued)

Location	D69-8205	D70-3115	D70-3185	N69-332	R69-345	Lee 74
			East Coast			
Linkwood, Md.	3.0	3.7	3.3	3.0	5.0	5.0
Warsaw, Va.	1.8	3.7	2.2	1.5	4.6	3.1
Petersburg, Va.	1.0	1.0	2.0	1.0	3.0	2.0
Holland, Va.	2.3	4.8	4.7	3.3	5.0	4.7
Plymouth, N.C.	2.0	2.3	2.0	2.0	3.0	3.0
Kinston, N.C.	2.0	2.0	2.3	2.0	2.3	2.0
Clayton, N.C.	1.3	1.3	1.7	1.0	2.0	1.7
Florence, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	1.7	1.3	2.3	1.6	2.5	2.0
Blackville, S.C.	1.0	1.7	1.7	1.3	2.3	3.7
			Southeast			
Tifton, Ga.	1.0	1.7	1.3	1.0	1.3	2.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	2.0	1.0
Baton Rouge, La.	1.0	1.0	1.3	1.0	2.3	1.5
			Upper and Central South			
Athens, Ga.	1.2	1.0	1.8	1.0	2.3	2.0
Calhoun, Ga.	1.0	1.0	1.5	1.0	1.3	1.3
Belle Mina, Ala.	1.0	1.3	3.0	1.0	4.2	3.0
Clemson, S.C.	1.0	1.6	1.8	1.8	1.8	2.5
Jackson, Tenn.	1.0	1.0	2.0	1.0	2.0	2.0
			Delta			
Portageville, Mo.(A)	2.7	3.5	3.3	2.2	4.0	4.0
Portageville, Mo.(B)	1.5	1.7	2.2	1.2	1.7	2.3
Keiser, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss.(A)	2.7	2.7	3.0	2.0	2.7	3.0
Stoneville, Miss.(B)	2.0	2.0	2.0	1.0	1.7	2.0
St. Joseph, La.	2.0	2.0	2.0	2.0	3.0	2.0
Rohwer, Ark.	1.3	1.0	1.3	1.0	3.0	1.7
			West			
Pine Bluff, Ark.	3.0	3.0	3.0	3.0	1.0	2.0
Stuttgart, Ark.	1.0	2.2	2.3	3.5	3.0	2.8
Curtis, La.	1.7	1.3	2.0	1.7	1.7	1.7
Beaumont, Texas	1.0	1.0	2.0	1.0	1.0	1.0
Bixby, Okla.	1.3	1.7	1.3	1.3	2.0	2.3
Halfway, Texas	2.0	4.0	3.6	2.3	3.6	3.3
Lubbock, Texas	2.0	3.0	2.5	2.0	3.0	4.0

Table 28. - Seed quality scores for the strains in Uniform Group VI, 1973

Location	Lee 68	Davis	Pickett 71	D67-4601	R68-208	D69-8201
			East Coast			
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Warsaw, Va.	1.5	1.6	1.4	1.5	1.6	2.2
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	2.0
Holland, Va.	1.0	1.0	1.0	1.0	1.2	1.0
Plymouth, N.C.	1.5	2.0	2.5	1.5	2.0	2.0
Kinston, N.C.	1.5	2.0	1.5	1.5	1.5	2.0
Clayton, N.C.	1.0	2.0	1.0	2.0	1.0	1.0
Blackville, S.C.	1.7	2.0	1.3	2.3	1.3	1.3
			Southeast			
Tifton, Ga.	1.5	1.7	1.8	2.0	1.7	1.7
Jay, Fla.	2.0	2.0	1.0	2.0	2.0	2.0
Fairhope, Ala.	2.0	2.0	1.7	2.0	1.7	1.7
			Upper and Central South			
Athens, Ga.	2.0	2.0	1.5	1.8	2.2	2.0
Calhoun, Ga.	1.1	1.3	1.3	1.7	1.3	2.0
Clemson, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	2.0	2.0	1.5	2.0	2.0	3.0
			Delta			
Portageville, Mo.(A)	2.0	1.7	2.2	2.3	1.8	1.7
Portageville, Mo.(B)	1.5	1.7	1.8	1.7	1.8	1.8
Keiser, Ark.	1.8	2.0	1.8	3.0	1.7	2.2
Stoneville, Miss.(A)	2.0	2.3	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Rohwer, Ark.	4.0	4.2	3.8	4.3	3.8	4.2
			West			
Pine Bluff, Ark.	2.0	1.3	2.0	2.0	1.3	1.3
Stuttgart, Ark.	2.0	2.8	2.3	3.3	2.0	2.8
Curtis, La.	1.3	1.7	1.3	2.0	1.3	2.0
Beaumont, Texas	4.0	3.0	3.0	3.0	2.0	3.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Halfway, Texas	2.0	1.0	2.0	2.0	2.0	2.0

Table 28. - (continued)

Location	D69-8205	D70-3115	D70-3185	N69-332	R69-345	Lee 74
			East Coast			
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Warsaw, Va.	1.9	1.8	1.5	1.9	1.6	1.4
Petersburg, Va.	1.0	1.0	1.0	2.0	1.0	1.0
Holland, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Plymouth, N.C.	1.5	1.5	1.5	1.5	1.5	1.5
Kinston, N.C.	2.0	1.5	1.5	1.5	1.5	1.5
Clayton, N.C.	1.0	2.0	1.0	2.0	1.0	1.0
Blackville, S.C.	1.0	2.0	2.0	1.3	1.3	2.0
			Southeast			
Tifton, Ga.	1.5	2.7	2.2	2.0	2.0	1.7
Jay, Fla.	2.0	2.0	2.0	1.0	1.0	1.0
Fairhope, Ala.	2.0	3.0	2.3	3.0	1.3	1.7
			Upper and Central South			
Athens, Ga.	1.3	1.3	1.2	2.0	1.6	2.0
Calhoun, Ga.	1.7	1.5	1.4	2.0	1.0	1.5
Clemson, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	3.0	4.0	2.5	3.0	1.0	2.0
			Delta			
Portageville, Mo.(A)	2.2	2.2	2.3	1.8	2.2	1.8
Portageville, Mo.(B)	1.5	2.0	1.8	1.8	1.8	2.0
Keiser, Ark.	2.8	2.2	2.3	3.2	2.0	2.0
Stoneville, Miss.(A)	2.0	2.3	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Rohwer, Ark.	3.7	3.0	2.0	4.2	3.8	4.0
			West			
Pine Bluff, Ark.	1.0	2.0	2.3	1.6	2.6	2.3
Stuttgart, Ark.	2.7	2.3	2.2	2.8	2.0	2.2
Curtis, La.	2.0	1.7	2.0	2.3	1.7	2.0
Beaumont, Texas	4.0	4.0	3.0	3.0	5.0	4.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Halfway, Texas	2.0	2.0	2.0	1.0	1.0	2.0

PRELIMINARY GROUP VI

1973

Preliminary Group VI nurseries, including 34 experimental strains along with Pickett 71 and D64-4636 as checks, were grown at seven locations. The parentage of these strains is reported in Table 29. Performance data are summarized in Tables 30 through 35. Difference among strains for seed yield were significant at the 5% level of confidence at only three locations. The combined analysis of variance for seed yield showed difference among strains to be significant.

Only two strains ranked above D64-4636 in seed yield. Five strains averaged significantly lower in seed yield than Pickett 71. There were no strains having a mean seed yield significantly greater than Pickett 71.

D70-3091, one of the better yielding strains, combines resistance to race 3 of the cyst nematode, root-knot nematode, and phytophthora rot. In other tests, it has not been superior to D70-3185 presently in Uniform VI. D70-3045, which has a similar disease and nematode reaction, has been used as a parent in the program to develop strains resistant to race 4 of the soybean cyst nematode.

D70-7358 is an oval leaf type with a low number of seeds per pod. Although mean yield was slightly below that of Pickett 71, its seed yield was near the top at several locations. D71-7399 has curled, deciduous pubescence.

Strains which appear to merit being advanced to Uniform Group VI are D70-7583, D71-6841, D71-6879, R70-33, and N70-1501.

Table 29. - Parentage of the strains in Preliminary Group VI, 1973

	Variety or strain	Parentage	Generation composited
1.	Pickett 71		
2.	D64-4636		
3.	D70-3045	D64-4636 x Lee type resistant to C.N. & P.R.	F_5
4.	D70-3091	D64-4636 x Lee type resistant to C.N. & P.R.	F_5
5.	D70-6733	D64-5144 x D62-6342	F_5
6.	D70-6750	D64-5144 x D62-6342	F_5
7.	D70-7358	D63-3933 x D62-6342	F_5
8.	D70-7583	Hood x D60-9647	F_5
9.	D71-6530	D65-2874 x Hood	F_5
10.	D71-6555	D65-2874 x Hood	F_5
11.	D71-6598	D65-2874 x Hood	F_5
12.	D71-6841	D64-4636 x D64-3937	F_5
13.	D71-6879	D64-4636 x D64-3937	F_5
14.	D71-7399	D64-8713 x D66-7398	F_5
15.	D71-7610	D64-2491 x D62-6770	F_5
16.	D71-7823	Dyer x Bragg	F_5
17.	D71-8629	Hardee x Hill	F_5
18.	N69-5020	D63-6094 x D62-7816	F_5
19.	N70-245	D63-6094 x D62-7816	F_5
20.	N70-365	D63-6094 x D62-7816	F_5
21.	N70-402	D63-6094 x D62-7816	F_5
22.	N70-409	D63-6094 x D62-7816	F_5
23.	N70-433	D63-6094 x D62-7816	F_5
24.	N70-497	D63-6094 x D62-7816	F_5
25.	N70-516	D63-6094 x D62-7816	F_5
26.	N70-558	D63-6094 x D62-7816	F_5
27.	N70-1501	Dare x D65-6765	F_4
28.	N70-1741	Dare x D65-6765	F_4
29.	N70-1845	Dare x D65-6765	F_4
30.	R70-33	Semmes x R64-500	F_5
31.	R70-580	Davis x Bragg	F_5
32.	R71-315	R66-100 x RA-8	F_5
33.	R71-803	D62-7816 x Davis	F_4
34.	R71-1920	R66-1516 x RAY-4	F_4
35.	V70-712	Dare x V66-172	
36.	V70-793	York x PI 59849	

Table 30. - General summary of performance for the strains in Preliminary Group VI, 1973

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	P.R.	R.K.	C.N.	D.M.
Pickett 71	44.7	10-17	31	22.9	40.9	1.0	1.0	5.0	R	1.0
D64-4636	46.5	-7	30	22.5	41.1	1.0	1.0	1.0	S	3.0
D70-3045	43.2	-11	30	24.0+	39.8	1.0	1.0	1.5	R	3.0
D70-3091	46.5	-7	26	22.2	42.9+	1.5	1.0	2.0	R	3.0
D70-6733	37.8-	-8	26	19.3-	45.0+	2.5	2.0	4.5	S	1.5
D70-6750	43.3	-9	32	20.1-	45.5+	2.0	2.0	4.5	S	1.0
D70-7358	43.1	0	39	21.3-	43.0+	1.0	1.0	5.0	S	1.0
D70-7583	47.3	-11	28	22.4	43.3+	2.0	1.0	4.0	S	3.0
D71-6530	40.4	-8	33	23.2	38.7-	1.0	1.0	5.0	S	1.0
D71-6555	41.8	-8	32	24.9+	37.9-	1.0	1.0	4.0	S	1.5
D71-6598	42.1	-2	37	23.5	38.7-	1.0	1.0	4.0	S	1.0
D71-6841	46.9	-4	38	22.9	41.5	1.0	1.0	2.5	S	3.0
D71-6879	46.4	-7	33	23.1	41.0	1.0	1.0	2.5	S	3.0
D71-7399	40.1	-6	26	20.2-	47.6+	1.0	1.0	3.5	S	2.0
D71-7610	44.3	-9	29	22.9	39.7-	2.0	1.0	4.5	S	1.5
D71-7823	40.0	-10	28	24.1+	39.3-	1.0	1.0	3.5	R	1.5
D71-8629	44.2	-5	36	22.9	40.2	1.0	1.0	4.5	S	3.0
N69-5020	42.7	-6	25	22.3	41.4	3.0	2.0	3.5	S	1.0
N70-245	43.4	-6	34	23.4	38.5-	2.0	2.0	5.0	S	1.0
N70-365	42.6	-7	35	24.0+	39.7-	1.0	1.0	2.5	S	1.0
N70-402	37.6-	-4	34	22.9	39.6-	1.0	2.0	5.0	S	1.5
N70-409	37.8-	-4	30	21.6-	40.6	1.0	1.0	3.0	S	1.0
N70-433	43.7	-4	31	22.5	40.5	1.0	1.0	4.0	S	1.0
N70-497	42.8	-6	31	23.0	39.9	2.0	1.0	3.0	S	2.0
N70-516	43.3	-4	32	21.9-	41.2	2.0	2.0	1.0	S	1.5
N70-558	41.1	-7	36	23.8+	39.6-	2.5	2.0	2.0	S	1.0
N70-1501	46.0	-7	34	23.8+	39.8	2.0	1.0	2.0	S	1.5
N70-1741	40.3	-4	37	23.1	40.3	1.0	1.0	2.0	S	2.5
N70-1845	43.0	-5	40	24.1+	41.0	1.0	1.0	1.5	S	1.0
R70-33	46.4	-3	36	21.9-	42.9+	1.0	1.0	2.5	S	2.5
R70-580	45.7	+2	35	22.6	41.2	1.0	1.0	2.5	S	3.0
R71-315	41.2	-1	37	23.3	41.5	2.5	2.0	2.0	S	3.0
R71-803	36.4-	0	40	23.2	39.5-	2.0	3.0	3.0	S	3.0
R71-1920	43.7	-3	31	23.4	40.9	1.0	1.0	2.0	S	3.0
V70-712	44.0	-8	31	24.6+	40.2	2.5	3.0	2.5	S	1.0
V70-793	38.9-	-6	26	23.0	40.8	2.0	1.0	2.0	S	1.0
L.S.D.(.05)	5.0			0.8	1.2					
L.S.D.(.01)	6.6			1.0	1.6					

P.R. = phytophthora rot ratings at Stoneville, Miss.
R.K. = root-knot ratings at Jay, Fla.
C.N. = cyst nematode race 3.
D.M. = downy mildew at Stoneville, Miss.

Table 31. - Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1973

Strain	Peters-burg, Va.*	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss. (A)	Stone-ville, Miss. (B)	Jay, Fla.	Belle Mina, Ala.
Pickett 71	29.6	44.7	52.6	41.0	45.3	47.6	37.9	44.1
D64-4636	39.9	51.1	49.1	38.9	49.0	43.7	42.4	51.4
D70-3045	28.3	51.4	51.8	19.8-	37.2	52.5	37.1	52.4+
D70-3091	29.3	52.5	55.4	30.1	42.0	45.9	42.0	58.0+
D70-6733	24.2	40.5	46.5	30.7	36.5	34.4-	34.1	41.8
D70-6750	27.4	44.3	52.1	38.2	42.6	35.4-	44.3	46.7
D70-7358	20.6	47.7	50.0	35.0	40.0	45.6	39.4	44.0
D70-7583	23.1	50.9	51.3	38.7	52.1	46.4	40.1	51.6
D71-6530	25.0	35.2	50.6	34.6	45.0	39.1	38.6	39.8
D71-6555	24.5	41.6	47.5	30.1	45.5	42.7	43.5	41.9
D71-6598	31.2	42.7	43.2	41.2	43.1	42.8	40.5	41.0
D71-6841	33.0	52.3	51.9	41.8	43.1	43.9	48.4	47.1
D71-6879	30.4	52.6	52.6	37.4	49.9	38.5	41.3	52.7+
D71-7399	28.2	41.6	47.0	26.0-	41.1	46.1	35.9	43.1
D71-7610	25.8	49.3	53.4	29.7	38.4	41.0	45.4	53.2+
D71-7823	27.0	49.0	46.4	18.6-	44.0	37.0	36.3	48.6
D71-8629	29.3	46.6	45.9	41.8	41.0	46.7	41.2	46.3
N69-5020	21.2	50.8	50.8	30.5	48.3	30.5-	42.4	45.6
N70-245	24.9	48.7	45.2	46.9	46.6	35.3-	37.5	43.7
N70-365	37.8	48.9	40.3	40.8	38.5	43.8	41.6	44.1
N70-402	24.2	42.8	47.0	32.2	40.4	23.2-	37.8	39.9
N70-409	26.0	40.8	42.3	36.8	32.7	38.7	35.6	38.1
N70-433	28.2	40.6	44.6	44.5	45.9	43.1	41.2	46.3
N70-497	30.1	47.3	53.2	37.6	39.6	39.0	41.2	41.8
N70-516	29.3	45.0	46.7	40.9	41.1	42.2	45.4	41.7
N70-558	23.8	46.7	45.7	39.8	37.4	34.2-	36.3	47.5
N70-1501	33.4	46.4	51.2	39.7	48.3	40.8	42.0	53.9+
N70-1741	31.8	40.6	43.6	44.2	40.5	34.2-	36.7	42.2
N70-1845	30.1	46.7	43.0	40.0	42.3	45.0	37.8	46.2
R70-33	25.6	49.1	50.5	43.7	47.3	47.0	40.5	46.8
R70-580	28.6	49.2	41.9	44.9	51.8	49.9	39.7	42.5
R71-315	29.2	53.2	39.7	37.3	38.9	36.2-	42.4	41.2
R71-803	31.5	47.3	51.6	21.9-	39.7	25.3-	36.7	32.3-
R71-1920	26.0	43.7	47.0	33.4	46.2	48.3	42.0	45.4
V70-712	37.0	53.9	52.1	26.4-	40.4	42.3	36.4	56.8+
V70-793	32.2	42.6	42.0	37.5	39.5	32.6-	34.1	43.9
L.S.D.(.05)	N.S.	N.S.	N.S.	12.1	N.S.	10.9	N.S.	7.6
C.V.	17%	12%	10%	17%	12%	13%	10%	8%

*Data received too late to be inclued in mean.

Table 32. - Oil percentages for the strains in Preliminary Group VI, 1973

Strain	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(B)	Jay, Fla.
Pickett 71	21.7	22.9	23.9	23.2
D64-4636	21.8	22.4	23.9	21.8
D70-3045	23.8	23.8	25.3	23.0
D70-3091	21.8	22.3	23.0	21.8
D70-6733	18.2	19.4	21.0	18.4
D70-6750	18.5	20.4	22.3	19.3
D70-7358	20.2	20.9	23.0	20.9
D70-7583	21.2	22.5	24.0	21.7
D71-6530	22.5	23.1	24.2	22.9
D71-6555	24.3	24.2	26.6	24.6
D71-6598	22.9	23.3	23.9	23.8
D71-6841	22.6	22.1	23.9	22.9
D71-6879	22.1	23.8	24.4	22.0
D71-7399	19.5	20.1	21.4	19.9
D71-7610	22.5	22.4	24.6	21.9
D71-7823	22.8	23.9	25.6	24.0
D71-8629	22.2	22.7	24.0	22.7
N69-5020	21.4	22.3	23.5	22.0
N70-245	19.6	24.0	26.1	23.7
N70-365	23.2	24.0	25.4	23.5
N70-402	21.6	23.5	23.9	22.5
N70-409	21.0	21.3	22.8	21.1
N70-433	22.3	22.0	23.4	22.2
N70-497	21.6	23.1	24.7	22.4
N70-516	21.0	22.0	22.5	22.0
N70-558	22.7	24.0	25.5	22.9
N70-1501	22.9	24.0	24.9	23.5
N70-1741	22.0	23.2	24.4	22.7
N70-1845	23.5	23.2	25.4	24.3
R70-33	21.4	22.0	22.7	21.4
R70-580	21.2	23.0	23.4	22.6
R71-315	22.4	23.4	24.4	22.8
R71-803	21.3	24.1	24.9	22.4
R71-1920	22.7	23.1	24.6	23.1
V70-712	23.2	25.1	25.6	24.6
V70-793	22.1	23.3	24.0	22.5

Table 33. - Protein percentages for the strains in Preliminary Group VI, 1973

Strain	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(B)	Jay, Fla.
Pickett 71	42.0	40.7	38.6	42.1
D64-4636	43.4	39.8	38.0	43.1
D70-3045	40.9	39.3	36.8	42.3
D70-3091	43.9	42.0	41.3	44.3
D70-6733	46.4	44.4	42.2	46.9
D70-6750	47.8	44.9	41.3	48.1
D70-7358	44.7	42.8	40.2	44.3
D70-7583	45.3	42.8	38.9	46.0
D71-6530	41.5	38.0	35.8	39.3
D71-6555	39.6	38.5	34.8	38.8
D71-6598	40.8	37.8	36.5	39.5
D71-6841	44.3	39.9	38.4	43.3
D71-6879	43.3	40.2	36.9	43.5
D71-7399	47.6	46.9	46.1	49.8
D71-7610	41.3	39.3	35.7	42.5
D71-7823	41.2	38.6	36.9	40.4
D71-8629	42.5	39.3	36.2	42.8
N69-5020	42.8	41.5	38.8	42.6
N70-245	39.9	38.4	35.3	40.4
N70-365	41.4	38.6	37.0	41.6
N70-402	41.7	36.9	36.4	43.4
N70-409	42.0	40.0	38.2	42.2
N70-433	41.1	41.1	37.7	41.9
N70-497	41.1	40.3	36.8	41.2
N70-516	43.2	40.2	39.0	42.2
N70-558	41.1	39.4	36.0	42.0
N70-1501	41.0	39.7	36.9	41.5
N70-1741	41.7	39.8	36.8	42.8
N70-1845	42.3	39.5	38.1	44.1
R70-33	43.7	42.8	40.2	44.7
R70-580	42.6	40.5	38.6	43.2
R71-315	43.5	40.3	38.0	44.3
R71-803	43.2	38.2	35.0	41.4
R71-1920	41.5	40.4	38.4	43.4
V70-712	41.7	39.5	36.7	43.0
V70-793	43.3	41.5	39.0	39.4

Table 34. - Plant height for the strains in Preliminary Group VI, 1973

Strain	Ply-mouth, N.C.	Portage-Ville, Mo.	Keiser, Ark.	Stone-ville, Miss. (A)	Stone-ville, Miss. (B)	Jay, Fla.	Belle Mina, Ala.
Pickett 71	36	29	27	32	28	28	37
D64-4636	33	29	25	35	26	29	33
D70-3045	35	33	23	30	26	31	33
D70-3091	31	31	18	24	23	27	31
D70-6733	30	28	22	28	23	24	29
D70-6750	37	29	25	34	28	35	35
D70-7358	42	43	28	40	37	40	40
D70-7583	34	31	20	33	24	27	27
D71-6530	40	36	26	34	28	34	32
D71-6555	39	33	23	33	27	34	36
D71-6598	43	39	27	41	35	37	40
D71-6841	44	38	32	40	35	37	37
D71-6879	39	29	27	37	26	34	36
D71-7399	31	24	21	29	23	29	25
D71-7610	34	31	23	28	23	30	33
D71-7823	35	29	16	33	23	30	32
D71-8629	42	42	27	38	32	36	36
N69-5020	32	30	22	28	18	18	30
N70-245	41	40	27	36	26	32	38
N70-365	41	37	32	35	27	32	38
N70-402	38	35	28	38	28	35	39
N70-409	33	32	26	29	24	29	34
N70-433	35	34	27	31	24	29	37
N70-497	39	33	26	33	24	26	36
N70-516	35	31	31	31	27	32	37
N70-558	44	38	29	37	28	34	39
N70-1501	37	37	27	39	27	35	39
N70-1741	42	41	29	41	29	36	39
N70-1845	45	43	35	45	35	36	44
R70-33	40	40	30	36	31	34	40
R70-580	41	42	26	35	31	32	38
R71-315	43	45	30	38	30	33	42
R71-803	43	43	32	48	36	37	42
R71-1920	37	34	23	32	25	31	33
V70-712	38	37	21	34	27	29	34
V70-793	32	28	19	28	20	26	32

Table 35. - Seed qulaity scores for the strains in Preliminary Group VI, 1973

Strain	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss. (A)	Stone-ville, Miss. (B)	Jay, Fla.
Pickett 71	1.5	1.8	2.3	2.0	2.0	1.0
D64-4636	1.5	2.3	2.3	2.0	2.0	1.0
D70-3045	1.0	2.5	2.5	3.0	2.0	1.0
D70-3091	1.5	1.8	2.3	2.0	2.0	1.0
D70-6733	1.5	2.0	2.0	3.0	2.0	2.0
D70-6750	1.5	1.8	2.0	2.5	2.5	1.0
D70-7358	1.5	2.3	1.5	2.0	2.0	1.0
D70-7583	1.5	2.5	2.5	2.0	2.0	2.0
D71-6530	2.0	1.8	3.0	3.0	3.0	2.0
D71-6555	1.5	1.8	2.8	2.0	2.0	1.0
D71-6598	1.5	1.8	1.5	2.0	2.0	1.0
D71-6841	1.5	2.3	3.0	2.5	2.0	2.0
D71-6879	1.5	1.5	1.8	2.0	2.0	1.0
D71-7399	1.5	2.0	1.5	2.0	2.0	2.0
D71-7610	1.5	1.8	3.0	3.0	2.5	1.0
D71-7823	1.0	2.3	2.8	2.0	2.0	2.0
D71-8629	1.5	1.5	3.0	2.5	2.0	2.0
N69-5020	1.5	2.0	1.8	2.0	2.0	1.0
N70-245	1.5	2.0	3.0	2.0	2.0	1.0
N70-365	1.5	1.5	2.5	2.0	2.0	1.0
N70-402	1.5	1.5	2.0	2.0	2.0	1.0
N70-409	1.5	2.0	1.8	2.0	2.0	1.0
N70-433	1.5	2.0	2.0	2.0	2.0	1.0
N70-497	1.5	1.8	1.5	2.0	2.0	1.0
N70-516	1.5	2.3	2.5	2.0	2.0	1.0
N70-558	1.5	1.8	2.0	2.0	2.0	1.0
N70-1501	1.5	1.8	2.3	2.5	2.0	1.0
N70-1741	1.5	2.0	3.0	2.0	2.0	1.0
N70-1845	1.5	1.5	3.3	2.0	2.5	1.0
R70-33	1.5	1.8	2.0	2.0	2.0	1.0
R70-580	1.5	2.0	2.5	2.0	2.0	1.0
R71-315	1.5	2.3	3.0	2.0	2.0	1.0
R71-803	1.5	2.3	2.3	2.0	2.0	2.0
R71-1920	1.5	2.0	2.0	2.0	2.0	1.0
V70-712	1.5	1.5	2.8	2.5	2.0	1.0
V70-793	1.5	2.0	3.3	2.5	2.5	1.0

UNIFORM GROUP VII

1973

	Variety or strain	Parentage	Generation composited
1.	Bragg	Jackson x D49-2491	F_6
2.	Ransom	(N55-5931 x N55-3818) x D56-1185	F_5
3.	F66-698	(F55-224 x D55-4073) x (F58-5788 x D56-4605)	F_5
4.	N66-1136	N56-4202 x N57-6801	F_4
5.	F67-3673	Bragg x D60-8107	F_6
6.	F68-1577	Bragg(3) x D60-7965	F_4
7.	N68-415	Dare x D60-5234	F_4
8.	Ts70-4	Bragg x PI 200492	F_8
9.	D69-442	Bragg(3) x D60-7965	F_4
10.	D70-8347	Semmes x Hardee	F_5
11.	D70-8444	D64-4716 x Hardee	F_5
12.	F70-3796	Bragg(2) x D61-3498	F_7

Background of strains used as parents:

D49-2491 is a sister strain of Lee selected from S100 x CNS.

N55-5931 is a selection from Roanoke x D49-2491 which was grown in Uniform Group VII in 1958.

N55-3818 is a selection from (N45-2994 x Ogden) x (N44-92 x N58-1867) which was grown in Preliminary VI in 1957. N45-2994 is from Arksoy x Ogden, N44-92 is from Haberlandt x Ogden, and N48-1867 is from Roanoke x N45-745.

D56-1185 is a selection from Perry x Lee.

D60-8107 is a selection from D51-4877 x D55-4168 which was grown in Uniform Group VII in 1963-65.

F55-224 is a selection from D49-772 x Improved Pelican. D49-772 is a selection from Roanoke x N45-745.

D55-4073 is a high protein selection from Volstate x Biloxi.

F58-5788 is a selection from D49-2491(3) x Biloxi.

D56-4605 is a high protein selection from Lee(2) x PI 163453.

N56-4202 is a selection from N46-1703 x D49-2525 which was grown in Uniform Group VI for the years 1959-61. N46-1703 is a selection from Ogden x Volstate.

N57-6801 is a selection from Jackson x D49-2491.

D60-7965 is a high protein selection from a cross of an F_5 line from Ogden x CNS with an F_5 from Ogden x Biloxi.

D60-5234 is a selection from D55-4110 x N56-4071. D55-4110 is a selection from Ogden x CNS. N56-4071 is a selection from N46-1703 (Ogden x Volstate) x D49-2525.

D64-4716 is a Lee type converted to non-nodulating.

D61-3498 is a high protein selection from D49-2491(6) x PI 174862.

Thirty Uniform Group VII nurseries were grown. Results are summarized in Tables 36 through 42. Table 36 gives a general summary of agronomic qualities, chemical composition of the seed, and field reaction to several diseases. Two- and three-year data are reported for seed yield and oil and protein percentages.

Seed yield differences among strains were significant at the 5% level of confidence at 19 of the 30 locations. The combined analysis of variance for mean seed yield by production regions showed differences among strains to be significant at the 5% level of confidence only in the Southeast. Here only Ransom had a seed yield significantly greater than for Bragg.

Two strains have been grown three years. F66-698 has a higher protein percentage than Bragg or Ransom. Seed yield approaches that for Bragg. N66-1136 has averaged slightly higher in yield than Bragg.

Four strains have been grown two years. Ts70-4 averaged

Table 36. - General summary of performance for the strains in Uniform Group VII, 1973

	Bragg	Ransom	F66-698	N66-1136	F67-3673	F68-1577
Seed Yield - 1973						
East Coast	40.7	41.6	41.4	43.6-	41.2	41.2
Southeast	39.2	44.0+	38.9	36.3	39.2	40.6
Upper & Central South	32.7	36.3	33.7	35.3	33.4	34.1
Delta and West	40.8	40.1	39.5	42.6	40.7	41.2
- 1972-73						
East Coast	41.3	43.0	40.7	44.1	41.3	41.7
Southeast	35.2	38.8	35.5	34.6	36.2	37.1
Upper & Central South	--	--	--	--	--	--
Delta and West	40.1	39.0	39.8	42.0	40.8	41.0
- 1971-73						
East Coast	40.4	40.9	39.5	43.0		
Southeast	37.9	40.9	37.4	37.5		
Upper & Central South	--	--	--	--		
Delta and West	39.2	37.8	40.1	40.7		
Oil Content - 1973	22.5	24.1+	20.9-	22.7	20.1-	21.6-
- 1972-73	22.1	24.1	20.7	22.7	19.5	21.5
- 1971-73	21.9	23.9	20.4	22.5		
Protein Content - 1973	42.1	40.4-	45.8+	42.2	46.4+	42.6
- 1972-73	41.6	40.2	45.0	41.8	45.8	42.1
- 1971-73	41.6	40.3	44.8	41.7		
Seed size	14.8	15.5	14.2	14.7	14.3	14.7
Maturity index	10-21	+2	+1	0	+5	+2
Height	38	31	34	39	39	37
Shattering	1.0	1.0	1.0	1.7	1.0	1.0
Phytophthora rot	1.0	3.0	1.0	2.0	1.0	1.0
Root-knot nematode	1.0	3.5	3.0	3.0	1.0	1.5
Purple stain	2.0	3.0	2.0	2.0	3.0	2.0
Flower color	W	P	P	W	W	W
Pubescence color	T	T	G	T	T	G
Pod wall color	T	T	T	T	T	T

Table 36. - (continued)

	N68-415	Ts70-4	D69-442	D70-8347	D70-8444	F70-3796
Seed Yield - 1973						
East Coast	41.3	37.7	40.1	41.0	39.1	38.5
Southeast	40.6	33.5-	39.4	38.3	38.1	37.6
Upper & Central South	33.5	32.4	33.9	34.5	30.4	32.5
Delta and West	41.5	41.9	38.4	42.6	40.0	37.0
- 1972-73						
East Coast	41.6	39.7				
Southeast	37.4	32.4				
Upper & Central South	--	--				
Delta and West	41.4	42.0				
- 1971-73						
East Coast						
Southeast						
Upper & Central South						
Delta and West						
Oil Content - 1973	22.6	21.8-	20.5-	22.4	21.9-	21.3-
- 1972-73	22.5	21.3				
- 1971-73						
Protein Content - 1973	42.2	43.7+	45.3+	41.5-	42.3	42.1
- 1972-73	41.7	43.4				
- 1971-73						
Seed size	13.6-	15.9+	14.0	13.5-	13.0-	13.2-
Maturity index	-4	+6	-2	-3	0	-2
Height	35	42	35	30	30	37
Shattering	1.2	1.4	1.0	1.8	1.7	1.0
Phytophthora rot	2.0	1.0	1.0	1.0	1.0	1.5
Root-knot nematode	2.5	1.0	1.0	2.0	2.5	2.0
Purple stain	2.0	3.0	3.0	3.0	3.0	4.0
Flower color	W	S	W	P	W	P
Pubescence color	G	T	T	G	G	T
Pod wall color	Br	T	T	T	T	T

Table 37. - Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1973

Location	Bragg	Ransom	F66-698	N66-1136	F67-3673	F68-1577	N68-415
			East Coast				
Holland, Va.	44.1	53.9	45.1	56.7	45.0	49.6	49.8
Plymouth, N.C.	48.0	55.4	51.2	49.9	45.8	49.2	47.8
Clayton, N.C.	22.7	11.9-	27.1	23.0	20.8	22.9	20.0
Kinston, N.C.	39.8	39.4	39.0	50.0+	32.6-	34.3	46.5+
Florence, S.C.(A)	45.0	40.3	36.4-	35.1-	49.5	50.2	44.9
Florence, S.C.(B)	33.4	30.9	32.7	35.0	37.6	28.1	26.5
Hartsville, S.C.	51.7	59.4+	58.2+	55.7	57.1+	54.3	53.8
Mean	40.7	41.6	41.4	43.6	41.2	41.2	41.3
			Southeast				
Blackville, S.C.	40.1	47.1+	40.6	40.6	41.6	43.1	42.1
Tallassee, Ala.	29.5	30.3	31.5	31.3	30.6	36.5	29.1
Tifton, Ga.	37.8	42.6	43.3	42.3	45.1+	35.8	44.8
Gainesville, Fla.	39.9	42.7	37.5	33.4-	39.5	39.9	38.7
Live Oak, Fla.	28.9	26.8	26.4	21.9-	25.3	31.1	29.6
Marianna, Fla.	42.9	50.2+	42.0	41.3	36.8-	46.1	46.1
Quincy, Fla.	40.7	53.7+	45.2	32.1-	41.7	43.8	41.6
Jay, Fla.	35.3	42.1+	29.7-	30.3-	35.3	28.7-	31.5
Fairhope, Ala.	48.7	52.9+	43.1-	50.5	41.7-	50.3	51.0
Poplarville, Miss.	49.0	50.6	44.6	35.3-	48.6	38.0-	44.4
Baton Rouge, La.	38.3	44.7+	43.4	42.4	45.1+	52.8+	47.4+
Mean	39.2	44.0+	38.9	36.3	39.2	40.6	40.6
			Upper and Central South				
Athens, Ga.	53.0	59.1	49.1	59.4	52.9	55.4	49.2
Calhoun, Ga.	21.2	23.3	29.7	21.0	23.5	26.2	26.7
Clemson, S.C.	24.0	26.6	20.0-	25.4	23.7	20.6-	24.5
Mean	32.7	36.3	33.7	35.3	33.4	34.1	33.5
			Delta and West				
Stoneville, Miss.(A)	43.4	40.7	45.2	50.9+	44.8	45.7	49.1
Stoneville, Miss.(B)	41.8	37.0	39.0	46.5	47.1	46.6	43.0
Pine Bluff, Ark.	48.0	47.0	44.0	48.0	40.0	41.0	38.0
Stuttgart, Ark.	42.3	44.1	43.2	43.5	40.1	46.2	43.7
Rohwer, Ark.	37.6	25.8-	40.2	32.6	36.9	39.3	32.8
St. Joseph, La.	44.8	50.0	36.4	49.5	48.1	43.6	48.5
Curtis, La.	45.6	43.8	39.9	47.8	46.0	42.9	52.2
Crowley, La.	32.5	38.7	38.2	33.5	36.6	36.8	34.4
Beaumont, Texas	31.8	34.5	29.5	31.5	26.1-	28.6	32.4
Mean	40.8	40.1	39.5	42.6	40.7	41.2	41.5

(+) - Strains yielding significantly more (odds 19:1 or greater) than Bragg.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Bragg.

Table 37. - (continued)

Location	Ts70-4	D69-442	D70-8347	D70-8444	F70-3796	L.S.D. (.05)	C.V. (%)
			East Coast				
Holland, Va.	39.8	52.0	45.6	46.1	44.2	N.S.	14
Plymouth, N.C.	47.6	47.4	48.0	46.8	44.2	N.S.	9
Clayton, N.C.	18.1	24.4	22.4	22.8	17.5	6.7	19
Kinston, N.C.	29.4-	34.9	42.9	44.6	39.9	6.5	10
Florence, S.C.(A)	38.7-	36.9-	44.0	35.5-	44.1	6.3	9
Florence, S.C.(B)	33.2	31.1	29.2	26.5	33.9	N.S.	21
Hartsville, S.C.	56.9+	54.0	54.7	51.5	45.7-	4.8	4
Mean	37.7	40.1	41.0	39.1	38.5	N.S.	
			Southeast				
Blackville, S.C.	30.8-	39.2	37.8	39.3	34.1-	5.6	8
Tallassee, Ala.	25.8	34.1	31.8	27.0	29.0	N.S.	12
Tifton, Ga.	37.8	41.4	49.8+	48.3+	41.0	7.1	10
Gainesville, Fla.	36.0	40.1	36.1	36.5	39.4	4.4	7
Live Oak, Fla.	26.0	29.4	20.8-	24.8	28.9	5.3	12
Marianna, Fla.	35.2-	41.8	40.4	43.0	38.7	5.6	8
Quincy, Fla.	33.0	37.4	42.6	40.0	38.8	7.8	11
Jay, Fla.	22.4-	32.3	35.3	39.3	30.7-	4.4	8
Fairhope, Ala.	42.1-	50.0	50.4	47.9	47.7	3.1	4
Poplarville, Miss.	37.1-	45.5	36.2-	29.8-	42.1	7.9	11
Baton Rouge, La.	42.1	42.2	40.0	43.1	39.4	5.8	8
Mean	33.5-	39.4	38.3	38.1	37.6	3.1	
			Upper and Central South				
Athens, Ga.	52.1	48.5	46.0	50.0	50.6	N.S.	10
Calhoun, Ga.	26.8	26.1	26.9	21.1	21.5	N.S.	20
Clemson, S.C.	18.3-	27.1+	30.6+	22.4	25.4	3.0	7
Mean	32.4	33.9	34.5	30.4	32.5	N.S.	
			Delta and West				
Stoneville, Miss.(A)	43.4	48.4	52.5+	53.5+	39.4	6.1	8
Stoneville, Miss.(B)	40.6	44.1	48.7	47.5	40.4	N.S.	11
Pine Bluff, Ark.	51.0	37.0	42.0	40.0	40.0	N.S.	17
Stuttgart, Ark.	40.7	40.8	44.4	42.8	35.6-	4.0	6
Rohwer, Ark.	37.7	36.4	37.6	36.0	33.1	6.0	10
St. Joseph, La.	52.2	48.1	53.4	52.0	46.8	N.S.	15
Curtis, La.	46.1	30.0	51.3	38.1	48.8	N.S.	16
Crowley, La.	27.9	28.1	29.3	27.1	22.9	N.S.	20
Beaumont, Texas	36.8+	32.7	23.9-	22.0-	25.7-	4.2	8
Mean	41.9	38.4	42.6	40.0	37.0	N.S.	

Table 38. - Chemical composition and seed size for the strains in Uniform Group VII, 1973

Location	Bragg	Ransom	F66-698	N66-1136	F67-3673	F68-1577
			Oil Percentage			
Plymouth, N.C.	21.1	22.0	19.8	21.7	19.2	20.2
Kinston, N.C.	21.2	23.9	20.3	22.7	19.6	21.1
Blackville, S.C.	23.8	25.9	23.2	24.0	22.2	22.9
Tifton, Ga.	22.4	22.6	20.4	20.2	20.3	19.5
Gainesville, Fla.	21.7	25.1	20.5	22.8	20.2	21.0
Fay, Fla.	23.2	24.0	21.0	22.7	19.1	22.1
Baton Rouge, La.	23.6	24.1	20.9	23.6	20.2	23.3
Clemson, S.C.	21.2	22.5	20.9	22.1	20.2	21.0
Stoneville, Miss.(B)	23.2	25.9	21.5	23.0	20.5	22.2
Beaumont, Texas	23.3	24.8	20.3	23.7	19.9	22.4
Mean	22.5	24.1+	20.9-	22.7	20.1-	21.6-
			Protein Percentage			
Plymouth, N.C.	42.6	41.2	47.6	42.4	47.8	41.9
Kinston, S.C.	42.5	40.3	46.0	42.0	46.3	43.0
Blackville, S.C.	41.1	39.5	44.5	41.0	44.4	41.7
Tifton, Ga.	43.9	41.4	45.8	44.0	46.6	45.6
Gainesville, Fla.	43.4	40.0	45.1	42.3	46.3	42.9
Jay, Fla.	42.4	42.1	47.8	44.1	47.5	43.9
Baton Rouge, La.	42.6	41.6	47.5	42.8	47.5	42.8
Clemson, S.C.	41.1	41.0	46.0	42.0	46.4	42.6
Stoneville, Miss.(B)	40.9	38.7	44.1	40.6	45.9	40.6
Beaumont, Texas	40.5	38.2	44.0	40.4	45.2	40.7
Mean	42.1	40.4-	45.8+	42.2	46.4+	42.6
			Grams per 100 Seeds			
Plymouth, N.C.	15.0	14.3	14.2	14.6	14.2	15.0
Kinston, N.C.	13.9	14.0	13.5	14.4	12.8	13.0
Blackville, S.C.	13.3	13.7	14.3	13.3	12.3	14.3
Tifton, Ga.	12.6	13.7	12.0	12.6	12.7	13.0
Gainesville, Fla.	14.1	16.4	13.1	14.8	14.2	13.2
Jay, Fla.	18.0	19.0	17.0	16.0	17.0	18.0
Baton Rouge, La.	18.3	19.3	16.4	16.3	16.7	16.5
Clemson, S.C.	12.0	12.4	11.5	13.4	12.5	13.3
Stoneville, Miss.(B)	15.6	15.2	13.0	15.4	16.0	15.6
Beaumont, Texas	15.0	17.1	16.5	16.2	14.2	15.3
Mean	14.8	15.5	14.2	14.7	14.3	14.7

Table 38. - (continued)

Location	N68-415	Ts70-4	D69-442	D70-8347	D70-8444	F70-3796	L.S.D. (.05)
			Oil Percentage				
Plymouth, N.C.	21.6	20.4	19.3	20.4	20.7	19.8	
Kinston, N.C.	22.6	21.2	20.3	22.1	21.2	20.9	
Blackville, S.C.	23.8	22.8	20.3	24.0	22.7	22.5	
Tifton, Ga.	21.6	21.3	19.1	21.2	21.5	19.3	
Gainesville, Fla.	22.3	21.5	20.2	22.8	23.1	21.7	
Jay, Fla.	22.6	21.2	20.3	22.6	21.7	21.1	
Baton Rouge, La.	23.5	23.0	21.7	23.5	22.1	22.4	
Clemson, S.C.	22.1	21.2	20.9	21.1	21.0	21.3	
Stoneville, Miss.(B)	23.1	22.7	21.5	23.1	22.4	21.7	
Beaumont, Texas	22.9	22.2	21.2	23.3	22.8	21.8	
Mean	22.6	21.8-	20.5-	22.4	21.9-	21.3-	0.5
			Protein Percentage				
Plymouth, N.C.	43.5	44.9	46.2	43.1	44.0	42.0	
Kinston, N.C.	43.4	45.6	46.4	43.4	43.7	43.5	
Blackville, S.C.	40.7	42.8	44.1	40.6	40.7	41.3	
Tifton, Ga.	44.5	45.4	47.2	42.3	42.6	43.4	
Gainesville, Fla.	42.4	43.6	45.2	41.1	41.3	42.0	
Jay, Fla.	42.0	45.5	47.4	42.7	43.6	44.0	
Baton Rouge, La.	42.7	42.5	45.2	41.3	42.6	42.9	
Clemson, S.C.	41.7	43.6	44.6	40.9	42.6	40.9	
Stoneville, Miss.(B)	40.5	40.7	42.5	39.8	40.6	40.6	
Beaumont, Texas	40.8	42.4	44.2	39.7	41.1	40.0	
Mean	42.2	43.7+	45.3+	41.5-	42.3	42.1	0.6
			Grams per 100 Seeds				
Plymouth, N.C.	12.8	15.8	13.6	12.7	12.3	12.4	
Kinston, N.C.	12.5	14.8	12.9	13.2	11.6	11.6	
Blackville, S.C.	12.0	13.7	13.0	12.3	11.0	11.3	
Tifton, Ga.	13.4	13.9	12.4	13.3	13.2	12.5	
Gainesville, Fla.	13.6	14.5	13.5	13.3	12.4	13.2	
Jay, Fla.	16.0	18.0	18.0	16.0	16.0	16.0	
Baton Rouge, La.	15.4	14.3	15.8	14.3	13.6	15.0	
Clemson, S.C.	11.5	15.0	12.1	12.1	14.0	11.5	
Stoneville, Miss.(B)	13.8	16.0	14.0	14.4	13.0	13.6	
Beaumont, Texas	14.7	23.1	15.1	13.1	13.1	14.6	
Mean	13.6-	15.9+	14.0	13.5-	13.0-	13.2-	0.9

Table 39. - Relative maturity data, days earlier (-) or later (+), than Bragg for the strains in Uniform Group VII, 1973

Location	Date planted	Bragg matured	Ransom	F66-698	N66-1136	F67-3673	F68-1577
		East Coast					
Holland, Va.	5-17	10-29	0	-3	-3	+6	0
Plymouth, N.C.	5-16	10-28	-2	0	-4	+5	+2
Clayton, N.C.	5-26	10-24	-2	0	0	+4	+2
Kinston, N.C.	5-15	10-28	-3	0	0	0	0
Florence, S.C.(A)	5-15	10-22	+2	+10	+2	-5	-5
Hartsville, S.C.	5-28	10-20	+3	+5	-2	+7	+2
Mean		10-25	0	+2	-1	+3	0
		Southeast					
Blackville, S.C.	5-17	10-15	+1	+4	-2	+5	+6
Tallassee, Ala.	5-23	10-14	+4	+3	+2	+7	+2
Tifton, Ga.	5-11	10-3	-1	+1	0	+2	+1
Gainesville, Fla.	6-11	10-13	+12	0	+2	+9	+1
Marianna, Fla.	6-11	10-16	+9	+2	-3	+8	+3
Quincy, Fla.	5-15	10-9	+8	+5	-2	+8	+4
Jay, Fla.*	5-18	10-9	-1	-2	+3	0	0
Fairhope, Ala.	6-11	10-20	+9	-1	-1	+9	+3
Baton Rouge, La.	5-18	10-29	+3	-1	-3	+4	+3
Mean		10-15	+6	+2	-1	+7	+3
		Upper and Central South					
Athens, Ga.	5-14	10-16	0	+2	0	+1	+5
Calhoun, Ga.	6-12	10-28	-1	+2	+1	0	+3
Clemson, S.C.	6-5	10-7	0	+17	+5	+6	+6
Mean		10-17	0	+7	+2	+2	+5
		Delta and West					
Stoneville, Miss.(A)	5-16	10-20	-1	-1	-1	+4	+4
Stoneville, Miss.(B)	5-16	10-19	0	-4	0	+9	+4
Pine Bluff, Ark.	5-14	10-30	-4	-2	0	0	0
Stuttgart, Ark.	6-7	10-24	-1	+1	-2	+6	+1
Rohwer, Ark.	6-6	10-26	-7	-2	-5	+4	-2
St. Joseph, La.	5-31	10-17	+2	-7	-2	+8	-5
Curtis, La.	5-8	10-20	+4	-3	+1	+4	0
Crowley, La.	5-18	11-3	+3	+2	+4	+12	0
Beaumont, Texas	6-19	11-14	+2	0	0	+3	0
Mean		10-26	0	-2	0	+6	0

Table 39. - (continued)

Location	N68-415	Ts70-4	D69-442	D70-8347	D70-8444	F70-3796
			East Coast			
Holland, Va.	-3	+6	-3	-3	-5	-7
Plymouth, N.C.	-4	+8	-4	-4	-4	-2
Clayton, N.C.	-6	+2	-8	-10	+2	-8
Kinston, N.C.	-10	0	0	0	-3	0
Florence, S.C. (A)	-3	+6	+4	+2	+10	-7
Hartsville, S.C.	+1	+12	+2	-1	0	0
Mean	-4	+6	-2	-3	0	-4
			Southeast			
Blackville, S.C.	-5	+7	-3	-4	-3	-5
Tallassee, Ala.	0	+6	0	0	+2	0
Tifton, Ga.	-1	+6	-1	-1	0	0
Gainesville, Fla.	0	+8	+1	-3	0	-1
Marianna, Fla.	-4	+5	-4	-6	-2	+2
Quincy, Fla.	-3	+12	-2	-2	0	-2
Jay, Fla.*	-1	-4	-14	-2	0	0
Fairhope, Ala.	-1	+3	-1	-1	-1	-1
Baton Rouge, La.	-7	+10	-3	-5	-2	-3
Mean	-3	+7	-2	-3	-1	-1
			Upper and Central South			
Athens, Ga.	-4	+6	-3	+2	+2	-3
Calhoun, Ga.	+3	+6	+1	0	+3	+1
Clemson, S.C.	-1	+16	-1	0	+17	0
Mean	-1	+9	-1	+1	+7	-1
			Delta and West			
Stoneville, Miss. (A)	-4	+4	-3	-1	-1	-1
Stoneville, Miss. (B)	-5	+10	-2	-6	0	+1
Pine Bluff, Ark.	-12	0	-14	-10	-10	-12
Stuttgart, Ark.	-4	+6	-4	-7	-5	-3
Rohwer, Ark.	-6	+3	-7	-6	+1	-6
St. Joseph, La.	-7	+8	+5	-3	-7	+2
Curtis, La.	0	+1	-2	-6	+2	+1
Crowley, La.	-4	+10	-2	-4	+3	+2
Beaumont, Texas	-1	-1	+2	0	0	+1
Mean	-5	+5	-3	-5	-2	-2

Table 40. - Plant height for the strains in Uniform Group VII, 1973

Location	Bragg	Ransom	F66-698	N66-1136	F67-3673	F68-1577
			East Coast			
Holland, Va.	59	44	42	55	56	50
Plymouth, N.C.	42	41	39	49	42	43
Clayton, N.C.	37	29	31	38	37	35
Kinston, N.C.	45	39	40	48	47	45
Florence, S.C(A)	28	28	24	26	29	32
Florence, S.C.(B)	29	32	32	32	28	25
Hartsville, S.C.	32	31	37	39	37	35
Mean	39	35	35	41	39	38
			Southeast			
Blackville, S.C.	35	30	33	37	39	35
Tallassee, Ala.	36	32	32	42	43	39
Tifton, Ga.	35	27	37	38	37	34
Gainesville, Fla.	29	22	29	24	32	29
Live Oak, Fla.	29	21	27	25	27	27
Marianna, Fla.	34	32	34	36	38	33
Quincy, Fla.	30	22	26	26	32	29
Jay, Fla.*	34	33	36	32	31	34
Fairhope, Ala.	43	42	37	39	44	44
Baton Rouge, La.	42	34	39	43	42	42
Mean	35	29	33	34	37	35
			Upper and Central South			
Athens, Ga.	46	35	37	46	49	47
Calhoun, Ga.	35	30	22	35	39	34
Clemson, S.C.	43	32	33	43	43	42
Mean	41	32	31	41	44	41
			Delta and West			
Stoneville, Miss.(A)	46	35	40	47	48	45
Stoneville, Miss.(B)	46	33	39	43	40	40
Pine Bluff, Ark.	48	34	38	44	50	43
Stuttgart, Ark.	43	37	39	47	47	38
Rohwer, Ark.	37	29	30	37	40	35
St. Joseph, La.	46	38	45	50	44	48
Curtis, La.	34	23	30	35	36	27
Crowley, La.	26	25	28	29	31	25
Beaumont, Texas	23	24	22	30	25	31
Mean	39	31	35	40	40	37

*Not included in mean.

Table 40. - (continued)

Location	N68-415	Ts70-4	D69-442	D70-8347	D70-8444	F70-3796
			East Coast			
Holland, Va.	52	54	50	43	46	64
Plymouth, N.C.	45	44	42	39	41	42
Clayton, N.C.	31	38	33	29	31	35
Kinston, N.C.	41	47	45	41	41	45
Florence, S.C.(A)	30	34	26	26	24	24
Florence, S.C.(B)	24	33	22	28	26	31
Hartsville, S.C.	35	42	36	32	31	30
Mean	39	42	36	34	34	39
			Southeast			
Blackville, S.C.	37	43	34	31	33	34
Tallassee, Ala.	37	42	39	30	31	37
Tifton, Ga.	35	46	36	28	30	35
Gainesville, Fla.	24	32	27	19	21	27
Live Oak, Fla.	26	33	27	21	21	29
Marianna, Fla.	32	37	31	28	29	34
Quincy, Fla.	25	43	23	23	22	27
Jay, Fla.*	33	34	32	32	35	33
Fairhope, Ala.	43	45	44	31	30	43
Baton Rouge, La.	42	45	39	33	31	41
Mean	33	41	33	27	28	34
			Upper and Central South			
Athens, Ga.	43	48	41	35	35	44
Calhoun, Ga.	35	37	32	28	28	35
Clemson, S.C.	41	45	38	33	35	41
Mean	40	43	37	32	33	40
			Delta and West			
Stoneville, Miss.(A)	37	49	43	33	35	39
Stoneville, Miss.(B)	39	43	40	33	34	42
Pine Bluff, Ark.	37	46	38	34	34	41
Stuttgart, Ark.	40	45	44	34	35	42
Rohwer, Ark.	31	37	34	26	24	34
St. Joseph, La.	32	55	45	35	40	46
Curtis, La.	27	38	25	29	22	33
Crowley, La.	27	32	25	23	18	23
Beaumont, Texas	20	33	28	26	21	31
Mean	32	42	36	30	29	37

Table 41. - Lodging scores for the strains in Uniform Group VII, 1973

Location	Bragg	Ransom	F66-698	N66-1136	F67-3673	F68-1577
		East Coast				
Holland, Va.	5.0	4.3	3.5	4.0	4.0	4.8
Plymouth, N.C.	3.0	2.0	2.3	3.0	3.0	3.0
Clayton, N.C.	2.7	1.3	2.7	2.0	3.0	2.0
Kinston, N.C.	3.0	2.0	2.7	2.7	3.0	2.7
Florence, S.C.(A)	1.0	1.0	1.0	1.0	1.0	1.0
Florence, S.C.(B)	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	2.2	1.5	2.7	2.2	2.5	2.3
		Southeast				
Blackville, S.C.	2.3	1.0	2.3	1.7	2.7	2.3
Tallassee, Ala.	1.5	1.0	1.0	1.5	1.6	1.3
Tifton, Ga.	2.0	1.0	2.0	1.3	2.0	1.3
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.7	1.0
Marianna, Fla.	2.0	2.0	3.0	2.3	2.3	1.7
Quincy, Fla.	1.0	1.0	2.0	1.0	2.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	2.0	1.0	2.0	1.0
Baton Rouge, La.	1.5	1.1	1.5	1.8	1.8	1.8
		Upper and Central South				
Athens, Ga.	3.0	1.3	2.0	1.8	2.8	2.2
Calhoun, Ga.	1.5	1.0	1.5	1.2	1.5	1.7
Clemson, S.C.	2.0	1.7	1.0	2.0	2.0	2.0
		Delta and West				
Stoneville, Miss.(A)	3.0	2.7	3.3	3.0	3.0	3.0
Stoneville, Miss.(B)	3.0	2.3	3.0	3.0	3.0	3.0
Pine Bluff, Ark.	5.0	1.0	2.0	1.0	4.0	5.0
Stuttgart, Ark.	3.7	3.7	3.7	3.3	3.0	3.8
Rohwer, Ark.	3.0	2.7	2.0	2.3	2.0	3.0
St. Joseph, La.	3.0	3.0	3.0	1.0	2.0	3.0
Curtis, La.	1.3	1.0	2.0	1.7	1.7	1.0
Crowley, La.	1.5	1.0	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	1.0	2.0	1.0	2.0	2.0

Table 41. - (continued)

Location	N68-415	Ts70-4	D69-442	D70-8347	D70-8444	D70 3796
		East Coast				
Holland, Va.	4.3	4.5	4.2	3.7	3.0	5.0
Plymouth, N.C.	2.0	3.0	2.0	2.0	2.0	3.0
Clayton, N.C.	1.7	2.0	2.3	2.0	1.3	2.7
Kinston, N.C.	3.0	2.0	2.0	2.3	2.0	3.0
Florence, S.C.(A)	2.0	1.0	1.0	1.0	1.0	1.0
Florence, S.C.(B)	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	2.3	2.7	2.5	1.5	1.7	2.0
		Southeast				
Blackville, S.C.	1.7	1.7	2.0	1.7	1.0	1.3
Tallassee, Ala.	1.5	2.1	1.3	1.0	1.0	1.3
Tifton, Ga.	1.7	2.0	1.7	1.0	1.3	1.7
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	2.0	2.0	2.0	2.0	1.3	2.3
Quincy, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	2.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.7	1.3	1.1	1.0	1.5
		Upper and Central South				
Athens, Ga.	2.5	2.2	1.8	1.7	1.0	1.8
Calhoun, Ga.	1.3	1.2	1.2	1.0	1.0	1.7
Clemson, S.C.	2.0	1.8	2.0	1.5	1.7	1.8
		Delta and West				
Stoneville, Miss.(A)	3.0	3.0	3.0	2.3	2.0	3.0
Stoneville, Miss.(B)	3.0	3.0	2.7	2.0	2.0	3.0
Pine Bluff, Ark.	4.0	4.0	4.0	5.0	2.0	3.0
Stuttgart, Ark.	3.2	3.3	3.3	3.0	1.7	4.0
Rohwer, Ark.	2.7	2.0	2.7	1.0	1.0	3.0
St. Joseph, La.	4.0	2.0	1.0	2.0	1.0	2.0
Curtis, La.	1.3	2.0	1.0	1.7	1.0	1.7
Crowley, La.	1.0	1.5	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	2.0	2.0	2.0	1.0	1.0

Table 42. - Seed quality scores for the strains in Uniform Group VII, 1973

Location	Bragg	Ransom	F66-698	N66-1136	F67-3673	F68-1577
			East Coast			
Holland, Va.	1.0	1.0	1.0	1.5	1.0	1.0
Plymouth, N.C.	1.0	1.0	1.5	1.5	1.0	1.5
Clayton, N.C.	1.5	1.5	1.5	1.5	1.5	1.5
Kinston, N.C.	1.5	1.5	2.0	1.5	1.5	1.5
			Southeast			
Blackville, S.C.	2.0	1.0	1.0	1.0	2.0	1.0
Tifton, Ga.	2.0	2.3	2.0	3.0	1.8	1.7
Gainesville, Fla.	1.0	1.3	1.0	1.7	1.0	1.0
Live Oak, Fla.	2.7	1.7	1.3	2.3	2.0	1.3
Quincy, Fla.	3.0	3.0	2.0	2.0	2.0	3.0
Jay, Fla.	1.0	2.0	2.0	2.0	2.0	1.0
Fairhope, Ala.	1.0	1.7	1.7	2.0	1.7	1.0
Baton Rouge, La.	2.2	2.5	2.1	2.8	2.1	2.1
			Upper and Central South			
Athens, Ga.	1.5	1.5	1.5	2.0	1.5	1.8
Calhoun, Ga.	1.2	1.4	2.0	1.7	1.5	1.8
Clemson, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta and West			
Stoneville, Miss.(A)	2.7	2.3	2.0	2.0	2.3	2.3
Stoneville, Miss.(B)	2.0	2.7	2.3	2.0	2.3	2.0
Pine Bluff, Ark.	2.0	2.0	1.3	2.0	1.0	1.0
Stuttgart, Ark.	2.8	3.0	3.3	3.0	3.0	3.0
Rohwer, Ark.	4.0	4.0	4.0	4.0	3.3	4.0
Curtis, La.	1.7	1.7	1.3	1.7	1.3	1.3
Beaumont, Texas	3.0	3.0	2.0	4.0	3.0	2.0

Table 42. - (continued)

Location	N68-415	Ts70-4	D69-442	D70-8347	D70-8444	F70-3796
			East Coast			
Holland, Va.	1.0	1.0	1.5	1.0	1.0	1.0
Plymouth, N.C.	1.0	1.5	1.0	2.0	1.5	1.0
Clayton, N.C.	1.5	1.5	1.5	1.5	1.5	1.5
Kinston, N.C.	1.5	2.0	1.5	1.5	1.5	1.5
			Southeast			
Blackville, S.C.	2.0	1.0	1.0	2.0	1.0	1.0
Tifton, Ga.	1.8	2.0	2.0	1.8	1.7	1.8
Gainesville, Fla.	1.0	1.0	1.0	1.3	1.0	1.0
Live Oak, Fla.	1.3	2.0	2.0	2.0	1.7	1.3
Quincy, Fla.	2.0	4.0	3.0	3.0	2.0	3.0
Jay, Fla.	2.0	2.0	2.0	2.0	1.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.3	1.0	1.0
Baton Rouge, La.	1.8	2.3	2.3	2.2	2.1	2.0
			Upper and Central South			
Athens, Ga.	1.2	1.7	1.7	2.0	1.3	1.7
Calhoun, Ga.	1.2	1.8	1.5	2.0	2.0	1.3
Clemson, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta and West			
Stoneville, Miss.(A)	2.3	3.0	3.0	2.7	3.0	3.0
Stoneville, Miss.(B)	3.0	2.3	2.3	2.7	3.0	2.7
Pine Bluff, Ark.	1.0	2.3	1.6	2.0	1.0	1.6
Stuttgart, Ark.	2.2	2.8	2.3	2.8	1.7	2.3
Rohwer, Ark.	3.8	3.8	4.3	4.0	3.7	4.2
Curtis, La.	2.0	1.3	2.0	1.3	2.0	1.3
Beaumont, Texas	3.0	3.0	3.0	3.0	2.0	3.0

PRELIMINARY GROUP VII

1973

Preliminary Group VII nurseries, including 34 experimental strains and the two check varieties Bragg and Pickett 71, were grown at eight locations. The parentage of these strains is reported in Table 43. Performance data are summarized in Tables 44 through 49. Differences among strains for seed yield were significant at seven locations. The combined analysis of variance for seed yield also showed differences among strains to be significant. There were no strains yielding significantly better than Bragg. One strain, N70-2173, had a mean yield higher than that for Bragg.

Two strains, D71-8787 and D71-8790, have deciduous or curly pubescence. Both strains yielded significantly less than Bragg at Blackville, South Carolina, but their mean yield was within the range of experimental error of the yield of Bragg.

Five strains, Ga70-192, Ga70-331, Ts72-1, Ts72-2, and Ts72-3, were segregating for pubescence color or flower color.

Strains which appear to merit further testing in Uniform Group VII are N70-1816, N70-2173, F70-2061, and D71-8928.

Table 43. - Parentage of strains in Preliminary Group VII, 1973

	Vareity or strain	Parentage	Generation composited
1.	Bragg		
2.	Pickett 71		
3.	D71-8787	D64-8713 x Hardee	F_5
4.	D71-8790	D64-8713 x Hardee	F_5
5.	D71-8896	D49-772 x D55-4102	F_5
6.	D71-8928	D49-772 x D55-4102	F_5
7.	D71-8944	D49-772 x D55-4102	F_5
8.	D71-9022	D49-772 x D55-4102	F_5
9.	D71-9966	Bragg x. PI 230973	F_5
10.	F70-1226	Bragg(3) x D60-7965	F_6
11.	F70-1511	Bragg(3) x D60-7965	F_6
12.	F70-1573	Bragg(3) x PI 96035	F_6
13.	F70-2061	F62-2953 x D62-3286	F_6
14.	F70-3736	Bragg(2) x D61-3498	F_6
15.	F70-3837	Bragg(2) x D61-3498	F_6
16.	F70-4008	Bragg(3) x D60-7965	F_6
17.	Ga70-192	Davis x Lee	F_4
18.	Ga70-331	Davis x D64-4715	F_4
19.	La69-899	Natural cross in Bienville	
20.	La70-1194	Bossier x Curtis	
21.	N70-1488	Dare x D65-6765	F_4
22.	N70-1559	Dare x D65-6765	F_4
23.	N70-1610	Dare x D65-6765	F_4
24.	N70-1612	Dare x D65-6765	F_4
25.	N70-1616	Dare x D65-6765	F_4
26.	N70-1768	Dare x D65-6765	F_4
27.	N70-1816	Dare x D65-6765	F_4
28.	N70-2173	Hampton x Ransom	F_4
29.	N70-2205	Hampton x Ransom	F_4
30.	N70-2226	Hampton x Ransom	F_4
31.	N70-2230	Hampton x Ransom	F_4
32.	N70-2252	Hampton x Ransom	F_4
33.	Ts72-1	Semmes x PI 200492	F_8
34.	Ts72-2	Bragg x PI 200492	F_8
35.	Ts72-3	Semmes x PI 200492	F_8
36.	Ts72-4	Bragg x PI 200492	F_8

Table 44. - General summary of performance for the strains in Preliminary Group VII, 1973

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	P.R.	R.K.	D.M.
Bragg	41.2	10-19	40	22.9	41.8	1.0	1.0	1.0	2.5
Pickett 71	38.1	-2	28	23.1	41.3	1.0	1.0	4.0	1.5
D71-8787	39.8	-2	34	22.8	42.7	1.0	1.0	1.0	1.0
D71-8790	37.8	+3	35	22.2-	43.6+	1.0	1.0	4.0	1.5
D71-8896	37.3	0	39	21.8-	44.1+	1.0	2.5	3.0	1.0
D71-8928	39.3	0	37	23.5	41.8	1.0	1.0	4.0	2.5
D71-8944	36.7	+2	38	21.9-	44.5+	1.0	1.0	3.0	3.0
D71-9022	36.5-	+4	41	21.9-	44.8+	1.0	1.0	4.0	1.5
D71-9966	33.4-	+7	42	22.5	42.2	1.0	1.0	3.5	2.5
F70-1226	38.1	+2	36	23.4	41.8	1.0	1.0	2.0	2.5
F70-1511	39.2	0	40	22.5	42.0	1.0	1.0	2.0	2.0
F70-1573	38.4	0	40	22.7	41.9	1.0	1.0	2.0	2.5
F70-2061	40.2	-1	36	24.0+	39.1-	1.0	1.0	0.5	3.0
F70-3736	37.1	+1	38	21.0-	43.6+	1.0	1.0	1.5	2.5
F70-3837	37.6	+2	36	23.6+	40.2-	1.0	1.0	0.5	2.5
F70-4008	34.1-	-1	38	20.4-	44.9+	1.0	1.0	1.0	2.5
Ga70-192	38.6	0	40	23.3	39.3-	2.0	1.0	4.0	2.0
Ga70-331	38.7	+6	42	22.4	41.6	1.0	1.0	4.0	2.0
La69-899	37.6	+1	38	23.1	40.6	1.0	1.0	0.5	2.5
La70-1194	33.9-	+5	40	22.0-	41.0	2.0	4.5	3.5	2.5
N70-1488	37.9	0	36	23.0	41.6	1.0	1.0	3.0	1.5
N70-1559	38.3	-3	34	23.9+	41.8	1.0	1.0	1.5	1.0
N70-1610	34.9-	-5	34	23.6+	40.5-	1.0	1.0	3.5	3.0
N70-1612	37.0	-2	39	24.1+	40.7	1.0	1.0	3.0	1.5
N70-1616	36.2	-5	34	23.5	40.6	1.0	1.0	4.5	2.5
N70-1768	37.3	-2	34	23.5	41.1	1.0	1.0	5.0	2.0
N70-1816	40.0	-3	34	23.1	41.0	1.0	1.0	0.5	1.0
N70-2173	43.7	-1	35	24.4+	39.1-	1.0	2.5	3.0	1.0
N70-2205	41.0	+1	34	25.1+	38.1-	1.0	1.0	4.0	3.0
N70-2226	39.3	+1	39	23.9+	40.2-	1.0	1.0	4.0	1.0
N70-2230	39.2	+4	34	24.1+	40.0-	1.0	1.0	4.0	1.0
N70-2252	38.0	+4	38	24.7+	40.0-	1.0	3.0	1.5	1.5
Ts72-1	28.7-	+7	41	22.0-	41.6	1.0	2.5	3.0	1.5
Ts72-2	32.8-	+2	36	22.0-	41.6	1.0	1.0	4.5	2.0
Ts72-3	39.4	+6	44	22.8	42.4	1.0	1.0	1.5	3.0
Ts72-4	25.3-	+5	43	21.6-	41.3	1.0	5.0	1.5	1.0
L.S.D.(.05)	4.8			0.7	1.3				
L.S.D.(.01)	6.3			1.0	1.7				

Table 45. - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1973

Strain	Kinston, N.C.	Black-ville, S.C.	Tallas-see, Ala.	Jay, Fla.	Baton Rouge, La.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	41.9	41.4	31.1	43.5	49.6	45.9	44.5	31.4
Pickett 71	36.6	39.4	28.7	42.0	40.7	44.6	45.4	27.6
D71-8787	35.6	31.3-	28.1	42.0	39.8	51.8	50.4	39.3+
D71-8790	40.0	33.1-	30.3	44.7	37.7	43.2	43.5	30.0
D71-8896	43.1	37.7	30.8	42.8	38.8	45.7	30.1-	29.6
D71-8928	38.3	37.8	33.2	38.6	41.6	45.2	48.4	31.6
D71-8944	32.1-	41.2	29.6	38.2	34.6	42.8	36.5	38.3+
D71-9022	35.4	40.8	30.2	36.7-	36.0	39.2	42.5	31.6
D71-9966	36.1	36.4	22.8-	34.0-	39.4	36.9	38.9	22.7-
F70-1226	44.0	41.1	30.2	34.8-	34.2	46.1	46.8	27.9
F70-1511	38.1	40.0	37.8+	38.2	40.3	44.1	46.9	28.3
F70-1573	38.0	38.7	31.0	40.5	42.7	46.2	40.0	30.4
F70-2061	48.5	47.4	37.9+	37.8	40.6	39.4	38.0	32.0
F70-3736	39.1	42.2	28.8	39.4	39.7	42.7	37.7	27.6
F70-3837	40.8	37.3	31.6	37.1	44.2	41.2	37.9	31.1
F70-4008	35.5	32.7-	25.9-	34.4-	36.9	37.5	37.6	32.3
Ga70-192	40.3	39.1	28.4	40.5	38.8	46.7	44.4	30.7
Ga70-331	39.4	41.6	29.4	43.5	37.1	42.5	36.1	39.9+
La69-899	39.6	38.9	30.1	37.5	38.2	44.6	38.7	33.2
La70-1194	38.2	42.3	26.5	38.9	43.6	37.1	9.6-	34.8
N70-1488	43.4	41.6	31.9	35.6-	37.3	40.7	44.1	28.6
N70-1559	37.8	40.1	31.8	42.0	41.0	38.4	41.0	34.3
N70-1610	35.2	40.2	28.8	42.4	41.1	38.5	26.1-	27.1
N70-1612	33.8-	38.4	35.0	42.0	41.4	35.1-	35.6	34.6
N70-1616	43.2	37.2	27.4	35.2-	38.2	38.7	41.0	28.5
N70-1768	43.0	41.5	34.9	39.0	35.2	34.9-	31.0-	39.2+
N70-1816	38.4	46.3	31.2	45.4	43.6	40.1	43.9	31.3
N70-2173	46.3	46.2	36.2	51.2	46.5	47.6	33.0-	42.6+
N70-2205	45.0	45.2	35.1	48.1	44.8	37.0	40.0	33.0
N70-2226	39.1	41.1	30.8	46.2	46.4	44.8	38.6	27.9
N70-2230	40.1	48.6+	35.7	46.2	43.4	26.8-	30.6-	42.0+
N70-2252	35.8	46.2	33.4	49.2	39.4	37.6	26.2-	36.6
Ts72-1	26.9-	33.0-	23.6-	31.8-	29.4	29.0-	25.4-	30.3
Ts72-2	36.7	34.8	28.4	38.9	33.0	28.8-	27.7-	33.9
Ts72-3	37.4	42.7	27.1	38.9	42.6	42.2	43.3	41.3+
Ts72-4	27.7-	34.0-	24.6-	29.5-	32.0	22.3	2.1-	30.5
L.S.D.(.05)	7.4	7.0	5.0	6.7	N.S.	10.1	11.3	6.6
C.V.	10%	9%	8%	8%	13%	12%	15%	10%

Table 46. - Oil percentages for the strains in Preliminary Group VII, 1973

Strain	Kinston, N.C.	Blackville, S.C.	Jay, Fla.	Baton Rouge, La.	Stoneville, Miss.(B)	Beaumont, Texas
Bragg	22.1	23.9	22.4	24.3	23.8	20.7
Pickett 71	22.4	24.7	23.0	23.2	24.1	21.4
D71-8787	22.3	23.7	21.7	23.0	23.0	22.9
D71-8790	21.9	23.4	22.1	22.0	22.7	21.0
D71-8896	20.8	22.4	22.0	21.6	22.3	21.4
D71-8928	22.3	24.0	23.4	24.1	24.3	22.6
D71-8944	20.6	21.6	22.1	22.0	22.2	23.0
D71-9022	20.2	22.6	21.5	21.8	21.9	23.4
D71-9966	21.6	23.6	21.2	23.0	22.9	22.9
F70-1226	22.4	24.4	22.8	24.3	23.9	22.5
F70-1511	21.2	23.0	22.4	23.6	23.0	21.9
F70-1573	21.4	23.0	22.9	23.3	23.1	22.6
F70-2061	23.8	--	22.9	25.0	24.6	23.9
F70-3736	19.8	21.8	20.5	22.1	21.5	20.1
F70-3837	21.7	24.6	22.6	23.7	24.1	25.1
F70-4008	18.8	21.4	20.2	21.0	20.8	20.2
Ga70-192	21.0	23.4	23.3	22.8	24.3	24.8
Ga70-331	20.6	23.1	22.3	22.3	23.4	22.5
La69-899	21.5	23.3	23.2	23.6	23.6	23.2
La70-1194	21.1	23.2	21.1	22.2	23.0	21.5
N70-1488	21.8	24.1	22.6	23.5	23.6	22.5
N70-1559	21.8	24.6	24.8	23.9	24.3	23.9
N70-1610	21.9	23.9	23.0	24.1	24.7	24.2
N70-1612	22.2	24.7	24.1	24.4	25.9	23.5
N70-1616	22.1	23.9	23.5	24.6	23.9	23.0
N70-1768	21.9	23.8	23.9	23.6	23.8	23.7
N70-1816	21.6	23.8	22.8	23.3	23.3	23.6
N70-2173	22.6	24.6	25.0	25.3	25.8	23.3
N70-2205	23.6	25.3	24.9	25.0	26.1	25.6
N70-2226	21.8	24.7	23.6	24.5	25.6	23.4
N70-2230	22.5	24.7	23.8	25.8	25.2	22.5
N70-2252	22.5	26.2	24.2	25.5	26.3	23.4
Ts72-1	20.1	22.3	21.8	23.6	21.8	22.3
Ts72-2	20.0	22.8	21.0	22.7	22.5	22.9
Ts72-3	20.8	23.2	22.7	22.8	23.6	23.6
Ts72-4	19.6	22.2	21.1	22.9	21.9	22.1

Table 47. - Protein percentages for the strains in Preliminary Group VII, 1973

Strain	Kinston, N.C.	Blackville, S.C.	Jay, Fla.	Baton Rouge, La.	Stoneville, Miss.(B)	Beaumont, Texas
Bragg	41.4	41.3	42.0	42.7	38.8	44.8
Pickett 71	41.8	40.4	41.7	42.3	37.4	43.9
D71-8787	43.0	42.5	45.0	43.7	41.3	40.6
D71-8790	43.5	41.8	44.9	45.4	40.9	45.0
D71-8896	47.1	43.7	43.6	45.9	41.2	43.2
D71-8928	43.0	41.2	42.4	43.0	39.9	41.0
D71-8944	46.8	45.0	46.6	45.6	41.9	40.9
D71-9022	47.1	44.4	47.6	46.7	43.1	40.0
D71-9966	41.7	40.9	44.8	42.9	40.6	42.0
F70-1226	42.1	41.7	43.0	41.0	39.9	42.8
F70-1511	43.2	42.3	42.4	42.7	38.7	42.5
F70-1573	42.7	41.4	42.1	43.4	40.3	41.7
F70-2061	39.1	40.5	41.3	39.7	36.3	37.5
F70-3736	44.2	43.2	45.0	44.5	41.2	43.4
F70-3837	40.6	40.4	42.4	42.7	37.8	37.0
F70-4008	40.7	45.1	47.3	47.1	43.3	46.0
Ga70-192	40.9	38.2	40.3	41.5	37.0	37.7
Ga70-331	42.9	40.1	43.0	43.3	39.2	40.9
La69-899	41.5	41.3	42.4	41.0	38.7	38.9
La70-1194	40.6	39.3	43.1	43.2	37.1	42.5
N70-1488	41.8	40.5	42.4	43.5	39.5	41.8
N70-1559	42.5	41.4	44.0	42.9	40.1	39.8
N70-1610	41.9	39.9	42.5	42.6	37.9	38.1
N70-1612	40.9	40.0	41.7	43.0	38.1	40.2
N70-1616	41.0	40.4	42.6	41.0	38.4	40.1
N70-1768	41.4	41.2	41.6	43.7	38.6	39.8
N70-1816	40.8	40.0	41.7	42.0	38.9	42.7
N70-2173	40.3	38.9	40.2	39.0	36.1	39.9
N70-2205	38.7	37.6	41.1	39.4	35.5	36.3
N70-2226	40.6	39.6	42.2	41.6	36.6	40.4
N70-2230	40.2	39.7	41.5	41.5	36.8	40.3
N70-2252	41.0	39.8	41.5	41.1	35.2	41.4
Ts72-1	41.8	41.2	43.0	43.3	38.9	41.6
Ts72-2	41.9	40.5	44.6	41.7	39.3	41.4
Ts72-3	42.8	42.4	43.7	43.7	39.4	42.4
Ts72-4	41.5	39.9	43.6	42.6	38.9	41.4

Table 48. - Plant height for the strains in Preliminary Group VII, 1973

Strain	Kinston N.C.	Black-ville, S.C.	Tallas-see Ala.	Jay, Fla.*	Baton Rouge, La.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont Texas
Bragg	44	37	39	35	43	50	42	23
Pickett 71	35	28	24	28	29	30	25	24
D71-8787	33	33	30	40	37	42	34	29
D71-8790	35	32	37	40	35	40	33	33
D71-8896	42	36	39	33	40	48	35	31
D71-8928	42	34	32	35	34	46	38	31
D71-8944	40	38	34	28	38	43	37	35
D71-9022	46	38	46	38	40	51	37	29
D71-9966	43	41	48	34	44	48	41	30
F70-1226	39	37	33	36	35	42	39	24
F70-1511	45	36	44	32	39	42	40	31
F70-1573	42	38	40	39	37	50	42	34
F70-2061	38	35	34	39	38	44	33	32
F70-3736	42	35	36	38	36	47	38	33
F70-3837	36	35	38	39	37	40	36	31
F70-4008	41	35	36	35	38	45	34	36
Ga70-192	42	40	38	44	38	51	42	27
Ga70-331	45	45	44	35	42	47	43	27
La69-899	41	33	38	35	40	47	37	33
La70-1194	44	42	40	48	38	52	34	32
N70-1488	40	35	38	35	37	37	35	29
N70-1559	36	37	33	31	32	39	33	26
N70-1610	38	32	34	35	32	39	30	32
N70-1612	41	39	42	38	42	44	36	26
N70-1616	37	36	34	42	32	39	35	23
N70-1768	34	34	35	35	34	40	33	25
N70-1816	34	33	32	34	36	38	31	31
N70-2173	45	33	34	38	36	38	29	31
N70-2205	38	34	32	36	32	37	32	34
N70-2226	42	39	36	42	37	47	37	23
N70-2230	40	36	32	34	36	36	31	28
N70-2252	41	38	36	43	39	44	35	33
Ts72-1	39	50	36	50	42	46	48	26
Ts72-2	40	38	36	40	32	42	35	32
Ts72-3	44	40	50	42	46	45	45	35
Ts72-4	47	44	42	45	48	52	37	29

*Not included in mean.

Table 49. - Seed quality scores for the strains in Preliminary Group VII, 1973

Strain	Kinston N.C.	Black-ville, S.C.	Jay, Fla.	Baton Rouge La.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	1.0	1.5	2.0	1.8	2.0	2.0	3.0
Pickett 71	2.0	1.5	1.0	2.1	2.0	2.0	3.0
D71-8787	1.5	2.0	1.0	1.8	2.0	2.0	4.0
D71-8790	1.5	2.0	1.0	2.0	2.5	2.0	3.0
D71-8896	2.0	2.0	1.0	1.8	2.0	2.0	3.0
D71-8928	2.0	2.0	2.0	1.5	2.0	2.0	3.0
D71-8944	2.0	1.0	1.0	1.7	2.0	3.0	3.0
D71-9022	2.0	2.0	1.0	2.0	2.5	2.0	2.0
D71-9966	1.5	2.5	1.0	2.1	2.5	2.0	3.0
F70-1226	1.0	2.0	2.0	1.8	2.5	2.5	3.0
F70-1511	1.5	2.0	2.0	2.0	2.0	2.0	3.0
F70-1573	1.5	2.0	2.0	2.0	2.0	2.5	3.0
F70-2061	1.5	1.0	2.0	2.1	2.5	2.0	3.0
F70-3736	1.0	2.0	2.0	2.3	2.0	2.5	4.0
F70-3837	1.0	1.5	2.0	2.1	2.5	2.0	4.0
F70-4008	1.5	2.0	1.0	2.0	2.5	2.0	3.0
Ga70-192	1.5	2.5	2.0	1.8	2.5	2.0	4.0
Ga70-331	1.5	1.5	2.0	2.2	2.5	2.5	2.0
La69-899	1.5	2.0	2.0	2.0	2.0	2.0	3.0
La70-1194	1.5	1.5	1.0	2.1	3.0	3.0	3.0
N70-1488	2.0	2.0	1.0	2.3	2.0	2.0	-
N70-1559	2.0	3.0	2.0	2.1	3.0	2.5	3.0
N70-1610	2.0	1.5	1.0	2.1	3.0	3.0	-
N70-1612	2.0	2.0	2.0	2.3	3.0	3.0	3.0
N70-1616	2.0	1.5	1.0	1.8	2.0	2.5	-
N70-1768	1.5	1.0	1.0	1.2	2.5	2.0	3.0
N70-1816	2.0	1.0	1.0	1.5	2.5	2.0	3.0
N70-2173	1.5	2.0	1.0	2.3	2.5	2.5	2.0
N70-2205	1.5	2.5	2.0	3.0	3.0	3.0	4.0
N70-2226	2.0	1.5	1.0	2.2	3.0	2.0	3.0
N70-2230	2.0	2.0	1.0	2.0	2.5	3.0	2.0
N70-2252	2.0	1.0	2.0	2.2	2.5	2.5	2.0
Ts72-1	1.5	1.5	1.0	2.1	3.5	3.0	3.0
Ts72-2	1.5	1.5	1.0	1.8	3.0	3.0	2.0
Ts72-3	1.5	2.0	1.0	2.0	2.0	2.0	2.0
Ts72-4	1.5	1.5	1.0	1.8	2.0	3.0	2.0

UNIFORM GROUP VIII

1973

	Variety or strain	Parentage	Generation composited
1.	Hampton 266A	Majos x Lee	
2.	Hardee	D49-772 x Improved Pelican	F_7
3.	Hutton	F55-822 x (Roanoke x CNS-4)	F_6
4.	Cobb (F66-1166)	F57-735 x D58-3358	F_6
5.	Coker 338(Co68-38)	Hampton 266 x Bragg	F_4
6.	F68-1004	Bragg(3) x D60-7965	F_4
7.	F68-1018	Bragg(3) x D60-7965	F_4
8.	F68-1025	Bragg(3) x D60-7965	F_4
9.	F68-1033	Bragg(3) x D60-7965	F_4
10.	Co71-211	Hampton 266 x Bragg	F_7
11.	F66-216	F55-822 x (Roanoke x CNS-4)	F_9
12.	F70-3390	F63-3999 x Hutton	F_4

Background for strains used as parents:

D49-772 is a selection from Roanoke x N45-745 which was tested in Uniform Group VII. It is resistant to bacterial pustule and target spot.

F55-822 is the parent line of Bragg.

F57-735 is a selection from D49-772 x Improved Pelican which was grown in Uniform Group VIII.

D58-3358 is a bacterial-pustule-resistant selection from Jackson(4) x D49-2491.

D60-7965 is a high protein selection from D55-4090 (Ogden x CNS) x D55-4159 (Ogden x Biloxi).

F63-3999 has the same parentage as Hutton.

Twenty-four Uniform Group VIII nurseries were grown. Results are summarized in Tables 50 through 56 for 20 locations. Table 50 gives a general summary of agronomic qualities, chemical composition of the seed, and field reaction to several diseases. Two- and three-year data reported for seed yield, oil and protein percentages.

Seed yield differences among strains were significant at the 5% level of confidence at 15 locations. The combined analysis of variance showed differences among strains to be significant. One strain, Co68-38, had a mean yield significantly greater than that for Hampton 266A.

The breeding line F66-1166 was increased and released as Cobb. Cobb averaged 3 days later in maturity than Hardee in 1973, but its long-time average is similar to that for Hardee. Cobb flowers about a week earlier than Hardee, is more resistant to root-knot nematodes, Meloidogyne incognita, and has better quality seed.

Two strains, F66-216 and F70-3390, which were grown for the first time, averaged significantly lower in seed yield than Hampton 266A.

Table 50. - General summary of performance for the strains in Uniform Group VIII, 1973

	Hampton 266A	Hardee	Hutton	Cobb	Coker 338	F68-1004
Seed Yield - 1973	38.8	34.1-	39.6	39.1	42.1+	39.9
- 1972-73	34.1	30.7	36.0	35.2	37.0	35.5
- 1971-73	35.0	31.8	37.2	36.0	37.8	36.8
Oil Content - 1973	23.6	22.0-	22.1-	22.7-	24.3+	22.7-
- 1972-73	22.8	21.7	21.5	22.8	23.6	22.3
- 1971-73	22.7	21.3	21.3	22.5	23.5	22.1
Protein Content - 1973	40.5	42.9+	43.1+	40.7	41.0	41.5+
- 1972-73	40.5	42.5	43.1	40.2	40.9	41.5
- 1971-73	40.7	42.8	42.5	40.6	40.9	41.7
Seed size	15.4	13.6-	17.0+	14.5-	16.4+	14.1-
Maturity index	10-27	+3	0	+6	0	+2
Height	36	38	34	39	35	37
Phytophthora rot	2.0	1.0	1.0	2.0	1.0	1.0
Root-knot nematode	3.0	4.5	1.0	1.0	4.5	2.0

Table 50. - (continued)

	F68-1018	F68-1025	F68-1033	Co71-211	F66-216	F70-3390
Seed Yield - 1973	40.3	39.9	40.1	40.5	36.0-	35.5-
- 1972-73	36.3	36.1	36.7			
- 1971-73	37.7					
Oil Content - 1973	22.7-	22.6-	22.8-	23.3	21.6-	21.7-
- 1972-73	22.3	22.4	22.4			
- 1971-73	21.9					
Protein Content - 1973	41.5+	42.3+	42.3+	40.1	43.6+	42.5+
- 1972-73	41.4	42.0	42.1			
- 1971-73	41.5					
Seed size	15.5	17.2+	15.3	15.3	15.1	16.0
Maturity index	+1	+2	+2	0	-4	0
Height	37	38	37	37	31	29
Phytophthora rot	1.0	1.0	1.0	3.5	1.0	1.0
Root-knot nematode	1.5	2.0	1.5	1.5	2.5	1.5

Table 51. - Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1973

Location	Hampton 266A	Hardee	Hutton	Cobb	Coker 338	F68-1004	F68-1018
		South					
Clinton, N.C.	37.9	31.5-	34.4	38.8	42.6	34.3	40.0
Florence, S.C.	42.4	39.4	45.6	44.5	38.2	43.1	38.9
Hartsville,S.C.	51.2	50.4	60.2+	59.2+	57.3+	55.0	57.4+
Blackville, S.C.(A)	39.4	34.2	43.0	41.7	48.9+	36.8	39.7
Blackville, S.C.(B)	31.6	21.4-	29.9	29.9	26.0-	28.2	25.3-
Athens, Ga.	60.7	43.8-	45.1-	53.0	56.7	55.8	56.6
Clemson, S.C.*	16.7	--	25.0+	18.0	26.3+	20.1+	24.3+
Tallassee, Ala.	33.4	25.8-	34.4	31.9	36.8	33.3	29.9
Tifton, Ga.	40.1	36.5-	48.0+	43.4+	48.3+	39.3	43.2
Live Oak, Fla.	30.7	31.5	28.3	29.5	29.4	31.5	31.9
Gainesville, Fla.	36.2	31.0-	37.4	36.0	40.0	35.0	40.6+
Marianna, Fla.	38.7	39.6	43.2	40.9	47.5	40.9	43.4
Jay, Fla.	32.3	30.3	28.5	30.3	40.9+	35.8	37.6
Fairhope, Ala.	47.0	43.7	45.0	48.4	48.2	52.2+	48.1
Poplarville, Miss.	44.8	35.8	45.5	42.9	51.3	50.2	48.8
Baton Rouge, La.	35.5	34.2	40.9	34.5	38.4	42.0	42.8
Stoneville, Miss.	41.6	33.3	44.0	36.1	46.9	43.8	43.7
Curtis, La.*	44.2	--	34.9	43.4	44.9	47.0	44.9
Crowley, La.	26.7	21.6	30.6	31.3	30.1	27.6	25.8
Beaumont, Texas	28.6	28.7	28.8	30.8	29.7	34.0+	30.9
Mean	38.8	34.1-	39.6	39.1	42.1+	39.9	40.3

*Not included in mean.

(+) - Strains yielding significantly more (odds 19:1 or greater) than Hampton 266A.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Hampton 266A.

Table 51. - (continued)

Location	F68-1025	F68-1033	Co71-211	F66-216	F70-3390	L.S.D. (.05)	C.V. (%)
		South					
Clinton, N.C.	39.7	36.7	45.2+	22.0-	27.1-	5.9	10
Florence, S.C.	44.2	42.2	38.7	41.0	27.3	N.S.	12
Hartsville,S.C.	57.7+	60.6+	58.0+	53.0	48.7	5.4	6
Blackville, S.C.(A)	40.8	41.6	43.9	45.6+	36.3	5.6	8
Blackville, S.C.(B)	29.1	26.3	32.9	19.0-	17.7-	5.3	12
Athens, Ga.	57.5	54.1	53.5	49.3-	53.6	8.8	10
Clemson, S.C.*	20.1+	21.8+	23.5+	26.4+	25.5+	2.1	8
Tallassee, Ala.	31.1	32.2	29.3	31.7	29.7	4.6	9
Tifton, Ga.	44.5+	45.7+	44.8+	52.2+	47.5+	3.2	4
Live Oak, Fla.	30.2	28.4	36.7	26.7	28.5	N.S.	12
Gainesville, Fla.	35.0	36.5	39.0	38.4	36.6	4.3	7
Marianna, Fla.	39.0	34.7	45.3	32.6	35.6	N.S.	13
Jay, Fla.	35.0	35.6	37.1	37.1	42.3+	6.8	11
Fairhope, Ala.	50.0	50.0	48.1	49.6	43.6	3.8	5
Poplarville, Miss.	43.8	47.7	45.9	30.0-	36.7	11.5	16
Baton Rouge, La.	36.1	39.2	37.2	35.4	38.7	N.S.	10
Stoneville, Miss.	45.8	48.2	32.4-	40.9	39.3	9.1	13
Curtis, La.*	46.5	51.2	54.0	37.4	38.1	10.5	14
Crowley, La.	28.4	27.6	30.1	20.0	19.7	N.S.	18
Beaumont, Texas	30.7	34.7+	31.0	24.4	28.4	5.2	10
Mean	39.9	40.1	40.5	36.0-	35.5-	2.4	

Table 52. - Chemical composition and seed size for the strains in Uniform Group VIII, 1973

Location	Hampton 266A	Hardee	Hutton	Cobb	Coker 338	F68-1004
			Oil Percentage			
Hartsville, S.C.(A)	21.9	21.6	21.6	22.7	23.4	22.7
Blackville, S.C.(A)	24.4	23.1	22.1	24.0	26.9	24.5
Tifton Ga.	21.9	21.0	20.8	21.6	23.8	20.9
Live Oak, Fla.	25.5	22.8	23.8	24.3	24.1	23.2
Gainesville, Fla.	23.4	21.2	21.3	21.6	23.5	21.0
Jay, Fla.	23.1	21.3	22.8	21.8	23.9	22.6
Baton Rouge, La.	24.3	22.6	21.5	22.8	23.6	23.8
Beaumont, Texas	24.0	22.0	22.6	22.7	24.9	23.2
Mean	23.6	22.0-	22.1-	22.7-	24.3+	22.7-
			Protein Percentage			
Hartsville, S.C.(A)	38.6	39.9	40.7	38.0	38.1	39.0
Blackville, S.C.(A)	38.8	40.2	41.9	38.9	38.1	39.3
Tifton, Ga.	42.0	46.4	44.8	43.8	42.3	43.4
Live Oak, Fla.	40.9	40.9	43.9	37.7	41.4	41.2
Gainesville, Fla.	41.0	44.0	43.5	42.9	42.3	43.1
Jay, Fla. 42.4	42.4	45.1	44.5	42.0	42.5	42.7
Baton Rouge, La.	40.3	44.4	44.2	42.9	42.9	42.5
Beaumont, Texas	39.8	42.0	41.5	39.4	40.1	40.5
Mean	40.5	42.9+	43.1+	40.7	41.0	41.5
			Grams per 100 Seeds			
Hartsville, S.C.(A)	14.6	13.8	16.1	14.9	15.1	13.1
Blackville, S.C.(A)	13.7	12.3	16.0	12.0	15.3	11.7
Tifton, Ga.	13.3	11.4	15.2	14.0	13.7	12.4
Live Oak, Fla.	15.7	13.9	19.0	14.9	18.2	15.5
Gainesville, Fla.	14.6	11.7	15.3	12.7	15.3	11.9
Jay, Fla.	19.0	18.0	19.0	19.0	18.0	18.0
Baton Rouge, La.	15.2	15.2	18.8	15.7	17.8	15.5
Beaumont, Texas	16.8	12.2	16.3	12.7	18.1	14.3
Mean	15.4	13.6-	17.0+	14.5-	16.4+	14.1-

Table 52. - (continued)

Location	F68-1018	F68-1025	F68-1033	Co71-211	F66-216	F70-3390	L.S.D. (.05)
			Oil Percentage				
Hartsville, S.C.(A)	22.3	22.8	23.3	22.8	20.7	21.4	
Blackville, S.C.(A)	24.4	22.8	24.7	24.2	22.1	21.7	
Tifton, Ga.	21.0	21.5	21.0	22.0	20.6	20.0	
Live Oak, Fla.	23.4	23.0	24.7	23.5	22.8	22.2	
Gainesville, Fla.	21.7	21.6	21.3	22.9	20.8	21.8	
Jay, Fla.	22.4	22.8	22.3	22.9	21.3	21.8	
Baton Rouge, La.	23.5	22.9	22.5	24.0	21.8	21.6	
Beaumont, Texas	23.0	23.7	22.4	23.7	22.5	23.0	
Mean	22.7-	22.6-	22.8-	23.3	21.6-	21.7-	0.6
			Protein Percentage				
Hartsville, S.C.(A)	38.4	39.5	38.5	37.8	41.9	40.3	
Blackville, S.C.(A)	40.0	41.2	40.4	39.1	42.6	41.4	
Tifton, Ga.	43.0	44.5	43.9	42.7	45.5	45.4	
Live Oak, Fla.	42.3	43.0	42.3	38.7	44.2	42.6	
Gainesville, Fla.	42.0	43.7	44.0	41.1	43.9	43.1	
Jay, Fla.	43.0	42.7	43.5	42.5	44.8	44.5	
Baton Rouge, La.	42.8	44.4	44.0	41.7	44.3	43.7	
Beaumont, Texas	40.2	39.7	41.5	37.5	41.8	39.2	
Mean	41.5+	42.3+	42.3+	40.1	43.6+	42.5+	0.8
			Grams per 100 Seeds				
Hartsville, S.C.(A)	15.0	16.3	15.2	14.7	14.3	15.8	
Blackville, S.C.(A)	14.0	15.7	13.7	14.3	14.0	14.0	
Tifton, Ga.	14.2	14.6	13.5	14.0	14.8	14.5	
Live Oak, Fla.	16.0	18.0	16.2	16.4	15.1	16.3	
Gainesville, Fla.	14.4	15.3	13.5	14.0	13.7	15.7	
Jay, Fla.	18.0	21.0	19.0	19.0	18.0	21.0	
Baton Rouge, La.	18.6	19.9	17.5	16.0	15.9	16.3	
Beaumont, Texas	14.0	16.4	14.0	13.7	14.7	14.0	
Mean	15.5	17.2+	15.3	15.3	15.1	16.0	0.9

Table 53. - Relative maturity, days earlier (-) or later (+) than Hampton 266A, for the strains in Uniform Group VIII, 1973

Location	Date planted	Hampton 266A matured	Hardee	Hutton	Cobb	Co68-38	F68-1004
		South					
Hartsville, S.C.	5-28	10-28	+8	+1	+10	-1	+4
Blackville, S.C.(A)	5-16	10-23	+10	0	+10	-2	+1
Blackville, S.C.(B)	6-3	11-2	+3	-1	+6	+3	+3
Athens, Ga.	5-14	10-26	+4	-5	+4	-1	-3
Clemson, S.C.*	6-5	10-19	--	-1	+9	0	0
Tallassee, Ala.	5-23	10-22	-2	-3	0	0	-2
Tifton, Ga.	5-11	10-7	+4	+3	+5	+1	+3
Gainesville, Fla.	6-11	10-22	0	-1	+3	+1	+2
Marianna, Fla.	6-11	10-17	+9	+2	+8	+6	+6
Jay, Fla.*	5-18	10-31	+1	-3	-5	-5	-7
Fairhope, Ala.	6-11	10-26	+3	+3	+6	+3	+3
Baton Rouge, La.	5-18	11-6	+3	0	+8	-9	+5
Stoneville, Miss.	5-17	10-27	+2	-2	+2	0	+1
Curtis, La.	5-8	10-28	+3	+1	+5	0	+3
Beaumont, Texas	6-18	11-15	+1	0	+1	+3	+1
Mean		10-27	+3	0	+6	0	+2

*Not included in mean.

Table 53. - (continued)

Location	F68-1018	F68-1025	F68-1033	Co71-211	F66-216	F70-3390
		South				
Hartsville, S.C.	+1	+4	+4	0	-3	-1
Blackville, S.C.(A)	-1	+1	+4	-1	-4	+1
Blackville, S.C.(B)	+2	+2	+1	+1	-3	0
Athens, Ga.	-2	-2	-5	+1	-6	-5
Clemson, S.C.*	-1	-1	0	+1	-5	+1
Tallassee, Ala.	-3	-2	-1	-1	-5	-4
Tifton, Ga.	+2	+4	+4	+1	0	+3
Gainesville, Fla.	+1	+1	+1	-5	-5	+1
Marianna, Fla.	+5	+5	+2	+2	+1	+2
Jay, Fla.*	-6	-1	-6	-4	-2	-2
Fairhope, Ala.	+3	+6	+6	0	-6	0
Baton Rouge, La.	+6	-4	+6	0	-10	-4
Stoneville, Miss.	0	+2	+2	-2	-5	+1
Curtis, La.	+1	+4	+4	-1	-3	+1
Beaumont, Texas	0	+1	+1	+2	+1	+1
Mean	+1	+2	+2	0	-4	0

Table 54. - Plant height for the strains in Uniform Group VIII, 1973

Location	Hampton 266A	Hardee	Hutton	Cobb	Coker 338	F68-1004
		South				
Clinton, N.C.	32	33	28	41	35	33
Florence, S.C.	30	37	28	32	27	29
Hartsville, S.C.	40	44	39	40	41	37
Blackville, S.C.(A)	41	41	34	38	34	38
Blackville, S.C.(B)	30	29	27	30	30	33
Athens, Ga.	50	32	43	54	44	57
Clemson, S.C.*	38	--	39	43	41	43
Tallassee, Ala.	44	39	37	44	39	46
Tifton, Ga.	36	42	35	40	33	40
Live Oak, Fla.	34	35	31	37	31	37
Gainesville, Fla.	28	32	26	33	27	33
Marianna, Fla.	34	36	33	39	35	34
Jay, Fla.*	46	45	40	47	38	44
Fairhope, Ala.	43	44	39	44	42	42
Baton Rouge, La.	37	41	38	41	37	42
Stoneville, Miss.	39	49	41	41	37	43
Curtis, La.	33	37	31	39	33	38
Crowley, La.	27	31	29	31	28	29
Beaumont, Texas	29	36	32	34	34	35
Mean	36	38	34	39	35	37

*Not included in mean.

Table 54. - (continued)

Location	F68 1018	F68- 1025	F68- 1033	Co71- 211	F66- 216	F70- 3390
		South				
Clinton, N.C.	35	33	31	37	24	24
Florence, S.C.	29	30	29	32	26	22
Hartsville, S.C.	42	43	39	41	39	38
Blackville, S.C.(A)	36	37	39	38	32	31
Blackville, S.C.(B)	29	33	30	31	26	25
Athens, Ga.	50	52	53	46	41	39
Clemson, S.C.*	46	45	42	42	37	35
Tallassee, Ala.	42	43	41	46	35	35
Tifton, Ga.	40	43	39	37	31	30
Live Oak, Fla.	35	36	33	35	26	23
Gainesville, Fla.	33	32	33	31	26	24
Marianna, Fla.	36	34	34	36	30	28
Jay, Fla.*	43	46	41	36	38	42
Fairhope, Ala.	42	46	43	42	32	26
Baton Rouge, La.	40	42	42	38	36	32
Stoneville, Miss.	47	43	41	39	35	37
Curtis, La.	34	38	34	34	28	24
Crowley, La.	31	28	29	32	25	26
Beaumont, Texas	32	26	36	29	36	24
Mean	37	38	37	37	31	29

Table 55. - Lodging scores for the strains in Uniform Group VIII, 1973

Location	Hampton 266A	Hardee	Hutton	Cobb	Coker 338	F68-1004
		South				
Florence, S.C.	2.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	3.0	3.5	3.2	2.8	2.3	3.5
Blackville, S.C.(A)	2.0	3.3	3.3	2.3	1.7	3.7
Blackville, S.C.(B)	1.7	1.3	1.0	1.7	1.0	2.3
Athens, Ga.	3.7	3.5	2.8	2.3	2.5	3.7
Clemson, S.C.	2.2	-	2.0	2.2	2.0	2.0
Tallassee, Ala.	2.8	2.3	2.8	3.0	1.5	3.5
Tifton, Ga.	1.7	3.0	2.3	3.0	1.3	2.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.7	1.0	1.7	1.3	1.3
Marianna, Fla.	1.7	3.0	2.0	1.7	2.3	2.0
Jay, Fla.	2.0	2.0	2.0	2.0	2.0	2.0
Fairhope, Ala.	1.0	3.0	2.0	2.0	1.0	1.0
Baton Rouge, La.	2.0	2.6	1.9	1.1	1.1	2.1
Stoneville, Miss.	2.7	3.3	2.7	2.7	2.3	2.7
Curtis, La.	1.7	3.0	2.0	2.3	2.0	3.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Beaumont, Texas	1.0	2.0	1.0	1.0	1.0	2.0

Table 55. - (continued)

Location	F68-1018	F68-1025	F68-1033	Co71-211	F66-216	F70-3390
		South				
Florence, S.C.	1.0	1.0	2.0	2.0	1.0	1.0
Hartsville, S.C.	3.2	3.5	3.0	3.0	2.3	2.5
Blackville, S.C.(A)	3.7	4.0	3.7	2.7	1.0	1.0
Blackville, S.C.(B)	1.7	2.0	1.3	1.3	1.0	1.0
Athens, Ga.	3.7	3.5	2.7	2.8	2.0	2.2
Clemson, S.C.	2.0	2.0	2.0	2.2	1.8	1.8
Tallassee, Ala.	4.0	4.1	2.8	3.8	1.5	1.3
Tifton, Ga.	2.3	2.0	1.7	1.3	1.0	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.3	1.3	1.3	1.0	1.0	1.0
Marianna, Fla.	2.7	2.0	1.7	3.3	1.7	2.0
Jay, Fla.	2.0	2.0	2.0	4.0	1.0	1.0
Fairhope, Ala.	1.0	2.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.8	2.1	1.9	1.8	1.1	1.2
Stoneville, Miss.	3.3	3.0	2.7	2.7	2.0	2.0
Curtis, La.	2.0	2.7	2.7	2.0	1.7	1.3
Crowley, La.	1.0	1.0	1.0	1.0	2.0	1.0
Beaumont, Texas	1.0	1.0	2.0	1.0	2.0	1.0

Table 56. - Seed quality scores for the strains in Uniform Group VIII, 1973

Location	Hampton 266A	Hardee	Hutton	Cobb	Coker 338	F68-1004
		South				
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Blackville, S.C.(A)	1.7	1.0	1.0	1.7	1.0	1.3
Blackville, S.C.(B)	1.7	1.0	1.0	2.7	2.7	2.0
Athens, Ga.	2.0	1.0	2.0	1.1	2.0	1.8
Clemson, S.C.	1.0	-	1.0	1.0	1.0	1.0
Tifton, Ga.	1.8	1.5	1.7	1.7	2.0	1.7
Live Oak, Fla.	1.7	1.0	1.3	1.0	1.7	1.7
Gainesville, Fla.	2.0	1.3	1.0	1.0	1.7	1.0
Jay, Fla.	1.0	2.0	3.0	2.0	2.0	2.0
Fairhope, Ala.	2.3	1.3	2.0	1.3	2.0	1.0
Baton Rouge, La.	2.3	2.0	2.3	2.3	2.4	2.2
Stoneville, Miss.	2.3	2.3	2.0	2.3	2.0	2.3
Curtis, La.	2.0	-	1.7	1.7	1.3	1.7
Beaumont, Texas	2.0	2.0	3.0	3.0	3.0	3.0

Table 56. - (continued)

Location	F68-1018	F68-1025	F68-1033	Co71-211	F66-216	F70-3390
		South				
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Blackville, S.C.(A)	1.7	1.7	2.0	1.7	1.0	1.7
Blackville, S.C.(B)	2.3	2.0	2.3	1.0	1.3	1.7
Athens, Ga.	3.0	1.5	2.0	1.5	1.5	1.7
Clemson, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
Tifton, Ga.	2.0	2.0	2.0	2.0	1.8	1.7
Live Oak, Fla.	1.7	1.0	1.7	1.7	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	2.0	1.0	1.0
Jay, Fla.	3.0	1.0	2.0	1.0	1.0	1.0
Fairhope, Ala.	1.3	1.0	2.0	1.7	1.3	1.0
Baton Rouge, La.	2.1	1.8	2.1	2.2	2.2	2.0
Stoneville, Miss.	2.0	2.0	2.0	2.7	2.0	2.0
Curtis, La.	1.7	2.0	1.7	2.0	1.7	1.3
Beaumont, Texas	2.0	2.0	2.0	3.0	3.0	3.0

PRELIMINARY GROUP VIII

1973

Preliminary Group VIII nurseries, including 34 experimental strains and the check varieties Hutton and Cobb, were grown at eight locations. The parentage of these strains is reported in Table 57. Performance data are summarized in Tables 58 through 63. Poor stands were obtained for several strains at several of the locations. Average yields were calculated only for those strains having satisfactory stands at all locations.

The mean yields for Hutton and Cobb were very similar. Six strains had average yields slightly above that of the check varieties. Two of the higher yielding strains were segregating for flower color or pubescence color. Five strains with incomplete stands received low scores for root-knot nematodes in the special planting near Jay, Florida.

Strains which appear to merit being advanced to Uniform Group VIII are: Co71-222, F68-2507, F70-2207, F70-3215, and Ts72-6.

Table 57. - Parentage of strains in Preliminary Group VIII, 1973

	Variety or strain	Parentage	Generation composited
1.	Hutton		
2.	Cobb		
3.	Co69-117	Hampton 266 x Bragg	F_6
4.	Co71-221	Hampton 266 x Bragg (subline Co68-38)	F_7
5.	Co71-222	Hampton 266 x Bragg (subline Co68-38)	F_7
6.	Co71-233	Co208 x N60-5174	F_4
7.	Co71-241	Co208 x N60-5174	F_4
8.	Co71-242	Co208 x N60-5174	F_4
9.	Co71-243	Co208 x N60-5174	F_4
10.	Co72-337	Subline Hampton	
11.	F68-2507	Bragg(3) x D60-7965	F_4
12.	F69-2014	Bragg(2) x D60-7965	F_6
13.	F69-4435	Bragg x Hardee	F_6
14.	F70-1119	Bragg x D60-7965	F_8
15.	F70-2207	D60-9240 x Hardee	F_8
16.	F70-2472	Bragg x F59-2855	F_8
17.	F70-3215	Bragg(3) x D60-7965	F_6
18.	F70-3251	Bragg(3) x D60-7965	F_6
19.	F70-3260	Brag(3) x D60-7965	F_6
20.	F70-3324	F63-3999 x Hutton	F_4
21.	F70-3336	F63-3999 x Hutton	F_4
22.	F70-3352	F63-3999 x Hutton	F_4
23.	F70-3371	F63-3999 x Hutton	F_4
24.	F70-3374	F63-3999 x Hutton	F_4
25.	F70-3380	F63-3999 x Hutton	F_4
26.	F70-3414	Bragg x Hardee	F_7
27.	F70-3422	Bragg x Hardee	F_7
28.	Ga70-77	Bragg x Coker 240	F_4
29.	Ga70-99	Davis x Bienville	F_4
30.	Ga70-411	Davis x Ga59-871	F_4
31.	La68-26-70	Semmes x Hardee	F_4
32.	La68-27-43	Semmes x Hardee	F_4
33.	La68-29-7	Semmes x Hardee	F_4
34.	Ts72-5	D69-6094 x D61-4269	F_8
35.	Ts72-6	Bragg x PI 200492	F_8
36.	Ts72-7	D63-6094 x D61-4269	F_8

Table 58. - General summary of performance for the strains in Preliminary Group VIII, 1973

Strain	Seed yield	Maturity index	Ht.	Percent Oil*	Percent Protein*	P.R.	R. K.
Hutton	35.3	10-27	30	22.2	42.5	1.0	1.0
Cobb	35.5	+8	37	22.8	39.7	2.0	1.5
Co69-117	33.9	+8	29	24.0	39.2	1.0	3.0
Co71-221	36.5	+2	33	23.3	41.2	1.0	4.0
Co71-222	39.3	0	29	23.7	41.6	1.0	4.0
Co71-233	33.8	+1	29	22.2	41.4	3.0	4.5
Co71-241	30.4	+4	24	22.9	43.2	1.0	4.5
Co71-242	35.4	+2	30	22.9	41.9	1.0	4.0
Co71-243	32.0	+7	27	22.2	44.2	1.0	4.5
Co72-337	32.9	+1	29	23.9	39.7	2.5	3.5
F68-2507	35.3	-4	31	22.8	41.6	1.0	2.0
F69-2014	34.9	+2	28	23.3	40.6	1.0	2.0
F69-4435	33.7	+5	34	23.3	41.6	1.0	2.5
F70-1119	32.3	+8	38	22.0	42.9	2.0	2.0
F70-2207	33.9	+9	35	22.3	43.9	1.0	1.5
F70-2472	31.9	+6	40	20.9	43.3	3.0	1.5
F70-3215	35.9	+6	33	23.0	41.9	1.0	2.5
F70-3251	34.9	+5	36	22.0	42.4	1.0	2.0
F70-3260	34.6	-1	37	21.9	42.5	1.0	2.0
F70-3324	--	+3	--	22.7	42.8	1.0	2.0
F70-3336	--	-2	--	22.8	41.8	1.0	1.5
F70-3352	--	0	--	22.1	42.0	1.0	1.0
F70-3371	--	+1	--	22.8	41.8	1.0	1.0
F70-3374	--	+1	--	20.9	41.8	1.0	1.5
F70-3380	--	0	--	21.7	42.4	1.0	1.0
F70-3414	34.2	+5	34	22.1	42.3	1.0	3.0
F70-3422	33.2	+7	34	21.5	43.4	1.0	2.0
Ga70-77	37.8	+7	39	22.7	41.6	1.0	4.0
Ga70-99	34.8	+6	38	21.7	41.7	2.0	3.0
Ga70-411	33.8	-1	34	23.3	41.0	1.0	4.0
La68-26-70	33.5	+1	37	22.0	43.4	1.0	4.5
La68-27-43	32.4	+5	36	21.4	42.1	1.0	5.0
La68-29-7	32.5	+4	38	22.6	41.3	1.0	5.0
Ts72-5	35.8	+4	32	23.9	40.2	1.0	3.5
Ts72-6	38.6	+7	32	22.5	40.2	1.0	3.0
Ts72-7	34.8	-4	32	23.8	41.7	1.0	3.0

*Average of 4 locations

Table 59. - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1973

Strain	Black-ville, S.C.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.	Beaumont, Tex.	Stone-ville, Miss.
Hutton	26.7	29.6	41.8	50.1	28.4	32.5	25.3	48.2
Cobb	28.7	30.9	37.1	54.3	31.4	34.6	34.3+	32.9-
Co69-117	24.8	32.4	36.3-	41.3	24.6	41.6+	23.2	47.1
Co71-221	30.4	27.7	42.0	47.4	25.4	36.7	33.8+	48.9
Co71-222	29.1	28.1	36.6-	59.2	33.7	38.8	40.2+	48.5
Co71-233	30.9	24.9	33.1-	45.6	34.4	33.0	37.3+	31.5-
Co71-241	26.7	23.2	25.6-	37.2-	27.6	31.0	33.0+	39.2-
Co71-242	31.0	27.9	34.0-	46.9	34.8	38.5	33.5+	36.4-
Co71-243	19.5	27.2	33.5-	43.6	37.5+	36.0	27.3	31.3-
Co72-337	30.9	28.2	34.8-	48.2	20.5-	33.2	33.8+	33.4-
F68-2507	25.5	29.6	40.8	44.3	33.3	32.2	30.7	46.5
F69-2014	24.1	22.1	36.6-	46.8	27.2	45.3+	30.2	47.0
F69-4435	23.7	29.1	31.4-	42.4	40.9+	39.5	26.5	36.0-
F70-1119	30.8	28.7	28.3-	35.3-	36.3+	33.0	36.8+	29.6-
F70-2207	29.8	32.2	35.5-	45.9	19.7-	38.4	29.4	40.8
F70-2472	31.6	26.1	30.2-	44.2	33.3	31.6	37.8+	20.6-
F70-3215	26.1	27.5	35.6-	47.2	30.3	41.3	37.4+	42.2
F70-3251	25.6	26.1	30.7-	44.9	34.8	42.8+	31.3+	42.7
F70-3260	25.7	30.3	35.0-	43.9	30.7	38.1	30.5+	42.9
F70-3324	--	--	--	8.7-	37.1+	--	30.3	27.9-
F70-3336	--	--	41.1	35.9-	32.9	--	13.9-	50.4
F70-3352	--	--	--	13.6-	32.2	--	9.9-	24.7-
F70-3371	--	--	--	33.1-	29.9	21.4-	23.3	26.2-
F70-3374	--	--	37.8-	36.6-	36.7+	26.6	27.4	43.4
F70-3380	--	--	35.5-	37.2-	42.4+	42.2+	28.4	42.1
F70-3414	29.9	29.7	32.9-	49.6	32.5	34.5	25.8	38.9-
F70-3422	26.8	25.8	29.0-	45.6	29.5	37.8	33.5+	38.0-
Ga70-77	34.0	25.7	38.0-	50.6	35.6	41.0	35.6+	42.0
Ga70-99	31.6	24.7	37.3-	46.7	31.8	37.7	31.8+	37.4-
Ga70-411	27.4	27.9	36.9-	52.4	25.0	37.2	20.8	43.3
La68-26-70	27.9	23.2	33.1-	48.2	31.0	34.8	33.8+	36.3-
La68-27-43	26.0	19.9	30.7-	46.6	35.2	38.5	28.9	33.4-
La68-29-7	30.1	26.3	33.4-	42.2	38.2+	28.1	26.1	35.2-
Ts72-5	30.4	34.1	37.4-	43.6	23.5	37.8	34.1+	45.8
Ts72-6	27.7	30.3	37.6-	54.1	31.0	39.2	41.5+	47.2
Ts72-7	24.7	18.2	35.8-	47.2	33.3	38.3	33.7+	47.7
L.S.D.(.05)	9.2	N.S.	3.7	9.9	7.3	9.0	5.7	7.8
C.V.	16%	14%	5%	11%	11%	12%	9%	10%

Table 60. - Oil percentages for the strains in Preliminary Group VIII, 1973

Strain	Blackville, S.C.	Gainesville, Fla.	Jay, Fla.	Beaumont, Texas	Stoneville, Miss.
Hutton	23.4	22.7	22.6	22.0	21.3
Cobb	23.4	22.6	22.5	22.8	23.2
Co69-117	24.0	24.0	23.9	23.9	24.1
Co71-221	22.8	22.8	24.0	23.8	22.6
Co71-222	24.0	23.8	24.1	24.0	22.8
Co71-233	23.0	22.1	21.6	22.4	22.6
Co71-241	23.7	24.3	21.7	23.0	22.5
Co71-242	23.9	22.9	22.7	23.4	22.5
Co71-243	23.5	23.4	21.8	22.1	21.6
Co72-337	24.3	23.6	23.8	24.1	24.1
F68-2507	24.2	23.3	22.6	23.2	22.0
F69-2014	23.8	22.4	23.8	23.6	23.2
F69-4435	23.9	23.0	22.8	23.7	23.7
F70-1119	21.7	20.2	21.8	23.1	22.8
F70-2207	22.1	24.3	20.5	22.4	22.0
F70-2472	22.7	19.4	21.0	21.1	21.9
F70-3215	24.3	23.0	22.9	23.5	22.7
F70-3251	23.7	19.6	21.7	23.0	23.5
F70-3260	23.8	21.7	21.6	22.6	21.7
F70-3324	--	22.9	21.7	23.4	22.6
F70-3336	--	24.1	21.7	23.4	22.1
F70-3352	--	22.1	21.1	23.4	21.9
F70-3371	--	23.6	21.4	23.3	22.7
F70-3374	--	20.7	20.8	21.3	20.8
F70-3380	--	21.8	20.8	22.0	22.3
F70-3414	22.9	21.4	23.0	21.4	22.5
F70-3422	24.0	20.8	21.7	21.1	22.2
Ga70-77	22.9	22.3	24.1	22.4	22.1
Ga70-99	23.6	21.3	21.8	21.5	22.2
Ga70-411	24.0	23.1	23.2	24.2	22.7
La68-26-70	23.2	21.6	21.5	22.8	21.9
La68-27-43	22.6	20.6	21.7	21.6	21.6
La68-29-7	23.2	22.5	22.0	23.5	22.5
Ts72-5	24.8	23.6	24.6	24.4	23.1
Ts72-6	23.8	21.2	22.4	23.7	22.5
Ts72-7	24.1	23.9	24.0	23.9	23.4

Table 61. - Protein percentages for the strains in Preliminary Group VIII, 1973

Strain	Blackville, S.C.	Gainesville, Fla.	Jay, Fla.	Beaumont, Texas	Stoneville, Miss.
Hutton	42.1	43.0	43.4	43.4	40.1
Cobb	37.1	40.6	40.5	40.1	37.5
Co69-117	39.0	39.3	40.0	40.3	37.2
Co71-221	40.5	41.7	42.5	42.3	38.1
Co71-222	41.7	42.7	42.9	42.7	38.1
Co71-233	39.4	41.7	43.6	42.1	38.0
Co71-241	40.4	42.6	45.2	44.9	40.0
Co71-242	40.8	42.0	42.5	43.3	39.7
Co71-243	42.6	43.0	45.5	45.7	42.4
Co72-337	38.3	40.5	41.8	40.5	36.0
F68-2507	40.8	43.7	42.9	39.5	40.2
F69-2014	40.0	41.6	42.1	40.1	38.7
F69-4435	39.7	44.2	43.9	41.0	38.2
F70-1119	42.6	45.1	44.5	42.0	39.9
F70-2207	40.4	42.6	47.6	45.7	39.7
F70-2472	42.5	46.2	44.0	41.9	41.2
F70-3215	40.5	43.6	43.0	41.9	38.9
F70-3251	40.5	44.4	44.5	42.3	38.7
F70-3260	41.3	44.6	44.0	43.7	38.7
F70-3324	--	41.5	46.1	42.1	37.4
F70-3336	--	42.4	45.0	41.6	39.0
F70-3352	--	42.0	45.6	41.0	38.5
F70-3371	--	42.4	45.1	41.4	38.5
F70-3374	--	42.6	45.3	43.7	39.2
F70-3380	--	42.7	44.2	44.2	38.5
F70-3414	40.9	43.8	42.9	42.5	40.0
F70-3422	40.9	44.2	43.5	44.8	41.0
Ga70-77	39.4	41.9	42.6	43.0	38.8
Ga70-99	39.9	42.1	43.3	41.4	39.9
Ga70-411	39.8	42.9	43.0	39.2	38.7
La68-26-70	41.6	44.6	45.6	42.6	40.8
La68-27-43	38.3	44.1	44.1	41.8	38.3
La68-29-7	38.9	41.8	43.3	41.7	38.5
Ts72-5	38.2	41.5	41.3	40.6	37.4
Ts72-6	38.8	41.9	41.7	40.1	37.0
Ts72-7	41.0	41.1	43.7	43.5	38.6

Table 62. - Plant height for the strains in Preliminary Group VIII, 1973

Strain	Black-ville, S.C.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.*	Baton Rouge, La.	Beaumont, Tex.	Stone-ville, Miss.
Hutton	26	28	26	29	40	30	30	38
Cobb	29	41	32	40	48	44	32	40
Co69-117	24	32	26	26	40	37	23	33
Co71-221	30	34	29	33	37	36	30	40
Co71-222	29	29	22	25	48	42	25	31
Co71-233	25	29	24	29	38	38	27	34
Co71-241	26	18	15	21	35	34	23	30
Co71-242	30	31	25	28	39	37	24	37
Co71-243	22	27	20	22	34	35	32	32
Co72-337	26	29	25	27	38	32	29	32
F68-2507	30	29	28	31	42	28	30	41
F69-2014	23	24	22	24	35	30	29	36
F69-4435	27	33	29	32	46	42	33	43
F70-1119	31	42	34	38	40	42	34	44
F70-2207	31	39	29	36	46	44	25	42
F70-2472	32	40	37	41	52	50	30	49
F70-3215	29	35	33	33	44	42	18	41
F70-3251	30	33	32	36	47	46	31	41
F70-3260	29	39	35	35	40	34	33	44
F70-3324	--	--	--	18	30	--	17	33
F70-3336	--	--	26	23	38	--	21	38
F70-3352	--	--	--	18	36	28	21	31
F70-3371	--	--	--	24	35	30	31	35
F70-3374	--	--	24	22	38	29	24	35
F70-3380	--	--	23	25	30	33	30	35
F70-3414	28	34	20	32	41	42	30	44
F70-3422	26	34	32	30	42	42	32	43
Ga70-77	36	39	32	36	47	45	45	43
Ga70-99	34	39	35	35	40	44	30	48
Ga70-411	31	35	29	33	31	38	31	44
La68-26-70	28	37	31	36	42	48	33	48
La68-27-43	25	36	34	36	47	44	31	45
La68-29-7	32	40	36	38	50	38	34	46
Ts72-5	30	36	30	31	46	36	24	39
Ts72-6	26	31	25	32	41	39	31	43
Ts72-7	29	28	25	30	39	40	29	41

*Not included in mean.

Table 63. - Seed quality scores for the strains in Preliminary Group VIII, 1973

Strain	Black-ville, S.C.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.	Beaumont, Tex.	Stone-ville, Miss.
Hutton	2.0	1.5	1.0	2.0	1.0	2.0	2.0
Cobb	1.5	1.0	1.0	2.0	1.0	2.0	2.5
Co69-117	1.5	1.5	1.0	3.0	1.0	3.0	2.0
Co71-221	1.0	1.5	1.0	4.0	1.0	2.0	2.0
Co71-222	1.5	1.5	1.5	2.0	1.0	2.0	2.0
Co71-233	1.0	2.0	1.0	2.0	1.0	1.0	2.0
Co71-241	1.0	2.0	1.0	2.0	1.0	2.0	2.0
Co71-242	1.0	1.5	1.5	2.0	1.0	2.0	2.0
Co71-243	2.0	1.5	1.5	4.0	2.0	2.0	2.5
Co72-337	1.0	2.0	2.0	2.0	1.0	2.0	2.5
F68-2507	3.0	2.5	1.0	2.0	1.0	3.0	2.0
F69-2014	2.0	2.5	1.0	4.0	1.0	3.0	2.0
F69-4435	2.5	2.0	1.5	3.0	2.0	2.0	2.0
F70-1119	1.5	2.0	1.5	4.0	1.0	2.0	2.0
F70-2207	1.5	1.0	1.0	2.0	1.0	2.0	2.0
F70-2472	1.5	2.5	1.5	4.0	2.0	2.0	2.0
F70-3215	2.0	1.5	1.5	4.0	1.0	2.0	2.0
F70-3251	2.5	1.5	1.0	4.0	1.0	2.0	2.0
F70-3260	1.0	1.5	1.0	3.0	1.0	2.0	2.0
F70-3324	-	-	-	4.0	1.0	4.0	2.5
F70-3336	-	-	1.0	3.0	2.0	3.0	2.0
F70-3352	-	-	-	3.0	1.0	5.0	3.0
F70-3371	-	-	-	3.0	1.0	3.0	2.5
F70-3374	-	-	1.0	3.0	1.0	3.0	2.0
F70-3380	-	-	1.0	2.0	1.0	2.0	2.0
F70-3414	1.5	1.5	1.0	4.0	2.0	2.0	2.0
F70-3422	1.5	1.5	1.0	3.0	1.0	3.0	2.0
Ga70-77	2.0	1.5	1.5	2.0	2.0	2.0	2.0
Ga70-99	2.0	2.0	1.0	4.0	2.0	2.0	2.0
Ga70-411	1.5	1.5	1.5	2.0	2.0	2.0	2.0
La68-26-70	1.0	2.5	1.5	2.0	1.0	2.0	2.0
La68-27-43	1.5	1.5	1.0	3.0	2.0	3.0	2.0
La68-29-7	2.0	2.0	2.0	3.0	2.0	3.0	3.0
Ts72-5	1.5	1.5	1.5	3.0	2.0	2.0	2.0
Ts72-6	1.5	1.0	1.0	2.0	2.0	2.0	2.0
Ts72-7	2.0	3.5	1.5	3.0	2.0	4.0	2.0