U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

THE UNIFORM SOYBEAN TESTS

SOUTHERN STATES

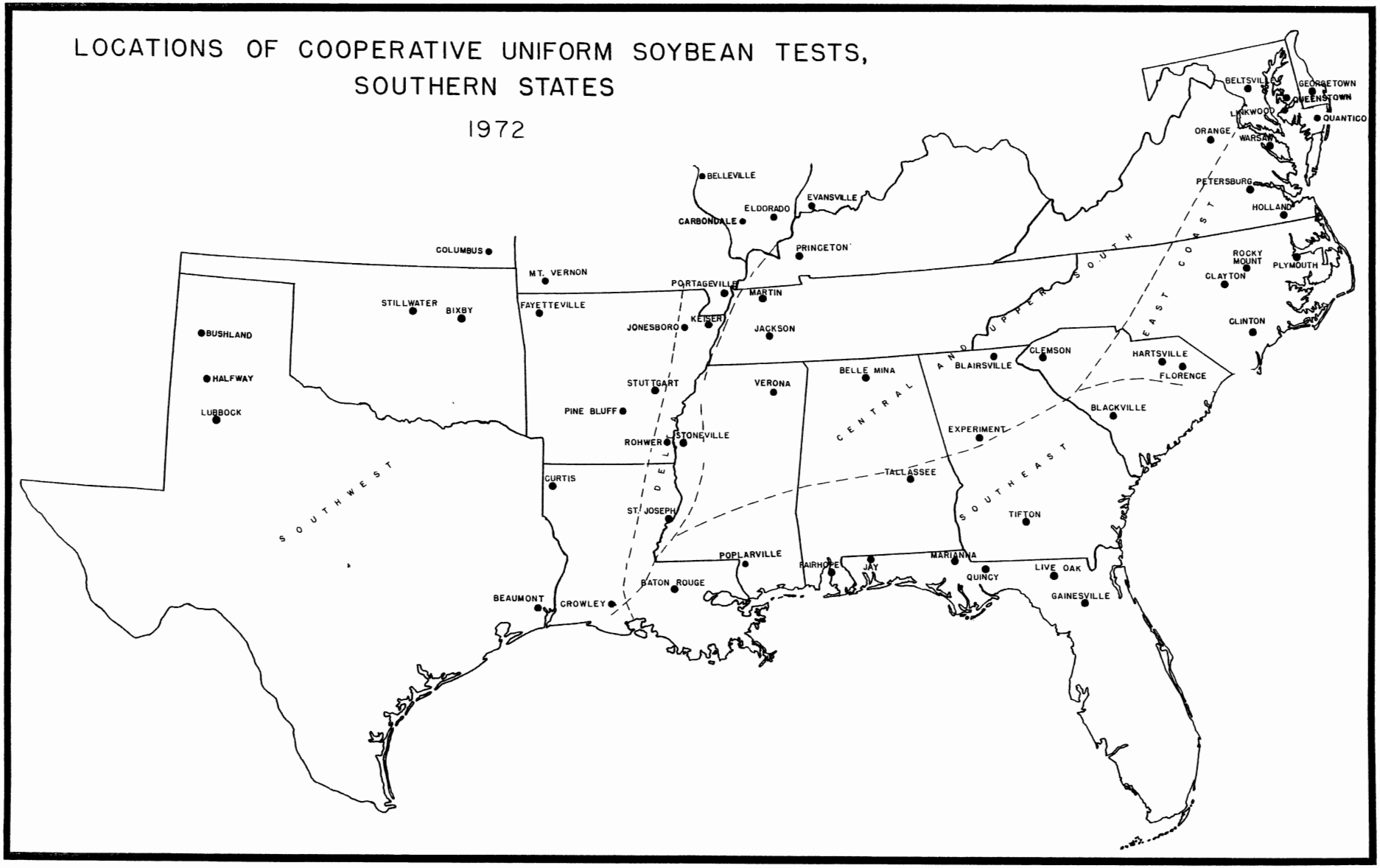
1972

RSLM 251

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
COOPERATING WITH
STATE AGRICULTURAL EXPERIMENT STATIONS

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES

1972



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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 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, Hill, Dare, D64-4636, Lee 68, Bragg, Hampton 266A, and Hardee. At Stoneville, Mississippi, where all maturity classes will mature, the approximate maturity dates of these varieties, when planted during the first half of May, are: Kent, September 8; Hill, September 20; Dare, October 1; D64-4636, October 6; Lee 68, October 16; Bragg, October 22; Hampton 266A, November 1; 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 identified where each strain was selected:

Co - Coker's Pedigreed Seed Co., Hartsville, South Carolina
D - Delta Branch Experiment Station and Agricultural Research Service, U.S. Department of Agriculture
F - Florida Agricultural Experiment Station and Agricultural Research Service, U.S. Department of Agriculture
Ga - Georgia Agricultural Experiment Station
L - Illinois Agricultural Experiment Station and Agricultural Research Service, U.S. Department of Agriculture
La - Louisiana Agricultural Experiment Station
Md - Maryland Agricultural Experiment Sation and Agricultural Research Service, U.S. Department of Agriculture
N - North Carolina Agricultural Experiment Station and Agricultural Research Service, U.S. Department of Agriculture
R - Arkansas Agricultural Experiment Station
S - Missouri Agricultural Experiment Station and Agricultural Research Service, U.S. Department of Agriculture
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	Yield-adapted variety[2]
East Coast											
Queenstown, Md.	1	1				Mattapex silt loam	H	H	5.7	0-75-150	47.9 - E
Linkwood, Md.	1	1*				Sassafras sandy loam	H	H	6.0	0-45-90	42.8 - E
Quantico, Md.	1	1				Downer sandy loam	H	M	5.6	50-100-100	43.7 - A
Georgetown, Del.	1	1*				Norfolk loamy sand	VH	M	6.5	40-40-40	46.1 - E
Warsaw, Va.	1	1*	1			Sassafras sandy loam	M	M	5.9	0-30-60	42.9 - E
Petersburg, Va.		1	1*			Marlboro f. sandy loam	H	M	6.0	0-0-0	30.1 - E
Holland, Va.		1	1	1		Bertie L.F.S.	VH	M+	5.7	0-0-0	57.5 - E
Plymouth, N.C.	1	1*	1*	1		Bladen f. sandy loam	H	H	6.2	0-40-80	47.3 - I
Clinton, N.C.			1	1*	1	Norfolk sandy loam				0-40-80	57.5 - L
Clayton, N.C.			1	1		Norfolk sandy loam	H	M	5.9	0-40-80	42.1 - L
Florence, S.C.			1	1	1	Marlboro sandy loam				0-0-0	50.5 - J
Hartsville, S.C.(A)			1	1	1	Norfolk sandy loam				18-54-108	33.8 - N
Hartsville, S.C.(B)					1	Dunbar sandy loam				18-54-108	30.2 - M
Southeast											
Blackville, S.C.(A)				1*	1	Freemanville loamy sand	M	M	6.0	0-27-54	16.9 - K
Blackville, S.C.(B)					1*	Freemanville loamy sand	M	M	6.0	0-27-54	18.4 - N
Tifton, Ga.			1	1	1	Tifton loamy sand	H	H	6.1	0-40-80	60.7 - H
Tallassee, Ala.				1*	1	Wickham f. sandy loam	VH	M	5.8	0-42-42	21.2 - K
Live Oak, Fla.				1*	1*	Klej fine sand	H	M	6.8	0-50-100	31.8 - K
Gainesville, Fla.				1	1*	Arredonda fine sand	H	H	6.8	0-40-80	34.6 - K
Marianna, Fla.				1	1	Red bay F.S.L.				25-50-75	35.3 - M
Quincy, Fla.			1	1	1*	Norfolk L.F.S.	H	H	5.5	5-50-75	27.1 - K
Jay, Fla.			1*	1*	1*	Tifton f. sandy loam	H	H		0-128-64	45.9 - K
Fairhope, Ala.			1	1	1	Malbis F.S.L.	H	H	6.4	0-56-56	44.6 - I
Baton Rouge, La.			1	1	1*	Olivier silt loam	L	L	6.0	0-40-40	45.8 - I
Poplarville, Miss.				1	1					0-80-80	18.2 - K
Upper & Central South											
Orange, Va.	1	1				Starr sandy loam	M	M+	6.6	0-42-42	46.4 - A
Blairsville, Ga.	1	1				Hayesville clay loam	M	M	6.2	0-70-140	47.4 - A
Belleville, Ill.	1					Ebbert silt loam	M	M	6.0	0-0-0	41.9 - A
Eldorado, Ill.	1					Harco silt loam	H	VH	6.5	30-90-120	47.7 - A
Carbondale, Ill.	1					Weir silt loam	H	H	6.5	0-75-145	37.9 - A
Princeton, Ky.	1	1				Crider silt loam	H	L	7.1	0-0-0	55.6 - E

Martin, Tenn.	1	1				Collins silt loam	H	H	6.6	0-60-60	61.8 - F
Jackson, Tenn.		1	1			Grenada silt loam	M	H	7.1	0-52-52	31.8 - F
Belle Mina, Ala.		1	1*			Humphrey sandy loam				0-40-40	52.2 - E
Verona, Miss.		1	1			Leaper silt loam				0-80-80	41.6 - F
Experiment, Ga.		1	1	1	1	Davidson sandy clay loam	M	H	6.1	0-50-100	48.3 - H
Clemson, S.C.				1		Cecil sandy loam	M	M	6.8	0-56-56	25.7 - L
Delta											
Evansville, Ind.	1					Montgomery silty clay	M	H	5.5	22-70-130	43.7 - A
Portageville,Mo.(A)	1	1*	1*			Tiptonville silt loam	VH	M	4.8	0-0-0	49.1 - F
Portageville,Mo.(B)	1	1	1			Sharkey clay	VH	VH	5.1	0-0-0	35.4 - F
Keiser, Ark.	1	1*	1*			Sharkey clay	H	H	6.0	0-0-0	39.0 - J
Jonesboro, Ark.		1	1			Collins silt loam				16-48-48	26.7 - F
Stoneville,Miss.(A)		1	1*	1*		Bosket f. sandy loam	M	M	6.7	0-0-0	59.2 - F
Stoneville,Miss.(B)	1	1*	1*	1*	1*	Sharkey clay	M	H	6.4	0-0-0	45.1 - I
Rohwer, Ark.			1	1		Perry clay	M	H	7.2	0-0-0	36.9 - J
St. Joseph, La.		1	1	1		Commerce silt loam	H	M	5.9	0-25-25	46.5 - K
West											
Columbus, Kan.	1					Cherokee silt loam				20-50-40	25.8 - B
Mt. Vernon, Mo.	1	1				Huntington silt loam					57.4 - F
Pine Bluff, Ark.			1	1		Calloway silt loam				0-20-20	50.7 - H
Stuttgart, Ark.		1	1	1		Crowley silt loam	VL	L	6.3	0-30-45	46.7 - H
Curtis, La.		1	1	1	1	Yahola very f. sandy loam				0-0-0	43.2 - F
Bixby, Okla.	1	1	1			Reinoch silt loam	VH	VH	6.1	0-0-0	39.9 - F
Halfway, Texas	1	1	1			Pullman clay loam	M	VH	8.2	0-0-0	40.7 - G
Lubbock, Texas	1	1	1			Amarillo loam	M-	VH	8.1	0-0-0	60.7 - E
Beaumont, Texas			1	1*	1*	Morrey silt loam	VL	M	6.7	0-40-40	54.3 - L
Crowley, La.			1	1	1	Crowley silt loam	L	L	5.9	0-60-30	37.5 - I

[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 = Dare; E = Essex; F = Forrest; G = Mack; 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 comparison

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 midsection 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 moderately, 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, Hill; 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.

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 seed coat 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

1972

	Variety or strain	Parentage	Generation composited
1.	Kent	Lincoln x Ogden	F_7
2.	Columbus	C1069 x Clark	F_8
3.	D66-5566	D49-2491(4) x Hawkeye	F_8
4.	D67-3297	Hill(2) x PI 171,450	F_5
5.	S63-5328S	Lee x Scott	F_6
6.	D68-4466	D66-5566(2) x PI 171,450	F_5
7.	L66L-310	Clark 63 x L57-9819	F_5
8.	D69-3871	D63-6094 x D62-6289	F_5
9.	D69-3955	D63-6094 x D62-6289	F_5
10.	D69-4073	D63-6094 x D62-6289	F_5
11.	S65-3339	PI 229,332 x Bethel	F_5
12.	V68-1242	PI 80837 x V63-76	F_5

Background of strains used as parents:

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

D49-2491 is a sister line of Lee.

PI 171,450 is a late-flowering strain of Group III maturity. It is considered a "summer type" at the 34° latitude level in Japan.

L57-9819 is a selection from Hawkeye x Lee.

D63-6094 is a phytophthora-rot-resistant line selected from Hill(4) x PI 171,442.

D62-6289 is a selection from Hill x Sioux.

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

Twenty-four IV-S nurseries were grown. Results of 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, 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 East Coast and Upper and Central regions.

The variety Columbus, recently released in Kansas, had been tested in northern group IV but was included in IV-S for the first time. Mean yield was nearly similar to that for Kent in most areas, although yield was significantly lower than for Kent at Orange, Virginia, and Carbondale, Illinois. Columbus is superior to Kent in shatter resistance.

D66-5566 is quite short but yields well. In the 1971 report, 3-year data were summarized for Eldorado and Carbondale, Illinois; Henderson, Kentucky; Evansville, Indiana; and Columbus, Kansas, to show that D66-5566 has produced superior seed yields with better seed quality than Kent. The data for 1972 again show superior seed quality. D68-4466, selected to give later flowering than D66-5566, averages 9 inches taller but does not yield as well.

D67-3297 is another determinate growth type strain which has been grown 3 years. Its average yield is slightly greater than for Kent and seed quality and shatter resistance are superior at Stoneville. D67-3297 flowers 18 days later than Kent. Average maturity is 3 days later. Three-year average yields for S63-5328S are also above the yield for Kent in all but the Upper and Central South. L66L-310 has yielded above Kent only in the Delta, perhaps largely because of resistance to phytophthora rot.

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

Table 1. - General summary of performance for the strains in Uniform Group IV-S, 1972

	Kent	Columbus	D65-5566	D67-3297	S63-5328S	D68-446
Seed Yield - 1972						
East Coast	38.9	38.4	36.9	39.4	40.0	34.6-
Upper & Central South	45.1	40.3-	41.1-	43.9	46.4	37.9-
Delta	40.2	43.0	42.0	44.9	46.1	41.7
West	36.3	37.7	32.6	34.6	34.0	32.1
- 1971-72						
East Coast	39.9		37.6	41.3	40.7	35.1
Upper & Central South	49.5		43.4	45.3	47.2	40.3
Delta	36.5		37.3	40.1	41.2	36.9
West	35.4		34.7	35.1	35.1	32.0
- 1970-71						
East Coast	38.3		37.0	39.7	39.4	
Upper & Central South	48.7		45.1	45.9	47.2	
Delta	34.6		35.8	38.1	38.4	
West	35.9		35.9	37.4	35.8	
Oil Content - 1972	22.8	22.0-	22.7	21.2-	22.7	19.3-
- 1971-72	22.4		22.3	21.1	22.5	19.3
- 1970-72	22.4		22.2	21.1	22.5	
Protein Content - 1972	40.4	41.2+	40.7	39.5-	38.6-	42.7+
- 1971-72	40.5		41.0	39.7	38.8	42.8
- 1970-72	40.5		41.2	39.6	38.7	
Seed size	18.0	15.8-	15.2-	13.8-	15.0-	14.0-
Maturity index	10-1	+3	0	+3	+3	+3
Seed quality	2.8	2.3	1.8	2.0	2.3	2.0
Height	34	38	23	31	38	32
Shattering	4.0	1.0	1.0	1.0	2.0	2.0
Bacterial pustule	S	S	R	R	R	R
Phytophthora rot	2.0	2.0	2.0	1.0	2.0	1.0
Purple stain (%)	14.0	2.0	1.5	1.0	8.5	1.5
Mottled seed (%)	3.3	13.0	13.3	23.7	2.3	29.7
Flower color	P	P	P	W	P	P
Pubescence color	T	T	T	T	G	T
Pod wall color	Br	Br	T	T	Br	T
Growth type	I	I	D	D	I	D

Table 1. - (continued)

	L66L-310	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242
Seed Yield - 1972						
East Coast	36.9	35.3-	35.1-	34.2-	37.2	39.4
Upper & Central South	40.3-	38.9-	38.5-	35.5-	42.9-	47.0
Delta	42.7	39.5	41.6	42.1	42.6	40.6
West	34.4	33.6	32.0	31.3	33.8	32.4
- 1971-72						
East Coast	38.3					
Upper & Centeral South	42.7					
Delta	39.5					
West	34.9					
- 1970-72						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1972	22.4	21.4-	21.2-	19.1-	22.4	22.2-
- 1971-72	22.2					
- 1970-72						
Protein Content - 1972	41.1	40.1	39.7	42.6+	39.5-	40.6
- 1971-72	41.3					
- 1970-72						
Seed size	15.6-	14.4-	12.9-	13.2-	16.3-	20.8+
Maturity index	-3	+4	+4	+3	+6	+4
Seed quality	2.5	1.7	1.7	1.8	2.1	1.8
Height	38	34	32	33	37	26
Shattering	2.0	1.0	1.0	3.0	1.5	1.0
Bacterial pustule	R	R	R	R	S	S
Phytophthora rot	1.0	1.0	1.0	1.0	2.0	2.0
Purple stain (%)	3.0	0.5	0.6	1.5	4.0	5.0
Mottled seed (%)	9.0	0.0	0.0	0.3	5.0	0.0
Flower color	P	W	W	W	W	P
Pubescence color	T	T	T	T	G	G
Pod wall color	T	T	T	Br	Br	T
Growth type	I	D	D	D	I	I

Table 2. - Seed yield, in bushels per acre, for the strains in Uniform Group IV-S 1972

Location	Kent	Columbus	D66-5566	D67-3297	S63-5328S	D68-4466	L66[illegible] 31
East Coast							
Queenstown, Md.(A)	43.7	42.4	39.4	44.0	37.2-	38.1	37.[illegible]
Queenstown, Md.(B)	35.9	35.4	33.2	30.0	29.7	26.4-	33.[illegible]
Linkwood, Md.	42.3	41.3	40.9	43.2	41.9	35.5-	42.[illegible]
Quantico, Md.	29.2	25.1	31.7	29.0	33.6+	29.3	26.[illegible]
Georgetown, Del.	40.6	41.5	42.0	42.0	48.2	39.6	36.[illegible]
Warsaw, Va.	41.0	39.7	40.1	40.0	40.6	35.5-	38.[illegible]
Plymouth, N.C.	39.7	43.2	34.8	47.6+	48.8+	37.9	44.[illegible]
Mean	38.9	38.4	36.9	39.4	40.0	34.6-	36.[illegible]
Upper and Central South							
Orange, Va.	46.4	33.3-	30.8-	34.5-	41.1	28.8-	36.[illegible]
Blairsville, Ga.	47.4	46.9	40.4	47.1	53.2	37.5-	41.[illegible]
Belleville, Ill.	41.9	42.2	45.8	43.0	43.0	42.1	41.[illegible]
Eldorado, Ill.	47.7	45.8	49.8	49.1	49.1	45.1	38.[illegible]
Carbondale, Ill.	37.9	29.2-	39.7	40.0	41.7	34.0	38.[illegible]
Princeton, Ky.	49.4	44.1-	39.8-	49.6	50.3	39.6-	44.[illegible]
Mean	45.1	40.3-	41.1-	43.9	46.4	37.9-	40.[illegible]
Delta							
Evansville, Ind.	43.7	40.3	43.7	48.9	50.5+	39.5	43.[illegible]
Portageville,Mo.(A)	33.2	44.2+	45.1+	45.6+	50.4+	40.3	45.[illegible]
Portageville,Mo.(B)	15.0	19.9+	25.8+	23.2+	20.3+	22.8+	23.[illegible]
Martin, Tenn.	52.9	59.2+	57.7	50.8	58.6+	51.1	49.[illegible]
Keiser, Ark.	34.6	30.9	31.5	35.5	33.5	31.4	34.[illegible]
Stoneville,Miss.(B)	38.6	37.2	29.9-	41.5	39.1	40.4	40.[illegible]
Mean	40.2	43.0	42.0	44.9	46.1	41.7	42.[illegible]
West							
Columbus, Kan.	22.0	25.8	25.1	27.6	29.6	26.8	22.[illegible]
Mt. Vernon, Mo.	43.3	47.3	44.8	46.9	49.4	42.8	42.[illegible]
Bixby, Okla.	27.1	24.0	26.2	29.3	29.3	28.2	28.[illegible]
Halfway, Texas	39.4	41.7	24.2-	29.9-	24.8-	27.0-	35.[illegible]
Lubbock, Texas	56.8	59.3	54.8	51.5-	52.3	46.5-	51.[illegible]
Mean	36.3	37.7	32.6	34.6	34.0	32.1	34.[illegible]

(+) - 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	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242	L.S.D. (.05)	C. V.
			East Coast				
Queenstown, Md.(A)	41.1	35.1-	35.5-	39.1	44.0	6.4	10%
Queenstown, Md.(B)	27.5-	29.4	26.8-	26.8-	35.7	7.1	14%
Linkwood, Md.	37.5-	39.6	35.4-	40.9	41.1	4.4	6%
Quantico, Md.	25.9	20.1-	24.9-	26.2	35.6+	4.3	11%
Georgetown, Del.	38.7	41.8	40.5	37.7	43.3	N.S.	9%
Warsaw, Va.	33.9-	35.4-	35.0-	40.4	39.1	3.3	5%
Plymouth, N.C.	42.8	44.3	44.2	49.7	36.8	7.8	11%
Mean	35.3-	35.1-	34.2-	37.2	39.4	3.3	
			Upper and Central South				
Orange, Va.	31.5-	29.0-	25.8-	40.1	36.3-	7.3	13%
Blairsville, Ga.	40.0	36.4-	34.1-	51.9	50.8	9.5	13%
Belleville, Ill.	37.5	39.1	35.2-	39.8	46.5	5.1	7%
Eldorado, Ill.	46.3	45.7	42.6-	44.2	48.7	4.4	6%
Carbondale, Ill.	32.7	36.6	35.3	34.9	48.5+	6.3	10%
Princeton, Ky.	45.0	43.9-	39.8-	46.7	51.3	5.1	7%
Mean	38.9-	38.5-	35.5-	42.9-	47.0	2.2	
			Delta				
Evansville, Ind.	40.8	43.6	39.1	43.0	48.0	6.0	8%
Portageville, Mo.(A)	40.8	41.2	44.6+	38.7	41.1	10.3	17%
Portageville, Mo.(B)	21.9+	23.8+	19.8+	20.9+	20.3+	4.2	14%
Martin, Tenn.	44.8-	49.1	48.8	55.4	53.4	5.5	6%
Keiser, Ark.	32.8	30.2	29.8	32.7	33.4	N.S.	9%
Stoneville, Miss.(B)	44.2	40.7	44.1	46.4+	23.3-	6.0	9%
Mean	39.5	41.6	42.1	42.6	40.6	N.S.	
			West				
Columbus, Kan.	23.2	26.5	26.9	22.4	26.6	N.S.	17%
Mt. Vernon, Mo.	44.4	44.1	38.6	47.4	40.2	7.2	11%
Bixby, Okla.	23.9	25.2	23.4	24.6	28.3	N.S.	19%
Halfway, Texas	31.8	24.8-	25.4-	37.8	27.3-	8.9	18%
Lubbock, Texas	55.5	51.5-	49.6-	50.4-	47.5-	4.7	5%
Mean	33.6	32.0	31.3	33.8	32.4	N.S.	

Table 3. - Chemical composition and seed size for the strains in Uniform Group, 1972

Location	Kent	Columbus	D66-5566	D67-3297	S63-5328S	D68-4466
			Oil Percentage			
Linkwood, Md.	22.9	21.9	22.2	21.1	21.9	18.5
Warsaw, Va.	23.2	22.7	23.3	21.3	22.9	19.9
Blairsville, Ga.	22.1	20.6	21.8	19.0	21.9	18.6
Carbondale, Ill.	21.8	21.0	21.4	20.5	22.0	18.0
Evansville, Ind.	22.9	22.1	22.4	20.9	22.9	19.5
Portageville, Mo.(A)	24.6	21.8	23.9	22.6	23.5	20.5
Stoneville, Miss.(B)	24.1	25.1	24.2	23.6	25.1	20.0
Bixby, Okla.	21.5	21.9	22.8	21.3	22.5	19.9
Halfway, Texas	22.0	21.1	22.5	20.4	22.0	18.8
Mean	22.8	22.0-	22.7	21.2-	22.7	19.3-
			Protein Percentage			
Linkwood, Md.	40.4	42.6	41.6	40.1	39.9	44.7
Warsaw, Va.	39.5	39.5	38.0	37.4	37.1	40.5
Blairsville, Ga.	41.5	43.0	41.8	41.6	38.3	43.4
Carbondale, Ill.	40.8	42.8	42.9	42.2	40.4	43.8
Evansville, Ind.	40.8	41.4	40.3	38.6	38.5	41.9
Portageville, Mo.(A)	37.7	40.7	39.2	36.7	37.1	40.3
Stoneville, Miss.(B)	38.5	37.4	39.7	37.0	36.1	41.6
Bixby, Okla.	42.3	41.2	41.4	41.5	39.9	44.5
Halfway, Texas	41.7	42.3	41.8	40.2	39.9	43.8
Mean	40.4	41.2+	40.7	39.5-	38.6-	42.7+
			Grams per 100 Seeds			
Linkwood, Md.	21.1	19.2	16.7	15.7	16.5	17.2
Warsaw, Va.	18.5	16.7	14.9	14.0	15.9	14.0
Blairsville, Ga.	19.0	16.0	15.0	12.0	17.0	13.0
Carbondale, Ill.	15.1	13.3	16.0	13.8	13.4	13.0
Evansville, Ind.	16.3	14.3	12.3	11.6	13.6	11.6
Portageville, Mo.(A)	15.3	13.7	15.0	12.6	13.8	12.4
Stoneville, Miss.(B)	16.2	13.3	14.6	12.6	13.1	13.1
Bixby, Okla.	18.6	16.1	15.4	15.9	16.9	17.0
Halfway, Texas	22.2	19.4	17.0	15.9	15.0	14.7
Mean	18.0	15.8-	15.2-	13.8-	15.0-	14.0-

Table 3. - (continued)

Location	L66L-310	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	23.0	21.0	21.4	20.0	22.2	21.6	
Warsaw, Va.	23.3	22.7	22.1	20.1	22.8	22.1	
Blairsville, Ga.	21.5	18.8	20.3	17.4	21.6	21.3	
Carbondale, Ill.	21.4	21.0	20.5	18.2	22.1	21.5	
Evansville, Ind.	22.0	21.5	20.9	19.1	22.2	23.1	
Portageville, Mo.(A)	23.5	21.3	20.8	18.3	22.8	22.0	
Stoneville, Miss.(B)	24.2	23.6	23.0	20.5	23.6	24.4	
Bixby, Okla.	21.3	21.3	21.0	19.9	22.4	22.5	
Halfway, Texas	21.3	21.3	20.8	18.8	21.5	21.4	
Mean	22.4	21.4-	21.2-	19.1-	22.4	22.2-	0.5
			Protein Percentage				
Linkwood, Md.	41.9	41.5	40.8	43.1	39.1	41.9	
Warsaw, Va.	38.5	37.0	37.2	39.5	37.6	38.6	
Blairsville, Ga.	42.3	41.8	39.9	43.5	39.7	41.0	
Carbondale, Ill.	43.7	41.6	41.4	44.4	41.8	42.3	
Evansville, Ind.	41.4	37.8	38.7	41.1	40.2	39.3	
Portageville, Mo.(A)	39.2	40.2	38.9	43.8	38.1	39.1	
Stoneville, Miss.(B)	38.3	37.8	37.7	40.2	36.7	39.5	
Bixby, Okla.	43.3	42.5	42.9	43.7	41.4	42.0	
Halfway, Texas	41.5	40.6	40.1	44.0	40.5	41.4	
Mean	41.1	40.1	39.7	42.6+	39.5-	40.6	0.8
			Grams per 100 Seeds				
Linkwood, Md.	18.6	17.5	15.5	16.7	19.7	22.5	
Warsaw, Va.	15.7	14.3	12.8	13.1	18.1	21.2	
Blairsville, Ga.	18.0	13.0	11.0	11.0	16.0	20.0	
Carbondale, Ill.	14.3	14.0	12.1	13.2	15.3	20.8	
Evansville, Ind.	14.2	11.4	10.6	10.9	14.5	17.3	
Portageville, Mo.(A)	14.2	13.2	11.8	11.9	12.0	18.3	
Stoneville, Miss.(B)	15.0	13.7	11.1	12.0	14.0	18.4	
Bixby, Okla.	16.6	16.6	16.6	14.9	16.7	22.3	
Halfway, Texas	14.0	16.2	14.6	14.8	20.1	26.1	
Mean	15.6-	14.4-	12.9-	13.2-	16.3-	20.8+	1.1

Table 4. - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV-S, 1972

Location	Date planted	Kent matured	Columbus	D66-5566	D67-3297	S63-5328S	D68-4466
			East Coast				
Queenstown, Md.(A)	5-26	10-7	+3	-4	+1	0	+1
Queenstown, Md.(B)	6-15	10-17	+2	0	+1	0	+1
Linkwood, Md.	6-9	10-9	+6	-3	+3	+1	+1
Quantico, Md.	7-10	10-25	+4	0	+5	-1	+2
Georgetown, Del.	6-2	10-9	+10	0	+8	+9	+9
Warsaw, Va.	5-30	10-9	+3	-6	-1	0	-4
Plymouth, N.C.	5-17	9-28	-1	-6	-1	0	-1
Mean		10-10	+4	-3	+2	+1	+1
			Upper and Central South				
Orange, Va.	6-5	10-17	0	0	+4	0	+2
Blairsville, Ga.	5-25	9-24	+6	+1	+9	+4	+7
Belleville, Ill.	5-11	10-4	+2	-1	+4	+3	+4
Eldorado, Ill.	5-10	9-28	+8	-4	+4	+3	+3
Carbondale, Ill.	5-12	9-23	+4	+2	+8	+5	+7
Princeton, Ky.	5-18	9-23	+2	-3	+2	+4	+3
Mean		9-30	+4	-1	+5	+3	+4
			Delta				
Evansville, Ind.	5-25	10-6	0	-6	+2	+2	-2
Portageville, Mo.(A)	5-10	9-12	+6	+6	+6	+9	+7
Portageville, Mo.(B)	5-11	9-17	0	-2	0	-2	-1
Martin, Tenn.	6-2	9-26	+4	0	0	+12	+8
Keiser, Ark.	5-17	9-14	+3	-2	+2	+2	+4
Stoneville, Miss.(B)	5-23	9-16	+5	-2	+2	+3	0
Mean		9-20	+3	-1	+2	+4	+3
			West				
Columbus, Kan.	5-31	10-16	+6	+3	+1	+11	+4
Bixby, Okla.	6-2	9-30	-1	+1	-1	+1	+1
Halfway, Texas	5-29	9-25	0	+5	+5	+5	+5
Lubbock, Texas	5-20	9-25	+5	+2	+7	-3	+7
Mean		10-2	+3	+3	+3	+4	+4

Table 4. - (continued)

Location	L66L-310	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242
			East Coast			
Queenstown, Md.(A)	-4	+3	+2	+1	+3	+6
Queenstown, Md.(B)	0	0	+1	+1	+1	+1
Linkwood, Md.	-7	+6	+7	+4	+4	+6
Quantico, Md.	-1	+6	+5	+6	+4	0
Georgetown, Del.	-3	+11	+8	+10	+11	+11
Warsaw, Va.	-8	+1	+1	0	+3	+1
Plymouth, N.C.	-4	-2	-1	-2	+10	0
Mean	-4	+4	+3	+3	+5	+4
			Upper and Central South			
Orange, Va.	-4	+4	+2	+4	+5	-4
Blairsville, Ga.	-8	+8	+9	+5	+6	+2
Belleville, Ill.	-9	+3	+3	+2	+7	+6
Eldorado, Ill.	-7	+6	+7	+6	+8	+7
Carbondale, Ill.	-6	+10	+10	+9	+15	+15
Princeton, Ky.	-3	+2	+5	+5	+4	+5
Mean	-6	+6	+6	+5	+8	+5
			Delta			
Evansville, Ind.	-10	+4	+3	+2	+6	-1
Portageville, Mo.(A)	+7	+5	+8	+9	+9	+9
Portageville, Mo.(B)	-1	0	-1	+1	+2	+1
Martin, Tenn.	+4	0	0	0	+8	+8
Keiser, Ark.	-1	+3	+2	0	+5	+5
Stoneville, Miss.(B)	+5	+2	+4	+2	+6	+7
Mean	0	+2	+3	+2	+6	+5
			West			
Columbus, Kan.	+3	+1	+1	0	+5	+7
Bixby, Okla.	0	-1	0	-1	+1	+1
Halfway, Texas	0	+5	+5	+5	+5	0
Lubbock, Texas	-7	+7	+8	+9	+7	+5
Mean	-1	+3	+4	+3	+5	+3

Table 5. - Plant height for the strains in Uniform Group IV-S, 1972

Location	Kent	Columbus	D66-5566	D67-3297	S63-5328S	D68-4466
		East Coast				
Queenstown, Md.(A)	34	36	21	36	39	40
Queenstown, Md.(B)	27	26	23	32	30	33
Linkwood, Md.	34	35	36	36	42	36
Quantico, Md.	25	27	19	27	24	26
Georgetown, Del.	34	38	21	31	38	31
Warsaw, Va.	37	38	21	33	43	31
Plymouth, N.C.	33	37	19	29	39	31
Mean	32	34	23	32	36	33
		Upper and Central South				
Orange, Va.	43	41	26	34	45	35
Blairsville, Ga.	38	39	30	36	44	36
Belleville, Ill.	44	49	25	35	48	37
Eldorado, Ill.	43	45	24	33	46	34
Carbondale, Ill.	40	45	27	35	50	39
Princeton, Ky.	41	48	22	33	48	34
Mean	42	45	26	34	47	36
		Delta				
Evansville, Ind.	39	41	28	34	43	36
Portageville, Mo.(A)	33	41	19	27	31	31
Portageville, Mo.(B)	23	26	15	23	24	20
Martin, Tenn.	43	41	28	32	44	26
Keiser, Ark.	35	43	21	30	36	32
Stoneville, Miss.(B)	34	39	18	25	37	27
Mean	35	39	22	29	36	29
		West				
Columbus, Kan.	24	25	18	25	26	27
Bixby, Okla.	34	38	27	33	39	36
Halfway, Texas	28	32	20	25	30	33
Lubbock, Texas	27	33	22	27	33	27
Mean	28	32	22	28	32	31

Table 5. - (continued)

Location	L66L-310	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242
			East Coast			
Queenstown, Md.(A)	36	37	36	38	34	33
Queenstown, Md.(B)	30	39	33	34	26	31
Linkwood, Md.	40	39	38	39	37	37
Quantico, Md.	24	34	28	31	27	22
Georgetown, Del.	39	35	33	37	34	30
Warsaw, Va.	41	37	34	37	40	22
Plymouth, N.C.	37	34	31	37	40	28
Mean	35	36	33	36	34	29
			Upper and Central South			
Orange, Va.	44	39	33	37	38	32
Blairsville, Ga.	38	36	36	37	42	32
Belleville, Ill.	47	37	34	32	47	30
Eldorado, Ill.	44	36	32	36	46	27
Carbondale, Ill.	45	39	35	32	49	31
Princeton, Ky.	44	35	35	37	46	27
Mean	44	37	34	35	45	30
			Delta			
Evansville, Ind.	43	40	34	33	40	29
Portageville, Mo.(A)	41	31	30	31	36	20
Portageville, Mo.(B)	27	23	22	23	27	20
Martin, Tenn.	43	38	34	33	42	27
Keiser, Ark.	44	28	29	30	40	23
Stoneville, Miss.(B)	41	29	30	30	41	17
Mean	40	32	30	30	38	23
			West			
Columbus, Kan.	29	26	27	27	25	20
Bixby, Okla.	41	38	33	35	35	29
Halfway, Texas	27	26	23	27	33	20
Lubbock, Texas	30	28	26	24	30	20
Mean	32	30	27	28	31	22

Table 6. - Lodging scores for the strains in Uniform Group IV-S, 1972

Location	Kent	Columbus	D66-5566	D67-3297	S63-5328S	D68-4466
			East Coast			
Queenstown, Md.(A)	1.3	2.5	1.7	3.7	1.5	2.5
Queenstown, Md.(B)	1.0	1.0	1.0	1.0	1.0	1.5
Linkwood, Md.	1.2	1.5	1.5	2.5	1.5	2.5
Quantico, Md.	1.0	1.5	1.0	2.0	1.0	2.2
Georgetown, Del.	2.0	2.2	2.0	2.2	2.0	2.7
Warsaw, Va.	1.5	2.6	1.0	1.7	1.8	1.7
Plymouth, N.C.	2.3	3.0	1.3	2.0	2.7	3.3
			Upper and Central South			
Orange, Va.	1.3	2.0	1.0	3.7	2.0	2.3
Blairsville, Ga.	1.0	2.0	1.0	3.0	1.0	3.0
Belleville, Ill.	1.4	1.8	3.1	3.7	2.4	3.5
Eldorado, Ill.	2.1	2.2	1.6	3.3	2.4	3.1
Carbondale, Ill.	2.0	3.7	2.7	4.0	2.7	3.3
Princeton, Ky.	1.0	2.3	1.0	1.0	1.3	1.0
			Delta			
Evansville, Ind.	1.8	3.0	2.5	2.8	2.0	3.5
Portageville, Mo.(A)	1.1	1.9	1.3	1.6	1.4	1.5
Portageville, Mo.(B)	1.0	1.0	1.0	1.1	1.0	1.0
Martin, Tenn.	2.0	3.0	2.0	5.0	3.0	4.0
Keiser, Ark.	1.7	3.0	1.0	1.7	2.3	3.0
Stoneville, Miss.(B)	2.0	2.0	1.7	2.0	2.0	2.3
			West			
Columbus, Kan.	1.5	1.3	1.8	2.2	1.5	1.8
Bixby, Okla.	2.0	1.0	1.0	1.3	1.0	1.3
Lubbock, Texas	2.5	2.0	3.5	3.5	2.0	4.0

Table 6. - (continued)

Location	L66L-310	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242
			East Coast			
Queenstown, Md.(A)	1.5	3.2	3.7	3.5	1.3	1.3
Queenstown, Md.(B)	1.0	1.2	1.5	1.2	1.0	1.0
Linkwood, Md.	1.7	2.2	2.8	2.7	1.5	1.7
Quantico, Md.	1.0	1.8	2.5	3.0	1.0	1.0
Georgetown, Del.	2.3	2.3	2.7	2.8	1.8	1.8
Warsaw, Va.	1.4	2.0	2.2	2.3	1.6	1.0
Plymouth, N.C.	2.3	2.3	2.3	3.0	3.0	2.0
			Upper and Central South			
Orange, Va.	2.0	3.7	2.3	3.0	1.7	1.0
Blairsville, Ga.	1.0	4.0	3.5	4.0	2.0	1.0
Belleville, Ill.	3.6	3.8	4.5	4.8	2.0	3.1
Eldorado, Ill.	2.3	3.7	3.6	3.4	2.6	1.3
Carbondale, Ill.	2.7	4.0	4.7	4.7	3.0	2.3
Princeton, Ky.	1.7	1.3	2.0	3.7	2.3	1.0
			Delta			
Evansville, Ind.	2.5	3.0	4.0	3.8	3.0	2.3
Portageville, Mo.(A)	1.8	1.4	1.5	2.1	1.6	1.0
Portageville, Mo.(B)	1.0	1.0	1.1	1.0	1.0	1.0
Martin, Tenn.	3.0	5.0	5.0	5.0	4.0	4.0
Keiser, Ark.	1.0	1.0	1.3	3.0	2.0	1.0
Stoneville, Miss.(B)	2.3	2.0	2.0	2.0	2.7	1.7
			West			
Columbus, Kan.	1.8	2.3	2.8	2.8	1.5	1.8
Bixby, Okla.	1.0	1.0	2.3	2.3	1.0	1.0
Lubbock, Texas	3.5	4.2	4.2	5.0	3.0	2.5

Table 7. - Seed quality scores for the strains in Uniform Group IV-S, 1972

Location	Kent	Columbus	D66-5566	D67-3297	D67-5328S	D68-4466
		East Coast				
Queenstown, Md.(A)	3.0	3.0	2.0	3.0	3.0	3.0
Queenstown, Md.(B)	2.0	1.0	1.0	1.0	1.0	1.0
Linkwood, Md.	3.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	1.0	1.0	1.0	1.0	1.0	1.0
Georgetown, Del.	2.0	2.0	1.8	2.2	2.3	2.0
Warsaw, Va.	2.8	1.8	1.6	1.3	2.0	1.8
Plymouth, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
		Upper and Central South				
Orange, Va.	2.3	1.0	1.5	2.0	2.2	1.2
Blairsville, Ga.	2.0	1.5	1.5	2.0	2.0	2.0
Belleville, Ill.	3.1	3.2	2.8	2.7	2.7	2.4
Eldorado, Ill.	3.0	4.3	3.2	3.3	3.9	3.5
Carbondale, Ill.	4.7	5.0	3.0	4.0	4.0	4.3
Princeton, Ky.	2.0	2.3	1.7	1.0	1.7	1.3
		Delta				
Evansville, Ind.	4.0	3.5	2.0	2.0	3.0	2.0
Portageville, Mo.(A)	2.9	1.0	1.5	2.1	1.5	1.0
Portageville, Mo.(B)	4.5	4.3	3.0	1.5	3.5	2.3
Martin, Tenn.	3.0	2.0	1.5	2.5	3.0	2.5
Keiser, Ark.	4.2	3.8	1.8	2.2	3.3	2.0
Stoneville, Miss.(B)	2.7	2.3	2.0	2.0	2.7	2.3
		West				
Columbus, Kan.	2.8	2.5	3.0	2.5	2.7	3.3
Mt. Vernon, Mo.	2.2	1.8	1.5	1.8	1.5	1.5
Bixby, Oka.	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	4.0	2.0	1.0	2.0	2.0	2.0

Table 7. - (continued)

Location	L66L-310	D69-3871	D69-3955	D69-4073	S65-3339	V68-1242
			East Coast			
Queenstown, Md.(A)	3.0	2.0	2.0	2.0	3.0	3.0
Queenstown, Md.(B)	2.0	1.0	1.0	1.0	1.0	1.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	1.0	1.0	1.0	1.0	1.0	1.0
Georgetown, Del.	2.2	1.8	2.0	2.0	1.8	1.5
Warsaw, Va.	1.7	1.0	1.0	1.2	1.7	1.7
Plymouth, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Orange, Va.	3.0	1.0	1.0	1.0	1.5	2.0
Blairsville, Ga.	2.0	1.5	2.0	2.0	2.0	1.5
Belleville, Ill.	2.7	1.8	1.4	2.3	3.2	2.8
Eldorado, Ill.	3.7	3.2	2.8	2.8	3.3	3.3
Carbondale, Ill.	5.0	2.0	3.0	3.0	3.7	1.7
Princeton, Ky.	2.7	1.7	1.7	2.0	2.3	1.0
			Delta			
Evansville, Ind.	3.0	1.5	2.0	1.5	3.0	2.0
Portageville, Mo.(A)	1.8	1.0	1.6	1.0	1.3	1.4
Portageville, Mo.(B)	4.0	1.1	1.5	1.1	1.4	1.4
Martin, Tenn.	3.0	1.5	2.0	2.0	3.0	3.0
Keiser, Ark.	3.2	3.0	2.3	3.0	3.2	3.2
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.3
			West			
Columbus, Kan.	3.3	2.8	2.5	2.3	2.7	2.0
Mt. Vernon, Mo.	2.0	1.7	1.2	1.3	1.8	-
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	2.0	2.0	1.5	2.0	3.0	2.0

UNIFORM GROUP V

1972

	Variety or strain	Parentage	Generation composited
1.	Hill	D632-15 x D49-2525	F_5
2.	Dare	Hill x D52-810	F_5
3.	Forrest(D68-128)	Dyer x Bragg	F_5
4.	Mack	Lee recurrent parent; resistant C.N. and P.R.	
5.	Essex (V66-180)	Lee x S5-7075	F_6
6.	V68-224	Lee x S5-7075	F_7
7.	V68-381	Lee x S5-7075	F_7
8.	D68-4641	D62-6289 x D60-9647	F_5
9.	R69-358	Semmes x R64-500	F_5
10.	R69-831	R60-66 x R64-500	F_4
11.	S67-80	PI 85559 x Kent	
12.	V68-920	York x Dare	

Background of strains used as parents:

D632-15 is a selection from Dunfield x Haberlandt, which was included in the Group V nursery for the years 1950 through 1953.

D49-2525 is a sister strain of Lee.

D52-810 is a selection from Roanoke x Ogden of Ogden type and maturity with yellow seed. It is a selection from N48-1101 which was included in the Uniform Group VI nurseries for the years 1951 through 1953.

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.

D62-6289 is a selection from Hill x Sioux.

D60-9647 is a high protein line selected from FC31745 x D49-2510, which was included in Uniform Group VI 1963-1965.

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

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

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 27 of the 30 locations. The combined analysis of variance for seed yield by production regions showed differences to be significant at the 5% level of confidence in all but the West.

A separate planting was made for root-knot nematode evaluation in west Florida. Mottled seed ratings were made at Orange, Virginia, and Halfway, Texas. Bacterial pustule, phytophthora rot, downy mildew, and shatter resistance ratings were made at Stoneville.

D68-128 was released as Forrest and V66-180 was released as Essex. These two strains along with Mack, which was released in 1971, give excellent performance. Essex is somewhat short in some areas, but yields well in all areas.

V68-224 and V68-381, strains having the same parentage as Essex, have been grown two years. Both yield well, but neither yields as well as Essex. V68-381 is 5 days later than Essex.

D68-4641 is of approximately the same maturity as Hill and has higher protein content of the seed. Seed yield was below that for Hill in the East and West. D68-4641 had high percentage of mottled seed at Orange, Virginia, and Halfway, Texas. R69-358 and R69-831 yielded well but were not superior to Mack. S67-80 yielded very well in the East. V68-920 yielded well in all areas but ranked above Essex only in the West.

Table 8. - General summary of performance for the strains in Uniform Group V, 1972

	Hill	Dare	Forrest	Mack	Essex	V68-224
Seed Yield - 1972						
East Coast	38.0	37.1	37.6	38.9	43.9+	41.4+
Upper & Central South	33.1	38.6+	38.0+	38.9+	45.7+	43.5+
Delta	38.0	41.0+	43.8+	41.2+	48.5+	42.2+
West	39.5	38.5	41.5	43.5	44.6	43.0
- 1971-72						
East Coast	39.0	38.9	42.3	41.4	47.8	43.8
Upper & Central South	36.7	41.3	42.5	41.5	48.3	45.9
Delta	33.3	38.0	40.1	37.0	43.2	38.4
West	41.6	40.5	43.3	43.3	45.2	43.9
- 1970-72						
East Coast	37.7	38.1	41.1	40.2	44.5	
Upper & Central South	38.8	43.1	45.3	42.9	49.3	
Delta	33.0	38.1	41.5	38.4	43.3	
West	39.8	40.5	41.1	43.0	44.4	
Oil Content - 1972	22.5	23.2+	22.0-	23.5+	22.2	22.2
- 1971-72	22.9	23.2	21.8	23.3	21.9	21.8
- 1970-72	23.0	23.3	21.9	23.2	21.9	
Protein Content - 1972	38.8	39.1	38.6	39.1	40.3+	40.0+
- 1971-72	38.5	38.9	38.7	39.4	40.6	40.4
- 1970-72	38.5	39.0	39.0	39.6	40.8	
Seed size	13.0	13.5	12.7	14.3+	13.6+	13.2
Seed quality	1.8	1.7	2.2	2.0	1.7	1.8
Maturity index	9-24	+7	+7	+5	+4	+4
Height	31	35	34	36	31	32
Bacterial pustule	R	R	R	R	R	R
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Downy mildew	1.3	1.0	1.3	1.7	1.3	2.7
Mottled seed (%)	18.0	3.5	4.5	3.5	0.0	8.0
Root-knot	2.5	4.0	1.0	5.0	5.0	4.5
Cyst nematodes (race 3)	S	S	R	R	S	S
Shatter resistance	1.0	1.0	1.0	1.0	1.0	1.0
Flower color	W	W	W	P	P	P
Pubescence color	T	G	T	T	G	T
Pod wall color	T	Br	T	T	T	T

Table 8. - (continued)

	V68-381	D68-4641	R69-358	R69-831	S67-80	V68-920
Seed Yield - 1972						
East Coast	39.3	34.4-	39.3	37.4	41.6+	41.5+
Upper & Central South	40.4+	37.3+	36.9+	35.9+	38.0+	42.1+
Delta	39.9	39.5	41.1+	42.2+	40.3	44.6+
West	45.6	36.4	41.1	41.5	40.7	47.4
- 1971-72						
East Coast	42.6					
Upper & Central South	43.9					
Delta	37.3					
West	45.8					
- 1970-72						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1972	22.1	20.2-	22.9	21.9-	22.9	21.8-
- 1971-72	21.8					
- 1970-72						
Protein Content - 1972	40.6+	44.4+	39.6-	38.9	39.7+	38.6
- 1971-72	40.7					
- 1970-72						
Seed size	14.6+	15.5+	14.1+	13.5	15.3+	15.0+
Seed quality	1.9	2.2	1.7	1.9	1.9	1.7
Maturity index	+8	+1	+4	+7	+3	+5
Height	33	35	34	37	32	34
Bacterial pustule	R	R	R	R	S	R
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Downy mildew	1.0	1.0	2.0	1.7	1.0	2.0
Mottled seed (%)	1.5	74.0	2.8	10.0	9.3	0.5
Root-knot	3.0	4.5	4.5	3.5	5.0	3.0
Cyst nematodes (race 3)	S	S	S	S	S	S
Shatter resistance	1.0	1.0	1.0	1.0	1.0	1.0
Flower color	P	W	P	W	P	S
Pubescence color	G	T	G	T	T	G
Pod wall color	T	Br	T	T	Br	T

Table 9. - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1972

Location	Hill	Dare	Forrest	Mack	Essex	V68-224	V68-381
East Coast							
Queenstown, Md.(A)	39.6	37.7	42.6	41.1	47.9+	44.9	42.5
Queenstown, Md.(B)	32.8	32.4	37.5	30.9	34.1	33.0	34.2
Linkwood, Md.	39.3	33.5-	30.5-	37.8	42.8+	41.4	35.9-
Quantico, Md.	17.4	19.0	9.6-	19.9	19.7	23.3+	20.9
Georgetown, Del.	44.3	36.1-	32.5-	38.7	46.1	44.0	38.2-
Warsaw, Va.	39.0	34.0-	37.1	40.0	42.9+	42.2+	39.5
Petersburg, Va.	20.5	25.9+	22.0	24.2	30.1+	20.7	25.7+
Holland, Va.	44.9	48.1	51.0	51.1	57.5	53.2	47.3
Plymouth, N.C.	43.4	49.3+	47.2	47.3	49.9+	51.9+	51.4+
Mean	38.0	37.1	37.6	38.9	43.9+	41.4+	39.3
Upper and Central South							
Orange, Va.	29.0	24.2-	20.8-	25.5	32.2	31.0	24.8
Blairsville, Ga.	26.4	30.0	27.3	29.2	34.5	35.3	35.7
Belle Mina, Ala.	26.8	33.0+	34.1+	38.0+	52.2+	43.0+	38.9+
Experiment, Ga.	28.6	38.6+	35.9+	37.4+	44.2+	35.0+	37.0+
Princeton, Ky.	40.7	42.9	50.8+	48.5+	55.6+	51.4+	50.0+
Martin, Tenn.	45.4	54.6+	61.8+	56.6+	58.6+	61.8+	52.9+
Jackson, Tenn.	35.7	39.0	31.8	32.4	46.5+	49.7+	42.2
Verona, Miss.	32.1	47.5+	41.6+	43.5+	41.7+	40.8+	41.2+
Mean	33.1	38.6+	38.0+	38.9+	45.7+	43.5+	40.4+
Delta							
Portageville, Mo.(A)	40.6	47.7+	49.1+	45.9	52.1+	48.1+	47.5+
Portageville, Mo.(B)	28.8	27.0	35.4+	32.8	29.9	26.1	29.4
Keiser, Ark.	32.3	32.5	36.5+	33.5	36.5+	37.3+	33.2
Jonesboro, Ark.	30.6	22.7	26.7	23.1	39.0	22.5	20.3
Stoneville, Miss.(A)	49.6	54.7	59.2+	55.0	63.7+	59.5+	53.0
Stoneville, Miss.(B)	39.9	50.1+	47.8+	52.5+	55.2+	46.7+	46.2+
St. Joseph, La.	44.2	52.4+	51.8+	45.8	63.0+	55.4+	49.8
Mean	38.0	41.0+	43.8+	41.2+	48.5+	42.2+	39.9
West							
Mt. Vernon, Mo.*	--	47.2	57.4	47.2	47.9	51.7	54.3
Stuttgart, Ark.	40.4	46.4+	45.5+	46.2+	47.4+	44.4	43.1
Curtis, La.	33.8	34.3	43.2	44.0	37.7	36.5	38.8
Bixby, Okla.	39.1	26.4-	39.9	27.6-	41.4	33.6	35.1
Halfway, Texas	27.2	34.0+	30.9	40.7+	35.9+	37.0+	50.7+
Lubbock, Texas	56.9	51.3	47.8	58.8	60.7	63.5	60.5
Mean	39.5	38.5	41.5	43.5	44.6	43.0	45.6

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

*Not included in mean

Table 9. - (continued)

Location	D68-4641	R69-358	R69-831	S67-80	V68-920	L.S.D. (.05)	C.V.
East Coast							
Queenstown, Md.(A)	33.5-	40.0	36.4	43.0	42.9	6.1	9%
Queenstown, Md.(B)	27.4	32.8	36.0	34.8	32.8	7.1	13%
Linkwood, Md.	35.1-	39.8	35.2-	39.8	41.0	3.0	5%
Quantico, Md.	21.9	12.9	18.2	20.5	24.8+	4.8	15%
Georgetown, Del.	40.0	38.2-	35.4-	43.7	42.3	5.9	9%
Warsaw, Va.	35.3-	38.0	37.4	38.4	41.3+	2.1	3%
Petersburg, Va.	24.6	28.7+	24.3	23.9	27.0+	5.0	12%
Holland, Va.	41.4	48.3	46.8	58.7	55.2	N.S.	13%
Plymouth, N.C.	38.0-	48.4+	47.8	50.7+	48.2+	4.6	6%
Mean	34.4-	39.3	37.4	41.6+	41.5+	2.8	
Upper and Central South							
Orange, Va.	30.6	20.0-	19.6-	25.3	28.0	4.4	10%
Blairsville, Ga.	38.7+	30.6	34.9	17.3	35.1	9.9	19%
Belle Mina, Ala.	33.4+	33.2+	32.9+	40.8+	41.5+	5.6	9%
Experiment, Ga.	29.2	36.5+	36.5+	35.7+	34.9+	5.5	9%
Princeton, Ky.	43.4	42.6	43.0	48.2+	51.5+	6.9	9%
Martin, Tenn.	50.3	51.1	50.3	51.1	58.9+	6.8	7%
Jackson, Tenn.	37.5	35.7	26.9	41.9	39.3	9.9	15%
Verona, Miss.	35.5	45.4+	42.7+	43.9+	47.7+	5.8	8%
Mean	37.3+	36.9+	35.9+	38.0+	42.1+	2.3	
Delta							
Portageville, Mo.(A)	43.3	45.3	46.0	53.6+	45.6	6.8	10%
Portageville, Mo.(B)	27.5	30.4	29.2	26.7	35.9+	4.2	10%
Keiser, Ark.	32.1	37.1+	36.7+	33.4	35.8	3.6	6%
Jonesboro, Ark.	28.9	24.9	21.4	23.5	31.4	N.S.	20%
Stoneville, Miss.(A)	48.4	52.8	55.4	48.7	60.1+	6.7	7%
Stoneville, Miss.(B)	42.0	47.8+	50.9+	48.0+	50.3+	5.0	6%
St. Joseph, La.	54.0+	49.6	55.9+	48.5	52.8+	6.6	8%
Mean	39.5	41.1+	42.2+	40.3	44.6+	2.8	
West							
Mt. Vernon, Mo.*	44.7	52.5	47.7	54.4	55.6	9.5	13%
Stuttgart, Ark.	42.2	47.1+	43.6	40.2	48.2+	5.0	7%
Curtis, La.	38.0	39.1	35.7	36.7	36.4	N.S.	13%
Bixby, Okla.	26.8-	26.5-	33.0	28.2-	35.2	8.1	15%
Halfway, Texas	29.7	41.9+	38.9+	40.4+	50.9+	6.1	9%
Lubbock, Texas	45.3-	51.2	56.2	58.0	66.2	9.8	10%
Mean	36.4	41.1	41.5	40.7	47.4	N.S.	

Table 10. - Chemical composition and seed size for the strains in Uniform Group V, 1972

Location	Hill	Dare	Forrest	Mack	Essex	V68-224
			Oil Percentage			
Linkwood, Md.	21.6	22.7	21.5	22.2	21.0	21.4
Warsaw, Va.	22.7	21.1	21.4	23.2	22.7	21.9
Plymouth, N.C.	22.1	22.4	22.5	23.4	22.2	22.2
Experiment, Ga.	23.5	25.7	24.3	25.7	23.3	23.7
Jackson, Tenn.	22.4	22.1	21.0	22.5	21.1	22.4
Portageville, Mo.(A)	22.9	23.1	21.1	23.1	21.9	21.8
Keiser, Ark.	21.1	23.9	21.4	23.4	21.7	21.4
Stoneville, Miss.(B)	24.1	24.9	23.6	25.1	23.6	23.4
Stuttgart, Ark.	24.2	23.5	22.1	23.5	22.9	22.1
Halfway, Texas	20.5	22.6	21.0	22.4	21.9	21.4
Mean	22.5	23.2+	22.0-	23.5+	22.2	22.2
			Protein Percentage			
Linkwood, Md.	39.5	40.8	39.7	40.7	42.4	41.5
Warsaw, Va.	34.7	38.0	36.4	36.2	37.8	37.9
Plymouth, N.C.	39.7	40.2	38.4	40.5	41.1	40.8
Experiment, Ga.	37.8	37.0	38.0	37.1	40.0	39.0
Jackson, Tenn.	41.0	40.3	39.9	41.8	41.4	41.5
Portageville, Mo.(A)	38.2	38.9	37.5	37.1	40.1	39.4
Keiser, Ark.	40.2	38.9	39.3	39.3	40.5	40.0
Stoneville, Miss.(B)	36.7	36.9	37.5	37.3	38.2	38.2
Stuttgart, Ark.	39.4	40.4	40.5	41.1	41.0	41.5
Halfway, Texas	40.4	39.5	38.8	39.7	40.8	40.6
Mean	38.8	39.1	38.6	39.1	40.3+	40.0+
			Grams per 100 Seeds			
Linkwood, Md.	15.2	16.5	15.5	17.8	16.5	15.9
Warsaw, Va.	12.1	12.2	10.7	13.9	12.5	12.2
Plymouth, N.C.	12.2	13.5	11.6	14.0	13.2	12.3
Experiment, Ga.	13.0	14.0	13.9	13.9	15.4	13.6
Jackson, Tenn.	12.9	13.5	11.9	12.8	12.1	13.3
Portageville, Mo.(A)	12.7	13.0	11.6	14.3	12.3	11.9
Keiser, Ark.	11.3	11.0	10.7	13.0	10.7	10.7
Stoneville, Miss.(B)	11.6	12.3	13.0	14.3	13.3	13.0
Stuttgart, Ark.	14.3	13.7	13.3	14.7	14.7	14.3
Halfway, Texas	14.9	15.1	15.0	14.7	15.2	15.0
Mean	13.0	13.5	12.7	14.3+	13.6+	13.2

Table 10. - (continued)

Location	V68-381	D68-4641	R69-358	R69-831	S67-80	V68-920	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	21.0	18.3	22.0	21.9	21.2	20.9	
Warsaw, Va.	20.4	20.3	22.2	21.9	22.7	20.8	
Plymouth, N.C.	21.9	19.9	22.2	20.9	22.5	21.0	
Experiment, Ga.	24.5	21.9	25.2	23.6	24.5	24.1	
Jackson, Tenn.	21.7	20.3	22.0	21.1	22.6	20.5	
Portageville,Mo.(A)	21.3	20.4	24.2	21.5	23.1	22.3	
Keiser, Ark.	22.9	19.5	22.9	21.1	23.4	22.2	
Stoneville,Miss.(B)	24.9	21.5	24.1	22.9	24.4	22.9	
Stuttgart, Ark.	22.0	20.3	23.5	22.7	23.5	22.2	
Halfway, Texas	20.6	20.0	20.4	21.0	21.4	20.8	
Mean	22.1	20.2-	22.9	21.9-	22.9	21.8-	0.5
			Protein Percentage				
Linkwood, Md.	42.4	47.1	41.5	39.6	41.0	40.1	
Warsaw, Va.	39.2	42.4	38.0	35.5	36.5	37.2	
Plymouth, N.C.	40.1	46.2	39.7	39.7	41.6	39.2	
Experiment, Ga.	39.1	44.1	37.5	37.2	38.8	36.9	
Jackson, Tenn.	42.2	44.8	41.1	40.8	41.3	40.6	
Portageville, Mo.(A)	41.4	44.4	38.3	38.4	39.0	37.9	
Kesier, Ark.	39.9	44.6	40.5	40.0	39.6	39.0	
Stoneville, Miss.(B)	37.2	40.6	37.7	37.1	37.8	37.3	
Stuttgart, Ark.	42.5	45.4	40.9	39.8	41.3	38.8	
Halfway, Texas	41.8	44.4	40.7	40.6	40.0	39.1	
Mean	40.6+	44.4+	39.6+	38.9	39.7+	38.6	0.6
			Grams per 100 Seeds				
Linkwood, Md.	18.2	19.0	17.1	17.3	17.7	17.7	
Warsaw, Va.	15.0	15.9	14.0	12.8	14.7	14.4	
Plymouth, N.C.	14.6	15.0	13.6	12.3	16.0	15.0	
Experiment, Ga.	16.2	16.1	14.1	13.4	16.8	15.6	
Jackson, Tenn.	14.3	15.5	12.7	14.4	15.1	14.3	
Portageville, Mo.(A)	13.6	14.8	13.9	11.6	14.1	14.4	
Keiser, Ark.	11.7	14.0	12.7	11.7	13.0	13.3	
Stoneville, Miss.(B)	13.3	14.3	12.7	12.8	14.6	14.5	
Stuttgart, Ark.	14.3	15.7	15.0	13.7	15.7	16.0	
Halfway, Texas	14.4	15.0	15.1	15.0	14.9	14.9	
Mean	14.6+	15.5+	14.1+	13.5	15.3+	15.0+	0.6

Table 11. - Relative maturity, days earlier (-) or later (+) than Hill, for the strains in Uniform Group V, 1972

Location	Date planted	Hill matured	Dare	Forrest	Mack	Essex	V68-224
		East Coast					
Queenstown, Md.(A)	5-26	10-12	+8	+9	+7	+2	+4
Queenstown, Md.(B)	6-15	10-24	+1	+6	+2	+2	+1
Linkwood, Md.	6-9	10-17	+9	+7	+7	+5	+5
Georgetown, Del.	6-2	10-24	+7	+4	+2	+6	+2
Warsaw, Va.	5-30	10-15	+7	+12	+6	+5	+6
Petersburg, Va.		10-19	+13	+15	+15	+4	+8
Holland, Va.	6-9	10-24	+6	+6	0	+3	0
Plymouth, N.C.	5-17	10-7	+5	+5	0	0	0
Mean		10-18	+7	+8	+5	+3	+3
		Upper and Central South					
Orange, Va.	6-6	10-25	+4	+5	+5	+4	+5
Blairsville, Ga.	5-25	10-3	+5	+7	+1	+4	+1
Belle Mina, Ala.	5-4	9-25	-1	-2	0	-3	0
Experiment, Ga.	5-18	9-15	+10	+10	+8	+9	+5
Princeton, Ky.	5-18	10-3	+8	+9	+6	+4	+4
Martin, Tenn.	6-2	9-30	+14	+17	+14	+17	+10
Jackson, Tenn.	5-17	9-20	+13	+14	+6	+5	+5
Verona, Miss.	5-2	9-18	+8	+4	+7	+3	+7
Mean		9-29	+8	+8	+6	+5	+5
		Delta					
Portageville, Mo.(A)	5-11	10-1	+6	+9	+6	+2	+2
Portageville, Mo.(B)	5-11	9-30	+4	+3	+2	0	0
Keiser, Ark.	5-17	9-20	+14	+7	+8	+2	+10
Jonesboro, Ark.	5-15	9-23	+4	0	+4	0	0
Stoneville, Miss.(A)	5-11	9-18	+8	+7	+7	+4	+1
Stoneville, Miss.(B)	5-23	9-22	+11	+11	+11	+9	+13
St. Joseph, La.	5-10	9-10	+10	+6	-1	-5	+3
Mean		9-23	+8	+6	+5	+2	+4
		West					
Stuttgart, Ark.	5-18	9-22	+7	+8	+5	+2	+6
Curtis, La.	5-15	9-18	+7	+7	+6	+5	+6
Bixby, Okla.	6-2	10-5	0	+1	+2	+1	0
Lubbock, Texas	5-20	10-8	+5	+8	+5	+5	+5
Mean		9-28	+5	+6	+5	+3	+4

Table 11. - (continued)

Location	V68-381	D68-4641	R69-358	R69-831	S67-80	V68-920
			East Coast			
Queenstown, Md.(A)	+4	+6	+7	+7	+7	+11
Queenstown, Md.(B)	+2	-1	0	+1	+1	+1
Linkwood, Md.	+11	+3	+8	+7	+5	+7
Georgetown, Del.	+7	-1	+6	+4	0	+6
Warsaw, Va.	+10	+1	+6	+7	+5	+6
Petersburg, Va.	+2	-3	-3	+13	-3	-3
Holland, Va.	+10	+4	0	+2	0	0
Plymouth, N.C.	+6	0	+2	+3	0	+3
Mean	+7	+1	+3	+6	+2	+4
			Upper and Central South			
Orange, Va.	+5	0	+5	+5	+4	+4
Blairsville, Ga.	+7	+3	+2	+6	+2	+3
Belle Mina, Ala.	-2	0	+1	+1	+1	-1
Experiment, Ga.	+12	+3	+4	+11	+10	+8
Princeton, Ky.	+9	0	+3	+8	+2	+4
Martin, Tenn.	+17	+4	+10	+14	+4	+14
Jackson, Tenn.	+15	+5	+6	+13	+7	+8
Verona, Miss.	+10	+3	+6	+6	+5	+7
Mean	+9	+2	+5	+8	+4	+6
			Delta			
Portageville, Mo.(A)	+9	+1	+2	+6	+2	+6
Portageville, Mo.(B)	+8	0	+2	+3	0	+3
Keiser, Ark.	+16	+1	+10	+12	+5	+12
Jonesboro, Ark.	0	0	0	+7	0	+1
Stoneville, Miss.(A)	+8	+2	+4	+7	+6	+5
Stoneville, Miss.(B)	+14	+4	+7	+12	+10	+11
St. Joseph, La.	+2	+1	+4	+8	-3	+5
Mean	+8	+1	+4	+8	+3	+6
			West			
Stuttgart, Ark.	+7	-1	+4	+9	+6	+7
Curtis, La.	+10	+2	+8	+11	+7	+9
Bixby, Okla.	+1	0	0	0	+1	0
Lubbock, Texas	+15	0	+5	+6	+1	+7
Mean	+8	0	+4	+7	+4	+6

Table 12. - Plant height data for the strains in Uniform Group V, 1972

Location	Hill	Dare	Forrest	Mack	Essex	V68-224
			East Coast			
Queenstown, Md.(A)	33	41	42	40	35	37
Queenstown, Md.(B)	30	38	30	34	28	29
Linkwood, Md.	32	40	38	41	33	35
Quantico, Md.	32	31	31	34	28	30
Georgetown, Del.	31	37	34	39	32	34
Warsaw, Va.	36	38	38	43	35	37
Petersburg, Va.	26	32	25	35	24	25
Holland, Va.	39	42	42	42	38	38
Plymouth, N.C.	33	37	36	39	31	33
Mean	32	37	35	39	32	33
			Upper and Central South			
Orange, Va.	38	44	39	42	35	36
Blairsville, Ga.	36	38	38	38	36	38
Belle Mina, Ala.	27	37	27	37	34	33
Experiment, Ga.	26	29	28	31	21	25
Princeton, Ky.	32	39	42	44	37	40
Martin, Tenn.	39	35	36	43	35	39
Jackson, Tenn.	39	44	46	45	39	44
Verona, Miss.	29	35	34	36	30	30
Mean	33	38	36	40	33	36
			Delta			
Portageville, Mo.(A)	30	37	34	39	32	34
Portageville, Mo.(B)	22	27	27	27	23	26
Keiser, Ark.	33	35	31	35	29	31
Jonesboro, Ark.	35	38	37	41	36	39
Stoneville, Miss.(A)	30	34	33	34	35	33
Stoneville, Miss.(B)	30	33	31	33	27	29
St. Joseph, La.	15	25	19	22	25	20
Mean	28	33	30	33	30	30
			West			
Stuttgart, Ark.	27	30	27	30	25	24
Curtis, La.	31	29	30	30	23	26
Bixby, Okla.	31	37	34	36	31	31
Lubbock, Texas	26	28	30	29	29	31
West	29	31	30	31	27	28

Table 12. - (continued)

Location	V68-381	D68-4641	R69-358	R69-831	S67-80	V68-920
			East Coast			
Queenstown, Md.(A)	37	39	40	40	40	44
Queenstown, Md.(B)	30	33	31	31	34	32
Linkwood, Md.	36	37	38	38	39	42
Quantico, Md.	28	31	30	34	32	29
Georgetown, Del.	36	38	36	38	34	38
Warsaw, Va.	37	40	40	44	36	38
Petersburg, Va.	29	32	31	33	30	32
Holland, Va.	38	42	37	42	34	41
Plymouth, N.C.	33	34	34	39	32	34
Mean	34	36	35	38	35	37
			Upper and Central South			
Orange, Va.	37	43	38	42	39	42
Blairsville, Ga.	38	38	36	36	36	38
Belle Mina, Ala.	35	37	37	39	31	39
Experiment, Ga.	23	28	26	35	28	23
Princeton, Ky.	39	41	38	42	34	40
Martin, Tenn.	37	39	38	39	45	37
Jackson, Tenn.	45	48	44	49	37	45
Verona, Miss.	31	29	32	37	29	38
Mean	36	38	36	40	35	38
			Delta			
Portageville, Mo.(A)	32	37	35	39	31	31
Portageville, Mo.(B)	23	28	26	29	22	26
Keiser, Ark.	34	36	32	34	30	33
Jonesboro, Ark.	37	41	38	40	35	39
Stoneville, Miss.(A)	33	36	33	37	27	33
Stoneville, Miss.(B)	27	35	32	37	26	26
St. Joseph, La.	27	19	23	22	21	25
Mean	30	33	32	34	27	30
			West			
Stuttgart, Ark.	24	32	30	34	24	26
Curtis, La.	24	28	28	31	26	24
Bixby, Okla.	30	36	35	37	33	35
Lubbock, Texas	30	26	27	30	27	29
Mean	27	31	30	33	28	29

Table 13. - Lodging scores for the strains in Uniform Group V, 1972

Location	Hill	Dare	Forrest	Mack	Essex	V68-224
			East Coast			
Quuenstown, Md.(A)	3.2	2.7	2.5	3.0	2.5	2.0
Queenstown, Md.(B)	1.0	1.5	1.3	2.3	1.0	1.0
Linkwood, Md.	2.8	2.5	2.2	2.3	2.3	2.8
Quantico, Md.	3.0	2.5	3.0	3.3	2.2	2.0
Georgetown, Del.	2.8	2.3	2.7	2.7	1.8	2.2
Warsaw, Va.	1.6	2.7	2.4	3.1	1.6	2.5
Petersburg, Va.	1.0	2.5	1.0	1.0	1.0	1.0
Holland, Va.	4.7	4.2	3.7	4.0	3.5	3.5
Plymouth, N.C.	3.7	2.7	2.3	3.0	2.0	2.0
			Upper and Central South			
Orange, Va.	2.7	3.0	2.7	3.3	2.0	2.7
Blairsville, Ga.	3.2	3.0	3.2	3.0	1.7	1.7
Belle Mina, Ala.	2.2	2.8	2.2	3.3	1.0	1.3
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	1.3	2.0	1.3	2.7	1.0	1.3
Martin, Tenn.	5.0	4.0	4.0	4.0	4.0	3.0
Jackson, Tenn.	3.0	3.0	2.0	4.0	2.0	2.0
			Delta			
Portageville, Mo.(A)	1.8	2.0	1.9	1.8	1.4	1.4
Portageville, Mo.(B)	1.6	1.6	2.0	1.9	1.4	1.5
Keiser, Ark.	1.7	1.0	1.0	1.7	1.0	1.3
Jonesboro, Ark.	2.0	4.0	3.0	3.0	1.0	1.0
Stoneville, Miss.(A)	2.7	2.7	2.3	3.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	3.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
Stuttgart, Ark.	1.8	1.7	1.5	2.5	1.3	1.2
Curtis, La.	2.0	2.0	2.0	2.0	1.0	1.7
Bixby, Okla.	1.7	1.0	1.3	1.7	1.3	1.0
Lubbock, Texas	4.0	4.0	3.0	3.0	2.0	2.0

Table 13. - (continued)

Location	V68-381	D68-4641	R69-358	R69-831	S67-80	V68-920
			East Coast			
Queenstown, Md.(A)	2.3	2.0	2.3	2.7	2.5	2.7
Queenstown, Md.(B)	1.0	1.3	1.3	1.8	1.8	1.1
Linkwood, Md.	2.0	2.2	2.2	2.2	2.7	2.0
Quantico, Md.	1.5	2.7	2.7	3.2	3.2	2.3
Georgetown, Del.	1.8	2.3	2.0	2.8	2.3	2.3
Warsaw, Va.	2.1	1.6	1.9	2.0	1.8	1.6
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.8	2.3	2.5	3.8	4.0	4.5
Plymouth, N.C.	2.3	3.7	2.0	3.0	3.0	2.7
			Upper and Central South			
Orange, Va.	2.3	2.7	2.7	4.0	2.3	2.3
Blairsville, Ga.	1.7	2.0	2.7	2.2	2.0	2.5
Belle Mina, Ala.	1.3	3.0	3.3	2.5	2.5	2.2
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	1.0	3.7	2.3	2.0	1.0	1.0
Martin, Tenn.	4.0	5.0	4.0	5.0	5.0	3.0
Jackson, Tenn.	2.0	3.0	3.0	3.0	2.0	3.0
			Delta			
Portageville, Mo.(A)	1.5	1.9	1.6	1.9	1.5	1.4
Portageville, Mo.(B)	1.1	1.5	1.9	2.3	1.5	1.4
Keiser, Ark.	1.0	1.0	1.0	2.0	1.0	1.0
Jonesboro, Ark.	1.0	2.0	4.0	2.0	2.0	2.0
Stoneville, Miss.(A)	2.0	3.0	3.0	3.3	2.0	2.7
Stoneville, Miss.(B)	2.0	3.0	2.0	3.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
Stuttgart, Ark.	1.0	3.3	2.2	2.5	1.0	1.3
Curtis, La.	1.0	2.0	2.0	2.0	1.3	1.7
Bixby, Okla.	1.0	1.3	1.3	1.7	1.0	1.3
Lubbock, Texas	2.0	4.0	2.0	3.5	3.0	2.0

Table 14. - Seed quality scores for the strains in Uniform Group V, 1972

Location	Hill	Dare	Forrest	Mack	Essex	V68-224
East Coast						
Queenstown, Md.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Queenstown, Md.(B)	1.0	1.0	1.0	1.0	1.0	1.0
Linkwood, Md.	2.0	3.0	2.0	2.0	2.0	2.0
Quantico, Md.	1.7	1.7	3.0	1.0	1.0	1.3
Georgetown, Del.	2.0	2.0	3.0	2.5	1.5	2.0
Warsaw, Va.	1.5	1.1	2.0	1.5	1.6	1.6
Petersburg, Va.	1.0	1.0	2.5	1.0	1.0	1.0
Holland, Va.	1.3	1.0	1.2	1.3	2.0	1.7
Plymouth, N.C.	1.5	1.0	1.0	1.5	1.0	1.0
Upper and Central South						
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	2.0	3.0	2.0	2.5	2.5	2.0
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	1.5	1.0	1.0	2.7	1.0	2.0
Martin, Tenn.	2.0	1.0	2.5	2.0	2.0	2.0
Jackson, Tenn.	3.0	2.0	4.0	2.5	2.5	2.0
Delta						
Portageville, Mo.(A)	2.0	1.0	1.4	1.9	1.1	1.8
Portageville, Mo.(B)	3.9	4.0	4.6	4.0	3.3	3.4
Keiser, Ark.	3.0	2.5	3.3	2.7	1.5	2.2
Jonesboro, Ark.	1.0	2.0	3.0	3.0	1.0	1.0
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
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
West						
Mt. Vernon, Mo.	-	1.0	2.0	2.0	2.0	1.0
Stuttgart, Ark.	3.3	2.5	3.2	2.2	2.3	3.0
Curtis, La.	1.5	1.0	2.0	1.5	2.5	2.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0

Table 14. - (continued)

Location	V68-381	D68-4641	R69-358	R69-831	S67-80	V68-920
			East Coast			
Queenstown, Md.(A)	3.0	3.0	2.0	2.0	2.0	2.0
Queenstown, Md.(B)	1.0	1.0	1.0	1.0	1.0	1.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	2.0	3.0	1.0	1.0	1.0	1.3
Georgetown, Del.	1.8	2.0	1.7	2.0	1.8	1.8
Warsaw, Va.	1.6	2.4	1.5	1.8	1.8	1.5
Petersburg, Va.	1.0	1.5	1.0	1.0	1.8	1.5
Holland, Va.	1.7	2.5	1.0	1.3	1.0	1.0
Plymouth, N.C.	1.5	1.5	1.0	1.5	1.0	1.0
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	2.0	2.0	2.5	2.0	3.0	2.5
Experiment, Ga.	1.3	1.3	1.0	1.0	1.0	1.0
Princeton, Ky.	1.7	2.0	2.0	1.7	2.0	1.0
Martin, Tenn.	2.0	3.0	1.5	2.0	2.0	1.5
Jackson, Tenn.	2.0	3.0	2.5	3.0	2.5	3.5
			Delta			
Portageville, Mo.(A)	1.0	1.3	1.3	1.3	1.9	1.3
Portageville, Mo.(B)	3.6	4.6	4.1	4.0	3.8	4.0
Keiser, Ark.	3.0	3.2	2.3	3.0	3.0	3.0
Jonesboro, Ark.	2.0	2.0	2.0	2.0	2.0	1.0
Stoneville, Miss.(A)	2.0	2.0	2.0	2.7	2.0	2.0
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.	1.0	3.0	1.0	1.0	1.5	1.0
Stuttgart, Ark.	2.7	3.2	2.7	3.2	2.7	2.5
Curtis, La.	1.5	1.5	1.0	1.5	1.0	1.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0

PRELIMINARY GROUP V

1972

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 six of the seven locations. The combined analysis of variance also showed differences among strains to be significant. Six strains ranked above Mack in seed yield and 12 yielded significantly less. Four strains were considered to be too late for this group.

Of the 34 experimental strains, 28 have the major gene for resistance to phytophtora rot. Seven strains had been selected for resistance to soybean mosaic virus. One of these was in the higher yielding group. Ratings for downy mildew were made at Stoneville. Seed was checked for purple stain at Warsaw and Georgetown. Seed was also checked for seed coat mottling at Warsaw, Only two strains had any mottled seed -- D68-4754 with 6% and D70-2199 with 2%.

A separate planting was made in west Florida for evaluating the strains for reaction to root-knot nematodes. Ratings are reported in Table 16.

D70-2199 is resistant to phytophthora rot and cyst nematodes, but its mean yield was considerably below that for Mack.

The strains D70-2650, D70-5107, D70-5154, R70-306, and V68-1171 appear to merit being advanced to Uniform Group V.

Table 15. - Parentage of the strains in Preliminary Group V, 1972

	Variety or strain	Parentage	Generation composited
1.	Hill		
2.	Mack		
3.	D68-3592	PI 171,450 x D61-1513	F_5
4.	D68-4195	D53-697(2) x PI 229,350	F_5
5.	D68-4754	D62-6289 x Semmes	F_5
6.	D69-4227	Semmes x D62-6289	F_5
7.	D70-2189	Dare x D66-12,394	F_5
8.	D70-2199	Dare x D66-12,394	F_5
9.	D70-2384	Hood x D65-6562	F_5
10.	D70-2582	Hood x D65-6562	F_5
11.	D70-2650	D65-3075 x Hood	F_5
12.	D70-2656	D65-3075 x Hood	F_5
13.	D70-2658	D65-3075 x Hood	F_5
14.	D70-2660	D65-3075 x Hood	F_5
15.	D70-2663	D65-3075 x Hood	F_5
16.	D70-5030	D65-3075 x D64-4636	F_5
17.	D70-5037	D65-3075 x D64-4636	F_5
18.	D70-5107	D65-3075 x D64-4636	F_5
19.	D70-5134	D65-3075 x D64-4636	F_5
20.	D70-5154	D65-3075 x D64-4636	F_5
21.	D70-5186	D63-6094 x (D59-693 x D61-672)	F_5
22.	D70-5291	D63-6094 x (D62-6289 x Semmes)	F_5
23.	D70-5314	D63-6094 x (D62-6289 x Semmes)	F_5
24.	D70-5366	D63-6094 x (D62-6289 x Semmes)	F_5
25.	D70-5381	D63-6094 x (D62-6289 x Semmes)	F_5
26.	D70-7485	D62-6392 x D62-6342	F_5
27.	Md69-410	Delmar x Dare	F_5
28.	R69-142	(R56-49 x PI 91120) x (Davis x Lee 68)	F_5
29.	R70-93	R60-66 x R64-500	F_5
30.	R70-176	R60-66 x R64-500	F_5
31.	R70-306	Davis x Lee 68	F_5
32.	V68-1156	PI 80837 x V63-76	
33.	V68-1171	PI 80837 x V63-76	
34.	V68-1365	PI 80837 x York	
35.	V69-156	Hood x PI 80837	
36.	V69-1111	PI 80837 x York	

Table 16. -General summary of performance for the strains grown in Preliminary Group V, 1972

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed holding	R.K.	D.M.	P.R.	% P.S.
Hill	35.2-	10-7	31	23.8	36.0	1.0	3.0	3.0	1.0	0
Mack	43.6	+7	36	23.0	38.5+	1.0	5.0	3.0	1.0	0
D68-3592	36.3-	+2	30	19.8-	41.3+	1.0	5.0	1.0	1.0	0
D68-4195	36.5-	+6	31	20.8-	39.2+	1.0	5.0	1.0	1.0	0
D68-4754	39.7	+2	32	20.0-	40.0+	1.0	4.5	3.0	1.0	2
D69-4227	36.9-	+2	31	19.1-	43.6+	1.0	4.0	1.5	1.0	2
D70-2189	36.4-	+5	34	22.8-	37.8+	1.0	4.0	2.5	1.0	0
D70-2199	38.1-	+12	40	23.1	38.6+	1.0	3.5	1.0	1.0	0
D70-2384	32.9-	+3	27	20.9-	39.4+	2.0	3.0	1.0	1.0	0
D70-2582	35.8-	0	33	20.0-	40.3+	1.0	4.0	1.0	1.0	1
D70-2650	42.4	+8	32	21.4-	40.4+	1.0	4.5	1.0	1.0	0
D70-2656	40.4	+6	43	22.1-	38.5+	1.0	4.0	3.5	1.0	0
D70-2658	37.5-	+10	41	20.4-	40.0+	1.0	4.5	1.0	1.0	0
D70-2660	31.9-	+10	34	20.4-	39.7+	1.0	4.0	1.0	1.0	0
D70-2663	39.2	+10	36	21.5-	40.6+	1.0	4.0	1.0	1.0	1
D70-5030	39.3	+7	39	22.3-	39.5+	1.0	1.0	1.0	1.0	0
D70-5037	41.8	+10	35	22.2-	39.1+	1.0	4.5	1.0	1.0	0
D70-5107	41.4	+1	35	22.7-	38.2+	1.0	2.0	1.0	1.0	0
D70-5134	38.2-	0	32	22.0-	39.6+	1.0	3.0	1.5	1.0	1
D70-5154	43.8	+3	33	22.6-	37.9+	1.0	1.5	1.5	1.0	1
D70-5186	34.8-	+6	37	22.0-	39.0+	1.0	4.5	1.0	1.0	0
D70-5291	36.0-	+4	32	21.5-	40.1+	1.0	4.0	1.0	1.0	0
D70-5314	36.6-	0	34	21.3-	39.9+	1.0	4.0	4.0	1.0	1
D70-5366	39.6	+4	34	18.3-	43.9+	1.0	5.0	2.0	1.0	0
D70-5381	38.5-	-2	32	22.0-	38.2+	1.0	3.0	2.0	1.0	2
D70-7485	36.2-	+8	30	21.6-	39.5+	1.0	5.0	1.0	1.0	0
Md69-410	39.5	+4	42	23.4	38.8+	2.0	4.5	1.0	3.0	1
R69-142	35.5-	+13	36	23.2	37.6+	1.0	4.0	4.0	1.0	1
R70-93	40.0	+3	36	21.8-	38.3+	1.0	1.5	3.0	1.0	1
R70-176	42.5	-2	36	22.4-	37.0	1.0	1.5	1.0	1.0	1
R70-306	43.0	+4	37	22.8-	38.6+	1.0	4.0	3.0	1.0	0
V68-1156	40.0	+12	33	22.3-	39.0+	1.0	2.0	2.0	2.0	1
V68-1171	44.4	+8	31	23.2	37.5+	1.0	2.0	1.0	1.0	1
V68-1365	38.7-	+11	33	21.9-	40.2+	1.0	1.5	1.0	2.0	1
V69-156	37.4-	+12	31	21.9-	39.8+	1.0	4.5	1.0	2.0	0
V69-1111	43.0	+1	30	23.7	39.1+	1.0	2.5	1.0	1.0	7
L.S.D.(.05)	4.8			0.9	1.5					
L.S.D.(.01)	6.3			1.2	1.9					

Table 17. - Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1972

Strain	George-town, Del.	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	36.8	34.2	36.2	35.6	34.5	30.9	38.5
Mack	39.9	36.4	39.9+	47.2+	57.4+	33.7	50.4+
D68-3592	32.5	32.4	33.9	39.6	43.4	29.9	42.2
D68-4195	32.3	20.0-	30.9-	41.0	48.8+	30.3	52.2+
D68-4754	34.8	36.6	42.6+	41.0	47.0+	31.5	44.3+
D69-4227	38.1	33.5	35.2	37.8	39.2	33.0	41.2
D70-2189	40.4	28.7-	30.9	39.3	39.1	31.1	45.1+
D70-2199	29.3	19.4-	34.7	50.2+	46.6+	36.7	49.7+
D70-2384	36.0	28.4-	36.0	34.1	--	29.3	33.4
D70-2582	35.0	32.6	35.0	40.1	40.3	31.4	36.5
D70-2650	40.1	34.6	36.9	48.4+	46.3+	38.9	51.8+
D70-2656	34.7	35.3	39.1	47.8+	46.4+	34.0	45.5+
D70-2658	29.1	27.4-	35.6	45.1+	46.8+	30.6	47.6+
D70-2660	25.1-	21.6-	33.9	39.9	32.6	32.0	38.4
D70-2663	33.0	27.2-	34.0	46.4+	48.0+	39.7	45.9+
D70-5030	35.4	28.9	37.6	45.5+	45.3+	36.3	46.1+
D70-5037	39.4	29.2	39.5+	52.0+	43.8	40.2	48.8+
D70-5107	41.2	40.2+	40.5+	44.9+	42.3	35.6	44.8+
D70-5134	42.8	37.3	37.1	43.0+	37.1	31.2	38.9
D70-5154	40.1	39.9+	46.4+	52.1+	46.4+	38.5	43.2
D70-5186	34.1	27.2-	34.5	43.5+	30.6	33.7	40.2
D70-5291	35.2	29.6	35.0	40.2	39.6	31.3	41.2
D70-5314	36.7	34.3	32.3-	40.6	37.2	35.6	39.5
D70-5366	44.2	41.0+	36.1	43.0	37.6	30.8	44.5+
D70-5381	36.8	38.6	38.4	43.3+	42.5	31.8	37.9
D70-7485	36.7	28.4-	38.3	34.7	45.1+	28.6	41.5
Md69-410	35.8	39.2	37.3	51.1+	36.5	38.9	38.0
R69-142	25.8-	28.5-	33.0-	48.7+	32.4	33.9	46.1+
R70-93	36.2	44.6+	36.9	46.1+	40.2	34.1	42.0
R70-176	45.1	38.0	38.5	43.9+	49.1+	35.9	46.8+
R70-306	41.8	41.6+	41.0+	45.1+	41.8	38.4	51.0+
V68-1156	38.2	40.4+	41.3+	50.7+	47.0+	31.8	30.5-
V68-1171	42.9	43.0+	47.0+	48.6+	44.4	34.9	49.9+
V68-1365	38.8	37.2	39.1	43.8+	43.7	33.7	34.3
V69-156	35.7	36.8	39.0	47.1+	33.8	34.1	35.3
V69-1111	47.2	44.4+	42.6+	38.7	50.4+	37.3	40.3
L.S.D.(.05)	9.0	5.5	3.2	5.6	10.6	N.S.	5.7
C.V.	12%	8%	4%	6%	15%	10%	7%

Table 18. - Oil percentages for the strains in Preliminary Group V, 1972

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	22.0	22.3	23.5	26.2	25.0
Mack	22.2	21.9	22.7	23.0	25.3
D68-3592	19.9	19.3	19.1	19.9	20.6
D68-4195	20.1	20.4	20.5	21.0	22.0
D68-4754	19.1	20.0	19.5	20.4	21.0
D69-4227	17.8	19.7	18.4	18.8	20.9
D70-2189	21.5	22.1	23.0	22.6	24.7
D70-2199	21.6	22.4	23.0	24.0	24.3
D70-2384	19.9	21.3	20.1	21.1	22.1
D70-2582	19.6	19.5	19.4	20.7	21.0
D70-2650	21.1	20.8	21.5	20.6	22.9
D70-2656	21.1	21.6	21.9	21.4	24.6
D70-2658	19.5	20.3	20.0	20.0	22.2
D70-2660	19.1	20.9	19.5	20.2	22.2
D70-2663	20.7	21.3	20.5	21.7	23.1
D70-5030	22.0	23.4	21.4	21.2	23.4
D70-5037	21.9	21.8	22.1	21.6	23.4
D70-5107	22.0	22.8	22.5	22.4	23.6
D70-5134	22.0	21.9	20.1	22.6	23.4
D70-5154	22.5	22.6	23.1	20.9	23.9
D70-5186	21.0	22.1	22.4	20.5	23.9
D70-5291	21.0	21.8	21.6	20.0	23.0
D70-5314	20.5	22.1	20.7	20.5	22.9
D70-5366	18.0	19.3	17.7	17.3	19.3
D70-5381	20.6	21.8	21.0	22.5	24.0
D70-7485	21.0	21.2	20.3	22.4	23.2
Md69-410	22.6	22.3	22.2	24.1	25.6
R69-142	22.0	21.2	22.2	25.2	25.5
R70-93	21.4	21.6	20.9	22.1	23.2
R70-176	22.5	22.9	20.8	22.3	23.6
R70-306	22.4	21.9	23.2	22.4	23.9
V68-1156	21.4	21.8	21.9	22.3	24.0
V68-1171	22.0	22.3	23.2	23.9	24.6
V68-1365	21.0	21.6	22.3	21.3	23.4
V69-156	21.9	20.9	22.4	21.5	23.0
V69-1111	22.0	22.7	23.5	24.1	26.2

Table 19. - Protein percentages for the strains in Preliminary Group V, 1972

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	39.1	35.4	36.4	32.8	36.1
Mack	40.4	36.4	39.5	38.3	37.7
D68-3592	42.8	40.1	42.0	41.6	40.2
D68-4195	41.0	38.3	40.4	39.0	37.5
D68-4754	42.8	39.1	41.4	37.5	39.4
D69-4227	45.2	41.0	46.7	43.4	41.5
D70-2189	39.9	37.4	38.1	37.4	36.3
D70-2199	40.9	37.6	39.1	38.4	37.0
D70-2384	41.4	38.9	41.4	35.8	39.3
D70-2582	42.5	38.3	40.8	39.5	40.3
D70-2650	41.6	38.9	40.9	41.5	39.0
D70-2656	40.4	37.6	38.3	39.6	36.8
D70-2658	41.6	38.2	40.8	41.1	38.5
D70-2660	41.8	37.3	40.0	41.3	38.1
D70-2663	42.6	37.8	42.5	40.6	39.7
D70-5030	40.4	36.6	41.0	41.5	38.2
D70-5037	40.1	37.5	40.5	39.8	37.7
D70-5107	39.3	35.7	38.9	40.0	37.1
D70-5134	40.6	38.0	42.4	38.5	38.5
D70-5154	38.3	36.3	38.4	40.2	36.5
D70-5186	40.9	36.7	38.6	41.3	37.5
D70-5291	41.2	36.6	40.9	43.4	38.2
D70-5314	41.8	35.8	41.9	42.2	37.8
D70-5366	44.7	41.5	45.7	45.5	42.1
D70-5381	40.5	35.0	40.4	38.5	36.8
D70-7485	40.2	37.8	41.8	39.4	38.1
Md69-410	39.5	38.2	42.1	39.0	35.4
R69-142	39.5	37.7	38.7	36.2	36.0
R70-93	40.1	36.0	40.5	38.4	36.4
R70-176	37.3	35.0	39.5	37.3	35.8
R70-306	39.9	37.7	38.5	39.4	37.3
V68-1156	39.1	38.5	40.2	39.6	37.4
V68-1171	38.9	37.7	38.3	36.4	36.3
V68-1365	40.3	39.1	40.7	42.0	39.0
V69-156	40.1	40.1	40.9	40.6	37.4
V69-1111	40.7	39.6	38.4	40.1	36.7

Table 20. - Plant height for the strains in Preliminary Group V, 1972

Strain	George-town, Md.	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	34	32	34	32	29	32	29
Mack	37	44	43	39	34	34	28
D68-3592	30	38	34	30	31	27	22
D68-4195	33	26	32	33	33	30	29
D68-4754	34	39	34	31	29	30	27
D69-4227	32	35	32	29	31	30	29
D70-2189	35	36	34	33	33	34	35
D70-2199	39	43	42	41	37	43	36
D70-2384	23	28	32	26	--	28	27
D70-2582	32	39	40	31	31	30	29
D70-2650	31	34	34	31	32	33	32
D70-2656	42	46	45	44	40	37	44
D70-2658	42	45	42	43	41	39	34
D70-2660	32	40	35	33	34	32	28
D70-2663	35	40	38	34	33	38	36
D70-5030	35	42	40	39	40	37	38
D70-5037	34	38	36	34	33	37	33
D70-5107	34	37	39	33	37	36	31
D70-5134	33	35	36	33	31	27	27
D70-5154	31	36	36	33	33	34	29
D70-5186	39	40	38	33	37	37	33
D70-5291	32	34	34	32	32	31	30
D70-5314	31	38	38	32	34	31	31
D70-5366	35	42	38	32	35	31	27
D70-5381	33	37	39	31	31	29	26
D70-7485	35	30	34	26	28	32	25
Md69-410	41	39	40	45	43	44	45
R69-142	35	38	39	39	29	37	34
R70-93	33	39	40	35	36	39	33
R70-176	33	35	34	35	36	33	49
R70-306	32	42	40	33	37	39	38
V68-1156	36	44	36	32	30	28	25
V68-1171	26	42	34	29	27	32	26
V68-1365	37	42	35	32	29	33	23
V69-156	32	40	34	30	25	29	24
V69-1111	32	36	32	28	31	30	23

Table 21. - Seed quality scores for the strains in Preliminary Group V, 1972

Strain	George-town, Md.	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hill	2.0	2.0	1.7	1.0	3.0	3.0	2.0
Mack	2.3	2.0	1.4	1.0	1.0	3.0	2.0
D68-3592	2.5	2.0	1.5	1.0	1.3	2.0	2.0
D68-4195	2.5	3.0	1.5	1.0	1.0	2.8	2.0
D68-4754	2.3	2.0	1.8	1.0	1.0	2.0	2.0
D69-4227	1.8	2.0	1.9	1.5	1.0	1.8	2.0
D70-2189	1.5	2.0	1.5	1.0	1.2	2.5	2.0
D70-2199	3.0	3.0	1.5	1.0	1.0	2.0	2.0
D70-2384	2.0	2.0	1.3	1.0	---	2.8	2.0
D70-2582	2.0	2.0	1.6	1.0	1.8	2.8	2.0
D70-2650	2.3	2.0	1.2	1.0	1.3	2.0	2.0
D70-2656	2.3	2.0	1.5	1.0	3.7	3.0	2.0
D70-2658	2.5	3.0	1.3	1.0	1.8	2.5	2.0
D70-2660	2.5	3.0	1.4	1.0	1.2	2.5	2.0
D70-2663	3.0	3.0	2.0	1.0	1.8	3.0	2.0
D70-5030	2.5	2.0	1.5	1.0	1.2	3.0	2.0
D70-5037	2.3	2.0	1.4	1.0	1.2	2.5	2.0
D70-5107	1.5	2.0	1.3	1.0	1.2	2.3	2.0
D70-5134	2.0	2.0	1.3	1.0	1.0	2.8	2.0
D70-5154	1.5	2.0	1.2	1.0	2.0	2.0	2.0
D70-5186	2.8	3.0	1.6	1.0	1.2	2.8	2.0
D70-5291	2.0	2.0	1.5	1.0	1.5	2.8	2.0
D70-5314	1.8	2.0	2.0	1.5	2.0	2.5	2.0
D70-5366	2.3	2.0	1.6	1.0	1.3	2.5	2.0
D70-5381	1.5	2.0	1.3	1.0	1.5	2.0	2.0
D70-7485	3.0	3.0	1.6	1.0	3.7	2.8	2.0
Md69-410	1.8	2.0	1.5	2.0	3.0	2.8	2.0
R69-142	2.5	2.0	1.3	1.0	1.0	3.5	2.0
R70-93	2.0	2.0	1.8	1.0	1.2	3.0	2.0
R70-176	1.8	2.0	1.5	1.5	1.7	2.5	2.0
R70-360	2.3	2.0	1.5	1.0	1.0	3.0	2.0
V68-1156	1.5	2.0	1.3	1.0	1.2	4.5	2.0
V68-1171	1.3	2.0	1.5	1.0	1.7	3.5	2.0
V68-1365	2.0	2.0	1.2	1.5	2.0	3.3	2.0
V69-156	2.0	2.0	1.4	1.5	1.5	3.5	2.0
V69-1111	1.3	2.0	3.0	1.0	2.7	3.0	2.0

UNIFORM GROUP VI

1972

	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.	D64-4636	Hill x D58-3311	F_5
4.	Pickett 71	Pickett x P.R. resistant Lee	Comp. F_4 lines
5.	D67-4601	D61-618 x D60-9647	F_5
6.	N68-358	Dare x N60-5234	F_4
7.	R68-208	Davis x Lee 68	F_5
8.	D69-8201	Hood x Semmes	F_5
9.	D69-8205	Hood x Semmes	F_5
10.	R69-186	(R65-49 x PI 91120) x (Davis x Lee 68)	F_5
11.	R69-1151	Davis x Bragg	F_4
12.	N69-468	N55-395 x N56-4202	F_5

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.

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

D61-618 is a phytophthora-rot-resistant selection from Hill(2) x PI 171,442.

N60-5234 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.

R56-49 is an off-type selection from Lee.

N55-395 is a selection from Adams x Roanoke.

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.

Results from 31 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 percentages.

Seed yield differences among strains were significant at the 5% level of confidence at 25 of the 31 locations. The combined analysis of variance for mean seed yield by production regions showed differences to be significant at the 5% level in all but the Upper and Central South region.

The 3-year mean yield for Pickett 71 is very similar to the 3-year mean for Lee 68. Pickett 71 differs from Lee 68 in that it is resistant to the soybean cyst nematode.

D64-4636 ranks highest in 3-year mean yield in all regions except the Southeast. It is the earliest maturing strain in the group. Davis has given higher average seed yield than Lee 68.

D67-4601 is being increased for release. Studies at Stoneville show that it has a higher tolerance to the herbicide 2,4-DB than varieties commonly grown. This should simplify control of cocklebur. N68-358 is similar to D67-4601 in maturity and has shown no superiority in seed yield. R68-208 has the highest 2-year average yield in the West. Of the five strains grown one year, D69-8201, D69-8205, and R69-1151 produced very well.

Root-knot nematode ratings were made in a special planting in west Florida.

Table 22. - General summary of the performance for the strains in Uniform Group VI, 1972

	Lee 68	Davis	D64-4636	Pickett 71	D67-4601	N68-358
Seed Yield - 1972						
East Coast	37.3	37.4	42.5+	35.7	42.2+	41.6+
Southeast	45.5	43.3-	47.1	40.9	43.4-	43.5-
Upper & Central South	35.2	37.0	34.1	33.2	35.3	35.6
Delta	36.5	40.4	42.1+	36.9	40.0	37.3
West	41.3	42.4	42.1	40.6	41.7	41.3
- 1971-72						
East Coast	34.7	37.1	38.7	33.8	40.1	39.2
Southeast	42.7	44.0	44.1	42.4	42.7	42.1
Upper & Central South	37.8	39.2	38.9	39.5	41.5	39.3
Delta	35.5	39.4	40.8	37.0	39.3	36.6
West	40.6	44.4	44.7	39.5	43.1	43.7
- 1970-72						
East Coast	34.8	36.9	38.7	34.7	38.8	
Southeast	42.5	45.6	41.9	42.7	41.8	
Upper & Central South	37.3	39.7	40.7	40.5	40.0	
Delta	34.3	37.8	39.7	35.2	36.8	
West	38.5	42.0	42.1	37.4	41.0	
Oil Content - 1972	22.0	22.7+	21.7	21.8	20.8-	22.0
- 1971-72	22.0	22.4	21.7	21.8	20.5	21.9
- 1970-72	21.8	22.3	21.6	21.6	20.3	
Protein Content - 1972	40.9	39.3-	40.6	39.8-	42.2+	40.4
- 1971-72	41.2	39.9	40.7	40.1	42.9	40.6
- 1970-72	41.3	40.0	40.8	40.4	43.3	
Seed size	14.1	14.7	14.4	14.0	16.2+	14.1
Maturity index	10-10	0	-6	+2	-1	0
Height	32	39	32	32	36	36
Shatter resistance	1.0	1.7	1.0	1.0	1.3	1.3
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Root-knot	4.0	4.0	1.5	5.0	4.5	3.5
Cyst nematode(race 3)	S	S	S	R	S	S
Downy mildew	3.0	1.7	3.0	2.3	1.0	2.0
Flower color	P	W	W	P	W	P
Pubescence color	T	G	G	G	T	G
Pod wall color	T	T	T	T	T	T

Table 22. - (continued)

	R68-208	D69-8201	D69-8205	R69-186	R69-1151	N69-468
Seed Yield - 1972						
East Coast	40.6	40.7	39.1	38.5	42.9+	38.1
Southeast	47.0	46.7	48.0	43.4-	47.0	40.7-
Upper & Central South	33.4	34.5	33.1	34.5	33.0	33.2
Delta	40.7	41.5	40.4	37.0	42.1+	36.2
West	44.8	46.1	43.9	42.4	47.2+	36.3-
- 1971-72						
East Coast	39.0					
Southeast	44.4					
Upper & Central South	38.2					
Delta	39.1					
West	47.2					
- 1970-72						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1972	22.5	22.3	21.8	21.3-	22.7+	22.1
- 1971-72	22.4					
- 1970-72						
Protein Content - 1972	41.4	40.1-	40.4	41.1	39.2-	39.6-
- 1971-72	41.9					
- 1970-72						
Seed size	16.4+	16.0+	15.4+	14.3	14.6	15.0+
Maturity index	-2	-5	-5	+3	-5	+1
Height	33	37	34	37	32	37
Shatter resistance	1.0	1.3	1.5	2.0	1.3	1.3
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Root-knot	4.0	4.0	4.5	4.5	4.0	4.5
Cyst nematode(race 3)	S	S	S	S	S	S
Downy mildew	3.0	2.5	2.3	1.0	2.0	2.0
Flower color	P	P	P	S	W	W
Pubescence color	G	G	G	G	G	G
Pod wall color	T	T	T	S	T	T

Table 23. - Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1972

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-4601	N68-358	R68-208
			East Coast				
Warsaw, Va.	39.0	34.0	37.1	40.0	42.9+	42.2+	39.5
Petersburg, Va.	34.2	28.2-	26.9-	24.3-	40.4+	38.0	23.9-
Holland, Va.	40.0	38.5	43.5	32.9	39.7	43.4	47.0
Plymouth, N.C.	47.3	48.6	51.2	43.6	51.6+	51.3	50.8
Clinton, N.C.	44.9	49.7	52.0	41.3	54.9	43.6	42.5
Clayton, N.C.	27.9	37.9+	40.6+	33.3	34.0	43.0+	43.4+
Florence, S.C.	44.7	48.8	54.8+	50.5+	48.2	52.8+	50.3+
Hartsville, S.C.	25.6	22.1	33.6	28.4	26.9	26.7	31.8
Mean	37.3	37.4	42.5+	35.7	42.2+	41.6+	40.6
			Southeast				
Tifton, Ga.	56.7	60.7	60.9	50.1-	58.7	57.3	59.5
Quincy, Fla.	30.2	29.3	34.7	26.8	29.7	33.6	29.7
Jay, Fla.	49.6	45.9	50.2	48.1	42.6	47.9	52.2
Fairhope, Ala.	44.6	40.7-	41.2	39.2-	43.4	38.9-	47.1
Baton Rouge, La.	45.8	39.7	48.2	40.3	42.6	40.0	46.5
Mean	45.5	43.3-	47.1	40.9	43.4-	43.5-	47.0
			Upper and Central South				
Belle Mina, Ala.	30.6	24.9-	31.9	23.0-	24.3-	27.4	23.7-
Experiment, Ga.	41.4	48.3	42.0	39.1	42.9	47.0	44.1
Jackson, Tenn.	32.8	34.2	26.5	28.3	27.5	30.4	32.3
Verona, Miss.	36.0	40.4	36.2	42.6	46.6+	37.5	33.5
Mean	35.2	37.0	34.1	33.2	35.3	35.6	33.4
			Delta				
Portageville, Mo.(A)*	46.7	42.0	44.5	41.8	48.0	40.9	41.9
Portageville, Mo.(B)*	35.6	32.0	35.2	36.1	32.4	32.3	34.7
Keiser, Ark.	39.5	35.4-	36.6	39.0	41.7	33.6-	38.6
Jonesboro, Ark.	16.7	25.3+	26.0+	13.8	17.1	23.0	32.6+
Rohwer, Ark.	34.0	32.4	35.5	36.9	35.4	33.6	36.9
Stoneville, Miss.(A)	42.2	51.6+	56.0+	45.1	51.3+	43.9	49.2+
Stoneville, Miss.(B)	45.1	51.2	47.5	41.0	43.3	46.5	47.2
St. Joseph, La.	32.5	53.2+	55.3+	41.3+	50.7+	44.7+	44.6+
Mean	36.5	40.4	42.1+	36.9	40.0	37.3	40.7
			West				
Pine Bluff, Ark.	42.2	50.7	44.9	42.9	44.8	47.1	49.8
Stuttgart, Ark.	40.4	46.4+	45.5+	46.2+	47.4+	44.4	43.1
Curtis, La.	38.7	35.3	33.3	29.6	33.2	33.9	40.1
Crowley, La.	37.5	33.6-	36.2	34.5	37.0	37.6	38.7
Beaumont, Texas	44.6	42.2	41.0	48.8	45.2	36.7	35.7
Bixby, Okla.	30.7	38.6	33.2	33.7	31.0	32.6	39.3
Lubbock, Texas	49.5	49.8	55.6	46.2	50.8	50.9	55.3
Mean	41.3	42.4	42.1	40.6	41.7	41.3	44.8

(+) - 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	D69-8201	D69-8205	R69-186	R69-1151	N69-468	L.S.D. (.05)	C.V.
			East Coast				
Warsaw, Va.	35.3-	38.0	37.4	38.4	41.3+	2.1	3%
Petersburg, Va.	34.2	29.8	26.7-	33.2	28.7-	5.3	10%
Holland, Va.	45.9	38.5	40.4	48.5+	41.9	8.0	11%
Plymouth, N.C.	53.9+	51.2	52.6+	51.9+	50.3	4.1	5%
Clinton, N.C.	42.0	43.5	40.9	49.6	41.2	N.S.	17%
Clayton, N.C.	36.6	32.1	37.9+	42.8+	40.4+	9.0	14%
Florence, S.C.	49.5+	50.7+	54.6+	51.9+	47.0	4.3	5%
Hartsville, S.C.	29.8	31.9	30.0	29.5	25.1	N.S.	16%
Mean	40.7	39.1	38.5	42.9+	38.1	3.7	
			Southeast				
Tifton, Ga.	59.9	59.8	53.2	64.2+	52.2-	4.5	5%
Quincy, Fla.	34.6	34.8	29.5	35.1	26.8	5.0	9%
Jay, Fla.	49.4	48.9	46.1	49.1	40.6-	4.6	6%
Fairhope, Ala.	47.6	48.1+	40.2-	40.7-	42.7	3.5	5%
Baton Rouge, La.	42.1	48.6	47.9	45.8	41.2	6.4	9%
Mean	46.7	48.0	43.4-	47.0	40.7-	1.9	
			Upper and Central South				
Belle Mina, Ala.	29.9	28.7	22.1-	36.0+	21.9-	3.9	9%
Experiment, Ga.	43.1	43.8	40.5	39.5	37.4	N.S.	12%
Jackson, Tenn.	23.9	27.7	32.6	26.2	36.1	N.S.	25%
Verona, Miss.	41.1	32.4	42.9	30.3	37.5	8.3	13%
Mean	34.5	33.1	34.5	33.0	33.2	N.S.	
			Delta				
Portageville, Mo.(A)	44.4	41.4	39.9	40.6	41.7	7.0	11%
Portageville, Mo.(B)	36.5	30.8	34.6	32.1	32.9	5.7	12%
Keiser, Ark.	36.2	32.0-	38.4	28.7-	25.2-	4.1	7%
Jonesboro, Ark.	28.2+	26.6+	15.3	23.8	27.9+	7.3	19%
Rohwer, Ark.	38.5	38.7	31.9	38.8	30.0	4.9	8%
Stoneville, Miss.(A)	51.0+	58.1+	48.8	56.0+	43.0	7.1	8%
Stoneville, Miss.(B)	44.3	45.9	44.3	55.6	42.3	N.S.	11%
St. Joseph, La.	52.6+	49.8+	42.4+	60.8+	46.5+	6.9	9%
Mean	41.5	40.4	37.0	42.1+	36.2	5.3	
			West				
Pine Bluff, Ark.	53.2	44.1	46.3	53.7	44.3	N.S.	18%
Stuttgart, Ark.	42.2	47.1+	43.6	40.2	48.2+	5.0	7%
Curtis, La.	37.4	37.9	38.5	46.3	31.2	N.S.	20%
Crowley, La.	39.0	38.5	40.2	41.0	37.5	3.8	6%
Beaumont, Texas	49.4	47.5	46.3	43.4	39.7	N.S.	15%
Bixby, Okla.	39.4	40.7+	35.2	36.7	34.6	10.0	17%
Lubbock, Texas	53.5	49.6	38.9-	53.8	18.8-	9.3	11%
Mean	46.1	43.9	42.4	47.2+	36.3-	4.9	

Table 24. - Chemical composition and seed size for the strains in Uniform Group VI, 1972

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-4601	N68-358
			Oil Percentage			
Warsaw, Va.	20.4	21.1	21.2	20.9	20.1	21.2
Plymouth, N.C.	21.9	22.3	21.2	21.4	19.9	21.8
Clayton, N.C.	22.7	22.9	21.5	22.2	20.0	22.9
Jay, Fla.	23.0	24.3	24.1	22.3	23.3	24.0
Jackson, Tenn.	22.0	23.0	21.3	21.8	20.2	21.3
Portageville, Mo.(A)	21.3	21.8	21.0	21.9	21.0	21.1
Stoneville, Miss.(B)	23.7	23.6	22.1	23.1	21.9	22.4
Stuttgart, Ark.	22.6	23.0	22.5	22.5	21.6	23.2
Halfway, Texas	20.8	22.1	20.1	20.5	18.8	20.5
Mean	22.0	22.7+	21.7	21.8	20.8-	22.0
			Protein Percentage			
Warsaw, Va.	39.0	38.3	37.5	37.2	38.6	38.5
Plymouth, N.C.	40.7	38.6	41.4	39.7	42.9	40.6
Clayton, N.C.	41.0	39.0	39.9	39.8	41.5	39.5
Jay, Fla.	43.3	40.5	42.4	41.0	43.1	41.0
Jackson, Tenn.	42.6	39.9	42.7	41.6	44.1	42.4
Portageville, Mo.(A)	41.4	40.6	41.6	40.6	42.8	41.1
Stoneville, Miss.(B)	38.5	37.6	39.6	38.9	41.5	38.3
Stuttgart, Ark.	40.9	39.4	40.8	40.4	43.2	40.0
Halfway, Texas	40.8	39.7	39.8	39.3	42.4	41.9
Mean	40.9	39.3-	40.6	39.8-	42.2+	40.4
			Grams per 100 Seeds			
Warsaw, Va.	12.1	12.2	10.7	13.9	12.5	12.2
Plymouth, N.C.	13.5	15.2	15.2	12.3	17.4	13.2
Clayton, N.C.	14.0	15.9	14.5	14.2	18.0	14.7
Jay, Fla.	16.0	17.0	18.5	15.0	19.0	16.5
Jackson, Tenn.	15.1	15.7	14.3	15.3	17.9	15.4
Portageville, Mo.(A)	13.7	14.3	14.4	13.7	15.3	13.7
Stoneville, Miss.(B)	13.2	13.5	13.7	12.0	15.7	12.2
Stuttgart, Ark.	14.3	13.7	13.3-	14.7	14.7	14.3
Halfway, Texas	14.9	15.1	15.0	14.7	15.2	15.0
Mean	14.1	14.7	14.4	14.0	16.2+	14.1

le 24. - (continued)

Location	R68-208	D69-8201	D69-8205	R69-186	R69-1151	N69-468	L.S.D. (.05)
			Oil Percentage				
rsaw, Va.	22.7	21.3	20.1	19.7	21.8	20.3	
ymouth, N.C.	21.9	21.2	21.3	20.8	22.4	22.2	
ayton, N.C.	22.9	22.7	21.7	21.7	22.7	23.0	
y, Fla.	24.8	25.2	25.1	22.4	25.1	23.5	
ckson, Tenn.	21.6	20.0	21.8	21.4	22.4	22.2	
rtageville,Mo.(A)	20.8	21.6	21.3	20.5	21.9	21.8	
oneville, Miss.(B)	23.4	23.9	22.7	22.9	24.1	22.2	
uttgart, Ark.	22.5	23.5	21.6	22.9	22.5	23.2	
lfway, Texas	21.6	21.0	21.0	19.8	21.0	20.6	
Mean	22.5	22.3	21.8	21.3-	22.7+	22.1	0.6
			Protein Percentage				
rsaw, Va.	40.6	38.9	40.4	38.9	36.4	38.3	
lymouth, N.C.	41.7	40.0	40.8	41.4	38.9	38.4	
layton, N.C.	39.8	39.5	38.7	41.0	38.1	38.1	
ay, Fla.	42.7	41.4	40.9	42.5	41.5	39.9	
ackson, Tenn.	42.7	42.5	41.7	42.1	40.7	41.8	
ortageville,Mo.(A)	42.8	40.9	41.4	42.6	40.3	41.7	
toneville, Miss.(B)	38.9	37.0	39.0	39.5	37.4	38.7	
tuttgart, Ark.	41.8	40.4	40.5	39.9	39.9	39.6	
alfway, Texas	41.2	40.2	40.0	41.9	39.3	39.6	
Mean	41.4	40.1-	40.4	41.1	39.2-	39.6-	0.7
			Grams per 100 Seeds				
Warsaw, Va.	15.0	15.9	14.0	12.8	14.7	14.4	
Plymouth, N.C.	16.5	14.9	15.5	14.6	13.7	15.5	
Clayton, N.C.	17.5	16.5	15.7	15.2	13.8	15.9	
Jay, Fla.	21.0	19.0	18.5	15.5	16.0	15.5	
Jackson, Tenn.	17.6	17.3	14.9	15.5	14.8	16.1	
Portageville, Mo.(A)	15.6	14.9	14.0	13.7	13.8	14.8	
Stoneville, Miss.(B)	15.5	15.1	15.8	12.6	14.4	12.1	
Stuttgart, Ark.	14.3	15.7	15.0	13.7	15.7	16.0	
Halfway, Texas	14.4	15.0	15.1	15.0	14.9	14.9	
Mean	16.4+	16.0+	15.4+	14.3	14.6	15.0+	0.9

Table 25. - Relative maturity data, days earlier (-) or later (+) than Lee 68, for the strains in Uniform Group VI, 1972

Location	Date planted	Lee 68 matured	Pickett				
			Davis	D64-4636	71	D67-4601	N68-358
East Coast							
Warsaw, Va.	5-30	10-15	+7	+12	+6	+5	+6
Petersburg, Va.		10-19	+3	-5	+5	0	-2
Holland, Va.	6-9	11-8	0	-5	-5	-5	0
Plymouth, N.C.	5-17	10-18	+8	-1	+2	+8	+2
Clinton, N.C.	5-30	10-24	+2	-8	0	-4	-4
Clayton, N.C.	5-30	10-24	+4	-8	+2	+4	+2
Florence, S.C.	5-18	10-16	+4	-11	0	0	+7
Hartsville, S.C.	6-6	10-17	-4	-10	+2	-1	+2
Mean		10-22	+3	-5	+2	+1	+2
Southeast							
Tifton, Ga.	5-9	10-3	-3	-3	+1	-2	+1
Quincy, Fla.	5-17	9-25	-1	-9	0	-3	-1
Jay, Fla.	5-19	10-2	-1	-9	+4	-1	+5
Fairhope, Ala.	6-2	9-28	-3	+2	+2	+2	+2
Baton Rouge, La.	5-22	10-9	-4	-12	0	-4	-1
Mean		10-1	-2	-6	+1	-2	+1
Upper and Central South							
Belle Mina, Ala.		10-5	0	+4	+2	+2	+4
Experiment, Ga.	5-18	10-8	-4	+19	+4	-4	+3
Jackson, Tenn.	5-17	10-16	+4	-11	+7	+4	0
Verona, Miss.	5-2	10-12	-4	-13	+1	-3	-2
Mean		10-10	-1	0	+4	0	+1
Delta							
Portageville, Mo.(A)	5-11	10-27	-3	-13	+1	-10	-5
Portageville, Mo.(B)	5-11	10-24	-3	-10	0	-2	0
Keiser, Ark.	5-17	10-25	-3	-15	+4	-6	-6
Jonesboro, Ark.	5-15	10-22	-1	-7	+4	+8	+2
Rohwer, Ark.	5-23	10-17	-12	-17	+1	-7	-4
Stoneville, Miss.(A)	5-11	10-11	-5	-14	+2	-4	-4
Stoneville, Miss.(B)	5-23	10-16	0	-13	0	-3	-1
St. Joseph, La.	5-10	9-28	+4	0	+8	+4	+7
Mean		10-18	-3	-11	+3	-3	-1
West							
Pine Bluff, Ark.	5-15	10-10	0	-10	+5	+5	0
Stuttgart, Ark.	5-18	9-22	+7	+8	+5	+2	+6
Curtis, La.	5-15	10-8	-9	-11	0	-4	-2
Crowley, La.	5-26	10-11	-5	-13	0	+1	-1
Beaumont, Texas	5-31	10-26	0	+2	+1	0	-2
Bixby, Okla.	6-2	10-28	-3	-10	-4	-5	-2
Lubbock, Texas	5-20	10-20	+9	-2	+9	-2	0
Mean		10-14	0	-5	+2	0	0

able 25. - (continued)

Location	R68-208	D69-8201	D69-8205	R69-186	R69-1151	N69-468
		East Coast				
arsaw, Va.	+10	+1	+6	+7	+5	+6
etersburg, Va.	0	-5	-	-2	0	-3
olland, Va.	0	0	0	0	0	-1
lymouth, N.C.	0	-1	-1	+10	0	+6
inton, N.C.	0	-10	-10	0	0	0
layton, N.C.	+2	-6	+2	+2	-2	+4
lorence, S.C.	0	+7	-11	+4	-11	-3
artsville, S.C.	-6	-6	-8	+3	-8	+2
Mean	+1	-3	-3	+3	-2	+1
		Southeast				
ifton, Ga.	-2	+1	-2	+1	0	+2
uincy, Fla.	-3	-2	-6	0	-6	+4
ay, Fla.	0	-5	-8	+2	-4	+1
airhope, Ala.	-3	-3	-3	+6	+2	+2
aton Rouge, La.	-2	-10	-10	0	-12	0
Mean	-2	-4	-6	+2	-4	+2
		Upper and Central South				
elle Mina, Ala.	+3	+1	+5	+1	+4	0
xperiment, Ga.	-3	-6	+9	+2	-11	+2
ackson, Tenn.	-4	-7	-3	+7	-7	+4
erona, Miss.	-6	-5	-9	+5	-9	+1
Mean	-3	-4	+1	+4	-6	+2
		Delta				
ortageville, Mo.(A)	-7	-10	-10	+1	-11	-1
ortageville, Mo.(B)	-8	-10	-9	+2	-11	+4
eiser, Ark.	+3	-12	-15	-2	-16	+9
onesboro, Ark.	0	-2	-2	+2	0	+2
ohwer, Ark.	-11	-17	-18	-6	-17	-1
toneville, Miss.(A)	-5	-7	-7	-1	-10	-4
toneville, Miss.(B)	-2	-7	-4	0	-3	-1
t. Joseph, La.	-7	0	0	+7	+4	+8
Mean	-5	-8	-7	0	-8	+2
		West				
ine Bluff, Ark.	+5	-12	-12	+5	-2	0
tuttgart, Ark.	+7	-1	+4	+9	+6	+7
urtis, La.	-7	-6	-5	-3	-9	-4
rowley, La.	-5	-11	-13	+1	-8	0
eaumont, Texas	-4	0	-1	+1	-5	-3
ixby, Okla.	-6	-5	-7	0	-9	-2
ubbock, Texas	+10	0	-6	+16	-2	-2
Mean	0	-5	-6	+4	-4	-1

Table 26. - Plant height for the strains in Uniform Group VI, 1972

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-4601	N68-358
			East Coast			
Warsaw, Va.	36	38	38	43	35	37
Petersburg, Va.	35	31	33	29	33	35
Holland, Va.	41	44	38	38	46	44
Plymouth, N.C.	34	42	35	33	35	36
Clinton, N.C.	25	32	21	23	30	26
Clayton, N.C.	27	37	31	30	32	34
Florence, S.C.	34	40	32	34	38	40
Hartsville, S.C.	36	41	36	36	40	37
Mean	34	38	33	33	36	36
			Southeast			
Tifton, Ga.	28	38	29	31	35	35
Quincy Fla.	26	37	26	25	32	27
Jay, Fla.	32	44	32	31	35	36
Fairhope, Ala.	30	39	32	32	37	35
Baton Rouge, La.	38	41	33	36	39	39
Mean	31	40	30	31	36	34
			Upper and Central South			
Belle Mina, Ala.	35	41	36	38	41	42
Experiment, Ga.	27	40	27	28	34	32
Jackson, Tenn.	48	47	48	46	48	50
Verona, Miss.	32	40	31	31	36	31
Mean	36	42	36	36	40	39
			Delta			
Portageville, Mo.(A)	36	38	33	39	42	40
Portageville, Mo.(B)	32	39	27	27	37	31
Keiser, Ark.	33	42	32	32	40	36
Jonesboro, Ark.	37	43	34	35	41	40
Rohwer, Ark.	24	38	33	20	35	33
Stoneville, Miss.(A)	34	47	35	33	41	37
Stoneville, Miss.(B)	31	41	34	30	40	39
St. Joseph, La.	24	34	25	25	26	25
Mean	31	40	32	30	38	35
			West			
Pine Bluff, Ark.	41	45	38	39	42	44
Stuttgart, Ark.	27	30	27	30	25	24
Curtis, La.	30	34	28	30	34	32
Crowley, La.	28	37	30	31	36	38
Beaumont, Texas	27	28	28	28	27	30
Bixby, Okla.	34	37	34	37	29	41
Lubbock, Texas	27	33	26	29	31	32
Mean	31	35	30	32	32	34

Table 26. - (continued)

Loaction	R68-208	D69-8201	D69-8205	R69-186	R69-1151	N69-468
		East Coast				
Warsaw, Va.	37	40	40	44	36	38
Petersburg, Va.	30	33	34	27	28	32
Holland, Va.	41	46	40	49	41	42
Plymouth, N.C.	33	38	36	40	34	38
Clinton, N.C.	20	25	25	23	19	27
Clayton, N.C.	33	33	31	33	29	36
Florence, S.C.	36	37	35	37	37	42
Hartsville, S.C.	37	39	38	39	36	41
Mean	33	36	35	37	34	37
		Southeast				
Tifton, Ga.	34	36	35	36	32	37
Quincy, Fla.	27	31	26	30	25	28
Jay, Fla.	35	40	36	39	35	41
Fairhope, Ala.	33	39	32	37	34	39
Baton Rouge, La.	35	36	33	39	31	39
Mean	33	36	32	36	31	37
		Upper and Central South				
Belle Mina, Ala.	40	43	39	43	36	44
Experiment, Ga.	29	32	28	36	29	34
Jackson, Tenn.	48	50	52	48	48	50
Verona, Miss.	34	36	32	35	31	36
Mean	38	40	38	41	36	41
		Delta				
Portageville, Mo.(A)	37	39	38	42	34	41
Portageville, Mo.(B)	26	31	27	33	26	35
Keiser, Ark.	33	36	37	37	32	39
Jonesboro, Ark.	39	43	41	45	38	45
Rohwer, Ark.	31	36	34	35	32	34
Stoneville, Miss.(A)	35	41	39	41	38	43
Stoneville, Miss.(B)	35	37	35	42	33	41
St. Joseph, La.	27	27	24	28	24	28
Mean	33	36	34	38	32	38
		West				
Pine Bluff, Ark.	39	44	39	44	35	42
Stuttgart, Ark.	24	32	30	34	24	26
Curtis, La.	27	33	30	33	33	31
Crowley, La.	31	37	31	36	29	35
Beaumont, Texas	30	23	23	37	15	27
Bixby, Okla.	40	41	38	41	35	39
Lubbock, Texas	30	34	32	34	31	31
Mean	32	35	32	37	29	33

Table 27. - Lodging scores for the strains in Uniform Group VI, 1972

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-4601	N68-358
East Coast						
Warsaw, Va.	1.6	2.7	2.4	3.1	1.6	2.5
Petersburg, Va.	3.3	2.7	2.0	2.0	3.7	3.7
Holland, Va.	5.0	4.7	4.7	5.0	4.7	4.8
Plymouth, N.C.	3.3	2.7	3.0	3.7	3.3	3.0
Clinton, N.C.	2.0	2.7	2.0	2.0	3.0	2.3
Clayton, N.C.	3.0	3.0	2.7	3.0	3.0	3.0
Florence, S.C.	3.0	2.0	1.0	2.0	2.0	2.0
Hartsville, S.C.	3.0	3.0	2.5	2.8	2.7	2.5
Southeast						
Tifton, Ga.	2.7	3.0	3.0	3.0	3.3	2.3
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	1.0	2.0
Baton Rouge, La.	1.7	1.5	1.4	1.8	1.0	1.5
Upper and Central South						
Belle Mina, Ala.	2.2	3.2	2.0	2.3	3.0	1.3
Experiment, Ga.	1.0	1.7	1.0	1.0	1.0	1.0
Jackson, Tenn.	3.0	3.0	2.3	2.0	2.3	2.0
Delta						
Portageville, Mo.(A)	2.3	3.6	2.6	3.1	3.5	2.8
Portageville, Mo.(B)	1.5	1.5	1.4	1.8	1.6	1.5
Keiser, Ark.	1.7	1.7	1.3	1.0	1.0	1.0
Jonesboro, Ark.	4.0	3.0	3.0	4.0	2.0	2.0
Rohwer, Ark.	2.3	3.0	2.0	2.0	3.0	1.7
Stoneville, Miss.(A)	2.7	3.7	3.0	3.0	3.0	3.0
Stoneville, Miss.(B)	2.7	3.3	3.0	2.3	3.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
West						
Pine Bluff, Ark.	2.0	3.0	2.0	2.0	3.0	1.0
Stuttgart, Ark.	1.8	1.7	1.5	2.5	1.3	1.2
Curtis, La.	2.0	2.0	2.0	2.0	2.0	1.5
Crowley, La.	1.0	2.0	2.0	1.5	1.5	1.0
Beaumont, Texas	1.0	1.0	3.0	3.0	2.0	1.0
Bixby, Okla.	2.7	2.3	1.3	2.3	4.0	2.0
Lubbock, Texas	3.0	2.5	2.5	3.0	3.0	2.5

Table 27. - (continued)

Location	R68-208	D69-8201	D69-8205	R69-186	R69-1151	N69-468
			East Coast			
Warsaw, Va.	2.1	1.6	1.9	2.0	1.8	1.6
Petersburg, Va.	1.7	1.7	1.0	1.0	1.0	1.0
Holland, Va.	4.2	4.3	4.3	4.5	4.2	4.5
Plymouth, N.C.	3.0	2.3	2.0	3.3	2.7	2.3
Clinton, N.C.	2.0	2.0	2.0	2.0	2.0	2.0
Clayton, N.C.	2.3	2.0	2.3	3.0	2.0	2.7
Florence, S.C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S.C.	2.2	2.5	2.3	2.0	2.2	2.0
			Southeast			
Tifton, Ga.	2.0	2.3	1.7	3.0	3.3	4.0
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	1.0	1.0
Baton Rouge, La.	1.2	1.0	1.0	1.2	1.0	1.3
			Upper and Central South			
Belle Mina, Ala.	1.3	2.7	2.8	2.0	1.8	1.3
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	2.0	2.0	2.0	2.0	2.0
			Delta			
Portageville, Mo.(A)	2.0	2.1	2.3	2.8	3.1	2.5
Portageville, Mo.(B)	1.1	1.1	1.4	1.6	1.4	1.1
Keiser, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Jonesboro, Ark.	1.0	2.0	2.0	3.0	2.0	2.0
Rohwer, Ark.	1.3	1.7	2.8	2.7	1.0	1.3
Stoneville, Miss.(A)	2.0	2.0	2.3	2.7	2.0	3.0
Stoneville, Miss.(B)	2.7	2.7	2.3	3.0	3.0	2.7
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
Pine Bluff, Ark.	1.0	1.0	1.0	3.0	1.0	4.0
Stuttgart, Ark.	1.0	3.3	2.2	2.5	1.0	1.3
Curtis, La.	1.5	1.5	1.5	1.5	2.0	1.5
Crowley, La.	1.0	1.0	1.0	1.5	1.0	1.0
Beaumont, Texas	1.0	3.0	1.0	2.0	1.0	1.0
Bixby, Okla.	1.3	1.3	1.7	2.0	2.0	1.7
Lubbock, Texas	2.0	2.0	2.0	3.0	2.0	2.0

Table 28. - Seed quality scores for the strains in Uniform Group VI, 1972

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-4601	N68-358
			East Coast			
Warsaw, Va.	1.5	1.1	2.0	1.5	1.6	1.6
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	1.2	1.2	1.0	1.0	1.2	1.0
Plymouth, N.C.	1.0	1.0	1.0	1.5	1.0	1.0
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Clayton, N.C.	1.0	1.0	1.0	1.0	1.5	1.0
			Southeast			
Tifton, Ga.	1.8	2.0	1.7	1.8	1.8	2.0
Quincy, Fla.	3.0	2.0	2.0	2.0	4.0	2.0
Jay, Fla.	2.0	2.0	3.0	2.0	4.0	2.0
Fairhope, Ala.	1.7	2.0	2.7	1.3	2.7	2.3
Baton Rouge, La.	1.0	1.0	1.5	1.0	1.5	1.0
			Upper and Central South			
Experiment, Ga.	1.0	1.7	1.0	1.0	2.0	1.0
Jackson, Tenn.	2.0	1.0	3.0	2.0	2.2	2.0
			Delta			
Portageville, Mo.(A)	1.0	1.3	2.0	1.0	1.0	1.6
Portageville, Mo.(B)	2.0	1.9	3.5	2.4	2.1	2.4
Keiser, Ark.	3.2	3.2	4.5	2.8	2.8	3.5
Jonesboro, Ark.	2.0	1.0	2.0	2.0	2.0	2.0
Rohwer, Ark.	2.8	2.5	2.8	2.5	3.0	2.7
Stoneville, Miss.(A)	2.7	3.0	2.7	2.3	2.7	2.7
Stoneville, Miss.(B)	2.0	2.3	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	2.0	1.0
			West			
Pine Bluff, Ark.	1.0	3.0	3.0	1.0	1.0	1.0
Stuttgart, Ark.	3.3	2.5	3.2	2.2	2.3	3.0
Curtis, La.	1.3	2.3	1.7	1.3	3.0	1.3
Beaumont, Texas	3.0	2.0	2.0	3.0	3.0	4.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0

Table 28. - (continued)

Location	R68-208	D69-8201	D69-8205	R69-186	R69-1151	N69-468
			East Coast			
Warsaw, Va.	1.6	2.4	1.5	1.8	1.8	1.5
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	1.3	1.0	1.2	1.0	1.0	1.0
Plymouth, N.C.	1.0	1.5	1.0	1.0	1.5	1.0
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Clayton, N.C.	1.0	1.0	1.5	1.0	1.0	1.0
			Southeast			
Tifton, Ga.	1.5	1.7	1.8	1.5	1.8	1.8
Quincy, Fla.	2.0	2.0	1.0	1.0	3.0	2.0
Jay, Fla.	2.0	2.0	3.0	1.0	3.0	1.0
Fairhope, Ala.	2.0	2.0	2.0	2.0	2.3	1.7
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Experiment, Ga.	1.0	2.0	1.7	1.0	1.7	1.3
Jackson, Tenn.	1.8	2.5	2.0	2.0	3.5	1.0
			Delta			
Portageville, Mo.(A)	1.0	1.5	2.0	1.0	2.9	1.0
Portageville, Mo.(B)	1.9	2.6	2.6	1.6	4.3	2.0
Keiser, Ark.	3.0	4.2	4.2	2.7	4.7	2.5
Jonesboro, Ark.	1.0	1.0	1.0	1.0	2.0	1.0
Rohwer, Ark.	1.8	3.2	2.8	2.0	3.0	2.5
Stoneville, Miss.(A)	2.7	3.0	3.0	2.0	3.0	2.0
Stoneville, Miss.(B)	2.0	2.3	2.3	2.0	2.3	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.5	2.0
			West			
Pine Bluff, Ark.	1.0	1.0	3.0	2.0	3.0	1.0
Stuttgart, Ark.	2.7	3.2	2.7	3.2	2.7	2.5
Curtis, La.	1.7	2.0	2.0	1.3	2.0	1.3
Beaumont, Texas	2.0	3.0	3.0	2.0	3.0	3.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0

PRELIMINARY GROUP VI

1972

Preliminary Group VI nurseries, including 34 experimental strains and the two checks Lee 68 and D64-4636, were grown at eight locations. The parentage of these strains is reported in Table 29. Performance data from seven locations are summarized in Tables 30 through 35. Plantings at Keiser were not harvested, because of prolonged adverse weather. Harvesting at several other locations was delayed because of adverse weather. Differences among strains for seed yield were significant at the 5% level of confidence at all locations. The combined analysis of variance for seed yield showed differences among strains to be significant.

Six strains selected for resistance to phytophthora rot, root-knot nematodes, and race 3 of the soybean cyst nematode were included. Five of these strains ranked above Lee 68 in mean yield. D69-6344 selected for a very high level of root-knot resistance and phytophthora rot had a mean yield significantly below that for Lee 68. D69-6344 has proved highly resistant to a strain of root knot in Louisiana that severely damages Bragg.

Twenty-six of the strains tested carry the major gene for resistance to phytophthora rot. All appeared resistant to target spot and 31 are resistant to bacterial pustule. Eleven strains were resistant to root-knot nematodes in the special planting in west Florida.

Two composites, D71-B24 and D71-B25, were included to attempt to obtain a measure of the effect of soybean mosaic virus upon seed yield under natural conditions. In a planting at Stoneville in 1971, D71-B24, the composite of resistant F_3 plants, yielded 24% more than D71-B25, the composite of susceptible F_3 plants, when inoculated at an early growth stage. Seed yields were similar when not inoculated. In these plantings mean seed yields were nearly similar. At Petersburg the susceptible composite was appreciably lower in seed yield than the resistant component. However, D70-2399 and D70-2621, two strains selected for resistance to SMV, were among the lowest in seed yield.

V68-1034 yields well in these plantings. It had been included in Preliminary V in 1971 and was considered to be too late for that group. Results in 1972 indicate that it is too early for Group VI. In both years, protein percentage was very low.

Strains which appear to merit being advanced to Uniform Group VI are D70-3115, D70-3185, D70-7589, and R69-345.

Table 29. - Parentage of the strains in Preliminary Group VI, 1972

	Variety or strain	Parentage	Generation composited
1.	Lee 68		
2.	D64-4636		
3.	D69-4980	D63-6094 x Semmes	F_5
4.	D69-5095	D63-6094 x Semmes	F_5
5.	D69-6344	D63-6094 x D62-7562	F_5
6.	D69-6543	Semmes x D61-2694	F_5
7.	D69-8594	D64-5144 x Semmes	F_5
8.	D69-8928	D64-5144 x Semmes	F_5
9.	D70-2364	Hood x D65-6562	F_5
10.	D70-2399	Hood x D65-6562	F_5
11.	D70-2527	Hood x D65-6562	F_5
12.	D70-2621	Hood x D65-6562	F_5
13.	D70-3064	D64-4636 x Lee type resistant C.N. & P.R.	F_5
14.	D70-3067	D64-4636 x Lee type resistant C.N. & P.R.	F_5
15.	D70-3101	D64-4636 x Lee type resistant C.N. & P.R.	F_5
16.	D70-3115	D64-4636 x Lee type resistant C.N. & P.R.	F_5
17.	D70-3124	D64-4636 x Lee type resistant C.N. & P.R.	F_5
18.	D70-3185	D64-4636 x Lee type resistant C.N. & P.R.	F_5
19.	D70-7040	D64-5149 x (D62-7816 x Lee 68)	F_5
20.	D70-7589	Hood x D60-9647	F_5
21.	D70-7687	Hood x D62-6342	F_5
22.	D71-B24	D64-3937 x PI 95960 (resistant to S.M.V.)	F_3
23.	D71-B25	D64-3937 x PI 95960 (susceptible to S.M.V.)	F_3
24.	F70-1792	Bragg x D61-3498	F_8
25.	F70-3739	Bragg(2) x D61-3498	F_7
26.	F70-3754	Bragg(2) x D61-3498	F_7
27.	N69-332	N55-47 x York	F_5
28.	N69-3011	Dare x Hood	F_4
29.	R69-345	Semmes x R64-500	F_5
30.	R69-1400	Lee 68 x R66-1517	F_4
31.	R70-504	Davis x Bragg	F_5
32.	R70-521	Davis x Bragg	F_5
33.	R70-580	Davis x Bragg	F_5
34.	R70-593	Davis x Bragg	F_5
35.	R71-700	Hood(8) x Arksoy	
36.	V68-1034	Dare x PI 71506	

Table 30. - General summary of performance for the strains in Preliminary Group VI, 1972

	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Shatter resist.	P.R.	R.K.	C.N.	D.M.
Lee 68	40.1	10-12	35	22.7	40.8	1.0	1.0	5.0	S	3.0
D64-4636	41.8	-4	34	22.4	40.3	1.0	1.0	0.0	S	4.0
D69-4980	40.2	-3	35	22.4	39.8-	1.0	1.0	3.0	S	2.5
D69-5095	38.7	-6	37	21.7	38.3-	1.0	1.0	4.0	S	3.0
D69-6344	33.2-	-6	35	22.2	38.4-	1.0	1.0	0.0	S	1.5
D69-6543	35.4	+1	34	17.9-	43.4+	1.0	1.0	5.0	S	2.5
D69-8594	36.6	+2	35	22.0	40.7	1.0	1.0	5.0	S	3.5
D69-8928	36.4	-2	37	20.0-	42.5+	1.0	1.0	5.0	S	3.0
D70-2364	33.5-	+5	36	22.8	40.2	1.0	1.0	5.0	S	2.0
D70-2399	34.7	-1	31	23.1	40.1	1.0	1.0	5.0	S	1.0
D70-2527	--	-11	24	23.5	39.7-	1.0	1.0	5.0	S	1.0
D70-2621	35.8	-7	36	22.8	39.4-	1.0	1.0	5.0	S	1.0
D70-3064	40.4	-9	34	23.8+	40.1	1.0	1.0	0.0	R	4.0
D70-3067	38.2	-2	39	23.3	38.8-	1.0	1.0	0.0	R	4.0
D70-3101	41.3	-5	27	22.3	41.0	1.0	1.0	0.0	R	3.5
D70-3115	41.7	-6	36	23.8+	39.4-	1.0	1.0	0.0	R	3.5
D70-3124	40.5	0	37	22.0	40.8	1.0	1.0	0.5	R	3.5
D70-3185	41.3	0	39	22.4	40.6	1.0	1.0	0.5	R	4.0
D70-7040	38.4	-1	34	19.9-	42.5+	1.0	1.0	5.0	S	2.5
D70-7589	41.1	-1	38	21.8	42.2+	1.0	1.0	5.0	S	3.0
D70-7687	35.2	-5	32	22.0	39.5-	1.0	1.0	5.0	S	1.0
D71-B24	36.2	+6	37	21.9	39.4-	1.0	1.0	4.5	S	3.5
D71-B25	35.8	+6	38	22.5	39.3-	1.0	1.0	4.0	S	4.0
F70-1792	--	0	33	19.9-	41.7	1.0	1.0	0.0	S	2.0
F70-3739	35.1	+4	34	19.8-	41.5	1.0	1.0	0.0	S	3.5
F70-3754	35.5	+4	37	22.2	39.5-	1.0	1.0	1.0	S	3.0
N69-332	40.5	-2	35	22.8	39.7-	1.0	1.0	3.5	S	3.5
N69-3011	39.4	-5	36	22.8	39.3-	1.0	1.0	2.0	S	2.5
R69-345	40.8	-3	36	21.9	40.4	1.0	1.0	4.0	S	3.0
R69-1400	37.9	+1	35	22.4	40.5	1.0	1.0	3.5	S	3.5
R70-504	39.1	0	45	22.3	39.3-	1.0	1.0	2.0	S	3.5
R70-521	36.5	+6	47	21.4-	40.6	1.0	1.0	4.5	S	2.0
R70-580	39.9	+3	36	22.5	40.3	1.0	1.0	4.5	S	3.5
R70-593	--	-4	32	22.7	39.8-	1.0	1.0	3.5	S	2.0
R71-700	38.7	-8	34	23.0	39.2-	1.0	1.0	4.0	S	3.5
V68-1034	41.6	-10	36	22.9	37.2-	1.0	1.0	3.5	S	3.0
L.S.D.(.05)	6.6			1.1	1.0					
L.S.D.(.01)	8.8			1.4	1.4					

Table 31. - Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1972

Strain	Petersburg, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Jay, Fla.	Belle Mina, Ala.
Lee 68	28.9	44.5	43.9	26.0	41.0	56.0	40.1
D64-4636	28.3	54.1+	44.5	35.5+	38.1	53.3	38.8
D69-4980	30.4	45.3	45.8	37.9+	40.7	43.8-	37.8
D69-5095	28.9	45.8	36.1	30.3	45.2	48.4	36.4
D69-6344	16.5-	41.1	39.2	31.9	39.2	35.2-	29.5-
D69-6543	24.9	40.1	41.2	29.4	33.5	46.1-	32.8-
D69-8594	22.0	45.2	42.5	30.1	37.8	46.1-	32.8-
D69-8928	22.0	44.0	38.3	30.4	39.9	42.7-	37.6
D70-2364	25.3	45.0	40.6	21.6	35.8	34.4-	32.1-
D70-2399	17.3-	47.3	39.3	19.1	40.7	43.5-	35.4-
D70-2527	--	37.9	40.7	23.0	39.7	46.2-	41.1
D70-2621	15.4-	42.4	42.6	27.8	40.9	43.5-	38.0
D70-3064	31.8	49.5	44.9	28.6	45.6	43.9-	38.6
D70-3067	26.8	47.7	38.6	25.8	40.4	52.6	35.7
D70-3101	31.4	50.7	43.8	33.0	42.7	46.5-	41.2
D70-3115	31.8	48.4	48.2	33.4+	51.9+	39.7-	38.5
D70-3124	28.6	49.3	43.7	33.3+	42.7	47.7	38.1
D70-3185	31.8	53.7+	45.7	39.9+	35.8	43.9-	38.2
D70-7040	22.4	49.5	46.7	27.4	35.3	47.3	40.4
D70-7589	32.6	44.5	46.1	37.6+	43.2	44.3-	39.2
D70-7687	20.5	47.4	38.1	26.9	33.0-	42.4-	38.3
D71-B24	28.2	43.9	41.3	22.1	35.7	42.4-	40.1
D71-B25	22.4	42.5	43.2	25.2	34.9	43.6-	38.5
F70-1792	--	--	43.0	8.8-	21.3-	39.0-	34.4
F70-3739	20.5	46.6	38.7	26.4	33.4-	43.1-	36.7
F70-3754	19.8	44.3	50.2	16.9-	31.6-	45.8-	39.8
N69-332	31.8	52.0+	44.6	29.1	42.7	42.8-	40.6
N69-3011	30.4	51.6+	38.6	29.7	47.8	45.8-	31.6-
R69-345	31.5	48.9	44.5	33.8+	43.3	47.3	36.0
R69-1400	24.9	44.0	44.6	25.5	41.7	47.3	37.0
R70-504	21.6	47.0	51.7	27.0	51.1+	40.9-	34.3
R70-521	26.7	47.4	37.3	28.4	33.6	41.6-	40.6
R70-580	34.8	47.7	43.2	30.9	41.1	47.3	34.3-
R70-593	--	--	--	12.6-	36.8	48.4	39.0
R71-700	14.8-	47.4	46.9	28.9	48.0	46.9	38.3
V68-1034	28.9	45.6	40.6	34.6+	50.8+	48.4	42.0
L.S.D.(.05)	7.8	6.6	9.9	7.3	7.6	9.4	4.6
C.V.	16%	7%	14%	13%	9%	10%	6%

Table 32. - Oil percentages for the strains in Preliminary Group VI, 1972

Strain	Petersburg, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)	Jay, Fla.
Lee 68	22.4	21.7	21.6	24.5	23.1
D64-4636	23.1	21.2	21.5	22.7	23.4
D69-4980	23.4	20.9	21.1	22.4	24.3
D69-5095	21.9	20.3	20.8	21.5	24.1
D69-6344	22.5	20.8	20.8	23.0	24.1
D69-6543	19.5	16.6	18.0	17.5	17.8
D69-8594	22.4	21.0	21.3	22.4	22.8
D69-8928	21.9	18.7	19.5	19.6	20.2
D70-2364	23.4	22.4	22.0	23.5	22.9
D70-2399	23.4	21.5	21.4	23.7	25.4
D70-2527	--	21.8	22.5	24.1	25.5
D70-2621	24.0	20.8	21.4	23.1	24.8
D70-3064	23.9	22.7	22.3	24.4	25.6
D70-3067	23.7	22.7	21.9	23.9	24.3
D70-3101	22.3	20.9	21.3	22.6	24.5
D70-3115	23.4	22.4	22.5	23.9	26.8
D70-3124	23.1	21.5	21.8	21.6	21.8
D70-3185	22.8	21.4	21.8	22.6	23.3
D70-7040	21.0	19.1	19.8	19.5	19.9
D70-7589	20.8	20.5	21.3	22.9	23.4
D70-7687	22.1	20.5	20.5	22.7	24.1
D71-B24	21.8	21.3	20.9	22.7	22.9
D71-B25	22.5	20.9	21.6	22.7	25.0
F70-1792	--	--	19.5	19.4	19.9
F70-3739	20.6	19.3	19.9	19.5	19.5
F70-3754	22.6	21.3	22.0	22.4	22.5
N69-332	22.6	21.4	21.9	23.7	24.6
N69-3011	23.4	22.2	21.6	24.6	22.4
R69-345	22.3	20.9	21.0	22.2	23.0
R69-1400	22.0	21.9	21.3	23.0	24.0
R70-504	23.1	21.4	22.6	23.5	21.1
R70-521	21.9	21.4	19.8	22.2	21.6
R70-580	22.6	21.2	20.9	22.5	25.5
R70-593	--	--	20.4	22.9	26.8
R71-700	22.1	21.3	21.6	23.2	26.8
V68-1034	24.1	21.4	21.4	24.7	22.9

Table 33. - Protein percentages for the strains in Preliminary Group VI, 1972

Strain	Petersburg, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)	Jay, Fla.
Lee 68	40.5	40.8	42.7	38.8	41.4
D64-4636	37.3	41.6	42.1	39.4	41.2
D69-4980	37.7	40.4	42.1	38.1	40.8
D69-5095	36.9	40.4	38.6	37.6	37.9
D69-6344	36.9	38.4	40.2	36.8	39.8
D69-6543	42.1	45.1	42.6	42.9	44.2
D69-8594	39.0	41.7	42.4	39.1	41.5
D69-8928	39.0	44.6	42.3	42.0	44.6
D70-2364	38.2	40.7	41.1	39.6	41.4
D70-2399	38.6	40.9	41.2	38.1	41.5
D70-2527	--	40.4	40.5	37.5	42.0
D70-2621	37.9	40.3	40.6	37.8	40.3
D70-3064	37.3	40.9	41.4	37.8	42.9
D70-3067	37.6	38.9	39.5	37.0	40.8
D70-3101	39.6	42.2	41.1	39.8	42.3
D70-3115	38.7	41.3	39.0	39.5	38.6
D70-3124	37.8	41.4	41.4	40.6	42.6
D70-3185	38.8	41.3	40.2	40.2	42.4
D70-7040	41.4	42.3	42.7	41.5	44.4
D70-7589	41.9	42.5	42.4	41.1	43.3
D70-7687	39.0	39.0	40.4	38.6	40.7
D71-B24	39.0	38.7	40.5	38.4	40.2
D71-B25	38.0	40.2	40.8	38.5	39.0
F70-1792	--	--	43.0	41.5	42.5
F70-3739	39.9	41.2	42.6	41.0	42.7
F70-3754	37.3	40.5	40.0	39.5	40.0
N69-332	38.8	40.0	40.6	38.1	40.8
N69-3011	37.6	39.4	41.7	37.3	40.7
R69-345	38.9	40.9	41.4	39.4	41.5
R69-1400	40.4	39.9	42.0	38.9	41.1
R70-504	37.5	40.0	39.5	38.3	41.0
R70-521	39.0	40.2	42.3	39.0	42.7
R70-580	38.5	39.9	41.9	39.4	41.9
R70-593	--	--	39.6	39.4	41.6
R71-700	38.5	40.0	40.1	37.3	40.2
V68-1034	35.4	37.1	39.8	35.0	38.8

Table 34. - Plant height for the strains in Preliminary Group VI, 1972

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Jay, Fla.	Belle Mina, Ala.
Lee 68	33	33	36	36	30	36	41
D64-4636	32	37	32	36	32	35	33
D69-4980	34	33	35	34	32	37	38
D69-5095	34	40	36	40	35	33	41
D69-6344	35	33	32	38	33	34	38
D69-6543	30	33	33	37	34	35	36
D69-8594	32	33	36	38	33	37	36
D69-8928	32	36	38	39	36	38	42
D70-2364	26	34	40	40	36	36	41
D70-2399	23	28	33	36	30	31	35
D70-2527	--	27	32	30	29	27	30
D70-2621	25	37	38	39	36	37	40
D70-3064	32	33	34	38	30	35	39
D70-3067	36	41	38	41	39	39	40
D70-3101	26	32	28	28	24	23	31
D70-3115	30	38	35	38	37	31	40
D70-3124	32	36	40	36	38	39	40
D70-3185	41	38	40	39	37	40	37
D70-7040	30	36	36	36	30	35	36
D70-7589	38	36	42	44	34	35	38
D70-7687	21	31	33	37	34	33	35
D71-B24	30	36	40	37	39	43	37
D71-B25	32	36	39	34	39	42	41
F70-1792	--	--	34	30	31	32	36
F70-3739	28	33	34	36	33	37	36
F70-3754	11	35	47	37	42	39	47
N69-332	33	36	34	39	33	35	36
N69-3011	32	37	35	37	34	36	42
R69-345	33	36	37	36	36	37	39
R69-1400	32	34	38	35	30	38	37
R70-504	34	46	51	53	46	45	51
R70-521	41	46	51	46	45	50	47
R70-580	28	36	35	39	38	35	38
R70-593	--	--	--	30	31	29	38
R71-700	28	33	35	39	37	34	35
V68-1034	31	36	34	38	34	37	42

Table 35. - Seed quality scores for the strains in Preliminary Group VI, 1972

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Jay, Fla.
Lee 68	1.0	1.0	1.3	4.0	2.0	2.0
D64-4636	1.0	1.0	2.0	3.5	2.0	3.0
D69-4980	1.0	1.0	1.7	3.0	2.0	2.0
D69-5095	1.0	1.0	3.3	3.5	2.0	2.0
D69-6344	2.0	1.5	3.3	4.0	2.0	5.0
D69-6543	1.0	1.0	1.0	3.0	2.0	2.0
D69-8594	1.0	1.0	1.7	2.5	2.0	3.0
D69-8928	1.0	1.0	1.2	4.0	2.0	2.0
D70-2364	1.0	1.0	2.3	3.5	2.0	3.0
D70-2399	1.0	1.5	1.5	5.0	2.0	3.0
D70-2527	-	2.0	3.7	4.0	2.0	4.0
D70-2621	1.0	1.5	2.3	4.0	2.5	3.0
D70-3064	1.0	1.0	3.3	5.0	2.0	3.0
D70-3067	1.0	1.0	1.0	4.0	2.0	1.0
D70-3101	1.0	1.0	2.7	4.0	2.0	4.0
D70-3115	1.0	1.0	3.5	4.0	2.0	3.0
D70-3124	1.0	1.0	1.2	3.0	2.0	1.0
D70-3185	1.0	1.0	1.2	3.5	2.0	2.0
D70-7040	1.0	1.0	1.3	4.5	2.0	1.0
D70-7589	2.0	1.0	1.0	3.0	2.0	2.0
D70-7687	1.0	1.0	1.5	4.0	2.5	3.0
D71-B24	1.0	1.0	1.2	3.5	2.0	2.0
D71-B25	1.0	1.5	1.0	3.5	2.0	3.0
F70-1792	-	-	1.7	3.5	2.5	1.0
F70-3739	1.0	1.0	1.5	3.0	2.0	2.0
F70-3754	1.0	1.5	1.2	3.0	2.0	1.0
N69-332	1.0	1.5	2.2	4.5	2.0	3.0
N69-3011	1.0	1.0	1.3	5.0	2.0	4.0
R69-345	1.0	1.0	1.0	3.0	2.0	1.0
R69-1400	1.0	1.0	1.0	3.5	2.0	2.0
R70-504	1.0	1.0	1.0	4.5	2.0	2.0
R70-521	1.0	1.0	1.0	2.5	2.0	2.0
R70-580	1.0	1.0	1.3	4.0	2.0	1.0
R70-593	-	-	-	5.0	3.0	4.0
R71-700	1.0	1.0	2.7	5.0	3.0	4.0
V68-1034	1.0	1.0	2.0	4.5	2.0	2.0

UNIFORM GROUP VII

1972

	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.	D66-8556	Bragg x Semmes	F_5
4.	D67-6021	Semmes x D60-8107	F_5
5.	F66-698	(F55-224 x D55-4073) x (F58-5788 x D56-4605)	F_5
6.	N66-1136	N56-4202 x N57-6801	F_4
7.	D69-263	Bragg(2) x D60-7965	F_5
8.	F67-3673	Bragg x D60-8107	F_6
9.	F67-4153	Bragg(2) x D60-7965	F_4
10.	F68-1577	Bragg(3) x D60-7965	F_4
11.	N68-415	Dare x D60-5234	F_4
12.	T70-4	Bragg x PI 200,492	F_8

Background of strains used as parent:

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

N55-5913 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.

N56-1185 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 163,453.

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.

Thirty Uniform Group VII nurseries were planted. Results from 28 nurseries 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 only 15 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 East Coast where two strains averaged significantly lower in seed yield than Bragg.

Three-year means for the two strains D66-8556 and D67-6021 were higher than Bragg in the Delta and West, but lower than Bragg in the East and Southeast. Both D66-8556 and D67-6021 are resistant to phytophthora rot. D67-6021 has a higher protein content in the seed. F66-698 has averaged higher in yield than Bragg in the Delta but has averaged lower in yield in the East and Southeast. It has higher protein content than Bragg. N66-1136 has averaged higher in yield in the East than Bragg or Ransom.

Six strains were grown for the first time. D69-263 yielded significantly lower than Bragg in the East Coast. It has higher protein content than Bragg. F67-3673 averaged higher in yield than Bragg in all areas. It also has higher protein content in the seed. F67-4153 showed little advantage over Bragg. F68-1517 yielded well in all areas, as did N68-415 and Ts70-4.

Table 36. - General summary of performance for the strains in Uniform Group VII, 1972

	Bragg	Ransom	D66-8556	D67-6021	F66-698	N66-1136
Seed Yield - 1972						
East Coast	41.9	44.3	39.3	37.9-	40.0	44.6
Southeast	31.2	33.6	31.2	32.1	32.1	32.8
Delta and West	39.3	37.8	39.0	38.8	40.1	41.3
- 1971-72						
East Coast	40.3	40.6	38.9	36.7	38.6	42.7
Southeast	37.3	39.4	37.1	36.6	36.7	38.2
Delta and West	38.5	36.6	40.2	39.1	40.5	39.7
- 1970-72						
East Coast	39.7	39.1	37.8	36.4		
Southeast	36.3	38.7	36.5	35.5		
Delta and West	37.2	35.8	38.7	37.7		
Oil Content - 1972	21.7	24.0+	22.4+	18.5-	20.5-	22.6+
- 1971-72	21.7	23.8	22.4	18.6	20.2	22.4
- 1970-72	21.5	23.8	22.4	18.6		
Protein Content - 1972	41.1	40.0-	41.3	44.1+	44.2+	41.3
- 1971-72	41.3	40.3	41.5	44.6	44.3	41.4
- 1970-72	41.3	40.2	41.3	44.6		
Size size	14.0	15.3+	14.7	11.9-	13.7	14.7
Maturity index	10-2	0	-4	-1	0	0
Height	39	35	35	37	36	40
Shattering	1.0	1.5	1.0	1.7	1.0	1.8
Phytophthora rot	1.0	2.5	1.0	1.0	1.0	1.0
Root-knot	2.0	4.5	3.0	4.5	4.5	1.5
Purple stain	1.0	1.0	1.0	1.0	1.0	2.0
Flower color	W	P	W	P	P	W
Pubescence color	T	T	T	G	G	T
Pod wall color	T	T	T	T	T	T

Table 36. - (continued)

	D69-263	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4
Seed Yield - 1972						
East Coast	38.1-	41.4	40.6	42.2	41.9	41.6
Southeast	32.1	33.2	32.2	33.5	34.1	31.2
Delta and West	39.8	40.9	39.6	40.7	41.2	42.1
- 1971-72						
East Coast						
Southeast						
Delta and West						
- 1970-72						
East Coast						
Southeast						
Delta and West						
Oil Content - 1972	18.6-	18.9-	20.6-	21.3	22.3+	20.7-
- 1971-72						
- 1970-72						
Protein Content - 1972	45.3+	45.2+	42.6+	41.6	41.2	43.1+
- 1971-72						
- 1970-72						
Seed size	14.6	13.8	12.4-	14.5	13.1-	15.2+
Maturity index	0	+3	+1	+2	-2	+2
Height	40	42	38	39	36	38
Shattering	1.0	1.0	2.0	1.3	1.3	2.0
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Root-knot	1.0	2.0	2.5	2.0	2.0	3.0
Purple stain	2.0	2.0	1.0	2.0	1.0	1.0
Flower color	W	W	W	W	W	P
Pubescence color	T	T	G	G	G	T
Pod wall color	T	T	T	T	Br	T

Table 37. Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1972

Location	Bragg	Ransom	D66-8556	D67-6021	F66-698	N66-1136	D69-263
			East Coast				
Holland, Va.	44.2	51.0+	43.8	40.9	42.2	54.3+	44.2
Plymouth, N.C.	51.7	47.3	43.1-	38.2-	38.0-	54.6	35.8-
Clayton, N.C.	42.0	42.1	33.7	40.7	42.1	43.3	31.4
Clinton, N.C.	46.3	57.5	47.8	44.2	45.4	50.4	46.0
Florence, S.C.(A)	44.7	45.2	42.4	45.2	47.5	46.8	42.6
Florence, S.C.(B)	37.6	36.2	36.9	34.1	37.6	30.4-	37.1
Hartsville, S.C.	26.7	30.9+	27.1	22.2-	27.1	32.2+	29.7
Mean	41.9	44.3	39.3	37.9-	40.0	44.6	38.1-
			Southeast				
Blackville, S.C.	16.9	18.9	17.4	17.8	19.8	16.4	16.8
Tallassee, Ala.	21.2	19.6	22.4	20.1	21.4	21.8	22.2
Tifton, Ga.	41.3	46.2	42.7	46.2	46.8+	51.1+	45.2
Gainesville, Fla.	34.6	38.4	37.5	33.3	46.9	35.1	46.4
Live Oak, Fla.	31.8	30.7	24.6-	26.2-	31.0	26.3-	28.0
Marianna, Fla.*	20.2	14.8	21.4	15.9	22.8	20.4	24.3
Quincy, Fla.	27.1	30.9	28.3	26.4	27.8	29.3	25.7
Jay, Fla.	45.9	47.4	42.4	46.1	37.1-	42.9	39.3-
Fairhope, Ala.	35.2	36.3	38.2	38.2	38.2	42.4+	34.9
Poplarville, Miss.	18.2	21.5	20.6	30.2	19.7	23.5	25.5
Baton Rouge, La.	42.4	46.4	40.7	42.5	41.1	42.0	37.5
Clemson, S.C.	17.9	25.7	23.5	19.6	16.5	19.6	24.0
Experiment, Ga.	41.7	41.1	36.4	38.5	38.7	43.5	40.2
Mean	31.2	33.6	31.2	32.1	32.1	32.8	32.1
			Delta and West				
Stoneville, Miss.(A)	37.9	31.5	33.9	39.5	38.3	38.9	36.5
Stoneville, Miss.(B)	37.1	36.1	41.9+	35.6	38.3	40.5	39.9
Pine Bluff, Ark.	32.7	34.6	35.6	36.2	38.4	40.7	38.8
Stuttgart, Ark.	47.8	47.1	46.7	44.3	49.0	50.1	49.4
Rohwer, Ark.	28.2	19.7-	26.8	30.4	36.1+	28.0	32.0
St. Joseph, La.	46.5	41.4	48.4	45.6	41.9	51.9	44.8
Curtis, La.	36.9	33.0	30.2	33.5	32.7	39.4	32.9
Crowley, La.	35.3	42.1+	37.2	33.7	38.4	33.7	33.7
Beaumont, Texas	51.1	54.3	50.4	50.0	47.9	48.4	50.3
Mean	39.3	37.8	39.0	38.8	40.1	41.3	39.8

*Not included in mean.

(+) 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	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4	L.S.D. (.05)	C.V.
			East Coast				
Holland, Va.	41.2	40.5	38.5-	46.9	43.8	5.6	8%
Plymouth, N.C.	46.0	46.2	41.5-	44.0	46.3	8.0	11%
Clayton, N.C.	39.9	40.5	45.0	35.5	46.6	N.S.	19%
Clinton, N.C.	45.1	47.5	47.9	51.0	46.2	N.S.	9%
Florence, S.C.(A)	47.5	49.3	47.0	46.3	44.0	N.S.	9%
Florence, S.C.(B)	41.0	36.4	40.3	39.4	37.3	5.3	8%
Hartsville, S.C.	28.8	23.7	35.0+	30.2	27.1	3.8	8%
Mean	41.4	40.6	42.2	41.9	41.6	3.8	
			Southeast				
Blackville, S.C.	17.7	17.4	18.8	16.1	20.0	N.S.	12%
Tallassee, Ala.	20.7	18.6	22.3	17.3	19.1	2.8	8%
Tifton, Ga.	48.3+	46.3	41.1	52.5+	50.0+	5.2	7%
Gainesville, Fla.	45.6	41.6	44.4	36.4	39.2	N.S.	17%
Live Oak, Fla.	32.0	33.5	33.3	28.3	27.4	5.3	11%
Marianna, Fla.*	16.1	23.1	18.1	21.6	26.0	N.S.	31%
Quincy, Fla.	24.3	26.0	24.2	29.1	28.1	4.6	10%
Jay, Fla.	41.3-	39.6-	44.9	45.6	39.6-	3.6	5%
Fairhope, Ala.	40.1+	36.7	34.1	43.5+	39.1	4.0	6%
Poplarville, Miss.	25.9	20.4	22.2	24.6	23.6	N.S.	22%
Baton Rouge, La.	42.7	46.8	42.8	41.0	37.6	N.S.	9%
Clemson, S.C.	19.5	19.1	29.1+	28.3+	12.8	8.1	22%
Experiment, Ga.	40.8	40.1	45.3	46.1	38.1	N.S.	13%
Mean	33.2	32.2	33.5	34.1	31.2	N.S.	
			Delta and West				
Stoneville, Miss.(A)	41.0	41.0	35.0	41.6	38.8	N.S.	15%
Stoneville, Miss.(B)	42.5+	38.9	40.6	45.9+	45.5+	4.8	7%
Pine Bluff, Ark.	37.1	42.5	34.6	34.0	39.2	N.S.	15%
Stuttgart, Ark.	46.9	47.3	52.2	50.1	51.6	N.S.	6%
Rohwer, Ark.	31.3	28.1	29.3	26.7	32.9	7.2	15%
St. Joseph, La.	50.8	45.0	46.9	47.6	42.4	5.6	7%
Curtis, La.	32.9	37.4	40.1	35.7	36.4	N.S.	19%
Crowley, La.	34.5	34.1	38.4	40.4+	36.7	3.4	6%
Beaumont, Texas	51.0	42.3	48.6	51.9	55.2	N.S.	9%
Mean	40.9	39.6	40.7	41.2	42.1	N.S.	

Table 38. - Chemical composition and seed size for the strains in Uniform Group VII, 1972

Location	Bragg	Ransom	D66-8556	D67-6021	F66-698	N66-1136
			Oil Percentage			
Plymouth, N.C.	22.1	24.4	22.6	18.4	20.3	23.1
Clayton, N.C.	22.5	24.7	23.5	19.3	20.6	23.7
Blackville, S.C.	18.8	19.6	19.0	16.4	18.2	19.8
Tifton, Ga.	19.8	23.8	20.8	16.4	19.9	21.1
Live Oak, Fla.	23.4	25.6	24.0	20.0	21.6	24.3
Jay, Fla.	21.7	25.0	23.2	20.4	23.0	23.6
Baton Rouge, La.	21.7	24.0	22.4	18.5	20.0	22.4
Stoneville, Miss.(A)	22.9	24.6	23.7	19.1	21.5	22.9
Beaumont, Texas	22.3	24.1	22.5	18.3	19.7	22.6
Mean	21.7	24.0+	22.4+	18.5-	20.5-	22.6+
			Protein Percentage			
Plymouth, N.C.	39.4	38.6	40.4	43.9	44.4	40.2
Clayton, N.C.	39.7	37.8	39.3	42.9	43.8	38.6
Blackville, S.C.	44.8	43.2	45.1	46.9	47.5	44.7
Tifton, Ga.	43.1	42.3	43.1	46.5	45.0	44.1
Live Oak, Fla.	39.8	39.3	40.9	43.9	42.5	40.3
Jay, Fla.	41.8	40.0	40.5	43.1	41.7	40.0
Baton Rouge, La.	41.0	40.1	41.3	43.8	45.0	41.6
Stoneville, Miss.(A)	39.1	39.1	38.8	42.1	42.5	39.6
Beaumont, Texas	41.2	39.5	42.0	43.6	45.5	42.2
Mean	41.1	40.0-	41.3	44.1+	44.2+	41.3
			Grams per 100 Seeds			
Plymouth, N.C.	14.7	15.8	15.2	11.8	13.8	16.0
Clayton, N.C.	16.6	17.6	15.8	12.9	15.7	16.9
Blackville, S.C.	10.5	11.2	10.8	9.0	10.6	11.8
Tifton, Ga.	12.8	14.8	13.3	9.7	12.2	13.8
Live Oak, Fla.	14.4	16.2	15.2	13.0	14.2	15.1
Jay, Fla.	13.5	15.3	14.8	13.8	14.2	12.4
Baton Rouge, La.	12.9	15.3	15.2	11.6	13.6	14.1
Stoneville, Miss.(A)	15.0	15.0	15.8	12.2	13.5	14.2
Beaumont, Texas	15.9	16.9	16.1	13.4	15.3	17.9
Mean	14.0	15.3+	14.7	11.9-	13.7	14.7

Table 38. - (continued)

Location	D69-263	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4	L.S.D. (.05)
			Oil Percentage				
Plymouth, N.C.	19.6	18.8	19.9	20.8	23.1	21.0	
Clayton, N.C.	20.4	20.0	20.6	21.9	22.6	21.3	
Blackville, S.C.	15.8	16.8	19.8	19.8	19.5	18.8	
Tifton, Ga.	17.3	17.5	20.0	19.4	21.6	21.0	
Live Oak, Fla.	21.0	21.3	21.8	22.8	23.1	21.5	
Jay, Fla.	18.8	20.4	22.1	21.6	23.8	22.7	
Baton Rouge, La.	17.3	18.3	20.5	21.1	21.8	19.5	
Stoneville, Miss.(A)	19.3	19.1	20.8	22.4	23.1	20.9	
Beaumont, Texas	18.0	18.0	19.9	22.0	22.3	19.4	
Mean	18.6-	18.9-	20.6-	21.3	22.3+	20.7-	0.6
			Protein Percentage				
Plymouth, N.C.	43.2	46.5	43.0	41.3	40.0	42.4	
Clayton, N.C.	43.7	44.6	42.4	40.4	39.4	41.1	
Blackville, S.C.	49.3	47.4	43.5	43.2	45.3	45.5	
Tifton, Ga.	47.8	46.3	43.1	44.8	43.1	43.3	
Live Oak, Fla.	44.5	43.8	42.3	40.2	40.6	43.4	
Jay, Fla.	43.6	43.2	40.8	40.8	39.1	41.5	
Baton Rouge, La.	45.1	45.0	43.7	41.5	41.0	44.4	
Stoneville, Miss.(A)	43.6	44.0	41.0	40.5	40.2	40.6	
Beaumont, Texas	46.8	45.8	43.6	41.8	42.3	45.6	
Mean	45.3+	45.2+	42.6+	41.6	41.2	43.1+	0.8
			Grams per 100 Seeds				
Plymouth, N.C.	14.5	14.8	12.2	14.6	12.8	14.8	
Clayton, N.C.	16.0	16.2	13.8	16.4	15.3	19.0	
Blackville, S.C.	12.0	10.2	10.6	12.0	8.6	11.0	
Tifton, Ga.	13.3	12.8	11.6	12.8	13.5	12.4	
Live Oak, Fla.	15.5	14.5	13.2	14.7	12.5	18.6	
Jay, Fla.	15.0	13.5	12.5	14.8	14.3	17.4	
Baton Rouge, La.	13.9	13.0	11.4	13.6	11.9	12.7	
Stoneville, Miss.(A)	14.5	13.5	12.5	14.9	14.0	16.1	
Beaumont, Texas	16.3	15.3	13.5	16.6	14.6	14.8	
Mean	14.6	13.8	12.4-	14.5	13.1-	15.2+	0.8

Table 39. - Relative maturity data, days earlier (-) or later (+), than Bragg for the strains in Uniform Group VII, 1972

Location	Date planted	Bragg matured	Ransom	D66-8556	D67-6021	F66-698
			East Coast			
Holland, Va.	6-9	11-8	0	0	0	0
Plymouth, N.C.	5-17	10-26	+7	0	0	+7
Clayton, N.C.	5-30	11-1	0	-4	+2	+2
Clinton, N.C.	5-30	10-30	+1	-6	-2	+1
Florence, S.C.(A)	5-18	10-25	0	0	-2	-2
Florence, S.C.(B)	6-15	10-23	+8	+4	0	+4
Hartsville, S.C.	6-9	10-27	+1	-8	-7	+3
Mean		10-29	+3	-1	0	+2
			Southeast			
Blackville, S.C.	5-22	10-15	-1	-8	-5	-1
Tallassee, Ala.	5-25	10-15	-1	-2	-2	+3
Tifton, Ga.	5-9	10-7	0	-1	0	+1
Gainesville, Fla.	6-27	10-18	+1	-4	-2	+2
Marianna, Fla.	6-29	10-14	-2	-6	-4	+4
Quincy, Fla.	5-17	9-29	-4	-6	0	+6
Jay, Fla.	5-19	10-16	-1	-4	+1	+4
Fairhope, Ala.	6-2	10-1	0	0	0	0
Poplarville, Miss.	5-25	10-13	-7	-7	-7	+3
Baton Rouge, La.	5-22	10-14	+2	-6	0	0
Clemson, S.C.	6-1	11-6	-5	-9	-3	0
Experiment, Ga.	5-18	10-16	-3	-6	-2	0
Mean		10-13	-2	-5	-2	+2
			Delta and West			
Stoneville, Miss.(A)	5-11	10-15	-2	-4	+1	0
Stoneville, Miss.(B)	5-23	10-17	0	-1	0	0
Pine Bluff, Ark.	5-15	10-15	+10	-10	+10	-5
Stuttgart, Ark.	5-18	10-23	+1	-6	-4	+2
Rohwer, Ark.	5-23	10-15	-3	-6	-5	-1
St. Joseph, La.	5-10	10-16	+1	-11	-3	0
Curtis, La.	5-15	10-16	+5	-1	-1	-1
Crowley, La.	5-26	10-19	-1	-4	-4	-1
Beaumont, Texas	5-27	10-25	0	0	+1	-3
Mean		10-18	+1	-5	0	-1

Table 39. - (continued)

Location	N66-1136	D69-263	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4
			East Coast				
Holland, Va.	0	0	+1	0	0	0	+3
Plymouth, N.C.	0	0	+9	+7	+7	-4	+7
Clayton, N.C.	-2	0	+2	+2	+4	+2	0
Clinton, N.C.	-2	-2	0	-2	+1	-2	-4
Florence, S.C.(A)	+9	+3	+7	-5	0	-5	+6
Florence, S.C.(B)	+11	0	+5	+7	+7	+8	+7
Hartsville, S.C.	+1	+1	+6	-4	+2	0	+1
Mean	+3	0	+4	+2	+3	0	+3
			Southeast				
Blackville, S.C.	+2	+3	+1	+4	+3	0	0
Tallassee, Ala.	+1	-1	-1	-3	-1	-4	-1
Tifton, Ga.	+1	+2	+3	0	+1	0	+3
Gainesville, Fla.	+1	+2	+3	+2	+3	+1	+2
Marianna, Fla.	+1	+1	+1	-1	-3	0	-1
Quincy, Fla.	+2	+7	+8	+3	+3	0	+4
Jay, Fla.	0	+4	+3	+3	+2	-1	+1
Fairhope, Ala.	0	0	0	0	0	0	0
Poplarville, Miss.	-7	+3	0	-4	0	-7	+3
Baton Rouge, La.	0	+2	+2	0	+1	-4	+2
Clemson, S.C.	-2	-1	-3	+2	-3	-3	+2
Experiment, Ga.	-2	-2	+1	0	-1	-4	+1
Mean	0	+2	+2	0	0	-2	+1
			Delta and West				
Stoneville, Miss.(A)	0	+2	+3	+1	+3	-2	-1
Stoneville, Miss.(B)	-1	+1	+4	+2	+3	-1	+2
Pine Bluff, Ark.	-5	-5	+10	+5	0	-5	+10
Stuttgart, Ark.	-2	-2	+2	+1	+1	-2	-1
Rohwer, Ark.	0	+2	+1	+2	+1	-1	-1
St. Joseph, La.	-1	-2	-3	-4	+1	-3	-2
Curtis, La.	+1	0	+2	+6	-1	-2	-1
Crowley, La.	-1	+3	+6	-1	+5	-4	+5
Beaumont, Texas	+2	+4	+5	-2	+4	-5	+2
Mean	0	0	+3	+1	+2	-3	+2

Table 40. - Plant height for the strains in Uniform Group VII, 1972

Location	Bragg	Ransom	D66-8556	D67-6021	F66-698	N66-1136
			East Coast			
Holland, Va.	51	48	45	47	45	52
Plymouth, N.C.	43	39	40	43	36	47
Clayton, N.C.	39	40	33	39	35	44
Clinton, N.C.	37	39	31	35	35	44
Florence, S.C.(A)	41	38	42	38	40	40
Florence, S.C.(B)	37	31	33	36	35	37
Hartsville, S.C.	36	31	32	30	35	36
Mean	41	39	37	40	38	44
			Southeast			
Blackville, S.C.	38	35	32	34	35	42
Tallassee, Ala.	45	31	37	34	36	43
Tifton, Ga.	41	36	39	39	35	41
Gainesville, Fla.	28	26	26	27	31	27
Live Oak, Fla.	27	23	21	22	25	23
Marianna, Fla.	25	24	21	26	26	25
Quincy, Fla.	33	25	29	35	27	34
Jay, Fla.	43	36	35	39	42	45
Fairhope, Ala.	35	36	40	33	36	40
Poplarville, Miss.	39	36	36	41	42	43
Baton Rouge, La.	46	40	44	44	43	46
Clemson, S.C.	41	38	38	35	37	44
Experiment, Ga.	39	34	37	37	34	41
Mean	37	32	33	34	35	38
			Delta and West			
Stoneville, Miss.(A)	43	41	41	47	45	49
Stoneville, Miss.(B)	43	38	39	44	43	48
Pine Bluff, Ark.	46	43	47	46	43	52
Stuttgart, Ark.	43	40	39	40	39	43
Rohwer, Ark.	40	31	31	34	35	40
St. Joseph, La.	28	25	31	29	29	29
Curtis, La.	36	34	35	36	35	34
Crowley, La.	40	35	33	34	34	37
Beaumont, Texas	31	27	27	29	32	30
Mean	39	35	36	38	37	40

Table 40. - (continued)

Location	D69-263	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4
			East Coast			
Holland, Va.	53	52	52	55	45	51
Plymouth, N.C.	43	45	44	39	41	42
Clayton, N.C.	36	41	41	40	35	41
Clinton, N.C.	43	47	37	41	41	40
Florence, S.C.(A)	42	45	44	41	41	43
Florence, S.C.(B)	38	36	35	36	33	34
Hartsville, S.C.	34	41	35	38	35	39
Mean	43	44	42	42	39	42
			Southeast			
Blackville, S.C.	40	42	40	38	37	37
Tallassee, Ala.	39	44	34	39	30	37
Tifton, Ga.	42	43	39	40	40	40
Gainesville, Fla.	31	33	32	32	26	27
Live Oak, Fla.	27	29	28	28	24	27
Marianna, Fla.	27	28	24	27	24	27
Quincy, Fla.	35	32	32	32	28	26
Jay, Fla.	45	46	45	43	39	41
Fairhope, Ala.	42	37	38	32	40	36
Poplarville, Miss.	42	44	38	41	36	40
Baton Rouge, La.	48	49	46	46	45	45
Clemson, S.C.	46	46	42	43	40	38
Experiment, Ga.	40	40	44	41	36	36
Mean	39	39	37	37	34	35
			Delta and West			
Stoneville, Miss.(A)	49	47	38	39	42	43
Stoneville, Miss.(B)	46	47	43	42	42	45
Pine Bluff, Ark.	47	52	43	49	46	46
Stuttgart, Ark.	43	46	45	42	40	41
Rohwer, Ark.	42	47	40	40	38	37
St. Joseph, La.	29	29	24	26	29	34
Curtis, La.	37	42	36	34	37	36
Crowley, La.	42	42	39	41	37	35
Beaumont, Texas	35	34	28	34	28	32
Mean	41	43	37	39	38	39

Table 41. - Lodging scores for the strains in Uniform Group VII, 1972

Location	Bragg	Ransom	D66-8556	D67-6021	F66-698	N66-1136
East Coast						
Holland, Va.	5.0	4.7	4.5	4.0	4.8	4.5
Plymouth, N.C.	2.3	2.0	2.0	2.0	2.7	3.0
Clayton, N.C.	3.7	3.3	2.7	3.0	3.7	3.0
Clinton, N.C.	3.0	3.7	2.7	2.7	3.0	3.3
Florence, S.C.(A)	1.0	1.0	1.0	1.0	1.0	1.0
Florence, S.C.(B)	2.0	1.0	1.0	2.0	2.0	1.0
Hartsville, S.C.	2.2	1.2	1.3	1.5	1.5	1.5
Southeast						
Blackville, S.C.	1.3	1.0	1.3	1.3	2.3	1.3
Tallassee, Ala.	1.2	1.0	1.0	1.0	1.2	1.0
Tifton, Ga.	4.0	2.0	3.0	3.3	3.0	4.0
Gainesville, Fla.	1.3	1.0	1.3	1.0	2.7	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.0	1.0	1.0	1.0	1.3
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	2.0	1.0
Fairhope, Ala.	2.0	1.0	1.0	1.0	1.0	1.0
Poplarville, Miss.	2.3	1.3	2.0	1.3	1.0	1.3
Baton Rouge, La.	1.5	1.2	1.4	1.0	1.5	1.5
Clemson, S.C.	1.3	1.5	1.3	1.3	1.8	1.7
Experiment, Ga.	1.0	1.3	1.3	1.0	1.3	1.3
Delta and West						
Stoneville, Miss.(A)	3.0	2.3	3.0	2.3	2.3	3.0
Stoneville, Miss.(B)	3.0	2.7	2.7	2.3	3.0	3.0
Pine Bluff, Ark.	4.0	1.0	2.0	2.0	3.0	4.0
Stuttgart, Ark.	2.7	2.0	2.0	1.2	1.7	2.2
Rohwer, Ark.	2.7	2.0	1.7	1.3	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	2.0
Curtis, La.	2.5	2.0	3.0	1.5	2.5	1.5
Crowley, La.	1.5	1.0	1.0	1.0	2.0	1.0
Beaumont, Texas	1.0	1.0	1.0	1.0	2.0	1.0

Table 41. - (continued)

Location	D69-263	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4
			East Coast			
Holland, Va.	4.5	4.3	4.7	4.7	4.8	4.5
Plymouth, N.C.	2.0	2.7	2.7	2.7	2.3	2.7
Clayton, N.C.	3.0	4.0	3.3	3.3	3.0	3.7
Clinton, N.C.	3.3	4.3	3.0	4.0	3.7	3.0
Florence, S.C.(A)	1.0	1.0	1.0	2.0	2.0	2.0
Florence, S.C.(B)	1.0	2.0	3.0	2.0	2.0	2.0
Hartsville, S.C.	1.2	2.3	2.2	2.2	1.8	1.7
			Southeast			
Blackville, S.C.	1.0	1.3	2.0	1.3	1.0	1.0
Tallassee, Ala.	1.2	1.0	1.0	1.2	1.0	1.0
Tifton, Ga.	3.3	3.3	3.0	3.7	3.0	3.0
Gainesville, Fla.	1.3	2.0	2.0	1.7	1.0	1.0
Live Oak, Fla.	1.0	1.3	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	2.0	1.0	2.0	1.0	1.0
Fairhope, Ala.	1.0	2.0	1.0	1.0	1.0	1.0
Poplarville, Miss.	2.0	1.3	1.7	1.3	1.7	2.0
Baton Rouge, La.	1.2	1.8	1.5	1.5	1.2	1.0
Clemson, S.C.	1.3	1.8	1.5	1.8	1.8	1.3
Experiment, Ga.	1.0	2.3	1.3	1.7	1.3	1.3
			Delta and West			
Stoneville, Miss.(A)	2.7	3.0	3.0	3.0	3.0	2.3
Stoneville, Miss.(B)	2.0	3.0	3.0	3.0	3.0	3.0
Pine Bluff, Ark.	3.0	4.0	3.0	4.0	2.0	1.0
Stuttgart, Ark.	1.8	2.5	2.2	2.5	1.8	1.5
Rohwer, Ark.	1.3	2.3	2.7	2.0	2.0	1.0
St. Joseph, La.	1.0	3.0	1.0	1.0	1.0	1.0
Curtis, La.	2.0	3.0	2.0	2.0	2.0	2.0
Crowley, La.	1.0	1.0	1.7	1.5	1.0	1.0
Beaumont, Texas	2.0	1.0	1.0	2.0	1.0	1.0

Table 42. - Seed quality scores for the strains in Uniform Group VII, 1972

Location	Bragg	Ransom	D66-8556	D67-6021	F66-698	N66-1136
East Coast						
Holland, Va.	1.0	1.0	1.0	1.2	1.0	1.2
Plymouth, N.C.	1.0	1.0	1.0	1.5	1.0	1.5
Clayton, N.C.	1.0	1.0	1.0	1.5	1.0	1.0
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Southeast						
Blackville, S.C.	1.0	2.0	2.0	1.0	1.0	4.0
Tallassee, Ala.	2.0	3.0	2.0	2.0	1.0	3.0
Tifton, Ga.	2.0	2.2	1.7	1.8	1.7	2.0
Live Oak, Fla.	2.0	1.7	2.0	1.7	1.3	2.3
Quincy, Fla.	2.0	2.0	1.0	2.0	1.0	3.0
Jay, Fla.	3.0	2.0	3.0	1.0	1.0	2.0
Fairhope, Ala.	1.7	2.0	2.7	1.0	1.3	2.7
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	1.0	1.0	1.0	1.0	2.0	1.7
Delta and West						
Stoneville, Miss.(A)	2.0	2.3	2.0	2.3	2.0	2.0
Stoneville, Miss.(B)	2.3	2.3	2.3	3.0	2.0	2.3
Pine Bluff, Ark.	2.0	2.0	2.0	1.0	1.0	1.0
Stuttgart, Ark.	2.5	2.3	2.8	2.0	2.7	2.5
Rohwer, Ark.	3.3	3.0	2.7	1.5	3.0	3.8
St. Joseph, La.	2.3	2.3	2.0	3.0	2.2	2.3
Curtis, La.	1.7	2.0	2.0	1.7	1.0	3.0
Beaumont, Texas	3.0	3.0	3.0	4.0	3.0	2.0

Table 42. - (continued)

Location	D69-263	F67-3673	F67-4153	F68-1577	N68-415	Ts70-4
			East Coast			
Holland, Va.	1.2	1.0	1.0	1.0	1.0	1.0
Plymouth, N.C.	1.5	1.5	1.5	1.5	1.0	1.5
Clayton, N.C.	1.0	1.0	1.5	1.0	1.0	1.0
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
			Southeast			
Blackville, S.C.	3.0	1.0	1.0	1.0	2.0	2.0
Tallassee, Ala.	1.0	3.0	2.0	1.0	1.0	3.0
Tifton, Ga.	2.0	2.0	2.0	1.8	1.8	2.2
Live Oak, Fla.	1.7	1.7	1.3	1.7	1.7	2.3
Quincy, Fla.	3.0	2.0	3.0	2.0	1.0	2.0
Jay, Fla.	2.0	1.0	2.0	1.0	1.0	2.0
Fairhope, Ala.	2.3	2.3	1.3	2.7	1.3	2.7
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	2.0	1.0	1.0	1.3	1.0	1.0
			Delta and West			
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.3	2.3
Stoneville, Miss.(B)	2.0	2.0	2.3	2.0	2.3	2.3
Pine Bluff, Ark.	1.0	1.0	2.0	1.0	1.0	1.0
Stuttgart, Ark.	2.8	2.3	2.5	2.2	2.8	3.0
Rohwer, Ark.	3.5	3.2	3.2	3.0	3.0	3.3
St. Joseph, La.	2.1	2.5	2.7	2.5	2.2	2.5
Curtis, La.	2.0	1.3	1.7	1.0	1.3	1.7
Beaumont, Texas	4.0	3.0	2.0	3.0	2.0	3.0

PRELIMINARY GROUP VII

1972

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 showed differences among strains to be significant at the 1% level of confidence. There were no strains yielding significantly better than Bragg, but there were eight strains which ranked above Bragg as a mean of eight locations.

The two highest ranking strains for seed yield were selections from Semmes x Hardee. D70-8347 has the Hardee type reaction to rhizobia and D70-8360 has the normal Lee type reaction. When a mixture of rhizobia are present in the soil, either type appears to be able to develop in sufficient numbers to produce an adequate level of nodulation. Two other high yielding types, D70-8437 and D70-8444, also have the Hardee type reaction.

Seventeen strains had a high level of resistance to root-knot nematodes in the special planting in west Florida. D69-9801 is highly resistant to a strain of root knot in Louisiana which attacks Bragg. D69-9801 received a high score for shattering, but it appeared to be segregating. Non-shattering plants were selected. D68-9801 carries the major gene for resistance to phytophthora rot.

The planting at Blackville suffered from late season drouth stress. Seed yields were reduced and protein content of the seed was increased and oil content was decreased.

D69-0442, one of the highest yielding strains, was also one of the highest in protein content of the seed. It also received low readings for phytophthora rot and root-knot nematodes.

Strains which appear to merit further testing in Uniform Group VII are: D70-8347, D69-0442, D70-8444, and F70-3796.

Table 43. - Parentage of strains in Preliminary Group VII, 1972

	Variety or strain	Parentage	Generation composited
1.	Bragg		
2.	Pickett 71		
3.	D69-0442	Bragg(3) x D60-7965	F_4
4.	D69-0559	Bragg(3) x D60-7965	F_4
5.	D69-8765	Bragg x D65-7187	F_5
6.	D69-9801	D62-7562 x Semmes	F_5
7.	D70-8347	Semmes x Hardee	F_5
8.	D70-8360	Semmes x Hardee	F_5
9.	D70-8378	Semmes x Hardee	F_5
10.	D70-8437	D64-4716 x Hardee	F_5
11.	D70-8444	D64-4716 x Hardee	F_5
12.	D70-8537	D51-4877 x Hampton	F_5
13.	D70-8612	D51-4877 x Hampton	F_5
14.	F68-1431	Bragg(3) x D60-7965	F_4
15.	F68-1531	Bragg(3) x D60-7966	F_4
16.	F68-1984	Bragg(3) x D60-7965	F_4
17.	F68-2128	Bragg(3) x D60-7965	F_4
18.	F68-2457	Bragg(3) x D60-7965	F_4
19.	F68-2580	Bragg(3) x D60-7965	F_4
20.	F68-3038	Bragg(3) x D60-7965	F_4
21.	F70-1786	Bragg x D60-9647	F_8
22.	F70-1832	Bragg x D61-3498	F_8
23.	F70-2174	F59-2496 x D60-9647	F_8
24.	F70-3340	F63-3999 x F63-4000	F_4
25.	F70-3349	F63-3999 x D63-4000	F_4
26.	F70-3389	F63-3999 x F63-4000	F_4
27.	F70-3712	Bragg(2) x D61-3498	F_7
28.	F70-3728	Bragg(2) x D61-3498	F_7
29.	F70-3730	Bragg(2) x D61-3498	F_7
30.	F70-3775	Bragg(2) x D61-3498	F_7
31.	F70-3784	Bragg(2) x D61-3498	F_7
32.	F70-3796	Bragg(2) x D61-3498	F_7
33.	F70-4016	Bragg(3) x D60-7965	F_6
34.	F70-4065	Bragg(3) x D60-7965	F_6
35.	Ts71-5	Bragg x PI 200,492	F_8
36.	Ts71-13	D69-6094 x D61-4269	F_8

Table 44. - General summary of performance for the strains in Preliminary Group VII, 1972

Strain	Seed yield	Mat. index	Ht.	Oil	Protein	Shatter resist.	P.R.	R.K.	Percent mottled seed
Bragg	35.6	10-17	39	21.6	41.2	1.0	1.0	0.5	0
Pickett 71	37.2	-2	28	21.9	41.0	1.5	1.0	4.0	0
D69-0442	37.0	-1	38	19.2-	44.1+	1.2	1.0	1.0	0
D69-0559	35.6	0	39	19.1-	44.0+	1.0	1.0	1.0	0
D69-8765	36.8	-3	31	21.5	40.8	1.0	1.0	1.0	75
D69-9801	32.7	-4	31	20.2-	41.5	3.5	1.0	0.0	60
D70-8347	37.7	-4	29	22.0	41.4	2.0	1.0	4.0	0
D70-8360	37.9	-3	29	21.9	42.0	2.0	1.0	4.5	30
D70-8378	35.1	-1	34	21.9	40.3	1.3	1.0	5.0	0
D70-8437	36.5	-1	33	21.7	39.8-	1.0	1.0	4.5	0
D70-8444	36.8	0	32	21.3	41.2	2.0	1.0	5.0	0
D70-8537	35.4	+4	36	22.3	41.0	1.3	1.0	4.5	0
D70-8612	33.0	0	29	20.8-	41.5	4.0	1.0	4.0	5
F68-1431	27.0-	0	34	19.6-	42.8+	1.3	1.0	1.5	5
F68-1531	33.5	-1	34	22.1	41.5	1.0	2.0	2.0	10
F68-1984	34.0	-1	39	20.4-	41.8	1.0	1.0	3.0	0
F68-2128	35.1	0	35	21.7	42.0	1.0	1.0	3.0	20
F68-2457	26.8-	+2	33	22.2	40.6	1.0	3.0	2.0	50
F68-2580	28.9-	0	33	21.7	41.5	1.0	2.0	3.0	40
F68-3038	33.6	0	42	21.1	42.8+	1.0	1.0	2.5	0
F70-1786	24.5-	-2	25	19.5-	44.5+	1.0	2.0	1.0	0
F70-1832	33.6	+1	39	21.0	40.6	1.0	1.0	0.5	0
F70-2174	35.4	0	37	21.6	41.1	1.0	1.0	2.5	5
F70-3340	31.4	+3	36	21.0	41.2	1.0	2.5	1.5	0
F70-3349	34.6	+2	34	20.8-	41.9	1.0	1.0	0.5	10
F70-3389	33.5	+4	39	20.5-	41.5	1.0	3.0	0.5	0
F70-3712	33.7	0	37	21.8	40.6	1.0	2.5	0.5	20
F70-3728	33.5	0	39	21.2	40.0-	1.0	1.0	2.0	10
F70-3730	32.8	+1	39	20.6	40.9	1.0	1.0	1.0	0
F70-3775	35.2	-1	36	19.9-	42.8+	1.0	1.0	1.0	20
F70-3784	34.6	0	32	19.3-	42.9+	1.5	2.0	3.0	20
F70-3796	35.9	0	35	20.3-	41.2	1.0	1.0	1.0	5
F70-4016	34.4	-1	34	20.0-	44.6+	1.5	1.0	1.0	0
F70-4065	36.8	0	38	21.7	42.4+	1.0	1.0	2.0	20
Ts71-5	33.0	-1	29	21.9	41.0	1.0	1.0	3.5	0
Ts71-13	27.0-	+8	46	21.8	41.3	1.0	1.0	3.0	5
L.S.D.(.05)	5.9			0.8	1.1				
L.S.D.(.01)	7.7			1.1	1.4				

Table 45. - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1972

Strain	Clinton, N.C.	Black-ville, S.C.	Live Oak, Fla.	Jay, Fla.	Tallas-see, Ala.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	57.6	15.0	33.4	39.0	23.4	30.6	35.8	50.2
Pickett 71	53.7	20.7	27.7	49.2+	23.0	32.1	44.3+	47.0
D69-0442	55.2	20.2	34.7	39.4	23.0	30.7	44.6+	48.3
D69-0559	48.7	16.9	33.5	42.0	25.0	30.2	42.4	46.2
D69-8765	51.7	17.7	30.8	45.8+	27.2	27.5	44.0+	49.5
D69-9801	46.2	19.7	22.9-	39.7	17.2-	29.6	39.4	46.8
D70-8347	51.0	27.2+	21.2-	46.2+	28.7+	38.5	50.0+	39.1
D70-8360	52.2	23.9+	24.6-	50.3+	21.1	28.4	52.2+	50.7
D70-8378	56.3	15.2	30.7	43.9	19.9	30.6	36.4	48.9
D70-8437	49.5	23.5+	34.0	42.4	22.9	35.5	36.5	47.7
D70-8444	43.9-	20.9	33.9	38.2	21.7	41.6+	43.6+	50.3
D70-8537	55.5	19.1	29.6	36.3	24.3	31.4	36.0	53.5
D70-8612	51.3	18.4	25.7-	43.5	10.9-	26.6	40.4	47.1
F68-1431	--	11.6	34.4	41.3	24.5	17.9-	33.4	43.4
F68-1531	44.5-	17.2	27.9	42.9	24.0	25.4	35.8	50.6
F68-1984	49.6	19.6	34.0	36.7	22.4	30.5	35.9	43.4
F68-2128	47.5	18.8	35.8	40.1	25.0	31.6	34.5	47.7
F68-2457	--	11.1	31.4	38.6	21.9	22.3	29.0	48.4
F68-2580	--	18.3	34.5	37.5	26.7	22.3	36.1	44.5
F68-3038	43.8-	16.3	37.5	40.5	23.8	19.7-	37.7	49.8
F70-1786	--	12.9	21.0-	37.5	15.9-	14.4-	28.0-	55.3
F70-1832	43.4-	20.3	35.2	39.4	23.2	18.5-	37.5	51.3
F70-2174	51.5	18.7	33.7	40.1	24.4	31.1	34.0	49.5
F70-3340	44.2-	14.2	35.7	38.2	27.6	18.5-	28.2	44.6
F70-3349	42.6-	18.0	36.7	38.6	23.0	28.0	38.9	55.7
F70-3389	42.2-	15.3	39.2	41.6	25.6	26.6	30.7	46.7
F70-3712	58.7	19.6	31.2	39.7	24.3	20.0-	26.8-	49.4
F70-3728	51.9	14.8	39.0	42.4	22.2	23.4	32.2	42.3
F70-3730	48.6	16.5	30.5	37.8	25.0	20.1-	32.1	51.6
F70-3775	46.3	15.2	33.1	40.1	27.1	32.8	43.1	44.3
F70-3784	39.8-	18.0	32.0	43.5	25.2	28.6	38.6	51.3
F70-3796	41.0-	18.7	37.0	45.4+	23.0	30.5	33.3	58.0
F70-4016	47.1	18.9	31.3	47.7+	23.4	27.0	32.1	47.6
F70-4065	53.9	19.6	30.6	40.5	27.5	23.1	42.8	56.1
Ts71-5	54.4	21.8	27.7	39.0	20.1	24.2	32.2	44.3
Ts71-13	31.8-	15.6	35.9	26.9-	21.8	18.5-	24.7-	40.6
L.S.D.(.05)	12.5	6.9	7.0	6.2	4.5	8.4	7.7	N.S.
C.V.	13%	14%	11%	7%	10%	15%	10%	10%

Table 46. - Oil percentages for the strains in Preliminary Group VII, 1972

Strain	Clinton, N.C.	Blackville, S.C.	Live Oak, Fla.	Jay, Fla.	Stoneville, Miss.(B)	Beaumont, Texas
Bragg	22.3	17.9	23.5	20.9	22.1	22.6
Pickett 71	21.6	18.3	23.0	23.8	22.6	21.9
D69-0442	20.8	15.3	21.4	18.8	20.0	18.8
D69-0559	19.9	15.4	21.4	19.1	20.0	18.8
D69-8765	22.5	18.1	24.0	18.9	23.4	22.0
D69-9801	19.4	16.9	21.9	21.6	21.0	20.6
D70-8347	21.9	20.1	22.5	23.8	22.0	21.4
D70-8360	21.3	18.8	22.5	23.8	22.8	22.1
D70-8378	22.0	18.3	24.0	21.9	22.4	22.8
D70-8437	21.0	20.2	23.5	23.2	20.9	21.5
D70-8444	20.9	18.9	23.1	22.5	21.4	20.8
D70-8537	22.3	19.9	23.5	23.1	21.9	23.1
D70-8612	20.4	17.8	22.1	22.9	21.0	20.4
F68-1431	20.6	17.3	21.8	19.5	19.3	19.3
F68-1531	22.5	19.3	23.8	22.9	22.4	21.4
F68-1984	21.4	16.9	21.9	20.5	21.5	20.2
F68-2128	22.5	19.3	23.3	21.5	21.5	22.0
F68-2457	22.3	20.4	23.5	23.0	21.6	22.1
F68-2580	21.8	19.9	23.0	23.0	21.4	21.3
F68-3038	20.8	19.0	22.4	21.7	21.5	21.3
F70-1786	20.9	17.5	20.2	19.5	19.8	19.0
F70-1832	21.6	18.2	23.0	20.8	21.8	20.3
F70-2174	22.5	18.3	23.6	20.6	22.3	22.1
F70-3340	21.1	18.2	22.6	21.0	21.4	21.9
F70-3349	20.8	18.0	22.3	21.7	20.8	21.4
F70-3389	20.3	18.9	21.8	20.3	20.3	21.3
F70-3712	22.4	19.4	23.0	22.1	22.1	21.8
F70-3728	21.6	18.2	22.8	21.1	21.8	21.5
F70-3730	21.9	18.0	22.1	20.5	20.4	20.8
F70-3775	20.5	17.2	22.1	19.9	20.2	19.2
F70-3784	19.9	17.2	20.9	19.5	19.3	19.0
F70-3796	20.6	18.0	21.9	20.5	20.9	19.8
F70-4016	19.9	17.0	22.0	20.0	20.9	20.0
F70-4065	22.4	18.2	23.8	21.9	22.5	21.5
Ts71-5	21.3	19.5	23.0	23.4	22.3	22.1
Ts71-13	21.0	20.4	22.9	22.1	22.3	21.9

Table 47. - Protein percentages for the strains in Preliminary Group VII, 1972

Strain	Clinton, N.C.	Blackville, S.C.	Live Oak, Fla.	Jay, Fla.	Stoneville, Miss.(B)	Beaumont, Texas
Bragg	40.9	43.6	39.9	42.4	39.4	41.0
Pickett 71	41.4	44.1	40.7	39.9	38.5	41.2
D69-0442	43.0	48.0	42.2	45.0	41.9	44.2
D69-0559	43.4	46.6	43.4	44.0	41.8	44.6
D69-8765	40.4	44.2	39.8	41.6	38.0	40.9
D69-9801	43.3	45.2	40.0	41.3	40.0	38.9
D70-8347	41.5	42.6	42.0	40.5	39.4	42.1
D70-8360	43.4	44.5	42.2	41.9	38.8	41.0
D70-8378	41.0	44.6	38.5	41.2	37.6	38.8
D70-8437	41.2	40.8	38.7	39.4	39.3	39.3
D70-8444	42.0	43.0	39.9	40.0	40.0	42.3
D70-8537	40.0	45.1	40.2	39.5	39.8	41.1
D70-8612	42.7	44.2	41.4	40.9	39.0	40.5
F68-1431	42.2	46.0	41.1	42.1	42.4	43.0
F68-1531	40.8	44.3	40.9	41.3	39.8	42.0
F68-1984	42.1	46.1	40.5	43.0	38.5	40.8
F68-2128	41.1	46.6	41.2	41.3	41.0	40.9
F68-2457	40.2	42.1	40.0	40.1	39.8	41.1
F68-2580	41.3	43.5	41.2	40.4	40.1	42.2
F68-3038	42.5	45.0	42.3	42.6	41.0	43.1
F70-1786	42.3	47.4	45.3	44.7	43.3	43.7
F70-1832	40.1	43.6	39.3	40.4	39.1	41.2
F70-2174	39.3	45.4	39.9	42.0	39.3	40.6
F70-3340	41.9	44.0	39.8	41.1	39.9	40.6
F70-3349	43.4	46.6	40.4	40.5	40.5	40.2
F70-3389	42.8	42.3	40.1	41.5	40.3	41.7
F70-3712	40.6	43.6	39.0	39.9	39.0	41.5
F70-3728	39.3	43.3	38.1	40.2	38.8	40.5
F70-3730	39.7	45.0	39.9	41.1	39.0	40.4
F70-3775	42.5	46.7	41.1	42.3	41.4	42.5
F70-3784	42.5	45.5	42.2	42.1	42.0	43.2
F70-3796	41.3	42.4	40.1	41.1	40.4	42.1
F70-4016	44.1	49.0	43.8	44.3	42.8	43.7
F70-4065	41.7	46.8	40.7	42.6	40.1	42.2
Ts71-5	40.1	43.5	40.4	40.9	39.3	42.0
Ts71-13	40.8	42.4	40.1	42.4	40.5	41.5

Table 48. - Plant height for the strains in Preliminary Group VII, 1972

Strain	Blackville, S.C.	Live Oak, Fla.	Jay, Fla.	Tallassee, Ala.	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Beaumont, Texas
Bragg	40	28	45	42	46	41	32
Pickett 71	31	23	33	27	32	25	25
D69-0442	38	27	44	39	45	44	32
D69-0559	39	29	44	44	43	40	33
D69-8765	29	20	36	34	38	33	29
D69-9801	30	19	35	31	40	38	24
D70-8347	30	19	32	31	36	31	23
D70-8360	31	18	31	27	36	36	24
D70-8378	38	24	42	31	40	33	28
D70-8437	31	24	43	30	40	37	26
D70-8444	31	21	37	31	39	32	30
D70-8537	36	27	43	40	43	38	28
D70-8612	29	19	30	28	34	31	24
F68-1431	28	26	46	36	40	36	25
F68-1531	32	24	41	38	38	35	27
F68-1984	36	29	45	47	47	41	31
F68-2128	32	25	38	39	40	44	29
F68-2457	33	23	37	35	38	35	30
F68-2580	34	25	32	36	37	34	32
F68-3038	38	30	45	46	53	47	35
F70-1786	26	21	35	24	28	29	12
F70-1832	35	27	46	42	45	43	35
F70-2174	36	27	44	41	47	38	29
F70-3340	34	24	45	39	40	35	35
F70-3349	32	24	37	34	44	33	35
F70-3389	33	28	46	44	55	36	32
F70-3712	37	24	45	39	42	39	30
F70-3728	37	28	44	42	51	38	36
F70-3730	36	27	45	45	47	41	35
F70-3775	36	27	47	24	46	40	32
F70-3784	29	26	37	33	41	37	20
F70-3796	34	26	41	40	39	40	28
F70-4016	29	23	42	37	42	38	26
F70-4065	37	29	43	42	45	40	33
Ts71-5	29	24	29	26	35	35	24
Ts71-13	44	33	50	46	58	48	40

Table 49. - Seed quality scores for the strains in Preliminary Group VII, 1972

Strain	Clinton, N.C.	Black-ville, S.C.	Live Oak, Fla.	Jay, Fla.	Tallas-see, Ala.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	1.0	1.0	1.5	3.0	2.0	3.0	2.0	2.0
Pickett 71	1.0	1.0	2.5	1.0	2.0	4.0	2.0	4.0
D69-0442	1.0	2.0	1.5	2.0	2.0	4.0	2.0	3.0
D69-0559	1.0	1.0	1.5	1.0	3.0	3.5	2.0	3.0
D69-8765	1.0	1.0	2.0	3.0	1.0	4.0	3.0	3.0
D69-9801	1.0	2.0	2.0	3.0	3.0	4.0	2.0	3.0
D70-8347	1.0	1.0	1.5	2.0	1.0	3.5	2.0	2.0
D70-8360	1.5	1.0	1.5	2.0	3.0	4.0	2.0	2.0
D70-8378	1.0	1.0	2.0	2.0	2.0	3.0	3.0	1.0
D70-8437	1.0	1.0	1.0	2.0	2.0	4.0	2.0	2.0
D70-8444	1.0	1.0	1.5	1.0	1.0	4.0	2.0	2.0
D70-8537	1.0	1.0	2.5	2.0	3.0	4.0	3.0	2.0
D70-8612	1.0	2.0	2.0	2.0	2.0	4.0	2.0	2.0
F68-1431	1.0	1.0	1.0	2.0	1.0	3.5	2.0	3.0
F68-1531	1.0	1.0	1.5	1.0	2.0	4.0	2.0	3.0
F68-1984	1.0	1.0	1.5	2.0	3.0	3.0	3.0	4.0
F68-2128	1.0	2.0	2.0	3.0	3.0	3.5	2.0	2.0
F68-2457	1.0	2.0	2.0	2.0	2.0	4.0	2.0	3.0
F68-2580	1.0	3.0	2.5	2.0	2.0	3.0	2.0	3.0
F68-3038	1.0	1.0	2.0	3.0	2.0	4.0	2.0	2.0
F70-1786	1.5	2.0	2.5	3.0	4.0	4.0	2.0	2.0
F70-1832	1.0	1.0	1.5	2.0	1.0	3.5	2.0	2.0
F70-2174	1.0	1.0	1.5	2.0	2.0	3.0	2.0	1.0
F70-3340	1.0	1.0	1.5	1.0	1.0	4.0	3.0	3.0
F70-3349	1.0	2.0	1.0	3.0	1.0	3.5	2.0	2.0
F70-3389	1.0	2.0	1.0	2.0	1.0	3.0	2.0	2.0
F70-3712	1.0	1.0	1.5	2.0	1.0	4.0	3.0	3.0
F70-3728	1.0	1.0	1.0	2.0	2.0	3.5	3.0	3.0
F70-3730	1.0	1.0	1.5	1.0	2.0	4.0	3.0	3.0
F70-3775	1.0	1.0	1.5	1.0	2.0	4.0	2.0	3.0
F70-3784	1.0	1.0	1.5	1.0	1.0	3.5	2.0	2.0
F70-3796	1.0	1.0	1.5	2.0	2.0	3.5	2.0	2.0
F70-4016	1.0	2.0	2.0	2.0	3.0	4.0	2.0	3.0
F70-4065	1.0	1.0	2.0	2.0	1.0	4.0	2.0	3.0
Ts71-5	1.0	1.0	1.5	3.0	2.0	4.0	3.0	4.0
Ts71-13	1.0	1.0	1.5	1.0	1.0	4.0	2.0	3.0

UNIFORM GROUP VIII

1972

	Variety or strain	Parentage	Generation composited
1.	Hampton 266A	Majos x Lee	
2.	Hardee	D49-772 x Improved Pelican	F_7
3.	Hutton (F63-4000)	F55-822 x (Roanoke x CNS-4)	F_6
4.	F66-1166	F57-735 x D58-3358	F_6
5.	Co68-38	Hampton 266 x Bragg	F_4
6.	Co68-41	Hampton 266 x Bragg	F_4
7.	F68-1004	Bragg(3) x D60-7965	F_4
8.	F68-1018	Bragg(3) x D60-7965	F_4
9.	F68-1025	Bragg(3) x D60-7965	F_4
10.	F68-1027	Bragg(3) x D60-7965	F_4
11.	F68-1033	Bragg(3) x D60-7965	F_4
12.	Co69-119	Hampton 266 x Bragg	F_5

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.

F58-3358 is a bacterial-pustule-resistant selection from Jackson(4) x D49-2491.

D66-7965 is a high protein selection from D55-4090(Ogden x CNS) x D55-4159 (Ogden x Biloxi).

Twenty-two Uniform Group VIII nurseries were grown. Results are summarized in Tables 50 through 56. 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 are reported for seed yield and oil and protein percentages.

Seed yield differences among strains were significant at the 5% level of confidence at 13 locations. The combined analysis of variance for seed yield showed differences among strains to be significant.

The breeding line F63-4000 was increased for release and named Hutton. Hutton had the highest mean yield for the 1972 Group VIII nurseries. Its 3-year mean is higher than that for Hampton 266A. Maturity of Hutton and Hampton 266A are similar.

F66-1166 has a 3-year average yield 3.5 bushels per acre higher than that for Hardee. Maturity is similar to that for Hardee.

Of the strains grown one year, all yielded significantly better than Hampton 266A, as a mean of all locations.

Table 50. - General summary of performance for the strains in Uniform Group VIII, 1972

	Hampton 266A	Hardee	Hutton	F66-1166	Co68-38	Co68-41
Seed Yield - 1972	29.4	27.2	32.4+	31.2	31.8+	31.2
- 1971-72	33.2	30.7	36.1	34.5	35.6	34.2
- 1970-72	33.9	31.3	36.3	34.8		
Oil Content - 1972	21.9	21.4	20.9-	22.8+	22.8+	22.2
- 1971-72	22.2	21.0	20.9	22.5	23.1	22.5
- 1970-72	22.5	21.1	20.9	22.5		
Protein Content - 1972	40.5	42.0+	43.0+	39.7	40.7	39.8
- 1971-72	40.8	42.7	43.2	40.6	40.8	40.0
- 1970-72	40.2	42.2	42.8	40.3		
Seed size	14.6	12.9-	15.3	13.1-	14.8	13.7-
Maturity index	10-24	+5	0	+4	0	0
Height	38	41	37	40	36	39
Shattering	1.0	1.1	1.0	1.8	1.2	1.2
Phytophthora rot	4.0	1.0	1.0	1.0	1.0	3.0
Root knot	3.5	3.0	1.5	2.5	3.0	1.0
Purple stain	2.0	1.0	2.0	2.0	4.0	3.0

Table 50. - (continued)

	F68-1004	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119
Seed Yield - 1972	31.1	32.2+	32.3+	31.9+	33.2+	33.1+
- 1971-72	35.2	36.4				
- 1970-72						
Oil Content - 1972	21.9	21.9	22.2	22.4	22.0	23.0+
- 1971-72	21.9	21.6				
- 1970-72						
Protein Content - 1972	41.4+	41.2	41.6+	41.0	41.9+	39.7
- 1971-72	41.8	41.5				
- 1970-72						
Seed size	13.3-	14.4	16.2+	14.4	14.1	15.9+
Maturity index	+3	+2	+4	+3	+3	+1
Height	40	40	40	38	38	36
Shattering	1.0	1.0	1.0	1.0	1.2	1.0
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	3.0
Root knot	2.0	2.5	2.0	1.5	2.0	2.0
Purple stain	2.0	1.0	2.0	2.0	2.0	1.0

Table 51. - Seed yield in bushels per acre for the strains in Uniform Group VIII, 1972

Location	Hampton 266A	Hardee	Hutton	F66-1166	Co68-38	Co68-41	F68-1004
			South				
Clinton, N.C.*	52.6	--	56.9	52.7	58.6	59.5	49.5
Florence, S.C.(A)	45.9	39.2	41.7	41.3	42.4	43.3	40.8
Florence, S.C.(B)	36.6	38.5	38.9	39.4	38.7	36.7	40.3
Hartsville,S.C.(A)	33.8	31.7	33.5	34.0	33.6	31.4	32.6
Hartsville,S.C.(B)	28.7	31.8	30.2	32.7	28.1	30.5	31.9
Blackville,S.C.(A)	14.7	13.4	17.4	18.0	18.0	13.9	14.8
Blackville,S.C.(B)	18.4	11.2	16.4	16.3	17.8	17.9	15.8
Experiment, Ga.	33.2	23.9	31.9	25.9	30.3	29.9	27.7
Tallassee, Ala.	19.6	19.4	19.0	20.7	21.7	20.2	22.6+
Tifton, Ga.	26.9	22.4-	35.9+	33.6+	37.8+	31.4+	27.2
Live Oak, Fla.	28.2	32.5+	38.9+	34.4+	36.7+	38.0+	36.7+
Gainesville, Fla.	32.0	29.8	32.2	35.3	35.5	38.5	43.2
Marianna, Fla.	29.7	27.4	35.3	35.3	21.6	24.3	40.4
Quincy, Fla.	19.5	16.6	24.7	21.3	21.5	24.1	18.2
Jay, Fla.	35.0	29.0-	35.0	33.3	42.1+	36.0	36.3
Fairhope, Ala.	23.4	21.5	32.8+	25.0	23.8	24.2	22.3
Poplarville, Miss.*	21.5	22.7	19.8	27.0	11.3	18.2	18.1
Baton Rouge, La.	37.5	24.2	32.5	34.8	35.0	33.3	31.5
Stoneville, Miss.	20.4	22.3	35.6+	28.2+	30.8+	26.4	30.9+
Curtis, La.	36.9	35.4	32.5	36.3	38.0	42.4	36.6
Crowley, La.	29.8	26.0	33.1	30.3	37.1+	32.8	29.1
Beaumont, Texas	38.3	46.8	50.6	48.2	44.8	49.1	42.0
Mean	29.4	27.2	32.4+	31.2	31.8+	31.2	31.1

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

*Not included in mean

Table 51. - (continued)

Location	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119	L.S.D. (.05)	C.V.
			South				
Clinton, N.C.*	50.6	47.9	51.6	57.7	62.9	N.S.	10%
Florence, S.C.(A)	42.9	44.5	41.0	44.5	46.1	N.S.	7%
Florence, S.C.(B)	42.6+	41.0	42.4+	44.5+	39.7	4.5	7%
Hartsville,S.C.(A)	36.1	35.7	34.5	34.4	32.9	3.9	7%
Hartsville,S.C.(B)	36.2+	34.7+	34.2+	32.6	27.4	4.9	9%
Blackville,S.C.(A)	17.4	16.8	14.5	17.2	20.0	7.8	13%
Blackville,S.C.(B)	17.9	15.7	15.7	16.7	20.0	3.1	8%
Experiment, Ga.	34.1	34.6	30.8	27.8	32.9	N.S.	18%
Tallassee, Ala.	23.6+	23.8+	23.3+	21.7	24.2+	3.0	8%
Tifton, Ga.	33.0+	33.6+	29.6	33.2+	37.4+	4.2	8%
Live Oak, Fla.	33.3+	37.0+	34.3+	37.6+	30.9	3.6	6%
Gainesville, Fla.	38.0	39.8	36.4	39.2	34.6	N.S.	15%
Marianna, Fla.	33.0	21.8	30.8	35.9	27.7	N.S.	26%
Quincy, Fla.	20.0	24.8	19.1	26.6+	29.5+	5.9	16%
Jay, Fla.	34.5	36.1	35.3	36.3	38.3	3.9	6%
Fairhope, Ala.	24.4	25.9	25.6	27.6	29.1+	4.3	10%
Poplarville, Miss.*	27.3	17.5	23.2	22.3	22.2	N.S.	26%
Baton Rouge, La.	31.2	33.7	36.1	37.2	38.9	N.S.	17%
Stoneville, Miss.	36.7+	37.1+	33.2+	37.7+	26.8	6.8	14%
Curtis, La.	24.0	34.3	39.4	37.4	36.3	N.S.	22%
Crowley, La.	33.4	29.6	32.3	32.5	37.3+	5.7	11%
Beaumont, Texas	51.0	45.5	50.2	42.0	51.4	N.S.	12%
Mean	32.2+	32.3+	31.9+	33.2+	33.1+	2.0	

Table 52. - Chemical composition and seed size for the strains in Uniform Group VIII, 1972

Location	Hampton 266A	Hardee	Hutton	F66-1166	Co68-38	Co68-41	F68-1004
			Oil Percentage				
Blackville,S.C(B)	21.5	20.8	18.4	20.3	20.2	20.6	19.9
Tifton, Ga.	18.9	18.2	18.0	21.1	21.9	18.9	18.9
Live Oak, Fla.	23.4	23.3	22.3	24.8	24.7	23.8	23.8
Gainesville, Fla.	24.0	22.5	21.8	23.6	24.3	23.6	23.3
Jay, Fla.	21.4	21.4	23.5	24.0	22.1	22.4	22.0
Baton Rouge, La.	23.1	21.3	20.5	22.0	23.4	23.4	22.3
Beaumont, Texas	21.3	22.0	22.1	23.5	23.0	23.0	23.0
Mean	21.9	21.4	20.9-	22.8+	22.8+	22.2	21.9
			Protein Percentage				
Blackville,S.C.(B)	40.4	41.6	43.5	40.5	42.0	40.9	43.7
Tifton, Ga.	43.7	44.9	46.6	44.7	42.5	44.5	45.3
Live Oak, Fla.	38.5	40.0	41.1	36.4	39.4	38.0	40.0
Gainesville, Fla.	39.0	41.3	42.5	38.4	40.0	38.5	39.1
Jay, Fla.	39.4	42.8	42.6	38.1	39.9	38.4	40.0
Baton Rouge, La.	40.4	42.4	43.2	39.9	41.1	39.4	41.3
Beaumont, Texas	41.9	41.1	41.2	39.8	40.2	38.8	40.2
Mean	40.5	42.0+	43.0+	39.7	40.7	39.8	41.4+
			Grams per 100 Seeds				
Blackville,S.C.(B)	9.4	10.8	11.2	9.4	11.0	10.6	10.0
Tifton, Ga.	12.2	9.0	13.2	10.7	12.3	11.2	11.3
Live Oak, Fla.	15.7	13.9	16.8	13.6	16.5	15.1	14.0
Gainesville, Fla.	16.3	13.9	16.3	14.3	16.2	14.9	13.9
Jay, Fla.	15.5	13.8	16.2	14.3	15.3	13.5	13.5
Baton Rouge, La.	15.6	12.0	15.9	12.9	15.0	13.4	14.1
Beaumont, Texas	17.6	16.7	17.2	16.8	17.3	16.9	16.4
Mean	14.6	12.9-	15.3	13.1-	14.8	13.7-	13.3-

Table 52. - (continued)

Location	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119	L.S.D. (.05)
			Oil Percentage			
Blackville,S.C.(B)	19.0	20.2	21.3	19.7	21.5	
Tifton, Ga.	19.4	19.9	19.4	19.4	20.4	
Live Oak, Fla.	23.3	23.9	24.3	23.5	25.4	
Gainesville, Fla.	23.1	23.8	23.6	23.6	24.4	
Jay, Fla.	23.4	22.8	22.5	22.6	22.5	
Baton Rouge, La.	21.5	22.0	23.5	22.4	23.8	
Beaumont, Texas	23.9	22.5	22.5	22.5	23.0	
Mean	21.9	22.2	22.4	22.0	23.0+	0.8
			Protein Percentage			
Blackville,S.C.(B)	43.0	42.9	42.7	44.2	40.5	
Tifton, Ga.	44.0	44.2	43.5	44.9	41.3	
Live Oak, Fla.	40.0	40.7	39.4	40.9	38.2	
Gainesville, Fla.	40.2	40.4	40.1	41.3	38.8	
Jay, Fla.	40.6	40.0	40.0	41.1	39.2	
Baton Rouge, La.	40.9	41.5	40.7	41.4	39.6	
Beaumont, Texas	39.4	41.7	40.3	39.6	40.6	
Mean	41.2	41.6+	41.0	41.9+	39.7	0.9
			Grams per 100 Seeds			
Blackville,S.C.(B)	10.8	12.2	11.8	10.8	12.0	
Tifton, Ga.	12.1	13.1	12.7	12.9	13.3	
Live Oak, Fla.	15.7	18.0	15.9	16.4	16.7	
Gainesville, Fla.	16.3	18.2	16.0	15.4	17.2	
Jay, Fla.	15.0	16.5	15.3	14.5	16.4	
Baton Rouge, La.	14.4	16.9	12.7	12.7	17.8	
Beaumont, Texas	16.2	18.4	16.3	15.7	17.7	
Mean	14.4	16.2+	14.4	14.1	15.9+	0.8

Table 53. - Relative maturity, days earlier (-) or later (+) than Hampton 266A, for the strains in Uniform Group VIII, 1972

Location	Date planted	Hampton 266A matured	Hardee	Hutton	F66-1166	Co68-38
			South			
Clinton, N.C.	5-30	11-7	+2	-2	+4	-5
Florence, S.C.(A)	5-18	11-2	+10	-1	+4	+4
Florence, S.C.(B)	6-15	11-3	+7	-2	+1	-2
Hartsville, S.C.(A)	6-9	11-5	+2	-2	+4	+1
Hartsville, S.C.(B)	6-23	11-3	+5	0	+4	0
Blackville, S.C.(A)	5-22	10-21	+7	-1	+4	-1
Blackville, S.C.(B)	7-7	10-24	+9	-2	+6	-3
Experiment, Ga.	5-18	10-25	+1	-6	0	-2
Tallassee, Ala.	5-25	10-21	0	-2	-2	+1
Tifton, Ga.	5-9	10-10	+9	+1	+9	-1
Live Oak, Fla.	6-22	10-23	+3	0	+4	0
Gainesville, Fla.	6-27	10-23	+3	-2	+7	0
Marianna, Fla.	6-30	10-24	+4	+1	+4	-3
Quincy, Fla.	--	10-7	+7	+3	+7	+1
Jay, Fla.	5-19	10-10	+6	+1	+3	-1
Fairhope, Ala.	6-2	10-10	0	0	0	0
Poplarville, Miss.	5-25	10-20	+6	0	+4	0
Baton Rouge, La.	5-22	10-22	+5	-3	+4	-3
Stoneville, Miss.	5-23	10-18	+14	+10	+14	+10
Curtis, La.	5-15	11-1	+6	-4	+6	+1
Crowley, La.	5-26	10-31	+4	+6	+2	+1
Beaumont, Texas	5-25	10-30	+2	-2	+1	+3
Mean		10-24	+5	0	+4	0

Table 53. - (continued)

Location	Co68-41	F68-1004	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119
			South				
Clinton, N.C.	0	-2	0	+2	0	0	+2
Florence,S.C.(A)	+2	+2	+6	+2	-1	-1	-5
Florence,S.C.(B)	-1	-2	-2	+5	-1	-2	-7
Hartsville,S.C.(A)	-1	0	0	+1	+1	+2	-3
Hartsville,S.C.(B)	-1	+1	0	+2	+3	0	-2
Blackville,S.C.(A)	-1	+7	+3	+3	+2	+3	-2
Blackville,S.C.(B)	-1	+7	+1	+5	+4	+3	-3
Experiment, Ga.	0	0	-3	-2	-1	0	-6
Tallassee, Ala.	0	+1	-2	0	+1	-1	-2
Tifton, Ga.	0	+6	+1	+8	+9	+8	0
Live Oak,Fla.	-1	0	+1	+1	+1	+2	0
Gainesville, Fla.	0	+6	+5	+6	+5	+4	-2
Marianna, Fla.	+2	+2	0	+2	+2	-1	-5
Quincy, Fla.	+1	+4	+4	+5	+4	+4	+1
Jay, Fla.	0	+4	+3	+6	+6	+3	0
Fairhope, Ala.	0	0	0	0	0	0	0
Poplarville,Miss.	0	+3	0	0	+2	+2	0
Baton Rouge, La.	-3	+4	0	+6	+5	+4	-2
Stoneville, Miss.	+5	+13	+13	+14	+14	+13	+10
Curtis, La.	0	+1	0	+3	+3	+5	-4
Crowley, La.	0	+10	+5	+10	+6	+5	-1
Beaumont, Texas	+1	+1	+2	+5		+4	+1
Mean	0	+3	+2	+4	+3	+3	-1

Table 54. - Plant height for the strains in Uniform Group VIII, 1972

Location	Hampton 266A	Hardee	Hutton	F66-1166	Co68-38	Co68-41
			South			
Clinton, N.C.	43	42	38	42	39	42
Florence, S.C.(A)	41	43	36	43	37	43
Florence, S.C.(B)	40	40	38	38	36	36
Hartsville, S.C.(A)	39	44	42	45	39	41
Hartsville, S.C.(B)	38	40	40	39	38	39
Blackville, S.C.(A)	41	38	35	42	36	43
Blackville, S.C.(B)	31	26	26	31	28	30
Experiment, Ga.	38	37	36	39	36	38
Tallassee, Ala.	45	45	42	43	41	45
Tifton, Ga.	39	43	38	41	40	39
Live Oak, Fla.	29	31	29	33	27	29
Gainesville, Fla.	28	29	27	31	27	30
Marianna, Fla.	28	29	29	28	27	28
Quincy, Fla.	34	44	35	37	31	32
Jay, Fla.	45	52	46	48	43	47
Fairhope, Ala.	39	44	38	40	37	33
Poplarville, Miss.	40	42	45	46	38	45
Baton Rouge, La.	46	49	47	53	41	48
Stoneville, Miss.	40	46	45	47	42	45
Curtis, La.	40	53	39	46	36	43
Crowley, La.	37	47	41	39	39	40
Beaumont, Texas	30	36	30	33	36	31
Mean	38	41	37	40	36	39

Table 54. - (continued)

Location	F68-1004	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119
			South			
Clinton, N.C.	40	43	41	43	41	45
Florence, S.C.(A)	41	40	41	37	39	37
Florence, S.C.(B)	38	36	36	38	40	38
Hartsville, S.C.(A)	45	43	44	43	41	40
Hartsville, S.C.(B)	40	41	41	40	39	38
Blackville, S.C.(A)	42	40	40	37	38	37
Blackville, S.C.(B)	31	30	31	26	29	28
Experiment, Ga.	41	41	44	38	39	33
Tallassee, Ala.	46	48	45	44	44	39
Tifton, Ga.	43	41	41	37	41	39
Live Oak, Fla.	34	33	33	29	33	27
Gainesville, Fla.	36	31	31	29	32	26
Marianna, Fla.	30	29	28	27	25	26
Quincy, Fla.	37	33	42	37	34	31
Jay, Fla.	48	48	52	49	47	41
Fairhope, Ala.	34	41	41	41	42	39
Poplarville, Miss.	45	48	35	42	39	38
Baton Rouge, La.	52	49	49	48	47	44
Stoneville, Miss.	45	46	47	45	41	41
Curtis, La.	39	40	41	40	42	35
Crowley, La.	46	45	40	39	36	34
Beaumont, Texas	36	30	33	35	33	31
Mean	40	40	40	38	38	36

Table 55. - Lodging scores for the strains in Uniform Group VIII, 1972

Location	Hampton 266A	Hardee	Hutton	F66-1166	Co68-38	Co68-41
			South			
Clinton, N.C.	5.0	4.0	3.0	3.7	3.7	4.3
Florence, S.C.(A)	2.0	3.0	1.0	3.0	1.0	2.0
Florence, S.C.(B)	4.0	4.0	2.0	3.0	3.0	3.0
Hartsville, S.C.(A)	2.5	2.5	2.3	2.5	2.5	2.5
Hartsville, S.C.(B)	3.0	2.3	2.5	2.5	2.8	2.5
Blackville, S.C.(A)	1.3	1.7	1.0	2.0	1.0	1.7
Blackville, S.C.(B)	1.7	1.0	1.0	1.7	1.0	1.0
Experiment, Ga.	1.7	1.3	1.3	1.3	1.0	1.0
Tallassee, Ala.	2.2	1.8	1.8	2.2	1.7	2.8
Tifton, Ga.	2.3	4.0	3.3	3.3	2.3	3.3
Live Oak, Fla.	1.0	1.0	1.0	1.3	1.0	1.0
Gainesville, Fla.	1.0	1.3	1.0	1.3	1.3	1.7
Marianna, Fla.	1.0	2.0	1.0	1.3	1.0	1.0
Quincy, Fla.	2.0	2.0	1.0	1.0	1.0	2.0
Jay, Fla.	2.0	2.0	4.0	2.0	1.0	2.0
Fairhope, Ala.	2.0	1.0	1.0	1.0	1.0	2.0
Poplarville, Miss.	2.0	1.7	2.0	1.3	1.0	1.0
Baton Rouge, La.	2.3	1.3	1.5	2.3	1.5	2.0
Stoneville, Miss.	3.0	3.0	3.0	3.0	2.7	2.3
Curtis, La.	3.0	4.5	2.5	3.0	2.0	3.5
Crowley, La.	1.5	1.0	1.0	2.0	2.0	2.0
Beaumont, Texas	1.0	1.0	1.0	1.0	2.0	1.0

Table 55. - (continued)

Location	F68-1004	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119
			South			
Clinton, N.C.	3.3	3.7	3.7	3.7	3.7	3.3
Florence, S.C.(A)	2.0	1.0	2.0	2.0	2.0	1.0
Florence, S.C.(B)	2.0	3.0	3.0	2.0	2.0	3.0
Hartsville, S.C.(A)	2.5	2.5	2.5	2.3	2.5	2.0
Hartsville, S.C.(B)	2.8	2.8	2.8	2.6	2.8	2.5
Blackville, S.C.(A)	1.0	1.0	1.0	1.3	1.0	1.0
Blackville, S.C.(B)	1.0	1.0	1.3	1.0	1.0	1.0
Experiment, Ga.	1.7	1.3	2.0	2.0	1.7	1.0
Tallassee, Ala.	2.0	2.7	2.7	2.3	1.5	1.7
Tifton, Ga.	2.7	3.7	3.3	4.0	2.3	2.3
Live Oak, Fla.	1.0	1.7	1.0	1.0	1.0	1.0
Gainesville, Fla.	2.7	1.3	1.0	1.0	1.7	1.0
Marianna, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	2.0	1.0	2.0	1.0	2.0	1.0
Jay, Fla.	2.0	3.0	3.0	3.0	2.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Poplarville, Miss.	1.0	1.7	2.0	2.0	2.3	1.7
Baton Rouge, La.	2.3	2.3	1.8	3.0	2.5	1.5
Stoneville, Miss.	3.0	3.0	3.0	3.0	3.0	2.7
Curtis, La.	3.5	3.5	3.0	3.5	3.0	2.0
Crowley, La.	1.0	1.5	1.5	1.5	2.0	1.0
Beaumont, Texas	1.0	3.0	1.0	1.0	2.0	1.0

Table 56. - Seed quality scores for the strains in Uniform Group VIII, 1972

Location	Hampton 266A	Hardee	Hutton	F66-1166	Co68-38	Co68-41
			South			
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Blackville, S.C.(A)	2.0	1.0	1.0	1.0	2.0	1.0
Blackville, S.C.(B)	1.0	1.0	1.0	1.0	2.0	1.0
Experiment, Ga.	3.0	3.0	3.7	4.0	3.0	3.3
Tallassee, Ala.	2.0	2.0	1.0	1.0	3.0	3.0
Tifton, Ga.	2.2	2.0	2.0	2.0	2.2	2.3
Live Oak, Fla.	2.3	1.7	1.3	1.3	2.0	2.7
Gainesville, Fla.	2.3	1.7	2.3	1.7	3.3	2.7
Quincy, Fla.	3.0	3.0	2.0	2.0	2.0	3.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	2.3	2.0	1.3	1.7	1.3	2.3
Baton Rouge, La.	2.0	1.6	1.0	1.7	1.8	1.1
Stoneville, Miss.	4.0	3.7	3.0	3.3	3.0	3.0
Curtis, La.	2.0	1.7	2.0	2.0	2.0	1.3
Beaumont, Texas	3.0	2.0	3.0	3.0	2.0	4.0

Table 56. - (continued)

Location	F68-1004	F68-1018	F68-1025	F68-1027	F68-1033	Co69-119
			South			
Clinton, N.C.	1.0	1.0	1.0	1.0	1.0	1.0
Blackville, S.C.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Blackville, S.C.(B)	1.0	2.0	1.0	2.0	2.0	1.0
Experiment, Ga.	3.7	3.7	4.0	3.3	4.0	3.7
Tallassee, Ala.	3.0	2.0	2.0	2.0	3.0	4.0
Tifton, Ga.	2.2	2.2	2.2	2.2	2.7	2.3
Live Oak, Fla.	1.7	2.0	1.7	1.3	1.3	2.3
Gainesville, Fla.	2.0	1.7	1.7	1.7	3.0	3.3
Quincy, Fla.	3.0	4.0	2.0	3.0	4.0	1.0
Jay, Fla.	2.0	1.0	1.0	2.0	2.0	2.0
Fairhope, Ala.	1.3	1.0	1.0	1.3	2.0	2.0
Baton Rouge, La.	1.2	1.0	1.8	1.0	1.1	1.4
Stoneville, Miss.	4.0	3.7	3.3	3.7	3.7	3.0
Curtis, La.	1.3	2.0	1.7	1.3	2.0	1.7
Beaumont, Texas	2.0	3.0	2.0	2.0	3.0	3.0

PRELIMINARY GROUP VIII

1972

Preliminary Group VIII nurseries, including 34 experimental strains and the check varieties Hampton 266A and Hardee, were grown at eight locations. The parentage of these strains is reported in Table 57. Performance data are summarized in Tables 58 through 63. Differences among strains for seed yield were significant at the 5% level of confidence at seven locations. The combined analysis of variance showed differences among strains to be highly significant.

Co71-222, the strain ranking highest in yield, is a subline of Co68-38, which was grown in Uniform Group VIII. The average seed yield of Co68-38 was significantly greater than Hampton 266A in Group VIII. F66-216, the second ranking strain, is closely related to Hutton which was the highest ranking strain in Group VIII.

Eighteen strains ranked low for root-knot nematodes in the special planting in west Florida.

Thirty-one strains had higher protein then Hampton 266A -- significant at the 1% level of confidence.

Table 57. - Parentage of strains in Preliminary Group VIII, 1972

	Variety or strain	Parentage	Generation composited
1.	Hampton 266A		
2.	Hardee		
3.	Co68-64	Hampton 266 x Bragg	F_5
4.	Co69-117	Hampton 266 x Bragg	F_6
5.	Co70-177	Co208 x N60-5174	F_3
6.	Co70-183	Co208 x N60-5174	F_3
7.	Co70-186	Co208 x N60-5174	F_3
8.	Co71-211	Subline Co68-41	F_7
9.	Co71-222	Subline Co68-38	F_7
10.	Co71-2028	Composite Co68-33 sublines	F_8
11.	F66-216	F55-822 x (Roanoke x CNS-4)	F_9
12.	F68-1416	Bragg(3) x D60-7965	F_4
13.	F68-4014	(Hardee x F59-2496) x (F62-2953 x D62-3773)	F_4
14.	F68-4294	(Hardee x F59-2496) x (F62-2953 x D62-3773)	F_4
15.	F69-1671	Bragg(3) x D60-7965	F_4
16.	F69-1679	Bragg(3) x D60-7965	F_4
17.	F69-1702	Bragg(3) x D60-7965	F_5
18.	F69-2009	Bragg(2) x D60-7965	F_6
19.	F70-1816	Bragg x D61-3498	F_8
20.	F70-2641	(Hardee x D60-9647) x (Bragg x F59-2496)	F_7
21.	F70-2655	(Hardee x D60-9647) x (Bragg x F59-2496)	F_7
22.	F70-2737	F59-2855 x Hardee	F_8
23.	F70-3223	Bragg(3) x D60-7965	F_6
24.	F70-3248	Bragg(3) x D60-7965	F_6
25.	F70-3274	Bragg(3) x D60-7965	F_6
26.	F70-3310	F63-3999 x F63-4000	F_4
27.	F70-3312	F63-3999 x F63-4000	F_4
28.	F70-3321	F63-3999 x F63-4000	F_4
29.	F70-3341	F63-3999 x F63-4000	F_4
30.	F70-3390	F63-3999 x F63-4000	F_4
31.	F70-3404	Bragg x Hardee	F_7
32.	F70-3459	Bragg x Hardee	F_7
33.	F70-4230	F57-735 x D58-3358	F_{10}
34.	La69-0973	Natural cross in Bienville	
35.	Ts71-6	Bragg x PI 200,492	F_8
36.	Ts71-7	D69-6094 x D61-4269	F_8

Table 58. - General summary of performance for the strains in Preliminary Group VIII, 1972

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter resist.	P.R.	R.K.	P.S.
Hampton 266A	29.7	10-21	36	23.0	39.0	1.5	3.0	3.5	2.0
Hardee	27.0	+4	39	22.4	40.9+	1.5	1.0	5.0	2.0
Co68-64	32.3	+2	37	22.7	40.7+	1.5	3.0	4.0	2.0
Co69-117	33.6	+3	33	22.7	38.9	1.0	1.0	4.0	2.0
Co70-177	29.1	+1	35	20.9-	42.9+	1.5	1.0	5.0	1.0
Co70-183	25.4-	+1	32	21.6-	43.4+	1.0	2.0	5.0	1.0
Co70-186	28.3	+4	31	21.9-	42.7+	1.0	2.0	4.0	2.0
Co71-211	32.5	0	38	23.3	39.1	1.5	1.0	1.0	1.0
Co71-222	35.3+	-2	31	23.1	40.5+	1.5	1.0	3.5	2.0
Co71-2028	33.1	0	35	23.1	39.6	1.0	1.0	3.0	2.0
F66-216	35.2+	-2	36	20.6-	42.1+	3.0	1.0	2.0	2.0
F68-1416	32.9	-4	34	22.0-	41.2+	1.0	1.0	1.0	4.0
F68-4014	25.3-	+3	38	19.6-	43.8+	3.5	1.0	2.0	2.0
F68-4294	25.5	+3	37	17.2-	45.3+	3.5	1.0	2.5	2.0
F69-1671	30.5	+3	41	22.1-	41.5+	1.0	1.0	2.0	2.0
F69-1679	29.1	+5	40	22.1-	41.7+	1.0	1.0	2.0	3.0
F69-1702	28.6	0	38	21.9-	41.0+	1.0	1.0	1.5	2.0
F69-2009	32.6	-3	34	23.2	40.5+	1.5	1.0	3.0	2.0
F70-1816	28.5	-4	35	21.5-	40.4+	1.0	1.0	1.5	2.0
F70-2641	27.6	+4	45	21.6-	42.5+	1.0	1.0	2.0	2.0
F70-2655	29.7	+4	45	22.3	41.6+	1.5	1.0	2.5	1.0
F70-2737	28.2	+6	39	22.2	41.4+	1.5	1.0	5.0	2.0
F70-3223	31.0	+5	41	23.0	40.9+	1.0	1.0	2.5	2.0
F70-3248	31.3	+5	40	22.9	40.5+	1.0	1.0	1.5	2.0
F70-3274	29.5	0	41	21.4-	41.6+	1.0	1.0	3.0	1.0
F70-3310	30.3	-2	37	19.7-	42.4+	2.0	1.0	2.0	2.0
F70-3312	33.1	+2	38	21.0-	42.1+	1.5	1.0	1.5	2.0
F70-3321	33.8	0	37	21.3-	41.4+	1.5	1.0	1.5	1.0
F70-3341	32.6	-2	35	21.0-	41.9+	1.0	1.0	1.0	2.0
F70-3390	33.0	0	34	21.0-	42.2+	1.5	1.0	1.0	2.0
F70-3404	28.6	+9	44	22.1-	42.1+	1.0	1.0	2.0	2.0
F70-3459	30.4	+9	43	21.7-	41.8+	2.0	1.0	2.0	2.0
F70-4230	33.5	+5	40	22.8	39.6	2.0	1.0	1.0	3.0
La69-0973	31.7	-3	36	22.0-	40.8+	2.0	1.0	1.0	2.0
Ts71-6	27.2	+6	40	21.8-	40.6+	1.5	3.0	4.0	3.0
Ts71-7	22.9-	+14	45	21.0-	40.7+	2.0	2.0	4.0	2.0
L.S.D.(.05)	4.3			0.9	1.1				
L.S.D.(.01)	5.6			1.2	1.4				

Table 59. - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1972

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.	Beaumont, Texas	Stoneville, Miss.
Hampton 266A	14.7	25.6	35.5	14.3	35.2	38.5	49.4	24.6
Hardee	13.7	30.3	35.3	11.8	30.7	31.2	46.6	16.4
Co68-64	18.7	40.5+	29.4	18.7	50.7+	40.8	39.8	20.2
Co69-117	16.5	35.3+	38.8	18.0	34.8	40.0	50.3	35.2+
Co70-177	17.7	35.3+	30.1	14.8	31.8	33.4	37.7-	32.6+
Co70-183	12.8	30.4	28.3	12.8	30.6	31.0	33.6-	23.7
Co70-186	12.8	32.1	31.3	17.3	37.8	26.7-	46.7	21.5
Co71-211	12.9	40.9+	40.4	20.4+	36.3	35.2	45.4	28.2
Co71-222	14.4	39.8+	37.6	23.4+	42.8	47.4+	54.6	27.9
Co71-2028	18.8+	36.6+	36.7	18.4	35.9	37.0	55.6	28.2
F66-216	17.1	39.5+	40.1	24.1+	48.4+	32.9	53.3	28.6
F68-1416	16.4	37.3+	35.8	19.9+	44.6+	33.8	48.8	26.6
F68-4014	12.3	32.5	35.8	9.7	23.8-	34.4	37.2-	17.0-
F68-4294	13.4	28.1	31.8	10.2	18.6-	32.4	49.8	19.7
F69-1671	18.4	35.5+	36.9	16.6	31.8	34.8	54.3	21.1
F69-1679	16.3	31.2	31.3	14.7	31.0	34.1	55.4	23.9
F69-1702	16.5	34.2	32.2	18.1	32.9	30.3-	45.0	19.9
F69-2009	14.0	36.1+	34.2	21.1+	40.1	45.6	41.9	27.8
F70-1816	12.4	27.2	31.2	19.1	38.2	34.9	50.4	14.5-
F70-2641	14.6	30.3	36.3	11.2	24.5-	30.3-	51.3	22.8
F70-2655	16.7	30.5	39.4	10.6	29.9	35.4	53.8	21.2
F70-2737	14.7	25.8	22.9	12.3	37.1	40.0	43.3	30.4
F70-3223	16.7	31.5	29.4	17.1	36.0	34.2	53.0	29.9
F70-3248	17.1	36.7+	27.4	14.3	42.0	30.0-	50.0	32.7+
F70-3274	13.4	27.0	34.8	19.5+	34.8	32.4	52.3	22.1
F70-3310	17.5	35.4+	38.0	18.7	31.4	26.1-	52.9	22.6
F70-3312	16.3	38.7+	42.1	19.0	30.7	42.1	51.6	24.5
F70-3321	15.7	33.3	36.1	22.7+	37.8	42.4	51.5	31.0
F70-3341	14.8	41.9+	38.9	17.4	36.7	32.6	52.0	26.9
F70-3390	15.8	34.1	31.7	23.1+	36.3	43.0	50.5	29.9
F70-3404	13.6	33.5	34.9	10.6	30.3	28.0-	51.6	26.6
F70-3459	14.8	36.0+	42.2	10.8	31.1	35.9	50.1	22.5
F70-4230	19.0+	33.6	45.3	15.4	37.9	31.8	52.3	32.7+
La69-0973	17.1	39.9+	38.2	20.0+	35.6	32.0	41.9	29.2
Ts71-6	16.1	31.6	34.9	11.1	30.0	28.8-	51.7	13.3-
Ts71-7	14.6	28.3	26.0	3.8-	20.5-	19.9-	50.4	19.7
L.S.D.(.05)	4.1	9.6	N.S.	5.0	9.4	7.9	10.7	6.9
C.V.	13%	14%	17%	15%	13%	11%	11%	14%

Table 60. - Oil percentages for the strains in Preliminary Group VIII, 1972

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.	Baton Rouge, La.
Hampton 266A	22.1	24.0	24.3	21.4	23.1
Hardee	22.4	23.3	22.9	23.1	20.5
Co68-64	22.1	23.3	23.0	22.1	22.8
Co69-117	21.9	24.5	24.3	19.2	23.5
Co70-177	19.8	22.0	22.0	20.9	19.9
Co70-183	21.9	22.3	21.5	21.3	20.9
Co70-186	21.5	21.9	21.9	23.3	21.0
Co71-211	22.4	24.0	24.6	23.1	22.6
Co71-222	22.2	24.4	24.3	22.0	22.5
Co71-2028	21.6	24.6	24.5	21.5	23.4
F66-216	19.8	22.3	21.6	19.7	19.4
F68-1416	22.1	23.1	23.3	21.4	20.3
F68-4014	18.9	21.6	20.6	18.4	18.7
F68-4294	17.3	18.8	18.2	15.4	16.5
F69-1671	21.4	23.6	23.0	21.0	21.5
F69-1679	20.0	23.8	22.8	22.0	21.8
F69-1702	20.5	23.5	22.5	21.1	22.0
F69-2009	22.9	23.6	23.3	23.0	23.3
F70-1816	21.6	22.6	22.3	20.4	20.6
F70-2641	21.1	22.8	22.4	21.3	20.5
F70-2655	21.7	23.1	22.8	22.5	21.3
F70-2737	22.1	22.5	22.3	22.9	21.4
F70-3223	21.5	25.5	23.8	22.5	21.5
F70-3248	21.5	25.5	23.0	22.6	22.0
F70-3274	20.1	22.4	22.1	21.5	20.8
F70-3310	18.8	21.0	21.1	18.7	18.9
F70-3312	20.4	22.6	21.9	20.2	20.0
F70-3321	20.3	22.8	22.5	20.6	20.1
F70-3341	19.1	23.0	22.4	20.9	19.8
F70-3390	19.8	23.0	21.9	20.0	20.1
F70-3404	20.4	23.5	22.6	21.8	22.0
F70-3459	21.1	23.0	22.3	21.3	20.8
F70-4230	22.1	23.1	23.9	23.3	21.5
La69-0973	21.5	23.8	22.6	21.0	21.0
Ts71-6	20.5	22.8	22.5	21.3	22.0
Ts71-7	20.8	22.0	22.1	20.8	19.5

Table 61. - Protein percentages for the strains in Preliminary Group VIII, 1972

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.	Baton Rouge, La.
Hampton 266A	39.2	38.1	38.5	39.5	39.9
Hardee	40.4	40.0	38.5	42.8	42.9
Co68-64	41.3	39.3	41.5	39.7	41.7
Co69-117	39.9	37.1	37.1	39.8	40.6
Co70-177	43.0	41.6	41.6	43.6	44.8
Co70-183	42.3	42.8	44.1	43.6	44.2
Co70-186	41.6	42.6	42.5	42.2	44.5
Co71-211	39.6	38.3	38.4	39.4	39.9
Co71-222	41.1	39.9	40.0	39.3	42.0
Co71-2028	40.5	38.0	39.1	40.3	40.2
F66-216	43.3	40.6	41.6	42.5	42.7
F68-1416	40.2	43.6	39.9	40.1	42.1
F68-4014	43.9	41.1	43.7	45.2	44.9
F68-4294	44.2	43.8	44.7	46.8	46.8
F69-1671	42.4	40.9	41.2	41.0	42.2
F69-1679	43.0	40.4	41.7	41.4	41.9
F69-1702	41.1	39.2	41.4	41.0	42.5
F69-2009	40.8	39.6	40.1	41.5	40.3
F70-1816	38.8	39.8	39.4	42.1	41.9
F70-2641	42.6	42.2	42.0	42.6	43.2
F70-2655	41.1	41.6	41.5	41.1	42.9
F70-2737	40.5	41.9	41.9	40.7	41.8
F70-3223	41.0	40.6	41.4	40.1	41.3
F70-3248	40.2	39.9	41.0	38.9	42.4
F70-3274	42.1	41.0	41.3	40.9	42.8
F70-3310	42.9	41.7	41.2	42.1	44.1
F70-3312	42.3	40.2	42.0	42.4	43.5
F70-3321	41.8	40.5	40.3	42.0	42.3
F70-3341	41.5	40.1	41.3	42.6	44.0
F70-3390	42.6	41.1	41.4	42.7	43.0
F70-3404	42.9	40.7	41.8	41.6	43.5
F70-3459	41.9	40.5	41.5	42.5	42.5
F70-4230	40.1	37.5	39.6	38.8	42.1
La69-0973	40.0	39.9	40.2	42.1	42.0
Ts71-6	40.3	39.5	40.7	40.9	41.7
Ts71-7	39.1	39.6	40.3	41.0	43.3

Table 62. - Plant height for the strains in Preliminary Group VIII, 1972

Strain	Black-ville, S.C.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.	Beaumont, Texas	Stone-ville, Miss.
Hampton 266A	24	29	30	34	50	46	29	48
Hardee	24	31	30	45	48	51	30	52
Co68-64	26	30	28	35	43	47	35	48
Co69-117	23	22	25	33	45	44	25	43
Co70-177	28	29	25	33	45	46	29	47
Co70-183	21	26	26	28	46	42	25	45
Co70-186	19	25	25	30	42	42	22	46
Co71-211	24	31	28	37	46	49	37	53
Co71-222	22	26	24	28	37	42	27	40
Co71-2028	30	32	30	32	47	47	32	49
F66-216	24	29	30	32	48	47	34	47
F68-1416	22	27	26	31	48	42	31	48
F68-4014	24	29	28	38	51	51	31	48
F68-4294	26	33	35	35	44	43	36	42
F69-1671	27	34	33	38	49	52	42	52
F69-1679	33	33	34	40	52	50	28	52
F69-1702	26	32	32	37	49	50	32	49
F69-2009	19	29	28	29	42	46	31	45
F70-1816	21	26	28	32	50	49	31	45
F70-2641	32	36	35	53	51	56	39	54
F70-2655	31	37	39	52	52	55	38	54
F70-2737	26	29	26	44	48	47	38	52
F70-3223	30	37	34	42	53	52	29	51
F70-3248	27	34	29	42	52	51	30	53
F70-3274	29	30	37	41	51	51	38	52
F70-3310	24	29	32	34	45	42	42	50
F70-3312	24	31	33	37	48	48	31	48
F70-3321	24	27	27	29	48	48	45	49
F70-3341	23	27	25	31	46	45	29	50
F70-3390	25	26	25	30	44	46	30	48
F70-3404	29	36	37	49	54	52	37	54
F70-3459	28	36	37	49	54	52	37	54
F70-4230	29	35	35	41	50	46	33	49
La69-0973	24	29	30	27	45	43	40	50
Ts71-6	27	35	37	45	47	50	27	53
Ts71-7	32	37	39	56	53	56	36	54

Table 63. - Seed quality scores for the strains in Preliminary Group VIII, 1972

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.	Beaumont, Texas	Stoneville, Miss.
Hampton 266A	1.0	3.0	2.5	3.0	1.0	1.2	3.0	3.0
Hardee	2.0	2.0	2.0	4.0	1.0	1.5	3.0	3.0
Co68-64	2.0	1.5	2.0	2.0	1.0	1.2	2.0	3.0
Co69-117	2.0	2.0	1.5	3.0	1.0	2.5	3.0	3.0
Co70-177	1.0	2.5	2.0	2.0	2.0	1.3	2.0	3.0
Co70-183	3.0	2.0	2.5	3.0	1.0	1.3	2.0	2.5
Co70-186	2.0	2.0	2.0	1.0	1.0	1.3	2.0	3.0
Co71-211	2.0	2.5	2.5	4.0	2.0	1.0	2.0	3.0
Co71-222	3.0	2.5	2.5	2.0	2.0	1.5	2.0	3.0
Co71-2028	1.0	2.5	2.0	2.0	2.0	3.0	2.0	3.0
F66-216	2.0	2.0	3.0	2.0	2.0	1.0	2.0	3.0
F68-1416	1.0	2.5	2.0	3.0	2.0	1.3	3.0	3.0
F68-4014	1.0	3.0	2.0	4.0	1.0	1.2	3.0	3.0
F68-4294	1.0	1.5	1.0	5.0	1.0	1.4	3.0	3.0
F69-1671	1.0	2.5	2.0	2.0	1.0	1.7	3.0	3.0
F69-1679	1.0	2.0	1.0	4.0	1.0	1.2	3.0	3.0
F69-1702	1.0	2.0	2.5	4.0	1.0	1.4	3.0	3.0
F69-2009	2.0	2.0	2.5	3.0	2.0	1.0	3.0	3.0
F70-1816	1.0	2.5	2.5	3.0	2.0	1.6	2.0	4.0
F70-2641	1.0	1.5	1.0	3.0	2.0	1.0	2.0	2.5
F70-2655	1.0	1.5	1.0	4.0	1.0	1.2	2.0	3.0
F70-2737	1.0	2.0	1.5	3.0	1.0	3.0	3.0	2.5
F70-3223	1.0	2.0	1.5	3.0	1.0	1.3	3.0	3.0
F70-3248	1.0	2.0	1.0	3.0	1.0	2.2	2.0	2.5
F70-3274	2.0	3.5	1.5	3.0	1.0	1.0	2.0	3.0
F70-3310	2.0	2.0	2.0	3.0	2.0	1.2	2.0	3.0
F70-3312	1.0	2.0	2.0	3.0	2.0	1.2	2.0	3.0
F70-3321	2.0	3.0	2.5	1.0	2.0	1.7	2.0	3.0
F70-3341	2.0	1.5	1.5	2.0	2.0	1.0	2.0	3.0
F70-3390	1.0	1.5	2.5	2.0	2.0	1.0	3.0	3.0
F70-3404	2.0	1.0	1.0	3.0	2.0	2.0	2.0	2.5
F70-3459	2.0	1.5	1.0	3.0	1.0	2.0	3.0	2.5
F70-4230	2.0	2.0	1.5	2.0	1.0	3.0	3.0	2.5
La69-0973	3.0	1.5	3.0	3.0	2.0	1.1	3.0	3.0
Ts71-6	1.0	2.5	2.5	4.0	2.0	1.4	2.0	4.0
Ts71-7	2.0	1.5	1.0	5.0	1.0	1.1	4.0	3.0