U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

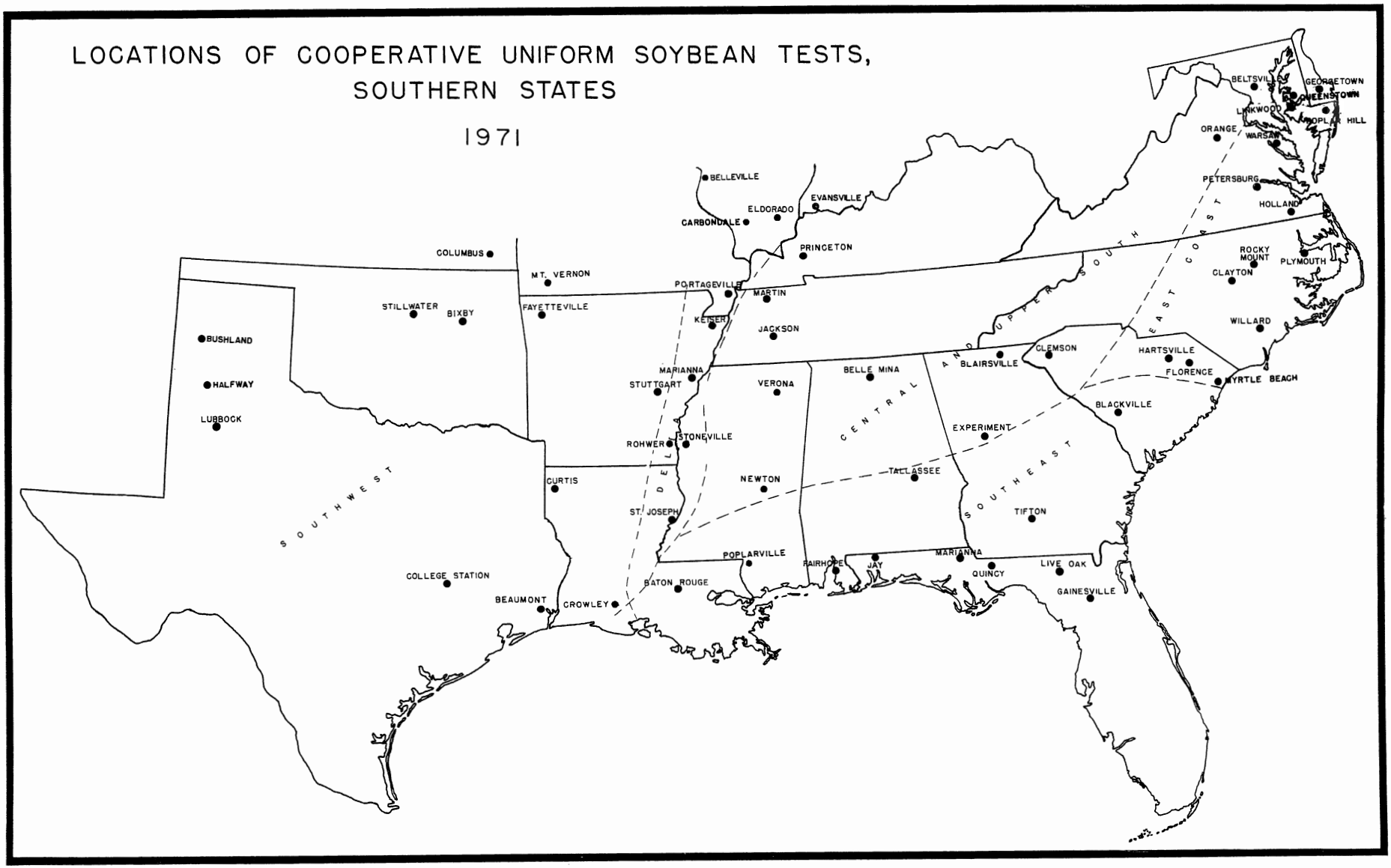
THE UNIFORM SOYBEAN TESTS
SOUTHERN STATES
1971

RSLM 249

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

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES

1971



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INTRODUCTION

The program of the U.S. Regional Soybean Laboratory 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, Hood, Lee 68, Bragg, Hampton, 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; Hood, October 8; Lee 68, October 16; Bragg, October 22; Hampton, 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 identifies where each strain was selected:

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

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

Location	IV	V	VI	VII	VIII	Soil type	P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
East Coast											
Queenstown, Md.	1	1				Mattapex silt loam	M	H	6.0	0-60-120	44.6 - A
Linkwood, Md.	1*	1*				Sassafras sandy loam	H	H	6.0	0-45-90	39.4 - D
Quantico, Md.	1	1				Mattapex silt loam	H	H	5.8	0-80-80	49.7 - D
Georgetwon, Del.	1*	1*				Norfolk loamy sand	H	M	6.0	40-40-40	47.7 - E
Warsaw, Va.	1*	1*	1			Sassafras sandy loam	M+	M+	6.3	15-90-90	45.6 - E
Petersburg, Va.		1	1*			Marlboro f. sandy loam	H	M	6.0	0-0-0	44.7 - E
Holland, Va.		1	1			Othello L.F.S.	VH	M+	5.3	0-0-0	33.7 - G
Plymouth, N.C.	1	1*	1*	1		Bladen f. sandy loam	H	H	5.7	0-40-80	31.4 - G
Rocky Mt., N.C.				1		Norfolk sandy loam	H	M	5.9	0-40-80	36.6 - I
Clinton, N.C.			1	1*	1	Norfolk sandy loam				0-40-80	35.6 - I
Clayton, N.C.			1	1		Norfolk sandy loam	H	H	6.0	0-40-80	33.9 - I
Florence, S.C.			1	1	1	Marlboro sandy loam				0-0-0	52.5 - I
Hartsville, S.C.(A)			1	1	1	Norfolk sandy loam				15-45-94	36.5 - I
Hartsville, S.C.(B)					1	Norfolk sandy loam					32.5 - J
Southeast											
Blackville, S.C.(A)				1*	1	Freemanville loamy sand	M	M	6.0	24-72-72	36.5 - I
Blackville, S.C.(A)					1*	Freemanville loamy sand	M	M	6.0	24-72-72	23.5 - J
Tifton, Ga.			1	1	1	Norfolk loamy sand	H	H	5.2	0-50-100	43.9 - I
Tallassee, Ala.				1*	1	Norfolk f. sandy loam			6.2	0-42-42	40.8 - I
Live Oak, Fla.				1*	1*	Klej fine sand	H	M	6.1	0-50-100	30.6 - K
Gainesville, Fla.				1	1*	Arredonda fine sand	H	H	6.0	0-80-100	32.6 - K
Marianna, Fla.				1	1	Red bay F.S.L.				20-60-60	33.3 - I
Quincy, Fla.			1	1	1*	Norfolk L.F.S.	H	H	5.5	0-70-70	31.9 - I
Jay, Fla.			1*	1*	1*	Tifton sandy loam				0-128-64	50.7 - I
Fairhope, Ala.			1	1	1	Malbis F.S.L.	H	H	6.4	16-48-48	48.6 - I
Baton Rouge, La.			1	1	1*	Olivier silt loam	L	L	6.0	0-40-40	43.4 - I
Upper and Central South											
Orange, Va.	1	1				Davidson sandy loam	M	M	6.5	0-84-84	50.4 - A
Blairsville, Ga.	1	1				Hayesville clay	M	M	6.2	0-70-140	56.8 - A
Belleville, Ill.	1					Ebbert silt loam	VH	M	5.8	0-0-0	48.0 - A
Eldorado, Ill.	1					Harco silt loam	M	VH	6.4	12-35-12	57.6 - A
Carbondale, Ill.	1					Stoy silt loam				0-120-180	56.5 - A
Princeton, Ky.	1	1				Crider silt loam				0-0-0	45.3 - C
Martin, Tenn.	1	1				Grenada sandy loam	M	M	6.5	0-60-60	43.2 - D
Jackson, Tenn.		1	1			Memphis silt loam	H	H	6.7	0-40-40	47.6 - H
Belle Mina, Ala.		1	1			Humphrey sandy loam				0-40-40	45.3 - G
Verona, Miss.		1	1			Leaper silt loam				0-80-80	29.6 - H
Experiment, Ga.		1	1	1	1	Cecil sandy loam				0-50-100	68.1 - I

Verona, Miss.											
Experiment, Ga.	1	1	1	1	Cecil sandy loam				0-50-100	68.1 - I

Location	IV	V	VI	VII	VIII	Soil type	P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
Delta											
Evansville, Ind.	1					Montgomery silty clay L.	M	H	6.1	12-40-120	46.3 - A
Portageville, Mo.(A)	1	1*	1*			Tiptonville silt loam	VH	H	6.3	0-0-0	37.1 - H
Portageville, Mo.(B)	1*	1	1			Sharkey clay	VH	VH	5.3	0-0-0	30.6 - G
Keiser, Ark.	1	1*	1*			Sharkey clay	M	H+	5.8	0-0-0	39.7 - F
Marianna, Ark.	1	1	1			Loring silt loam	M	M	7.2	0-0-60	35.7 - F
Stoneville, Miss.(A)		1	1*	1*		Bosket f. sandy loam	M	M	6.7	0-0-0	45.7 - H
Stoneville, Miss.(B)	1*	1*	1*	1*	1*	Sharkey clay	M	H	6.4	0-0-0	46.0 - G
Rohwer, Ark.				1		Perry clay	M	H+	7.5	0-0-0	30.7 - I
St. Joseph, La.		1	1	1	1	Commerce silt loam	H	M	5.9	17-52-52	44.1 - I
West											
Columbus, Kan.	1					Silt loam	M	VH	6.3	18-45-60	25.4 - A
Mt. Vernon, Mo.	1	1				Huntington silt laom				25-100-100	51.3 - D
Stuttgart, Ark.		1	1	1		Crowley silt loam	VL	L	6.5	0-30-45	51.4 - F
Curtis, La.		1	1	1	1	Yahola very f. sandy loam				0-0-0	39.0 - F
Bixby, Okla.	1	1	1			Lonoke sandy loam	VH	VH	6.2	0-0-0	48.3 - C
Bushland, Texas	1					Pullman silty clay loam				0-0-0	32.0 - A
Halfway, Texas	1	1	1			Pullman sandy clay	M	VH	8.2	0-0-0	48.3 - C
Lubbock, Texas	1	1	1			Amarillo loam	VH	M	8.1	0-0-0	52.9 - C
Beaumont, Texas				1*	1*	Morrey silt loam	VL	M	6.7	0-48-48	41.9 - I
Crowley, La.			1	1	1	Crowley silt loam	VL	ML	5.8	0-60-60	46.0 - F

[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 = Custer; C = Hill; D = Dare; E = York; F = Davis, G = Lee 68; H = Pickett 71; I = Bragg; J = Hampton; K = Hardee

METHODS

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

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

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

Yields are taken by harvesting a 16-foot length from the 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 maoisture-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 earect
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.

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

	Variety or strain	Parentage	Generation composited
1.	Kent	Lincoln x Ogden	F_7
2.	D66-4505	D53-354(2) x D54-2437	F_7
3.	D66-5566	Subline of DA60-13-1 (D49-2491(4) x Hawkeye)	F_8
4.	D67-2896	Hill(2) x PI 171,450	F_5
5.	D67-3143	Hill(2) x PI 171,450	F_5
6.	D67-3297	Hill(2) x PI 171,450	F_5
7.	S63-5328S	Lee x Scott	F_6
8.	D67-2908	Hill(2) x PI 171,450	F_5
9.	D68-4466	DA60-13(2) x PI 171,450	F_5
10.	L66L-310	Clark 63 x L57-9819	F_5
11.	Md66-1058	First cycle sel. from intermated pop. grown in bulk	
12.	Md66-1311	Second cycle sel. from intermated pop. grown in bulk	

Brackground of strains used as parents:

D53-354 was tested in Uniform Group IV for the years 1956-1958. It is a selection from D49-2525 x L6-5679. D49-2525 is a sister strain of Lee. D53-354 has excellent seed quality.

D54-2437 is a selection from N48-1394 x L6-5679 which has a high field type resistance to phytophthora rot. N48-1394 has the same parentage as Hood. L6-5679 is a selection from Lincoln x Richland. D54-2437 was tested in Uniform Group IV, 1957-1961.

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.

Twenty-seven IV-S nurseries were planted. Results of 23 of these nurseries are summarized in Tables 1 through 7. Table 1 gives a general summary of agronomic qualities, oil and protein content of the seed, and field reaction to disease development. 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. The combined analysis of variance for seed yield showed differences among strains to be significant at the 5% level of confidence in all but the Western region.

D66-5566, which is basically a Lee type converted to early maturity, has produced extremely well in tests in southwestern Kansas, southern Illinois, and the lower Ohio River Valley area of Indiana and Kentucky. In addition to yielding well, D66-5566 is superior to Kent in seed quality and shatter resistance. Three-year comparisons comparisons for these areas are:

	Kent		D566-5566	
	Yield	Seed quality	Yield	Seed quality
Eldorado, Ill.				
1969	56.9	3.2	60.3	1.5
1970	54.1	2.8	55.1	1.5
1971	57.6	2.5	52.7	2.0
Mean	56.2	2.8	56.0	1.7
Carbondale, Ill.				
1969	48.6	3.0	56.4	1.0
1970	45.9	5.0	45.0	2.0
1971	56.5	1.0	56.4	1.0
Mean	51.3	3.0	52.6	1.3
Henderson, Ky.				
1969	46.1	3.3	46.3	2.3
Evansville, Ind.				
1970	38.6	4.0	37.6	3.0
1971	46.3	1.5	51.8	1.0
Mean	43.7	2.9	45.2	2.1
Columbus, Kan.				
1969	38.9	1.4	40.3	1.2
1970	21.8	2.3	36.6	2.0
1971	25.4	2.0	33.3	1.2
Mean	28.7	1.9	36.7	1.5

The four strains included in these plantings two years all produced very well. D67-3297 has a slight yield advantage over D67-2896 and D67-3143. S63-5328S is weak in seed quality.

Of the strains grown one year, D67-2908, a late-flowering determinate growth type 6 days earlier than Kent was generally low in seed yield. D68-4466, which flowers later than D66-5566, grew taller but did not yield as well. L66L-310 was superior to Kent in seed yield in the Delta, grew taller, but showed little advantage in seed quality. Neither Md66-1058 or Md66-1311 appeared superior to Kent in any qualities.

Information on Diaporthe and purple stain was obtained from Georgetown, Quantico, and Warsaw. Downy mildew ratings were made at Belleville, Illinois.

Table 1. - General summary of performance for the strains in Unifrom Group IV-S, 1971

	Kent	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297
Seed Yield - 1971						
East Coast	40.8	36.9	38.2	41.9	39.3	43.2
Upper & Central South	53.9	44.3-	45.4-	44.4-	45.2-	46.6-
Delta	32.7	33.6	32.5	32.8	33.5	35.3
West	34.5	34.5	36.7	37.3	32.9	35.6
- 1970-71						
East Coast	38.1	35.8	37.0	38.2	38.0	39.8
Upper & Central South	50.5	45.0	47.1	44.7	45.1	47.0
Delta	31.8	32.9	32.7	34.1	32.1	34.8
West	35.8	36.7	37.6	38.7	34.4	38.8
- 1969-71						
East Coast	38.6	37.4	37.3			
Upper & Central South	49.6	45.5	48.5			
Delta	32.7	34.0	34.6			
West	36.0	35.8	37.5			
Oil Content - 1971	21.9	21.6	21.9	20.4-	20.6-	20.9-
- 1970-71	22.2	21.8	22.0	20.5	21.1	21.0
- 1969-71	22.2	21.9	22.1			
Protein Content - 1971	40.5	40.5	41.3+	39.1-	41.2	39.8
- 1970-71	40.6	40.3	41.4	39.2	40.5	39.7
- 1969-71	40.7	40.4	41.3			
Seed size	17.6	13.5-	15.9-	12.1-	14.8-	13.8-
Maturity index	9-27	-2	0	+6	+4	+4
Seed quality	2.8	2.4	2.0	2.2	2.0	2.1
Height	36	32	20	33	32	31
Shattering	3.7	1.0	1.0	1.3	1.0	1.0
Bacterial pustule	S	R	R	R	R	R
Phytophthora rot	2.0	1.0	1.0	1.0	1.0	1.0
Diaporthe	4.0	4.3	4.2	3.5	3.0	4.1
Purple stain	4.2	2.5	2.0	1.8	1.8	2.8
Downy mildew	2.0	3.9	2.9	1.0	1.0	1.3
Flower color	P	P	P	P	W	W
Pubescence color	T	G	T	T	T	T
Pod wall color	B	T	T	T	T	T
Growth type	I	I	D	D	D	D

Table 1. - (continued)

	S63-5328S	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311
Seed Yield - 1971						
East Coast	41.4	35.4-	35.5-	39.7	40.9	39.7
Upper & Central South	47.9-	42.6-	42.7-	45.1-	46.9-	44.1-
Delta	36.2+	30.5	32.0	36.2+	30.6	30.9
West	36.2	33.1	31.9	35.3	31.7	33.1
- 1970-71						
East Coast	39.1					
Upper & Central South	47.7					
Delta	34.6					
West	36.8					
- 1969-71						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1971	22.2	20.7-	19.2-	22.0	23.0+	22.8+
- 1970-71	22.4					
- 1969-71						
Protein Content - 1971	38.9-	39.9	42.9+	41.5+	40.1	41.0
- 1970-71	38.8					
- 1969-71						
Seed size	15.3-	13.4-	14.2-	15.7-	16.3-	17.9
Maturity index	+3	-6	+1	-4	0	+4
Seed quality	2.7	2.0	2.0	2.6	3.2	2.6
Height	38	25	33	41	34	43
Shattering	1.0	1.0	1.0	1.0	1.0	1.0
Bacterial pustule	R	R	R	R	S	S
Phytophthora rot	1.0	1.0	1.0	1.0	3.0	3.0
Diaporthe	4.2	4.4	4.0	4.4	4.3	4.0
Purple stain	3.8	1.5	2.4	3.6	4.3	3.0
Downy mildew	4.0	1.7	3.0	4.0	3.9	2.9
Flower color	P	P	P	P	P	W
Pubescence color	G	T	T	T	G	G
Pod wall color	B	T	T	T	Br	T
Growth type	I	D	D	I	I	I

Table 2. - Seed yield, in bushels per acre, for the strains in Uniform Group IV-S, 1971

Location	Kent	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297	S63-5328S
			East Coast				
Queenstown, Md.	44.6	40.8	35.9-	46.6	47.4	49.2	40.5
Linkwood, Md.	37.9	32.2-	25.5-	31.2-	32.9-	38.5	37.2
Quantico, Md.	48.6	35.2-	49.2	48.8	38.2-	43.0	45.7
Georgetown, Del.	35.2	37.6	44.2+	44.2+	38.8	46.4+	40.5+
Warsaw, Va.	38.5	32.0-	36.2	38.3	40.2	40.1	41.3
Plymouth, N.C.	39.9	44.7	40.0	41.3	42.6	44.7	45.2
Mean	40.8	36.9	38.2	41.9	39.3	43.2	41.4
			Upper and Central South				
Orange, Va.	50.4	38.0-	30.8-	45.2	44.4-	46.4	44.6-
Blairsville, Ga.	56.8	44.4-	39.4-	41.3-	44.3-	39.7-	43.4-
Belleville, Ill.	48.0	42.2-	47.5	37.3-	39.2-	45.5	43.4-
Eldorado, Ill.	57.6	45.8-	52.7-	49.3-	46.6-	52.1-	52.6-
Carbondale, Ill.	56.5	51.3	56.4	49.0-	51.4	49.3-	55.5
Mean	53.9	44.3-	45.4-	44.4-	45.2-	46.6-	47.9-
			Delta				
Evansville, Ind.	46.3	46.9	51.8	44.8	46.0	46.9	50.8
Portageville, Mo.(A)	25.1	29.5	29.5	26.5	22.5	24.3	29.4
Portageville, Mo.(B)	24.0	24.0	17.1-	30.3+	26.2	27.7	26.4
Martin, Tenn.	46.8	42.1	46.6	46.6	47.3	52.8	45.2
Keiser, Ark.	21.6	26.8	18.3	20.1	32.9	29.3	29.4
Marianna, Ark.	32.5	32.2	32.0	28.3	26.2	30.8	35.9
Mean	32.7	33.6	32.5	32.8	33.5	35.3	36.2+
			West				
Columbus, Kan. [1]	25.4	31.5+	33.3+	30.9+	27.2	36.3+	30.9+
Mt. Vernon, Mo.	50.3	45.7+	34.4	51.5+	46.3+	50.0+	52.3+
Bixby, Okla.	26.3	23.8	23.1	28.1	19.1	19.8	28.8
Bushland, Texas	32.0	24.9-	33.6	27.9	26.5-	28.9	26.0-
Halfway, Texas	37.9	46.9	40.0	48.6	43.5	42.0	44.6
Lubbock, Texas	51.1	45.3-	53.4	50.9	47.9	51.1	50.8
Mean	34.5	34.5	36.7	37.3	32.9	35.6	36.2

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

[1]Not in included in mean

Table 2. - (continued)

Location	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311	L.S.D. (.05)	C. V.
East Coast							
Queenstown, Md.	37.9-	42.1	45.2	48.6	51.2+	6.3	8%
Linkwood, Md.	30.2-	28.5	33.9-	38.0	39.4	3.1	6%
Quantico, Md.	40.0-	38.3-	38.3-	46.0	38.9-	8.6	14%
Georgetown, Del.	37.1	35.3	41.5+	39.2	35.5	4.5	7%
Warsaw, Va.	33.0-	33.5-	36.5	39.3	39.9	4.1	6%
Plymouth, N.C.	36.6	35.4	44.2	34.9	35.5	7.2	10%
Mean	35.4-	35.5-	39.7	40.9	39.7	4.5	
Upper and Central South							
Orange, Va.	34.0-	39.6-	39.9-	43.7-	43.5-	5.7	8%
Blairsville, Ga.	36.2-	43.1-	44.2-	45.9-	50.9	7.9	11%
Belleville, Ill.	42.6-	35.3-	44.1	41.2-	33.2-	4.4	6%
Eldorado, Ill.	47.0-	49.2-	48.4-	48.6-	45.1-	4.4	5%
Carbondale, Ill.	53.1	46.4-	48.9-	55.0	47.8-	6.9	8%
Mean	42.6-	42.7-	45.1-	46.9-	44.1-	2.5	
Delta							
Evansville, Ind.	45.8	44.3	51.9	41.0	42.7	6.7	8%
Portageville, Mo.(A)	19.0	31.8	31.6	24.9	27.7	7.7	17%
Portageville, Mo.(B)	26.0	28.5	31.7+	19.7	22.2	5.0	12%
Martin, Tenn.	45.9	40.6	42.1	41.6	37.0	N.S.	11%
Keiser, Ark.	23.5	20.8	29.7	23.5	26.8	N.S.	20%
Marianna, Ark.	22.8-	26.0-	30.3	32.8	29.2	6.4	13%
Mean	30.5	32.0	36.2+	30.6	30.9	2.8	
West							
Columbus, Kan.	24.8	24.8	26.6	18.1-	24.2	3.8	8%
Mt. Vernon, Mo.[1]	43.3	42.4	39.9	50.5+	52.3+	6.7	12%
Bixby, Okla.	19.9	22.3	22.4	23.0	24.2	N.S.	18%
Bushland, Texas	27.6-	24.3-	27.5-	25.5-	26.2-	4.4	9%
Halfway, Texas	44.7	43.0	50.1	45.6	43.8	N.S.	13%
Lubbock, Texas	48.7	45.1-	50.0	46.4-	46.9-	3.5	4%
Mean	33.1	31.9	35.3	31.7	33.1	N.S.	

Table 3. - Chemical composition and seed size for the strains in Uniform Group IV-S, 1971

Location	Kent	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297	S63-5328S
			Oil Percentage				
Linkwood, Md.	22.4	21.7	22.2	20.8	20.2	20.9	21.9
Warsaw, Va.	22.9	23.3	21.2	22.3	22.4	22.3	23.5
Plymouth, N.C.	21.6	20.6	21.4	19.4	20.6	20.9	21.6
Blairsville, Ga.	21.8	20.5	21.5	18.4	20.0	19.9	21.0
Carbondale, Ill.	21.4	22.0	22.0	20.6	20.6	21.1	22.2
Evansville, Ind.	22.5	21.4	22.5	20.0	20.5	20.8	22.6
Portageville, Mo.(A)	19.8	21.3	22.1	20.1	19.1	20.5	21.2
Bixby, Okla.	22.4	21.7	22.6	21.4	21.0	20.9	23.5
Mean	21.9	21.6	21.9	20.4-	20.6-	20.9-	22.2
			Protein Percentage				
Linkwood, Md.	39.2	38.3	40.5	38.1	40.6	37.8	38.4
Warsaw, Va.	38.4	38.9	39.4	35.8	38.2	36.6	35.2
Plymouth, N.C.	41.7	42.3	43.2	41.1	42.9	40.8	41.2
Blairsville, Ga.	41.1	42.4	41.7	39.0	40.3	39.7	39.0
Carbondale, Ill.	41.1	40.4	40.7	39.3	41.0	40.6	39.0
Evansville, Ind.	39.4	40.1	40.6	40.4	41.9	39.9	38.3
Portageville, Mo.(A)	42.4	42.2	41.9	39.5	41.5	42.2	41.3
Bixby, Okla.	40.5	39.4	42.5	39.7	43.0	40.8	38.5
Mean	40.5	40.5	41.3+	39.1-	41.2	39.8	38.9-
			Grams per 100 Seeds				
Linkwood, Md.	19.6	14.6	16.9	14.1	15.9	15.8	15.8
Warsaw, Va.	17.6	12.0	15.3	12.8	15.4	14.5	15.1
Plymouth, N.C.	16.6	12.9	16.7	11.5	14.2	13.9	14.3
Blairsville, Ga.	21.0	17.0	17.0	11.0	16.0	14.0	17.0
Carbondale, Ill.	18.3	13.7	16.0	12.4	15.1	14.2	15.1
Evansville, Ind.	17.8	13.8	14.3	11.8	15.6	14.4	15.3
Portageville, Mo.(A)	15.3	13.0	15.0	11.7	13.0	12.7	16.3
Bixby, Okla.	14.7	11.3	15.8	11.8	13.2	11.2	13.3
Mean	17.6	13.5-	15.9-	12.1-	14.8-	13.8-	15.3-

Table 3. - (continued)

Location	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311	L.S.D. (.05)
			Oil Percentage			
Linkwood, Md.	20.9	18.4	21.8	24.0	23.8	
Warsaw, Va.	22.0	19.7	23.7	24.6	25.5	
Plymouth, N.C.	20.5	18.5	21.1	23.1	23.0	
Blairsville, Ga.	20.4	18.3	21.0	21.7	22.2	
Carbondale, Ill.	21.0	21.9	24.1	23.2	20.7	
Evansville, Ind.	21.3	18.8	21.0	24.0	23.0	
Portageville, Mo.(A)	19.8	18.7	20.8	21.2	21.0	
Bixby, Okla.	19.9	19.3	22.8	22.5	23.5	
Mean	20.7-	19.2-	22.0	23.0+	22.8+	0.8
			Protein Percentage			
Linkwood, Md.	39.1	43.3	39.3	38.4	39.2	
Warsaw, Va.	37.3	41.2	38.6	37.7	37.0	
Plymouth, N.C.	41.5	44.1	43.6	41.7	43.4	
Blairsville, Ga.	40.0	42.2	42.6	42.0	41.5	
Carbondale, Ill.	39.0	43.4	41.2	39.7	40.5	
Evansville, Ind.	40.1	42.0	41.7	38.9	41.3	
Portageville, Mo.(A)	41.0	44.0	43.7	42.0	43.5	
Bixby, Okla.	41.5	43.3	41.2	40.6	41.5	
Mean	39.9	42.9+	41.5+	40.1	41.0	0.8
			Grams per 100 Seeds			
Linkwood, Md.	15.1	15.9	17.2	17.4	19.2	
Warsaw, Va.	12.9	13.9	14.8	15.2	18.1	
Plymouth, N.C.	12.6	13.0	15.4	13.3	16.4	
Blairsville, Ga.	14.0	14.0	18.0	20.0	20.0	
Carbondale, Ill.	14.3	15.4	16.2	18.0	18.6	
Evansville, Ind.	14.2	13.3	16.2	16.2	18.1	
Portageville, Mo.(A)	12.3	14.7	14.7	15.3	17.0	
Bixby, Okla.	11.8	13.3	13.2	14.6	15.6	
Mean	13.4-	14.2-	15.7-	16.3-	17.9	1.0

Table 4. - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV-S, 1971

Location	Date planted	Kent matured	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297
			East Coast				
Queenstown, Md.	5-26	10-1	-2	-2	+10	+10	+10
Linkwood, Md.	5-25	10-4	-2	-2	+8	+7	+7
Quantico, Md.	6-25	10-14	0	+1	+8	0	+2
Georgetown, Del.	6-2	10-6	0	+2	+9	+7	+6
Warsaw, Va.	5-25	10-2	-10	-2	+3	+2	0
Plymouth, N. C.	5-10	9-20	0	-2	+6	0	0
Mean		10-3	-2	-1	+7	+4	+4
			Upper and Central South				
Orange, Va.		9-25	-4	-9	0	+1	-4
Blairsville, Ga.	5-24	9-30	+2	-2	+5	+5	+2
Belleville, Ill.	5-14	9-24	-6	+8	+11	+10	+18
Eldorado, Ill.	5-19	9-23	-5	+2	+11	+6	+8
Carbondale, Ill.	5-18	9-22	-3	+2	+8	+7	+6
Mean		9-25	-3	0	+7	+6	+6
			Delta				
Evansville, Ind.	5-22	9-30	+1	+3	+7	+5	+3
Portageville, Mo.(A)	5-28	9-20	-3	-2	0	0	+2
Portageville, Mo.(B)	6-8	10-6	-3	-1	-3	-2	-3
Martin, Tenn.	5-29	9-26	-3	-5	-6	-6	-10
Keiser, Ark.	5-27	9-19	-4	-9	-1	0	-3
Marianna, Ark.	6-14	9-26	-4	0	+2	-2	+2
Mean		9-26	-3	-2	0	-1	-2
			West				
Columbus, Kan.	6-7	9-20	+5	+12	+26	+27	+25
Bixby, Okla.	5-21	9-13	0	+2	+9	+7	+3
Lubbock, Texas[1]	5-14	9-23	+1	+1	+6	+7	+7
Mean		9-17	+3	+7	+18	+17	+14

[1]Not included in mean.

Table 4. - (continued)

Location	S63-5328S	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311
			East Coast			
Queenstown, Md.	+1	-11	+10	-3	+2	+9
Linkwood, Md.	+2	-2	+2	-2	-1	+5
Quantico, Md.	+2	-2	0	-4	+1	+3
Georgetown, Del.	+7	-5	+4	-5	+3	+9
Warsaw, Va.	-1	-12	0	-10	-1	+4
Plymouth, N.C.	0	-2	0	0	0	0
Mean	+2	-6	+3	-4	0	+6
			Upper and Central South			
Orange, Va.	+1	-17	-6	-21	-5	-5
Blairsville, Ga.	+3	-2	0	0	+3	+3
Belleville, Ill.	+7	-1	+3	-4	-4	+10
Eldorado, Ill.	+4	-5	+4	-8	-6	+9
Carbondale, Ill.	+6	-7	+3	-6	0	+9
Mean	+4	-6	+1	-8	-3	+5
			Delta			
Evansville, Ind.	0	-3	+2	-4	+1	+2
Portageville, Mo.(A)	0	-16	-2	-3	-3	+5
Portageville, Mo.(B)	0	-3	-1	-2	0	+1
Martin, Tenn.	+4	-10	-6	-6	+6	+6
Keiser, Ark.	+3	-14	-6	-1	-2	0
Marianna, Ark.	+1	-5	-2	-4	0	-4
Mean	+1	-9	-3	-3	0	+2
			West			
Columbus, Kan.	+10	+7	+15	+3	-1	+10
Bixby, Okla.	+7	-1	+6	0	-2	+4
Lubbock, Texas[1]	+7	-5	+8	+1	+1	+8
Mean	+9	-3	+11	+2	-2	+7

Table 5. - Plant height for the strains in Uniform Group IV-S, 1971

Location	Kent	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297
			East Coast			
Queenstown, Md.	36	30	20	33	33	32
Linkwood, Md.	33	31	14	30	29	26
Quantico, Md.	30	26	20	35	29	33
Georgetown, Del.	38	34	22	40	36	34
Warsaw, Va.	33	27	19	36	35	32
Plymouth, N.C.	37	39	19	35	34	30
Mean	35	31	19	35	33	31
			Upper and Central South			
Orange,Va.	35	33	21	44	39	35
Blairsville, Ga.	38	35	28	35	32	33
Belleville, Ill.	46	39	23	39	38	37
Eldorado, Ill.	45	39	20	35	35	34
Carbondale, Ill.	35	19	32	31	29	44
Mean	40	33	25	37	35	31
			Delta			
Evansville, Ind.	43	37	27	38	37	36
Portageville, Mo.(A)	29	27	14	28	26	26
Portageville, Mo.(B)	31	23	13	26	27	25
Martin, Tenn.	42	36	16	32	30	25
Keiser, Ark.	25	28	13	22	27	19
Marianna, Ark.	41	34	24	32	31	27
Mean	35	31	18	30	30	26
			West			
Columbus, Kan.	36	37	24	33	29	35
Mt. Vernon, Mo.	42	36	20	31	31	33
Bixby, Okla.	32	32	17	28	26	24
Bushland, Texas[1]	25	23	16	20	20	20
Lubbock, Texas[1]	30	30	15	24	28	26
Mean	37	35	20	31	29	31

[1]Not included in mean

Table 5. - (continued)

Location	S63-5328S	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311
			East Coast			
Queenstown, Md.	30	26	33	35	31	43
Linkwood, Md.	36	21	27	36	31	39
Quantico, Md.	30	27	33	28	29	33
Georgetown, Del.	43	28	35	45	36	44
Warsaw, Va.	38	27	31	37	29	41
Plymouth, N.C.	43	27	30	44	36	45
Mean	37	26	32	38	32	46
			Upper and Central South			
Orange, Va.	38	26	39	38	30	43
Blairsville, Ga.	38	34	35	38	36	38
Belleville, Ill.	51	30	42	51	38	56
Eldorado, Ill.	48	29	37	49	38	51
Carbondale, Ill.	25	31	43	37	47	38
Mean	40	30	39	43	38	45
			Delta			
Evansville, Ind.	42	30	40	47	39	49
Portageville, Mo.(A)	32	20	30	40	29	36
Portageville, Mo.(B)	26	23	29	34	23	33
Martin, Tenn.	48	14	28	48	33	46
Keiser, Ark.	30	16	18	33	27	34
Marianna, Ark.	40	23	34	40	33	36
Mean	36	21	30	40	31	39
			West			
Columbus, Kan.	35	23	37	42	35	43
Mt. Vernon, Mo.	45	26	35	47	38	46
Bixby, Okla.	39	21	26	43	32	43
Bushland, Texas[1]	27	16	22	26	23	29
Lubbock, Texas[1]	37	20	23	36	31	36
Mean	40	23	33	44	35	44

Table 6. - Lodging scores for the strains in Uniform Group IV-S, 1971

Location	Kent	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297
			East Coast			
Queenstown, Md.	2.0	1.2	1.3	2.7	2.8	2.5
Linkwood, Md.	1.8	1.5	1.5	2.2	2.5	2.3
Quantico, Md.	1.0	1.0	2.0	3.0	3.0	3.0
Georgetown, Del.	2.2	2.3	2.2	3.0	2.8	2.7
Warsaw, Va.	1.0	1.0	1.0	1.9	2.7	1.3
Plymouth, N.C.	3.0	3.0	2.0	3.0	3.0	2.7
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	2.7	2.7	2.5
Blairsville, Ga.	1.5	2.0	1.5	3.3	4.0	3.7
Belleville, Ill.	1.6	1.3	1.6	2.0	2.3	1.7
Eldorado, Ill.	1.4	1.4	1.3	1.9	2.2	1.9
Carbondale, Ill.	1.0	2.0	1.0	2.0	2.0	1.0
			Delta			
Evansville, Ind.	2.8	2.8	2.5	4.0	3.7	3.5
Portageville, Mo.(A)	1.5	1.7	1.0	2.0	2.7	1.8
Portageville, Mo.(B)	1.3	1.3	1.0	2.5	2.2	1.7
Martin, Tenn.	1.0	1.0	1.0	1.0	4.0	2.0
Keiser, Ark.	1.0	1.0	1.0	3.0	3.0	1.0
Marianna, Ark.	2.3	2.0	2.0	3.0	3.7	3.3
			West			
Columbus, Kan.	1.5	1.5	1.1	2.2	2.8	3.0
Mt. Vernon, Mo.	3.2	3.8	2.3	3.6	4.3	3.6
Bixby, Okla.	1.0	1.7	1.0	1.0	1.0	1.0
Bushland, Texas	2.5	2.5	1.0	3.5	4.5	1.3
Lubbock, Texas	4.0	2.0	1.0	2.0	1.0	2.0

Table 6. - (continued)

Location	S63-5328S	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311
			East Coast			
Queenstown, Md.	1.2	1.7	2.8	1.8	1.2	2.5
Linkwood, Md.	2.0	2.0	2.5	2.3	1.5	2.2
Quantico, Md.	2.0	2.0	2.0	1.0	1.0	1.0
Georgetown, Del.	2.2	2.3	3.2	2.8	2.0	2.5
Warsaw, Va.	1.0	1.0	1.2	1.0	1.0	1.0
Plymouth, N.C.	3.0	2.0	3.0	3.0	2.7	3.0
			Upper and Central South			
Orange, Va.	1.2	1.0	1.5	1.2	1.0	1.0
Blairsville, Ga.	2.2	2.3	3.5	3.0	1.5	3.0
Belleville, Ill.	1.7	1.2	2.2	1.5	1.2	2.2
Eldorado, Ill.	2.2	1.6	2.7	2.0	1.1	3.0
Carbondale, Ill.	1.0	1.0	2.0	2.0	2.0	3.0
			Delta			
Evansville, Ind.	3.0	2.2	4.0	3.0	2.0	3.3
Portageville, Mo.(A)	1.5	1.0	2.7	2.7	1.5	1.8
Portageville, Mo.(B)	1.5	1.3	2.0	1.5	1.0	1.5
Martin, Tenn.	2.0	1.0	1.0	2.0	1.0	2.0
Keiser, Ark.	3.0	1.0	3.0	3.0	1.0	2.0
Marianna, Ark.	2.7	2.0	3.7	2.7	1.7	3.3
			West			
Columbus, Kan.	2.2	1.5	1.9	1.9	1.3	2.2
Mt. Vernon, Mo.	4.1	2.6	3.4	3.9	2.6	4.1
Bixby, Okla.	1.0	1.0	1.3	1.3	1.0	1.7
Bushland, Texas	2.0	1.0	1.5	2.0	1.0	3.5
Lubbock, Texas	2.0	3.0	1.5	2.5	3.0	2.0

Table 7. - Seed quality scores for the strains in Uniform Group IV-S, 1971

Location	Kent	D66-4505	D66-5566	D67-2896	D67-3143	D67-3297
			East Coast			
Queenstown, Md.	3.0	2.0	2.0	2.0	2.0	3.0
Linkwood, Md.	3.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	4.0	4.0	2.0	2.0	2.0	2.0
Georgetown, Del.	4.3	4.0	4.0	2.3	3.3	3.8
Warsaw, Va.	3.5	1.8	1.3	2.0	1.4	1.5
Plymouth, N.C.	2.0	2.0	1.5	1.5	1.5	1.5
			Upper and Central South			
Orange, Va.	3.0	2.1	1.0	1.2	1.5	1.3
Blairsville, Ga.	2.5	3.5	2.5	2.0	2.0	2.5
Belleville, Ill.	2.3	2.8	2.3	2.2	2.2	2.2
Eldorado, Ill.	2.5	2.5	2.0	2.7	2.3	2.5
Carbondale, Ill.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Evansville, Ind.	1.5	1.5	1.0	3.0	1.5	1.5
Portageville, Mo.(A)	4.0	2.5	2.7	3.2	2.7	3.2
Portageville, Mo.(B)	4.0	2.7	3.7	3.5	2.7	2.8
Martin, Tenn.	3.0	2.0	1.0	2.0	1.0	1.0
Keiser, Ark.	4.0	3.0	2.5	2.5	2.8	2.5
Marianna, Ark.	3.5	3.3	2.8	2.8	3.0	2.7
			West			
Columbus, Kan.	2.0	1.5	1.2	1.2	1.8	1.5
Mt. Vernon, Mo.	2.7	2.3	2.5	2.3	2.0	2.5
Bixby, Okla.	1.0	1.0	1.0	2.0	2.0	1.0
Bushland, Texas	2.5	2.5	1.5	2.0	2.0	2.0
Lubbock, Texas	4.0	2.0	1.0	2.0	1.0	2.0

Table 7. - (continued)

Location	S63-5328S	D67-2908	D68-4466	L66L-310	Md66-1058	Md66-1311
			East Coast			
Queenstown, Md.	2.0	2.0	2.0	2.0	3.0	3.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	4.0	2.0	2.0	4.0	5.0	3.0
Georgetown, Del.	4.5	3.7	3.8	4.2	4.7	4.3
Warsaw, Va.	2.5	1.7	1.3	1.4	3.8	2.5
Plymouth, N. C.	2.0	1.5	1.5	2.5	3.0	2.0
			Upper and Central South			
Orange, Va.	1.7	1.5	1.0	3.3	4.0	1.0
Blairsville, Ga.	3.5	2.0	3.0	3.0	3.5	2.5
Belleville, Ill.	2.5	2.0	2.2	2.3	2.8	3.0
Eldorado, Ill.	2.5	2.2	2.3	2.0	2.5	2.7
Carbondale, Ill.	2.0	1.0	1.0	1.0	2.0	2.0
			Delta			
Evansville, Ind.	1.5	1.0	1.0	1.5	3.0	2.0
Portageville, Mo.(A)	3.2	2.7	3.0	3.2	3.8	3.7
Portageville, Mo.(B)	3.5	2.5	2.8	4.5	5.0	3.7
Martin, Tenn.	4.0	1.0	1.0	3.0	2.0	3.0
Keiser, Ark.	2.8	2.7	2.2	3.3	4.0	3.8
Marianna, Ark.	3.3	3.2	2.8	3.2	3.3	3.5
			West			
Columbus, Kan.	1.9	1.2	1.3	1.9	2.0	1.5
Mt. Vernon, Mo.	2.5	2.7	2.7	2.6	2.5	2.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Bushland, Texas	4.0	2.0	2.5	2.5	2.5	3.0
Lubbock, Texas	2.0	3.0	1.5	2.5	3.0	2.0

PRELIMINARY GROUP IV-S

1971

Five Preliminary Group IV-S nurseries, including 27 experimental strains along with Kent, Delmar, and Custer, were grown. The parentage of these strains is reported in Table 8. Performance data are summarized in Tables 9 through 14. The test at Stoneville was replanted and made poor growth. Yield data are not included.

Differences among strains for seed yield were significant at all locations. The combined analysis for the four locations showed differences among strains to be nonsignifiscant at the 5% level of confidence. All strains ranked above Kent in seed yield. At Georgetown, all strains yielded significantly better than Kent, while at Portageville all but one of the strains yielded significantly better than Kent. At Linkwood, only two strains had yields significantly above Kent. Results from Warsaw were different in that there were no strains with yields significantly above the yield for Kent and 21 strains produced seed yields significantly below the yield for Kent.

Mean seed quality ratings showed all strains to have better quality seed than Kent. All but three strains were superior in shatter resistance. All strains had lower ratings for phytophthora rot and purple stain than Kent. Rather large differences were also observed for moldy seed at Georgetown.

Table 8. - Parentage of the strains in Preliminary Group IV-S, 1971

	Variety or strain	Parentage	Generation composited
1.	Kent		
2.	Delmar		
3.	Custer		
4.	D67-2984	Hill(2) x PI 171,450	F_5
5.	D67-3003	Hill(2) x PI 171,450	F_5
6.	D67-3208	Hill(2) x PI 171,450	F_5
7.	D67-3344	Hill(2) x PI 171,450	F_5
8.	D69-3827	D63-6094 x D62-6289	F_5
9.	D69-3839	D63-6094 x D62-6289	F_5
10.	D69-3847	D63-6094 x D62-6289	F_5
11.	D69-3851	D63-6094 x D62-6289	F_5
12.	D69-3856	D63-6094 x D62-6289	F_5
13.	D69-3863	D63-6094 x D62-6289	F_5
14.	D69-3866	D63-6094 x D62-6289	F_5
15.	D69-3871	D63-6094 x D62-6289	F_5
16.	D69-3878	D63-6094 x D62-6289	F_5
17.	D69-3889	D63-6094 x D62-6289	F_5
18.	D69-3896	D63-6094 x D62-6289	F_5
19.	D69-3914	D63-6094 x D62-6289	F_5
20.	D69-3938	D63-6094 x D62-6289	F_5
21.	D69-3955	D63-6094 x D62-6289	F_5
22.	D69-3958	D63-6094 x D62-6289	F_5
23.	D69-3980	D63-6094 x D62-6289	F_5
24.	D69-4020	D63-6094 x D62-6289	F_5
25.	D69-4041	D63-6094 x D62-6289	F_5
26.	D69-4073	D63-6094 x D62-6289	F_5
27.	D69-4117	D63-6094 x D62-6289	F_5
28.	S65-3339	PI 229,352 x Bethel	F_5
29.	S65-5695	Scott(4) x FC33243	F_5
30.	V68-1242	PI 80837 x V63-76	

Table 9. - General summary of performance for the strains grown in Preliminary Group IV-S, 1971

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Seed quality	Shatter resist.	P.R.	% P.S.	% moldy seed
Kent	28.0	10-6	26	22.2	39.9	3.6	3.0	3.0	15	25
Delmar	27.2	+3	31	23.4+	38.2	2.7	1.0	3.5	5	31
Custer	33.8	-3	33	24.0+	37.0-	3.3	4.0	1.0	9	27
D67-2984	31.3	-5	28	21.3-	39.8	2.8	3.0	1.0	0	15
D67-3003	31.9	+2	28	21.2-	39.1	3.0	1.0	1.0	2	16
D67-3208	34.7	+1	29	20.1-	39.2	2.9	1.0	1.0	2	14
D67-3344	32.4	+3	32	20.3-	39.4	3.1	1.0	1.0	4	13
D69-3827	33.2	+2	29	19.7-	41.6+	2.6	1.0	1.0	2	10
D69-3839	35.1	+3	31	20.5-	40.0	2.3	1.0	1.0	2	6
D69-3847	34.4	+5	39	19.2-	41.7+	2.6	1.0	1.0	4	3
D69-3851	35.4	+4	35	20.0-	40.9	2.3	1.0	1.0	1	5
D69-3856	36.0	+4	32	20.5-	40.8	2.6	1.0	1.0	8	8
D69-3863	35.8	+3	35	19.4-	42.7+	2.5	1.0	1.0	1	10
D69-3866	34.9	+3	34	20.9-	38.7	2.6	3.0	1.0	5	4
D69-3871	38.0	+2	35	21.8	38.8	2.3	1.0	1.0	1	3
D69-3878	33.0	+2	32	19.1-	42.3+	2.1	2.0	1.0	1	5
D69-3889	29.7	0	28	19.2-	42.7+	3.3	1.0	1.0	2	30
D69-3896	34.3	+2	33	20.3-	41.7+	2.3	1.0	1.0	7	6
D69-3914	31.3	+2	33	19.9-	40.7	2.5	3.0	1.0	2	5
D69-3938	35.1	+3	39	19.4-	42.1+	2.6	2.0	1.0	2	6
D69-3955	37.4	+3	33	21.5	40.1	2.1	1.0	1.0	2	2
D69-3958	35.5	+3	36	21.4-	39.3	2.5	1.0	1.0	0	9
D69-3980	36.1	+3	37	18.9-	41.6+	3.1	1.0	1.0	3	12
D69-4020	30.0	+3	34	19.7-	41.8+	2.8	2.0	1.0	4	5
D69-4041	34.9	+4	41	20.4-	38.8	2.8	1.0	1.0	8	2
D69-4073	36.1	+2	33	19.9-	41.9+	2.6	1.0	1.0	1	6
D69-4117	35.9	+3	40	20.1-	41.4+	2.7	1.0	1.0	2	4
S65-3339	37.3	+4	33	22.4	38.7	2.8	1.0	1.0	6	21
S65-5695	36.4	+4	42	21.5	38.4	3.2	1.0	1.0	9	20
V68-1242	34.4	+4	24	21.5	40.8	2.8	1.0	2.0	12	4
L.S.D.(.05)	N.S.			0.8	1.1					
L.S.D.(.01)	N.S.			1.1	1.4					

Table 10 - Seed yield, in bushels per acre, for the strains in Preliminary Group IV-S, 1971

Strain	Georgetown, Del.	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.
Kent	25.7	33.0	43.9	9.3
Delmar	18.0-	35.8	42.1	12.9
Custer	32.2+	36.8	42.0	24.0+
D67-2984	33.3+	31.0	39.9	20.9+
D67-3003	33.6+	27.8	42.2	24.2+
D67-3208	38.4+	35.1	39.6-	25.8+
D67-3344	35.6+	32.4	36.7-	25.0+
D69-3827	35.0+	32.4	36.4-	29.1+
D69-3839	35.3+	35.4	38.7-	30.9+
D69-3847	38.8+	34.6	35.6-	28.7+
D69-3851	37.1+	36.4	41.0	27.1+
D69-3856	40.0+	37.8	38.0-	28.3+
D69-3863	38.6+	37.7	38.3-	28.6+
D69-3866	38.6+	34.0	38.2-	28.8+
D69-3871	43.4+	39.4+	37.9-	31.5+
D69-3878	36.0+	31.1	35.6-	29.1+
D69-3889	33.2+	--	37.6-	13.4
D69-3896	36.0+	32.9	37.9-	30.3+
D69-3914	38.4+	27.5	36.4-	22.9+
D69-3938	40.2+	37.0	35.8-	27.4+
D69-3955	40.5+	38.0	39.2-	32.0+
D69-3958	36.3+	37.9	37.4-	30.4+
D69-3980	42.6+	38.4	35.9-	27.6+
D69-4020	32.4+	28.4	33.0-	26.2+
D69-4041	43.1+	30.0	36.8-	29.8+
D69-4073	37.7+	38.8	37.0-	31.0+
D69-4117	42.7+	32.8	37.1-	31.0+
S65-3339	34.8+	42.0+	41.9	30.4+
S65-5695	36.0+	37.8	43.8	28.1+
V68-1242	42.4+	32.0	47.6	15.7+
L.S.D.(.05)	6.0	6.0	4.1	4.3
C.V.	8%	8%	5%	8%

Table 11. - Oil percentages for the strains in Preliminary Group IV-S, 1971

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.
Kent	22.1	23.3	21.3
Delmar	22.4	23.8	24.0
Custer	23.5	25.1	23.4
D67-2984	21.7	21.9	20.4
D67-3003	21.4	22.3	19.9
D67-3208	20.2	20.9	19.1
D67-3344	19.9	21.0	20.0
D69-3827	19.4	20.5	19.2
D69-3839	19.9	21.8	19.8
D69-3847	18.9	20.1	18.6
D69-3851	20.4	21.5	18.2
D69-3856	20.7	21.9	18.9
D69-3863	18.9	20.3	18.9
D69-3866	20.8	21.3	20.7
D69-3871	21.4	23.1	20.9
D69-3878	19.1	19.8	18.3
D69-3889	19.3	20.0	18.4
D69-3896	20.1	21.9	18.9
D69-3914	19.7	20.3	19.6
D69-3938	19.1	20.3	18.9
D69-3955	21.4	22.5	20.5
D69-3958	20.9	22.3	21.0
D69-3980	18.9	20.0	17.7
D69-4020	20.2	20.3	18.7
D69-4041	20.1	21.2	19.8
D69-4073	19.4	20.3	19.9
D69-4117	20.7	20.5	19.0
S65-3339	22.8	23.1	21.3
S65-5695	20.6	22.4	21.4
V68-1242	21.6	22.0	20.9

Table 12. - Protein percentages for the strains in Preliminary Group IV-S, 1971

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.
Kent	40.0	38.4	41.3
Delmar	38.8	37.0	38.9
Custer	37.1	35.4	38.4
D67-2984	39.2	39.1	41.1
D67-3003	39.1	37.0	41.1
D67-3208	38.8	37.8	40.9
D67-3344	39.4	38.4	40.3
D69-3827	41.6	40.9	42.4
D69-3839	40.7	38.4	40.9
D69-3847	42.4	39.8	42.8
D69-3851	41.2	39.5	42.0
D69-3856	40.4	38.3	43.6
D69-3863	43.4	40.6	44.2
D69-3866	38.2	38.0	40.0
D69-3871	38.3	37.0	41.1
D69-3878	42.6	40.0	44.2
D69-3889	43.1	41.6	43.4
D69-3896	41.6	39.3	44.2
D69-3914	40.9	38.9	42.3
D69-3938	42.0	40.6	43.6
D69-3955	40.1	38.2	42.1
D69-3958	39.6	37.5	40.7
D69-3980	41.8	39.9	43.2
D69-4020	41.6	40.9	43.0
D69-4041	38.2	38.4	39.7
D69-4073	42.6	40.6	42.4
D69-4117	41.6	39.4	43.3
S65-3339	39.2	36.5	40.4
S65-5695	39.5	36.4	39.3
V68-1242	40.5	38.6	43.3

Table 13. - Plant height for the strains in Preliminary Group IV-S, 1971

Strain	Georgetown, Del.	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.
Kent	26	26	32	19
Delmar	30	30	36	28
Custer	32	32	41	27
D67-2984	28	28	33	24
D67-3003	28	28	34	23
D67-3208	31	31	32	21
D67-3344	30	30	38	31
D69-3827	30	30	32	22
D69-3839	32	32	34	27
D69-3847	42	42	39	34
D69-3851	37	37	37	30
D69-3856	33	33	35	26
D69-3863	37	37	36	28
D69-3866	34	34	37	30
D69-3871	36	36	36	31
D69-3878	32	32	34	29
D69-3889	28	28	32	22
D69-3896	33	33	34	31
D69-3914	37	37	34	23
D69-3938	43	43	38	32
D69-3955	34	34	36	29
D69-3958	37	37	37	32
D69-3980	39	39	36	33
D69-4020	36	36	34	31
D69-4041	45	45	40	33
D69-4073	33	33	35	32
D69-4117	44	44	40	33
S65-3339	35	35	36	27
S65-5695	46	46	44	33
V68-1242	26	26	26	19

Table 14. - Seed quality scores for the strains in Preliminary Group IV-S, 1971

Strain	Georgetown, Del.	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.
Kent	4.5	3.0	3.0	4.0
Delmar	4.3	2.0	1.8	2.5
Custer	4.0	3.0	2.5	3.5
D67-2984	3.3	3.0	1.4	3.5
D67-3003	3.8	3.0	2.0	3.3
D67-3208	3.5	3.0	1.7	3.5
D67-3344	4.3	3.0	1.8	3.3
D69-3827	3.3	3.0	1.4	2.5
D69-3839	2.8	2.0	1.5	2.8
D69-3847	2.3	2.0	2.8	3.3
D69-3851	2.0	3.0	1.6	2.5
D69-3856	2.8	2.0	1.8	3.8
D69-3863	2.8	3.0	1.2	3.0
D69-3866	2.8	3.0	2.1	2.5
D69-3871	2.0	3.0	1.3	2.8
D69-3878	2.0	2.0	1.3	3.0
D69-3889	4.0	3.0	1.7	4.3
D69-3896	2.5	3.0	1.5	2.0
D69-3914	2.8	3.0	1.3	3.0
D69-3938	2.3	3.0	1.8	3.5
D69-3955	2.3	2.0	1.9	2.3
D69-3958	2.8	3.0	1.5	2.5
D69-3980	3.5	3.0	2.0	4.0
D69-4020	3.3	3.0	1.7	3.3
D69-4041	2.5	3.0	2.3	3.5
D69-4073	3.0	3.0	1.2	3.3
D69-4117	2.5	3.0	1.8	3.3
S65-3339	4.0	3.0	1.8	2.5
S65-5695	3.5	3.0	2.8	3.3
V68-1242	2.8	3.0	2.0	3.5

UNIFORM GROUP V

1971

	Variety or strain	Parentage	Generation composited
1.	Hill	D632-15 x D49-2525	F_5
2.	Dare	Hill x D52-810	F_5
3.	York	Dorman x Hood	F_7
4.	D68-128	Dyer x Bragg	F_5
5.	N67-3831	Dare x N60-5234	F_4
6.	Mack (R68-105)	Lee recurrent parent; resistant C.N. & P.R.	
7.	V66-180	Lee x S5-7075	F_6
8.	N68-96	Dare x N60-5234	F_4
9.	V68-224	Lee x S5-7075	
10.	V68-297	Lee x S5-7075	
11.	V68-381	Lee x S5-7075	
12.	V68-2331	York x Clark	

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.

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.

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.

Thirty-one Uniform Group V nurseries were planted. Results from 28 nurseries are summarized in Tables 15 through 21, with Table 15 giving 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 by production regions and for oil and protein content of the seed.

Seed yield differences among strains were significant at the 5% level of confidence at 21 of the 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 were variety x location interaction was very high.

Three strains grown 2 years have given excellent performance. All are nearly similar to Dare in maturity. R68-105 has been named 'Mack' and released for increase in Arkansas, Missouri, Tennessee, Mississippi, Kentucky, Maryland, and Virginia. In addition to yielding well, Mack carries the major gene for resistance to phytophthora rot and is resistant to race 1 and 3 of the soybean cyst nematode. D68-128 has yielded well in all areas except some plantings in the High Plains. A preliminary increase was made at Jackson, Tennessee. It is anticipated that D68-128 will be further increased for release in 1972. D68-128 has the same type resistance to the soybean cyst nematode as Mack and Pickett 71 and is resistant to root-knot nematodes and reniform nematodes. It has a moderate level of resistance to phytophthora rot. V66-180 is also being considered for release. Its 2-year mean is at the top in all areas. Its rating for purple stain was lowest for the group.

Seed coat mottling determinations were made from plantings at Halfway, Texas; root knot and frogeye ratings from plantings in west Florida; and purple stain ratings from the plantings at Warsaw, Petersburg, Holland, and Gerogetown.

Table 15. - General summary of performance for the strains in Uniform Group V, 1971

	Hill	Dare	York	D68-128	N67-3831	Mack
Seed Yield - 1971						
East Coast	40.0	40.7	46.5+	47.0+	45.4+	43.9
Upper & Central South	40.2	43.9	44.1	46.9+	44.0	44.0
Delta	28.6	35.0+	32.8	36.4+	35.0+	32.7
West	43.6	42.4	45.5	45.1	43.3	43.0
- 1970-71						
East Coast	37.5	38.6	42.2	42.9	41.2	40.9
Upper & Central South	41.7	45.4	46.6	48.9	45.9	44.9
Delta	30.5	36.7	34.9	40.4	36.2	37.0
West	40.0	41.5	43.9	40.9	42.2	42.8
- 1969-71						
East Coast	37.3	38.5	41.5			
Upper & Central South	41.1	44.1	45.0			
Delta	32.1	36.5	36.3			
West	40.1	41.4	44.8			
Oil Content - 1971	23.2	23.1	21.7-	21.6-	21.8-	23.0
- 1970-71	23.3	23.3	22.2	21.9	21.9	23.1
- 1969-71	23.0	23.1	22.1			
Protein Content - 1971	38.1	38.7	38.7	38.7	40.6+	39.6+
- 1970-71	38.4	39.0	39.1	39.2	40.8	39.8
- 1969-71	38.7	39.1	39.2			
Seed size	13.0	13.5	17.3+	13.4	13.9+	14.7+
Seed quality	2.2	2.1	2.3	2.4	2.3	2.4
Maturity index	10-1	+7	+11	+8	+9	+7
Height	31	34	29	33	33	32
Bacterial Pustule	R	R	S	R	R	R
Phytophthora rot	1.0	1.0	2.0	1.0	1.0	1.0
Purple stain (%)	1.2	2.5	1.5	1.2	7.5	1.6
Root-knot	2.5	4.0	4.0	1.5	5.0	4.0
Cyst nematode (race 3)	S	S	S	R	S	R
Downy mildew	1.6	1.0	1.0	1.0	1.6	1.7
Frogeye	2.0	1.0	1.0	2.0	1.0	1.0
Shatter resistance	1.0	1.0	2.0	1.0	1.0	1.0
Flower color	W	W	P	W	W	P
Pubescence color	T	G	G	T	G	T
Pod wall color	T	B	T	T	T	T

Table 15. - (continued)

	V66-180	N68-96	V68-224	V68-297	V68-381	V68-2331
Seed Yield - 1971						
East Coast	51.6+	44.6+	46.2	47.4+	45.9+	41.1
Upper & Central South	50.8+	42.4	48.2+	45.3+	47.4+	43.1
Delta	37.9+	31.5	34.6	33.6	34.6+	30.0
West	45.7	41.3	44.8	46.6	46.0	44.5
- 1970-71						
East Coast	46.2					
Upper & Central South	51.1					
Delta	40.7					
West	44.3					
- 1969-71						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1971	21.6-	21.6-	21.4-	22.0	21.5-	23.0
- 1970-71	21.7					
- 1969-71						
Protein Content - 1971	40.8+	40.8+	40.7+	41.0+	40.7+	39.4+
- 1970-71	41.0					
- 1969-71						
Seed size	13.9+	15.3+	13.3	15.1+	15.3+	17.9+
Seed quality	2.1	2.2	2.3	2.3	2.4	2.5
Maturity index	+5	+6	+5	+8	+10	+1
Height	27	28	30	30	29	25
Bacterial pustule	R	R	R	R	R	S
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Purple stain (%)	0.7	0.5	2.0	1.2	1.6	10.5
Root-knot	5.0	4.0	4.0	4.0	5.0	5.0
Cyst nematode (race 3)	S	S	S	S	S	S
Downy mildew	1.0	1.0	2.5	1.3	1.0	1.0
Frogeye	1.0	3.0	1.0	2.0	2.0	1.0
Shatter resistance	2.0	1.0	1.3	1.3	1.3	1.0
Flower color	P	P	P	P	P	W
Pubescence color	G	G	T	S	G	G
Pod wall color	T	T	T	T	T	T

Table 16. - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1971

Location	Hill	Dare	York	D68-128	N67-3831	Mack	V66-180
East Coast							
Queenstown, Md.(A)	44.1	46.1	48.5	52.6+	52.4+	45.2	58.5+
Queenstown, Md.(B)	--	39.8	58.9	54.4	57.6	56.2	55.3
Linkwood, Md.	37.5	39.4	44.9+	45.6+	45.8+	42.6+	49.8+
Quantico, Md.	42.9	49.7	53.9	55.4	47.9	47.7	61.8
Georgetown, Del.	37.9	40.3	47.7+	45.1+	48.2+	40.2	51.8+
Warsaw, Va.	38.9	38.2	45.6+	40.3	37.6	39.3	47.1+
Petersburg, Va.	41.0	45.2	44.7	48.6+	42.0	41.0	47.2
Holland, Va.	29.8	28.4	25.6	34.5	37.6+	40.1+	40.0+
Mean	40.0	40.7	46.5+	47.0+	45.4+	43.9	51.6+
Upper and Central South							
Orange, Va.	36.8	42.0+	44.3+	41.1	36.7	41.8	44.8+
Blairsville, Ga.	32.5	50.8+	45.7+	48.8+	47.8+	38.0	57.9+
Experiment, Ga.	60.8	65.7	59.2	68.3	69.7+	69.9+	79.8+
Princeton, Ky.	45.3	44.8	50.2	36.1	49.1	47.7	53.8
Martin, Tenn.	41.3	43.2	47.8	54.3+	43.7	45.6	51.4+
Jackson, Tenn.	48.0	46.7	45.4	53.2	46.3	50.4	55.0
Verona, Miss.	16.4	13.8	15.9	26.1+	14.9	14.9	12.6
Mean	40.2	43.9	44.1	46.9+	44.0	44.0	50.8+
Delta							
Portageville, Mo.(A)	21.7	27.1	29.7	33.6+	27.0	30.9+	33.7+
Portageville, Mo.(B)	28.3	31.0	24.7	28.7	29.4	27.6	34.1
Keiser, Ark.	25.6	30.1	32.9	33.7	32.9	27.2	29.4
Marianna, Ark.	23.2	38.4+	34.0+	43.5+	41.4+	32.8+	47.5+
Stoneville, Miss.(A)	34.3	38.4	34.2	43.3+	43.2+	36.7	47.4+
Stoneville, Miss.(B)	29.8	42.0+	28.5	38.2	33.5	32.4	27.6
St. Joseph, La.	37.1	38.0	45.8	33.7	37.4	41.2	46.0
Mean	28.6	35.0+	32.8	36.4+	35.0+	32.7	37.9+
West							
Mt. Vernon, Mo.	44.4	51.3	48.8	59.3+	53.9+	49.5	56.9+
Stuttgart, Ark.	38.9	51.7+	44.8	47.5+	47.3+	44.9	42.1
Curtis, La.	29.5	28.4	37.9+	34.7	35.2	31.8	35.6
Bixby, Okla.	48.3	40.6	40.1	51.6	35.1	43.4	48.9
Halfway, Texas	48.3	42.5	46.2	36.1	46.9	39.9	46.6
Lubbock, Texas	52.9	49.0	58.2+	55.5	52.1	55.0	55.1
Mean	43.6	42.4	45.5	45.1	43.3	43.0	45.7

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

Table 16. - (continued)

Location	N68-96	V68-224	V68-297	V68-381	V68-2331	L.S.D. (.05)	C.V.
			East Coast				
Queenstown, Md.(A)	50.7	49.2	51.4+	45.6	44.1	7.3	9%
Queenstown, Md.(B)	48.6	44.1	52.2	48.7	52.3	N.S.	19%
Linkwood, Md.	47.4+	48.0+	45.8+	45.1+	43.2+	3.3	4%
Quantico, Md.	42.5	55.1	52.7	49.3	46.0	N.S.	15%
Georgetown, Del.	45.4+	49.5+	45.8+	44.8+	39.2	5.1	7%
Warsaw, Va.	40.4	42.8+	45.5+	41.9	46.3+	3.6	5%
Petersburg, Va.	46.2	42.3	44.0	51.5+	32.3-	6.8	9%
Holland, Va.	37.1+	40.1+	39.9+	41.1+	23.4-	5.7	10%
Mean	44.6+	46.2+	47.4+	45.9+	41.1	4.1	
			Upper and Central South				
Orange, Va.	40.9	45.1+	45.1+	45.5+	44.5+	5.1	7%
Blairsville, Ga.	49.3+	50.0+	53.0+	54.9+	47.5+	7.4	9%
Experiment, Ga.	66.9	68.8	68.0	66.0	54.7	8.6	8%
Princeton, Ky.	47.1	51.4	49.1	49.5	45.8	N.S.	12%
Martin, Tenn.	43.0	56.4+	43.0	52.6+	51.1+	7.5	9%
Jackson, Tenn.	37.5-	49.1	41.9	51.4	46.1	8.5	11%
Verona, Miss.	12.3	16.5	17.2	12.1	12.3	5.8	22%
Mean	42.4	48.2+	45.3+	47.4+	43.1	4.9	
			Delta				
Portageville, Mo.(A)	29.0	26.8	25.4	30.2+	31.8+	8.2	17%
Portageville, Mo.(B)	26.3	31.6	28.4	23.8	24.5	7.4	16%
Keiser, Ark.	25.2	24.8	27.5	30.4	31.1	N.S.	15%
Marianna, Ark.	40.0+	38.6+	37.9+	39.0+	36.6+	7.5	12%
Stoneville, Miss.(A)	37.6	45.9+	40.9+	39.6+	38.6	4.4	7%
Stoneville, Miss.(B)	24.2	31.7	33.7	40.1	13.2-	10.4	20%
St. Joseph, La.	38.1	43.0	41.2	39.1	33.8	N.S.	12%
Mean	31.5	34.6+	33.6+	34.6+	30.0	4.8	
			West				
Mt. Vernon, Mo.	49.5	57.2+	51.9	60.4+	49.8	8.1	11%
Stuttgart, Ark.	43.8	52.3+	53.6+	50.1+	40.7	6.4	8%
Curtis, La.	30.8	34.3	30.2	41.5+	29.5	7.6	13%
Bixby, Okla.	46.4	40.2	49.6	42.4	46.2	N.S.	14%
Halfway, Texas	39.7	43.6	45.6	43.3	45.8	N.S.	12%
Lubbock, Texas	45.7-	53.5	53.7	52.8	60.2+	4.9	5%
Mean	41.3	44.8	46.6	46.0	44.5	N.S.	

Table 17. - Chemical composition and seed size for the strains in Uniform Group V, 1971

Location	Hill	Dare	York	D68-128	N67-3831	Mack	V66-180
			Oil Percentage				
Linkwood, Md.	23.0	23.0	20.4	19.4	21.1	22.4	20.7
Warsaw, Va.	24.6	22.7	21.0	22.1	22.3	24.1	22.6
Experiment, Ga.	23.3	24.0	21.8	22.5	22.3	22.8	21.4
Jackson, Tenn.	23.8	23.0	22.3	22.7	21.9	22.6	21.7
Portageville, Mo.(A)	22.1	22.3	20.6	19.8	20.8	21.7	20.3
Keiser, Ark.	21.8	23.3	22.8	22.8	22.5	23.6	21.7
Stoneville, Miss.(A)	24.3	23.8	23.0	22.6	21.8	23.8	22.8
Stuttgart, Ark.	22.7	22.8	21.7	21.1	21.3	22.6	21.2
Mean	23.2	23.1	21.7-	21.6-	21.8-	23.0	21.6-
			Protein Percentage				
Linkwood, Md.	36.8	38.4	39.2	38.5	39.8	39.0	40.1
Warsaw, Va.	34.6	37.4	38.0	36.5	36.8	35.7	38.1
Experiment, Ga.	35.6	38.7	39.4	39.0	41.5	39.5	41.5
Jackson, Tenn.	38.9	39.1	38.5	38.4	42.0	39.8	40.8
Portageville, Mo.(A)	40.3	39.2	40.1	40.5	42.4	41.8	42.1
Keiser, Ark.	39.6	36.6	35.8	36.1	38.6	37.9	40.0
Stoneville, Miss.(A)	38.7	39.3	38.2	39.9	40.7	40.5	40.8
Stuttgart, Ark.	39.9	41.0	40.1	41.0	42.9	42.5	42.7
Mean	38.1	38.7	38.7	38.7	40.6+	39.6+	40.8+
			Grams Per 100 Seeds				
Linkwood, Md.	15.4	16.3	19.3	15.7	16.6	16.2	15.6
Warsaw, Va.	13.4	12.0	17.4	11.4	11.9	13.8	13.4
Experiment, Ga.	15.7	16.8	21.7	15.3	17.1	18.2	17.7
Jackson, Tenn.	14.5	13.2	17.9	13.6	14.9	14.6	14.6
Portageville, Mo.(A)	12.0	12.3	17.0	12.7	13.7	13.7	12.7
Keiser, Ark.	9.0	9.0	14.7	10.0	10.3	10.7	10.0
Stoneville, Miss.(A)	11.6	12.4	11.5	13.8	10.6	15.1	12.8
Stuttgart, Ark.	12.3	14.7	16.7	14.7	15.7	15.0	14.3
Mean	13.0	13.5	17.3+	13.4	13.9+	14.7+	13.9+

Table 17. - (continued)

Location	N68-96	V68-224	V68-297	V68-381	V68-2331	L.S.D. (.05)
			Oil Percentage			
Linkwood, Md.	21.4	20.9	21.4	21.2	21.7	
Warsaw, Va.	21.8	22.6	23.1	23.0	23.2	
Experiment, Ga.	22.3	21.5	22.0	20.7	22.8	
Jackson, Tenn.	21.6	21.3	20.6	21.8	24.3	
Portageville, Mo.(A)	20.8	20.2	21.8	19.3	22.0	
Keiser, Ark.	21.7	21.3	22.3	22.2	22.0	
Stoneville, Miss.(A)	22.4	22.2	22.8	21.8	24.6	
Stuttgart, Ark.	20.8	21.3	22.2	21.8	23.1	
Mean	21.6-	21.4-	22.0-	21.5-	23.0	0.6
			Protein Perecentage			
Linkwood, Md.	41.0	40.8	40.7	40.8	39.1	
Warsaw, Va.	38.2	37.7	37.1	38.0	38.0	
Experiment, Ga.	41.1	42.0	42.0	40.9	39.7	
Jackson, Tenn.	40.6	40.5	41.5	40.5	38.7	
Portageville, Mo.(A)	41.5	41.6	42.8	42.1	42.0	
Keiser, Ark.	39.0	39.5	39.9	38.9	38.4	
Stoneville, Miss.(A)	41.3	40.4	40.9	41.7	38.6	
Stuttgart, Ark.	43.5	43.3	43.4	43.0	40.8	
Mean	40.8+	40.7+	41.0+	40.7+	39.4+	0.8
			Grams per 100 Seeds			
Linkwood, Md.	18.2	15.5	16.8	18.4	20.4	
Warsaw, Va.	13.7	11.9	14.4	14.5	17.8	
Experiment, Ga.	19.7	16.5	18.3	18.4	19.8	
Jackson, Tenn.	15.2	13.0	15.9	16.5	19.4	
Portageville, Mo.(A)	14.3	12.7	13.7	13.3	16.0	
Keiser, Ark.	11.0	9.7	11.7	11.7	13.7	
Stoneville, Miss.(A)	14.2	12.4	14.1	14.1	18.3	
Stuttgart, Ark.	15.7	14.7	16.0	15.7	18.0	
Mean	15.3+	13.3	15.1+	15.3+	17.9+	0.9

Table 18. - Relative maturity, days earlier (-) or later (+) than Hill, for the strains in Uniform Group V, 1971

Location	Date planted	Hill matured	Dare	York	D68-128	N67-3831	Mack
		East Coast					
Queenstown, Md.(A)	5-26	10-12	+9	+14	+7	+3	+7
Linkwood, Md.	5-25	10-17	+3	+7	+2	+4	+3
Georgetown, Del.	6-2	10-18	+8	+12	+8	+10	+5
Warsaw, Va.	5-25	10-12	+4	+5	+6	+7	+4
Petersburg, Va.	5-24	9-29	+11	+16	+12	+14	+11
Holland, Va.	6-3	10-12	+12	+19	+9	+19	+19
Mean		10-11	+8	+12	+7	+10	+8
		Upper and Central South					
Orange, Va.		10-1	-2	+4	+2	+8	+1
Blairsville, Ga.	5-24	10-3	+9	+12	+12	+11	+3
Experiment, Ga.	5-9	9-15	+16	+20	+12	+16	+13
Princeton, Ky.	5-19	9-26	+13	+9	+14	+9	+6
Martin, Tenn.	5-29	10-1	+4	+8	+4	+3	+5
Jackson, Tenn.	5-6	9-20	+14	+13	+16	+17	+11
Verona, Miss.		9-28	+3	+8	+2	+3	0
Mean		9-26	+8	+11	+9	+10	+6
		Delta					
Portageville, Mo.(A)	5-28	10-3	+4	+5	+3	+6	+1
Portageville, Mo.(B)	6-8	10-6	+6	+8	+5	+6	+3
Marianna, Ark.	6-14	9-30	+7	+13	+10	+9	+9
Stoneville, Miss.(A)	5-18	9-16	+14	+13	+12	+15	+10
Stoneville, Miss.(B)	5-27	9-25	+13	+14	+14	+14	+16
St. Joseph, La.	5-18	9-13	+3	+16	+5	+7	+10
Mean		9-26	+9	+12	+8	+10	+8
		West					
Stuttgart, Ark.	5-20	9-28	+6	+14	+6	+11	+4
Curtis, La.	5-20	9-22	+6	+8	+2	+8	+6
Bixby, Okla.	5-21	10-13	0	+1	+6	-11	+2
Mean		10-1	+4	+8	+5	+3	+4

Table 18. - (continued)

Location	V66-180	N68-96	V68-224	V68-297	V68-381	V68-2331
			East Coast			
Queenstown, Md.(A)	+7	+13	+7	+8	+12	+4
Linkwood, Md.	+3	+3	+3	+3	+6	-1
Georgetown, Del.	+6	+6	+3	+3	+9	+1
Warsaw, Va.	+3	+3	+2	+5	+7	-3
Petersburg, Va.	+2	+12	+4	+12	+18	-1
Holland, Va.	+12	+12	+17	+17	+19	+3
Mean	+6	+8	+6	+8	+14	+1
			Upper and Central South			
Orange, Va.	-3	-6	+2	-2	+6	-3
Blairsville, Ga.	+9	+4	+6	+11	+11	-1
Experiment, Ga.	+13	+15	+12	+17	+19	+7
Princeton, Ky.	+3	+5	+4	+4	+10	+4
Martin, Tann.	+12	0	+5	+4	+10	0
Jackson, Tenn.	+8	+12	+6	+15	+16	+2
Verona, Mss.	0	+1	0	+2	0	0
Mean	+6	+4	+5	+7	+10	+1
			Delta			
Portageville, Mo.(A)	0	+2	0	+3	+4	+2
Portageville, Mo.(B)	+4	+3	+4	+4	+7	+2
Marianna, Ark.	+5	+7	+5	+7	+14	-2
Stoneville, Miss.(A)	+6	+11	+5	+14	+12	+4
Stoneville, Miss.(B)	+13	+12	+14	+14	+15	+3
St. Joseph, La.	+8	+4	+9	+8	+3	-2
Mean	+6	+7	+6	+8	+9	+1
			West			
Stuttgart, Ark.	-1	+6	+4	+12	+14	+1
Curtis, La.	+5	+9	+7	+12	+12	+5
Bixby, Okla.	-2	-6	-2	+2	-7	-2
Mean	+1	+3	+3	+9	+6	+1

Table 19. - Plant height data for the strains in Uniform Group V, 1971

Location	Hill	Dare	York	D68-128	N67-3831	Mack
			East Coast			
Queenstown, Md.(A)	33	38	31	38	35	35
Queenstown, Md.(B)	--	34	30	33	30	31
Linkwood, Md.	30	33	30	31	32	32
Quantico, Md.	33	34	32	35	34	34
Georgetown, Del.	40	40	42	42	39	41
Warsaw, Va.	38	38	35	38	39	38
Petersburg, Va.	26	27	24	26	25	26
Holland, Va.	37	39	40	42	41	42
Mean	34	35	33	36	34	35
			Upper and Central South			
Orange, Va.	41	45	43	43	44	39
Blairsville, Ga.	34	33	33	36	34	32
Experiment, Ga.	36	37	30	35	38	35
Princeton, Ky.	29	38	36	39	38	34
Martin, Tenn.	26	38	29	36	41	32
Jackson, Tenn.	41	45	37	44	45	43
Verona, Miss.	19	19	17	26	20	24
Mean	32	36	32	37	37	34
			Delta			
Portageville, Mo.(A)	28	34	25	36	37	29
Portageville, Mo.(B)	28	32	27	31	32	28
Keiser, Ark.	31	31	23	30	29	28
Marianna, Ark.	34	33	30	32	34	34
Stoneville, Miss.(A)	26	29	25	29	29	27
Stoneville, Miss.(B)	20	29	19	25	25	23
St. Joseph, La.	22	27	19	21	27	22
Mean	27	31	24	29	30	27
			West			
Mt. Vernon, Mo.	32	36	33	36	36	34
Stuttgart, Ark.	23	30	23	23	27	24
Curtis, La.	25	26	23	28	29	25
Bixby, Okla.	31	36	28	29	27	29
Lubbock, Texas [1]	27	29	24	28	28	26
Mean	28	32	27	29	30	28

[1]Not included in mean.

Table 19. - (continued)

Location	V66-180	N68-96	V68-224	V68-297	V68-381	V68-2331
			East Coast			
Queenstown, Md.(A)	31	35	33	33	32	30
Queenstown, Md.(B)	31	28	31	32	32	26
Linkwood, Md.	27	28	30	30	32	25
Quantico, Md.	30	32	34	32	30	27
Georgetown, Del.	36	35	36	37	35	35
Warsaw, Va.	30	34	33	36	33	28
Petersburg, Va.	17	22	20	23	25	15
Holland, Va.	36	36	38	38	36	35
Mean	30	31	32	33	32	28
			Upper and Central South			
Orange, Va.	33	36	40	40	36	37
Blairsville, Ga.	34	32	37	35	36	35
Experiment, Ga.	30	32	31	32	31	24
Princeton, Ky.	29	29	33	33	36	24
Martin, Tenn.	30	32	32	28	31	28
Jackson, Tenn.	34	37	34	37	37	31
Verona, Miss.	16	14	16	17	16	10
Mean	29	30	32	32	32	27
			Delta			
Portageville, Mo.(A)	26	25	28	28	28	24
Portageville, Mo.(B)	28	26	29	29	27	20
Keiser, Ark.	22	22	26	24	23	23
Marianna, Ark.	31	30	33	33	32	30
Stoneville, Miss.(A)	25	25	25	23	25	21
Stoneville, Miss.(B)	20	17	23	21	23	13
St. Joseph, La.	20	23	20	20	20	15
Mean	25	24	26	25	25	21
			West			
Mt. Vernon, Mo.	33	32	34	34	36	30
Stuttgart, Ark.	19	20	20	21	22	15
Curtis, La.	19	22	21	23	21	18
Bixby, Okla.	26	26	33	32	22	31
Lubbock, Texas[1]	25	25	28	26	28	19
Mean	24	25	27	28	25	24

Table 20. - Lodging scores for the strains in Uniform Group V, 1971

Location	Hill	Dare	York	D68-128	N67-3831	Mack
			East Coast			
Queenstown, Md.(A)	3.5	3.3	3.5	3.2	2.8	3.8
Queenstown, Md.(B)	-	3.0	2.0	2.4	2.0	3.0
Linkwood, Md.	2.5	2.7	2.0	2.3	2.2	3.0
Quantico, Md.	4.0	4.0	2.0	2.0	2.0	4.0
Georgetown, Del.	3.5	2.7	2.2	2.7	2.3	3.5
Warsaw, Va.	2.4	2.0	1.7	2.2	1.9	2.7
Petersburg, Va.	1.7	3.0	1.0	2.7	1.7	2.0
Holland, Va.	4.0	3.3	3.0	3.5	2.8	3.8
			Upper and Central South			
Orange, Va.	2.7	3.0	2.0	2.7	2.3	3.3
Blairsville, Ga.	2.5	2.7	1.6	2.5	2.5	3.7
Experiment, Ga.	1.7	2.0	1.3	1.7	1.7	2.0
Princeton, Ky.	1.0	1.0	1.3	1.3	1.0	1.3
Martin, Tenn.	1.0	4.0	1.0	2.0	1.0	4.0
Jackson, Tenn.	2.0	2.0	1.0	1.0	1.0	2.0
			Delta			
Portageville, Mo.(A)	1.7	2.3	1.7	2.2	1.5	2.7
Portageville, Mo.(B)	2.7	2.8	1.5	1.8	2.0	2.8
Keiser, Ark.	2.7	2.0	1.3	1.7	2.0	2.7
Marianna, Ark.	2.7	3.0	3.3	3.3	3.0	4.0
Stoneville, Miss.(A)	2.3	2.3	2.0	2.0	2.0	2.7
Stoneville, Miss.(B)	1.0	2.0	2.0	1.7	2.0	2.0
St. Joseph, La.	2.0	2.0	2.0	1.0	2.0	2.0
			West			
Mt. Vernon, Mo.	4.2	3.9	3.6	4.0	3.4	4.1
Stuttgart, Ark.	1.0	1.3	1.0	1.0	1.3	1.2
Curtis, La.	2.0	2.0	2.0	2.0	2.0	2.5
Bixby, Okla.	2.0	1.3	1.7	1.0	3.0	1.3
Lubbock, Texas	2.5	3.0	2.0	3.0	2.5	2.5

Table 20. - (continued)

Location	V66-180	N68-96	V68-224	V68-297	V68-381	V68-2331
			East Coast			
Queenstown, Md.(A)	2.5	3.3	3.5	2.5	1.8	1.5
Queenstown, Md.(B)	2.0	2.0	2.0	2.0	2.0	1.0
Linkwood, Md.	2.2	1.8	2.2	2.0	1.8	1.3
Quantico, Md.	2.0	3.0	2.0	4.0	2.0	2.0
Georgetown, Del.	2.3	2.0	3.5	2.8	2.0	1.7
Warsaw, Va.	1.4	1.7	2.1	2.2	1.5	1.0
Petersburg, Va.	1.7	1.7	1.0	1.7	1.0	1.0
Holland, Va.	2.3	2.8	3.0	2.7	1.8	1.7
			Upper and Central South			
Orange, Va.	1.0	2.0	2.7	2.3	2.0	1.0
Blairsville, Ga.	1.5	1.7	1.8	2.8	2.0	1.8
Experiment, Ga.	1.0	1.0	1.0	1.7	1.0	1.0
Princeton, Ky.	1.0	1.0	1.0	1.0	1.0	1.0
Martin, Tenn.	1.0	1.0	2.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	1.2	1.3	1.3	1.3	1.5	1.0
Portageville, Mo.(B)	1.5	1.5	1.7	1.7	1.5	1.3
Keiser, Ark.	2.0	1.0	1.7	1.7	1.0	1.0
Marianna, Ark.	2.3	3.0	2.3	3.0	2.0	1.7
Stoneville, Miss.(A)	1.3	2.0	2.0	2.0	2.0	1.3
Stoneville, Miss.(B)	1.7	1.7	2.0	2.0	2.0	1.3
St. Joseph, La.	1.0	2.0	1.0	2.0	2.0	1.0
			West			
Mt. Vernon, Mo.	3.0	3.6	3.1	3.1	2.1	2.5
Stuttgart, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Curtis, La.	1.5	1.0	1.5	1.5	1.5	1.0
Bixby, Okla.	1.3	1.3	2.7	1.3	1.0	2.7
Lubbock, Texas	2.5	1.5	2.5	2.5	1.5	1.0

Table 21. - Seed quality scores for the strains in Uniform Group V, 1971

Location	Hill	Dare	York	D68-128	N67-3831	Mack
			East Coast			
Queenstown, Md.(A)	2.0	2.0	2.0	2.0	2.0	3.0
Queenstown, Md.(B)	-	1.0	1.0	1.0	1.0	2.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Georgetown, Del.	2.0	2.0	2.3	2.5	2.3	2.5
Warsaw, Va.	3.5	2.4	1.7	2.0	2.4	2.2
Petersburg, Va.	3.0	1.0	1.0	1.0	2.0	1.0
Holland, Va.	4.5	3.5	3.3	3.5	3.0	4.0
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	2.5	2.0	2.0	2.5	2.5	2.0
Experiment, Ga.	1.3	2.0	2.7	2.0	1.6	2.3
Princeton, Ky.	1.0	1.0	1.0	2.7	1.3	2.0
Martin, Tenn.	2.0	2.0	2.0	3.0	3.0	3.0
Jackson, Tenn.	3.0	3.0	2.0	3.0	3.0	2.0
			Delta			
Portageville, Mo.(A)	3.2	3.0	3.2	3.8	3.0	3.3
Portageville, Mo.(B)	2.0	2.8	3.5	4.3	2.7	3.5
Keiser, Ark.	2.7	2.3	3.3	2.5	2.8	2.7
Marianna, Ark.	2.8	2.8	3.2	2.8	3.0	2.8
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.3	2.0	2.0	2.0
St. Joseph, La.	1.5	2.1	2.5	2.0	3.2	2.2
			West			
Mt. Vernon, Mo.	2.0	1.5	2.5	2.0	2.0	2.5
Stuttgart, Ark.	3.0	2.0	3.0	2.3	3.2	2.2
Curtis, La.	1.8	2.0	1.5	2.0	1.8	1.5
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.5	2.0	1.0	1.5	1.5	3.0

Table 21. - (continued)

Location	V66-180	N68-96	V68-224	V68-297	V68-381	V68-2331
			East Coast			
Queenstown, Md.(A)	2.0	2.0	2.0	2.0	2.0	3.0
Queenstown, Md.(B)	1.0	1.0	1.0	1.0	2.0	2.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Quantico, Md.	2.0	1.0	2.0	2.0	2.0	2.0
Georgetown, Del.	2.3	2.0	2.5	2.3	2.3	3.0
Warsaw, Va.	2.5	2.3	2.5	2.5	2.1	3.5
Petersburg, Va.	1.0	1.0	2.0	1.0	1.0	4.0
Holland, Va.	3.5	3.0	3.7	3.5	3.7	3.8
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	1.0	2.0
Blairsville, Ga.	2.5	2.0	2.0	2.0	2.0	2.0
Experiment, Ga.	2.0	1.7	2.3	2.7	3.0	3.3
Princeton, Ky.	1.0	1.0	1.3	1.3	1.3	2.0
Martin, Tenn.	2.0	3.0	3.0	2.0	3.0	3.0
Jackson, Tenn.	3.0	3.0	2.0	3.0	3.0	4.0
			Delta			
Portageville, Mo.(A)	2.5	3.0	3.3	3.2	3.3	3.3
Portageville, Mo.(B)	3.0	2.7	3.0	3.2	3.5	3.3
Keiser, Ark.	2.3	2.8	2.8	3.0	3.3	3.3
Marianna, Ark.	2.0	3.2	2.5	2.8	2.8	3.2
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.3	2.7	2.0	2.0	2.0	3.0
St. Joseph, La.	2.2	3.0	2.3	2.8	2.5	2.1
			West			
Mt. Vernon, Mo.	2.0	1.7	2.0	2.0	2.3	2.0
Stuttgart, Ark.	1.8	2.7	2.5	2.8	3.0	3.5
Curtis, La.	1.5	1.8	1.5	1.8	2.0	1.8
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.5	3.0	2.0	1.5

PRELIMINARY GROUP V

1971

Preliminary Group V nurseries, including 34 experimental strains and the two check varieties Hill and Dare, were grown at seven locations. The parentage of these strains is reported in Table 22. Performance data are summarized in Tables 23 through 28. Results of the Plymouth and Keiser plantings are not included in the summary. Prolonged and excessive rains prevented harvest of the Plymouth material until seed was badly deteriorated. The Keiser test was replanted and emergence was irregular.

Differences among strains for seed yield were significant at the 5% level of confidence at each of the five locations summarized. The combined analysis of variance also showed differences among strains to be significant. Two strains produced seed yields significantly greater than that for Hill. V68-920 was segregating for flower color and V68-1034 was later in maturity than Dare. There were 11 strains which were rated later in maturity than Dare. These strains are considered to be too late for this group.

Data on reaction to root-knot nematodes was obtained from a field planting in west Florida. Frogeye leafspot ratings were also made on the material planted for root-knot evaluation. Purple seed stain ratings were made from the plantings at Warsaw and Georgetown. Ratings for Diaporthe development on the seed were also made for Georgetown. Ratings for phytophthora rot were made at Stoneville. Shatter resistance ratings were made at Stoneville and Warsaw.

Strains which appear to merit being advanced to Uniform Group V are D68-4641, R69-358, R69-831, and S67-80.

Table 22 - Parentage of the strains in Preliminary Group V, 1971

	Variety or strain	Parentage	Generation composited
1.	Hill		
2.	Dare		
3.	D67-4066	D63-6107 x D60-9647	F_5
4.	D67-5679	D63-6108 x D63-4509	F_6
5.	D68-2488	D63-6094 x D61-5141	F_4
6.	D68-2601	D63-6094 x D61-5141	F_4
7.	D68-4516	D62-6289 x D60-9647	F_5
8.	D68-4641	D62-6289 x D60-9647	F_5
9.	D69-4157	Semmes x D62-6289	F_5
10.	D69-4178	Semmes x D62-6289	F_5
11.	D69-4227	Semmes x D62-6289	F_5
12.	D69-4251	Semmes x D62-6289	F_5
13.	D69-6255	D63-6094 x D62-7562	F_5
14.	N68-184	Dare x N60-5234	F_4
15.	N68-225	Dare x N60-5234	F_4
16.	N68-360	Dare x N60-5234	F_4
17.	N68-2044	N55-3643 x Hill	F_3
18.	N69-332	N55-47 x York	F_5
19.	N69-421	N55-47 x York	F_5
20.	N69-3011	Dare x Hood	F_4
21.	N69-4054	Dare x Hood	F_4
22.	R69-358	Semmes x R64-500	F_5
23.	R69-362	Semmes x R64-500	F_5
24.	R69-496	Semmes x R64-500	F_5
25.	R69-831	R60-66 x R64-500	F_4
26.	S67-80	PI 85559 x Kent	
27.	S67-1515	S9-119 x PI 85559	F_5
28.	S67-2336	PI 62248 x Scott	F_5
29.	UD65-7173	Delmar x Kent	
30.	UD66-9826	Bethel x Kent	
31.	UD67-18DE63	PI 181,550 x Delmar	
32.	V68-888	York x Dare	
33.	V68-920	York x Dare	
34.	V68-925	York x Dare	
35.	V68-1026	Dare x PI 71506	
36.	V68-1034	Dare x PI 71506	

Table 23. - General summary of performance for the strains grown in Preliminary Group V, 1971

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Seed hold.	R-K.	F.E.	% P.S.	P.R.	Dia-porthe
Hill	38.0	10-9	32	23.0	38.1	1.0	2.5	2.0	1.5	1.0	1.5
Dare	40.3	+8	35	22.8	38.9	1.0	4.0	1.0	0.0	1.0	1.8
D67-4066	32.0-	+6	28	21.1-	39.8+	1.0	5.0	1.0	1.5	1.0	4.0
D67-5679	33.3	+5	32	20.6-	40.6+	1.0	5.0	1.0	0.5	1.0	3.0
D68-2488	36.0	-3	32	22.3	39.5+	2.0	4.0	2.0	8.5	1.0	3.5
D68-2601	35.7	+2	36	22.1-	39.5+	1.5	5.0	4.0	11.0	1.0	1.5
D68-4516	34.2	+4	33	17.8-	46.2+	1.0	5.0	1.0	1.0	1.0	1.5
D68-4641	38.0	+2	35	19.9-	45.2+	1.0	3.0	1.0	2.5	1.0	1.3
D69-4157	36.6	+7	33	20.2-	41.9+	1.0	2.5	1.0	4.0	1.0	1.8
D69-4178	34.6	+6	40	19.6-	41.6+	1.0	3.0	1.0	0.5	1.0	3.5
D69-4227	35.3	0	31	19.7-	44.1+	1.0	2.0	1.0	3.5	1.0	2.8
D69-4251	34.3	-1	34	20.6-	42.8+	1.0	2.5	1.0	3.0	1.0	2.4
D69-6255	36.7	+5	34	20.7-	38.8	1.0	2.5	3.0	1.0	1.0	2.6
N68-184	35.8	+6	29	22.0-	40.2+	2.0	2.0	1.0	2.0	1.0	1.5
N68-225	39.9	+10	32	22.2-	41.2+	1.0	3.0	1.0	1.5	1.0	1.8
N68-360	39.5	+9	32	21.5-	40.9+	2.0	3.5	1.0	1.0	2.0	1.6
N68-2044	38.7	+12	35	22.2-	39.6+	1.5	4.0	2.0	6.5	1.0	3.2
N69-332	43.8	+12	35	21.7-	39.5+	1.0	3.5	1.0	8.5	1.0	1.5
N69-421	38.4	+8	32	22.5	39.4+	1.0	4.5	1.0	2.5	2.0	2.4
N69-3011	42.2	+11	34	22.7	38.6	1.0	4.0	1.0	1.0	2.0	2.6
N69-4054	31.3-	+7	31	22.1-	39.3+	2.5	4.5	1.0	2.0	1.0	1.1
R69-358	39.6	+6	32	22.6	39.6+	1.0	4.0	1.0	1.0	1.0	1.4
R69-362	37.9	+7	34	21.9-	39.9+	1.0	2.5	1.0	1.0	1.0	1.6
R69-496	37.2	+11	37	22.5	38.7	1.0	3.5	1.0	1.0	1.0	3.8
R69-831	41.8	+6	39	21.7-	38.1	1.0	4.0	2.0	2.0	1.0	1.2
S67-80	39.9	+6	30	22.7	39.3+	2.0	4.5	1.0	1.5	1.0	1.5
S67-1515	32.4	+9	42	21.1-	39.6+	1.0	3.5	3.0	4.0	1.0	4.0
S67-2336	34.8	+11	44	22.5	38.7	2.0	3.0	1.0	10.0	1.0	2.5
UD65-7173	37.6	0	42	23.3	39.9+	2.0	4.0	4.0	13.5	1.0	2.8
UD66-9826	35.0	+2	50	21.7-	41.1+	2.0	4.5	1.0	7.5	2.0	4.0
UD67-18DE63	33.8	+3	32	20.1-	43.4+	2.0	4.0	1.0	1.0	1.0	1.6
V68-888	42.9	+7	33	23.3	36.8-	1.0	4.5	1.0	1.0	1.0	1.5
V68-920	44.5+	+6	32	21.8-	38.9	1.0	4.0	2.0	1.5	1.0	1.3
V68-925	41.9	+9	32	23.1	35.8-	1.0	4.0	2.0	2.5	1.0	1.6
V68-1026	43.6	+9	34	23.1	37.0-	1.0	4.0	1.0	1.5	1.0	1.9
V68-1034	47.2+	+10	35	23.1	36.6-	1.0	4.5	1.0	4.0	1.0	2.4
L.S.D.(.05)	5.8			0.8	1.1						
L.S.D.(.01)	7.6			1.1	1.4						

Table 24. - Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1971

Strain	Georgetown, Del.	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	45.3	38.0	39.0	35.4	32.1
Dare	42.6	40.3+	38.7	40.9	38.9
D67-4066	37.2-	--	39.0	28.2	19.8-
D67-5679	38.3-	25.0-	35.7	34.2	33.3
D68-2488	44.1	32.6-	39.5	43.6	20.4-
D68-2601	48.2	32.0-	36.8	39.3	22.4-
D68-4516	39.7	34.2-	32.1-	30.8	34.5
D68-4641	44.0	37.4	39.7	38.0	31.0
D69-4157	37.7-	39.0	40.3	38.4	27.6
D69-4178	37.4-	31.2-	32.2-	35.1	36.9
D69-4227	39.2-	36.0-	36.5	37.6	27.5
D69-4251	42.8	26.6-	33.9-	36.3	31.7
D69-6255	39.6	32.4-	37.6	38.9	34.8
N68-184	45.0	39.4+	44.6+	36.8	13.4-
N68-225	46.5	43.5+	45.7+	45.4	18.3-
N68-360	46.7	38.6	43.5+	40.4	28.0
N68-2044	45.7	37.6	40.8	40.4	29.1
N69-332	50.5	38.2	46.5+	47.2+	36.6
N69-421	41.8	30.4-	41.4	45.6	33.0
N69-3011	42.8	39.0	38.0	48.6+	42.5+
N69-4054	42.7	27.2-	36.1	33.5	17.1-
R69-358	42.0	38.1	42.4	36.1	39.7
R69-362	41.2	37.4	35.8	36.3	38.8
R69-496	40.2	35.0-	39.8	33.4	37.6
R69-831	45.0	41.8+	38.9	40.4	43.1+
S67-80	45.2	42.3+	44.4+	38.7	29.1
S67-1515	31.6-	26.6-	30.8-	31.4	41.6+
S67-2336	36.3-	29.3-	37.5	34.7	36.0
UD65-7173	42.6	34.0-	36.4	40.9	34.3
UD66-9826	41.3	30.2-	34.7	39.7	29.3
UD67-18DE63	40.6	34.2-	33.0-	41.3	19.9-
V68-888	45.8	39.6+	45.5+	45.8	38.2
V68-920	53.1+	43.0+	46.0+	43.2	37.0
V68-925	46.0	40.3+	45.7+	40.0	37.7
V68-1026	47.0	42.4+	45.6+	43.6	39.5
V68-1034	49.3	42.4+	47.2+	48.1+	49.0+
L.S.D.(.05)	5.9	1.4	4.4	10.5	8.8
C.V.	7%	8%	5%	13%	13%

Table 25. - Oil percentages for the strains in Preliminary Group V, 1971

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	21.7	23.0	22.3	25.0
Dare	22.8	22.5	21.8	24.1
D67-4066	20.6	21.5	20.2	21.9
D67-5679	19.9	21.6	18.6	22.4
D68-2488	20.8	23.4	21.8	23.3
D68-2601	20.6	22.5	21.7	23.4
D68-4516	17.0	17.7	17.2	19.2
D68-4641	19.3	20.0	19.4	20.9
D69-4157	20.6	20.5	18.8	20.9
D69-4178	18.9	19.8	19.8	19.9
D69-4227	18.4	20.9	19.3	20.2
D69-4251	19.7	21.0	21.4	20.4
D69-6255	20.4	20.9	20.2	21.2
N68-184	21.6	22.5	20.7	23.3
N68-225	21.8	22.5	21.7	22.8
N68-360	20.9	21.3	20.8	22.8
N68-2044	21.9	22.0	21.4	23.3
N69-332	20.7	21.4	21.3	23.3
N69-421	21.6	22.6	22.8	22.8
N69-3011	22.1	22.5	21.9	24.3
N69-4054	21.4	22.3	21.7	22.8
R69-358	21.7	23.8	21.2	23.5
R69-362	20.9	21.9	21.7	23.1
R69-496	22.2	23.3	20.7	23.6
R69-831	21.4	21.1	21.2	23.0
S67-80	21.7	23.5	21.6	23.8
S67-1515	20.2	21.5	20.7	22.0
S67-2336	21.6	22.0	22.1	24.1
UD65-7173	22.4	24.3	21.8	24.8
UD66-9826	21.3	22.5	20.2	22.8
UD67-18DE63	18.6	19.9	21.3	20.4
V68-888	22.9	23.3	22.6	24.5
V68-920	20.8	22.3	21.1	23.0
V68-925	22.7	22.6	22.9	24.3
V68-1026	22.1	23.3	23.1	24.0
V68-1034	22.3	23.3	22.3	24.5

Table 26. - Protein percentages for the strains in Preliminary Group V, 1971

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	38.3	37.3	39.4	37.3
Dare	39.7	37.4	40.5	38.0
D67-4066	40.6	38.5	40.7	39.5
D67-5679	41.8	38.3	42.5	39.8
D68-2488	39.4	37.4	43.5	37.7
D68-2601	40.1	37.7	41.7	38.5
D68-4516	47.4	45.0	48.5	43.7
D68-4641	46.4	43.1	46.3	45.1
D69-4157	41.6	40.3	44.2	41.5
D69-4178	41.9	39.5	42.6	42.4
D69-4227	44.8	41.5	46.6	43.4
D69-4251	44.0	41.0	43.9	42.3
D69-6255	38.5	37.0	40.8	38.7
N68-184	39.6	38.5	41.8	40.9
N68-225	41.1	40.0	42.2	41.3
N68-360	41.2	39.7	43.0	39.8
N68-2044	39.5	38.1	41.6	39.2
N69-332	39.1	38.4	40.2	40.4
N69-421	39.8	38.1	39.3	40.2
N69-3011	38.1	36.7	42.2	37.2
N69-4054	38.7	37.8	41.9	38.8
R69-358	39.4	37.3	42.9	38.8
R69-362	40.4	37.6	41.9	39.5
R69-496	38.9	36.4	41.3	38.3
R69-831	37.7	36.9	40.2	37.7
S67-80	39.5	36.8	41.4	39.6
S67-1515	40.8	37.0	41.7	38.9
S67-2336	39.1	37.5	40.2	37.9
UD65-7173	40.2	39.0	41.7	38.8
UD66-9826	41.3	38.9	43.6	40.6
UD67-18DE63	43.4	42.0	45.9	42.2
V68-888	37.4	35.8	38.1	35.8
V68-920	38.9	37.4	41.0	38.3
V68-925	36.9	33.7	37.7	34.9
V68-1026	37.4	35.9	38.3	36.4
V68-1034	37.4	35.3	38.0	35.5

Table 27. - Plant height for the strains in Preliminary Group V, 1971

Strain	Georgetown, Del.	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	39	30	38	28	23
Dare	40	34	39	34	27
D67-4066	31	27	33	27	20
D67-5679	37	31	35	35	23
D68-2488	40	30	39	33	19
D68-2601	45	38	41	33	23
D68-4516	40	30	37	31	29
D68-4641	41	34	41	31	28
D69-4157	41	34	40	31	20
D69-4178	46	42	44	34	32
D69-4227	35	29	35	35	21
D69-4251	41	34	39	32	25
D69-6255	39	27	39	39	25
N68-184	34	25	35	36	17
N68-225	40	31	37	36	15
N68-360	40	28	39	32	22
N68-2044	43	33	41	34	26
N69-332	43	38	40	28	26
N69-421	38	30	36	33	21
N69-3011	38	32	40	31	27
N69-4054	36	29	40	26	23
R69-358	38	31	37	30	26
R69-362	39	34	40	36	23
R69-496	39	41	42	32	30
R69-831	45	40	43	35	33
S67-80	37	30	37	27	18
S67-1515	45	42	44	39	39
S67-2336	47	42	48	43	40
UD65-7173	42	44	47	38	38
UD66-9826	55	44	51	57	41
UD67-18DE63	40	34	36	32	19
V68-888	36	32	39	35	24
V68-920	39	34	36	32	17
V68-925	38	32	36	31	21
V68-1026	40	34	37	35	22
V68-1034	41	36	41	34	25

Table 28. - Seed quality scores for the strains in Preliminary Group V, 1971

Strain	Georgetown, Del.	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	2.0	2.0	3.0	3.0	2.0
Dare	2.0	2.0	2.2	2.8	2.0
D67-4066	3.0	2.0	2.0	5.0	2.0
D67-5679	2.3	3.0	2.1	2.8	2.0
D68-2488	3.5	3.0	4.0	2.8	2.0
D68-2601	2.5	2.0	3.7	3.5	2.0
D68-4516	2.0	2.0	1.7	3.5	2.0
D68-4641	3.0	2.0	2.5	5.0	2.0
D69-4157	3.0	2.0	1.9	3.0	2.0
D69-4178	2.8	2.0	2.2	3.0	2.0
D69-4227	2.5	2.0	3.8	2.5	2.0
D69-4251	2.3	2.0	3.8	2.8	2.5
D69-6255	3.0	2.0	3.2	3.5	2.0
N68-184	2.0	2.0	2.2	3.3	3.0
N68-225	2.5	2.0	1.6	3.0	2.5
N68-360	2.3	2.0	2.3	2.5	2.0
N68-2044	2.8	2.0	2.5	3.3	2.5
N69-332	2.5	2.0	2.2	3.0	2.5
N69-421	2.3	2.0	2.2	2.5	2.0
N69-3011	2.5	2.0	2.3	3.0	2.0
N69-4054	2.8	2.0	2.0	3.9	2.0
R69-358	2.3	2.0	1.8	4.0	2.0
R69-362	2.0	2.0	1.7	3.3	2.0
R69-496	3.0	2.0	2.3	3.0	2.0
R69-831	2.5	2.0	2.1	3.5	2.0
S67-80	2.0	2.0	2.6	3.5	2.5
S67-1515	3.3	2.0	2.3	3.5	2.0
S67-2336	2.5	2.0	2.1	3.8	2.5
UD65-7173	3.0	3.0	4.5	3.8	2.5
UD66-9826	3.0	3.0	3.5	4.5	3.0
UD67-18DE63	1.8	2.0	2.2	4.0	2.5
V68-888	2.0	2.0	2.1	3.0	2.0
V68-920	2.3	2.0	1.8	3.5	2.0
V68-925	2.3	2.0	1.3	2.3	2.0
V68-1026	2.3	2.0	2.0	3.0	2.0
V68-1034	3.0	2.0	1.6	3.3	2.0

UNIFORM GROUP VI

1971

	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.	D67-3951	D63-6107 x D60-9647	F_5
6.	D67-4601	D61-618 x D60-9647	F_5
7.	D68-180	Dyer x Bragg	F_5
8.	D69-8178	Hood x Semmes	F_6
9.	N68-358	Dare x N60-5234	F_4
10.	R67-141	R56-49 x Davis	F_5
11.	R68-208	Davis x Lee 68	F_5
12.	V67-447	S5-7075 x Hill	

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.

D63-6107 is a phytophthora-rot-resistant selection from Hill(4) x PI 171,442.

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

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

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.

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 - Roanoke x N45-745.

Thirty-one Uniform Group VI nurseries were planted. Results from 29 nurseries are summarized in Table 29 through 35. Table 29 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 26 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 region.

The 3-year mean for Pickett 71 is similar to the mean yield for Lee 68 in the East Coast and Delta regions; slightly higher in the Southeast and Upper and Central regions; and slightly lower in the West.

D67-3951 and D67-4601 have been grown two years. D67-3951, one of the earliest maturing strains, has not yielded as well as D64-4636. D67-4601 has yielded well in all tests. It has demonstrated a higher level of tolerance to the herbicide 2,4-DB than varieties now in production in studies at Stoneville.

Six strains, D68-180, D69-8178, D68-358, R68-508, and V67-447, have been included in this group only one year. D68-180 has good resistance to root-knot and cyst nematodes. Although somewhat later in maturity than D68-128, its general performance has not been as good. Stems tend to be rather heavy. D69-8178 yilelded well but proved more susceptible to shattering than was apparent in earlier tests. D69-8201 and 8205, which were grown in Preliminary Group VI, are of the same parentage and appear to have greater shatter resistance. At a few locations, such as Tifton, Baton Rouge, Crowley, and Lubbock, the seed yield for D69-8178 was quite outstanding. N68-358 was among the earlier maturing strains. R67-141 was of similar maturity but included a mixture of earlier maturing types. R68-208 was slightly later in maturity than R67-141 but gave somewhat better performance. V67-447 was 5 days earlier than N64-4636. It was weak in seed holding and not too outstanding in yield.

Root-knot ratings were made in a special planting in west Florida. Frogeye ratings were made in this same planting.

Table 29. - General summary of the performance for the strains in Uniform Group VI, 1971

	Lee 68	Davis	D64-4636	Pickett 71	D67-3951	D67-4601
Seed Yield - 1971						
East Coast	32.1	36.7+	34.9	31.8	31.5	37.9+
Southeast	39.9	44.6	41.0	43.9	36.6	41.9
Upper & Central South	40.4	41.4	43.7	45.7	42.5	47.7
Delta	34.4	38.4	39.4+	37.1	33.6	38.6+
West	39.9	46.3+	47.3+	38.3	43.8	44.5
- 1970-71						
East Coast	33.5	36.7	36.8	34.2	34.2	37.2
Southeast	41.0	46.8	39.4	43.6	36.3	41.1
Upper & Central South	39.4	41.0	44.0	44.2	41.1	42.4
Delta	33.2	36.6	38.5	34.4	33.2	36.7
West	37.1	42.3	42.1	35.8	39.7	40.7
- 1969-71						
East Coast	35.3	37.8	38.8	35.2		
Southeast	39.2	44.1	38.5	41.9		
Upper & Central South	39.0	40.7	43.4	42.6		
Delta	34.4	37.2	39.5	34.5		
West	36.1	39.9	38.1	34.1		
Oil Content - 1971	21.9	22.1	21.7	21.7	19.9-	20.2-
- 1970-71	21.7	22.1	21.6	21.6	19.1	20.0
- 1969-71	21.7	22.1	21.6	21.6		
Portein Content - 1971	41.4	40.4-	40.7-	40.3-	43.3+	43.5+
- 1970-71	41.6	40.4	40.9	40.7	43.5	43.9
- 1969-71	41.6	40.3	40.9	40.7		
Seed size	41.4	15.6+	14.7	13.5-	16.8+	17.7+
Maturity index	10-19	-1	-4	0	-6	-2
Height	30	36	28	30	27	35
Shatter resistance	1.0	2.3	1.0	1.0	1.0	1.0
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Root-knot	5.0	5.0	2.0	4.5	5.0	4.5
Cyst nematode	S	S	S	R	S	S
Frogeye	1.0	1.0	2.0	1.0	2.0	2.0
Target spot	1.0	1.0	2.0	2.0	1.0	1.0
Flower color	P	W	W	P	W	W
Pubescence color	T	G	G	G	T	T
Pod wall color	T	T	T	T	T	T

Table 29. - (continued)

	D68-180	D69-8178	N68-358	R67-141	R68-208	V67-447
Seed Yield - 1971						
East Coast	33.5	36.0	36.8+	37.1+	37.3+	32.3
Southeast	34.5-	45.2+	40.7	42.9	41.8	36.0
Upper & Central South	43.2	42.9	43.0	41.5	43.0	40.1
Delta	31.7	37.3	35.8	37.2	37.5	34.1
West	40.2	48.7+	46.0+	47.1+	49.5+	45.1+
- 1970-71						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
- 1969-71						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1971	22.0	21.6	21.8	22.9+	22.3+	21.8
- 1970-71						
- 1969-71						
Protein Content - 1971	40.9	41.5	40.7-	39.4-	42.4+	40.7-
- 1970-71						
- 1969-71						
Seed size	18.9+	18.5+	13.9	15.4+	16.9+	15.3+
Maturity index	-4	-5	-4	-4	-2	-11
Height	32	30	34	33	30	27
Shatter resistance	2.0	3.5	1.0	1.0	1.6	3.3
Phytophthora rot	2.0	1.0	1.0	1.0	1.0	1.0
Root-knot	2.0	4.5	3.5	4.5	4.5	3.0
Cyst nematode	R	S	S	S	S	S
Frogeye	3.0	1.0	5.0	1.0	1.0	3.0
Target spot	2.0	1.0	2.0	1.0	1.0	1.0
Flower color	P	P	P	W	P	P
Pubescence color	T	G	G	T	G	G
Pod wall color	T	T	T	T	T	T

Table 30. - Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1971

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-3951	D67-4601	D68-180
			East Coast				
Warsaw, Va.	34.3	34.0	37.8	33.6	38.6+	41.0+	36.6
Petersburg, Va.	32.0	34.2	33.9	26.4	31.0	37.3+	37.9+
Holland, Va.	33.7	34.8	28.3-	33.2	30.7	30.6	32.4
Plymouth, N.C.	31.4	32.6	38.8+	27.2	27.8	43.7+	32.0
Clinton, N.C.	25.0	35.7+	34.7+	28.4	20.9	33.0	27.0
Clayton, N.C.	23.8	29.1	29.6	27.4	29.0	28.3	32.3+
Florence, S.C.	44.8	56.4+	41.2	46.5	42.4	51.6+	36.3-
Mean	32.1	36.7+	34.9	31.8	31.5	37.9+	33.5
			Southeast				
Tifton, Ga.	42.9	53.6+	45.3	48.4	45.2	47.5	39.2
Quincy, Fla.	23.1	34.8+	28.9+	32.6+	16.6-	26.1	22.3
Jay, Fla.	50.9	44.1	47.4	51.7	40.3	44.1	43.4
Fairhope, Ala.	46.3	47.1	44.0	46.7	41.7	50.6	37.1-
Baton Rouge, La.	36.3	43.4+	39.4	39.8	39.2	41.1	30.7
Mean	39.9	44.6	41.0	43.9	36.6	41.9	34.5-
			Upper and Central South				
Belle Mina, Ala.	45.3	43.0	51.3	44.2	46.6	53.4	46.4
Experiment, Ga.	56.8	56.1	56.7	61.5	56.1	52.2	53.2
Jackson, Tenn.	41.0	37.8	44.6	47.6+	45.2	51.1+	47.7+
Verona, Miss.	17.2	28.5+	22.3	29.6+	22.0	34.1+	25.5+
Mean	40.4	41.4	43.7	45.7	42.5	47.7	43.2
			Delta				
Portageville, Mo.(A)	31.7	31.3	27.9	37.1	29.5	37.1	36.3
Portageville, Mo.(B)	30.6	26.8	29.6	29.5	27.3	31.1	28.4
Keiser, Ark.	31.3	39.7+	41.5+	35.4	38.9+	40.7+	28.6
Marianna, Ark.	33.9	35.7	37.4	32.6	23.9-	37.9	28.7
Stoneville, Miss.(A)	43.2	45.2	45.7	45.7	42.8	43.3	39.0
Stoneville, Miss.(B)	32.6	42.2+	43.7+	33.8	29.7	37.1	21.9-
St. Joseph, La.	37.0	48.0+	50.2+	46.0+	43.0+	43.2+	39.2
Mean	34.4	38.4	39.4+	37.1	33.6	38.6+	31.7
			West				
Stuttgart, Ark.	42.6	51.4+	55.7+	45.1	46.3	52.4+	43.3
Curtis, La.	26.5	39.0+	42.2+	25.4	33.3	34.0	33.4
Crowley, La.	39.0	46.0+	50.3+	36.7	36.9	49.9+	33.9-
Bixby, Okla.	50.3	54.3	45.4	43.3	43.1	47.7	44.7
Halfway, Texas	34.2	34.6	36.4	34.3	48.3+	35.3	38.4
Lubbock, Texas	46.6	52.7+	53.7+	45.0	54.7	47.9	47.2
Mean	39.9	46.3+	47.3+	38.3	43.8	44.5	40.2

(+) - 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 30. - (continued)

Location	D69-8178	N68-358	R67-141	R68-208	V67-447	L.S.D. (.05)	C.V.
			East Coast				
Warsaw, Va.	43.1+	35.4	38.7+	40.0+	40.4+	4.0	6%
Petersburg, Va.	35.9	35.7	35.2	34.4	38.8+	4.2	7%
Holland, Va.	35.8	33.3	38.6	37.8	29.2	5.1	9%
Plymouth, N. C.	32.4	35.8	32.3	41.5+	33.0	5.0	9%
Clinton, N. C.	31.8	35.2+	38.7+	30.7	21.9	8.6	17%
Clayton, N.C.	27.3	33.9+	32.5+	23.4	22.0	6.7	14%
Florence, S.C.	45.8	48.4	43.6	53.0+	40.4	5.8	7%
Mean	36.0	36.8+	37.1+	37.3+	32.3	4.2	
			Southeast				
Tifton, Ga.	57.0+	51.2+	56.5+	49.4	43.7	6.8	7%
Quincy, Fla.	27.1	25.2	30.7+	26.0	17.1-	4.8	11%
Jay, Fla.	46.4	45.9	49.9	47.7	44.1	N.S.	9%
Fairhope, Ala.	44.4	48.3	45.0	47.1	36.0-	6.0	8%
Baton Rouge, La.	51.2+	32.7	32.2	38.8	39.0	5.3	8%
Mean	45.2+	40.7	42.9	41.8	36.0	5.0	
			Upper and Central South				
Belle Mina, Ala.	48.4	45.3	45.2	49.7	--	N.S.	10%
Experiment, Ga.	58.3	63.5	55.9	62.7	49.6	7.6	8%
Jackson, Tenn.	43.6	41.7	40.9	40.6	46.7	6.3	8%
Verona, Miss.	21.5	21.7	24.2+	19.2	16.7	6.6	17%
Mean	42.9	43.0	41.5	43.0	40.1	N.S.	
			Delta				
Portageville, Mo.(A)	28.9	29.7	32.7	35.0	39.0	9.7	17%
Portageville, Mo.(B)	29.8	25.9	28.4	29.7	23.8-	5.5	12%
Keiser, Ark.	36.7	33.8	35.8	42.1+	27.6	6.9	11%
Marianna, Ark.	32.3	36.7	37.8	38.8	33.6	6.2	11%
Stoneville, Miss.(A)	45.1	43.6	44.9	43.8	45.1	N.S.	13%
Stoneville, Miss.(B)	38.8	33.0	32.4	31.1	20.9-	9.4	17%
St. Joseph, La.	49.4+	47.6+	48.5+	42.2	48.8+	5.3	7%
Mean	37.3	35.8	37.2	37.5	34.1	4.2	
			West				
Stuttgart, Ark.	52.0+	55.6+	47.9+	51.5+	42.9	4.2	5%
Curtis, La.	40.2+	35.9	42.6+	43.1+	37.2+	10.4	17%
Crowley, La.	55.5+	41.2	46.0+	46.8+	48.4+	4.9	7%
Bixby, Okla.	49.5	48.1	48.4	57.1	47.3	7.3	9%
Halfway, Texas	38.0	45.3+	41.9+	45.7+	44.3+	7.1	11%
Lubbock, Texas	57.0+	49.8	55.8+	52.8+	50.7	5.3	6%
Mean	48.7+	46.0+	47.1+	49.5+	45.1+	4.7	

Table 31. - Chemical composition and seed size for the strains in Uniform Group VI, 1971

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-3951	D67-4601	D68-180
			Oil Percentage				
Warsaw, Va.	22.8	21.9	22.8	22.1	20.1	20.3	21.8
Clinton, N.C.	20.8	20.7	20.8	20.4	18.6	18.6	20.4
Clayton, N.C.	22.1	22.4	22.7	23.1	19.6	20.7	22.8
Jay Fla.	21.9	22.4	21.4	21.9	20.4	21.4	23.1
Jackson, Tenn.	21.0	22.0	21.5	20.7	20.7	20.0	22.0
Portageville, Mo.(A)	21.0	20.8	20.3	20.8	19.0	19.8	21.6
Keiser, Ark.	22.8	23.1	22.6	22.3	22.5	20.5	22.8
Stoneville, Miss.(A)	23.9	23.9	22.7	23.9	20.0	21.0	22.9
Stuttgart, Ark.	20.6	21.3	20.6	20.3	18.2	19.3	21.0
Mean	21.9	22.1	21.7	21.7	19.9-	20.2-	22.0
			Protein Percentage				
Warsaw, Va.	38.0	38.3	36.3	36.4	40.2	41.1	38.9
Clinton, N.C.	42.7	42.5	42.8	42.8	44.8	45.2	41.7
Clayton, N.C.	42.4	42.2	40.6	41.0	46.2	44.2	41.1
Jay, Fla.	41.5	39.8	42.1	40.3	42.6	43.0	41.5
Jackson, Tenn.	41.2	40.6	40.8	41.1	43.6	43.3	42.0
Portageville, Mo.(A)	42.8	42.1	41.8	40.4	43.1	43.5	41.3
Keiser, Ark.	38.8	37.3	38.5	37.4	40.3	41.7	36.8
Stoneville, Miss.(A)	39.7	37.7	40.1	38.6	42.3	42.7	40.6
Stuttgart, Ark.	45.9	42.8	43.2	44.7	46.3	47.0	44.2
Mean	41.4	40.4-	40.7-	40.3-	43.3+	43.5+	40.9
			Grams per 100 Seeds				
Warsaw, Va.	14.2	14.9	13.7	13.8	17.2	18.7	18.6
Clinton, N.C.	12.9	14.7	14.3	11.9	15.0	16.0	16.9
Clayton, N.C.	13.8	15.7	13.6	12.6	18.2	17.0	17.3
Experiment Ga.	16.0	18.3	16.9	16.9	19.8	20.2	22.7
Jay, Fla.	15.8	16.6	16.0	14.4	16.6	18.9	21.3
Jackson, Tenn.	14.0	15.5	15.8	12.7	18.6	19.2	20.2
Portageville, Mo.(A)	15.7	16.7	15.7	15.3	17.0	18.0	20.0
Keiser, Ark.	12.3	13.7	11.7	11.3	14.3	15.3	14.0
Stoneville, Miss.(A)	13.5	13.5	13.6	12.5	15.0	15.2	19.1
Stuttgart, Ark.	15.3	16.0	15.3	13.3	16.7	18.0	19.0
Mean	14.4	15.6+	14.7	13.5-	16.8+	17.7+	18.9+

Table 31. - (continued)

Location	D69-8178	N68-358	R67-141	R68-208	V67-447	L.S.D. (.05)
			Oil Percentage			
Warsaw, Va.	21.3	22.3	23.1	22.1	22.3	
Clinton, N.C.	20.2	20.4	21.7	20.7	20.4	
Clayton, N.C.	22.7	21.9	24.1	22.9	22.6	
Jay, Fla.	21.9	22.4	23.1	23.1	22.5	
Jackson, Tenn.	21.0	21.3	22.3	21.6	21.2	
Portageville, Mo.(A)	21.3	21.0	22.0	21.5	20.7	
Keiser, Ark.	22.8	23.0	23.8	23.3	22.3	
Stoneville, Miss.(A)	23.2	23.0	24.0	24.0	22.9	
Sutttgart, Ark.	20.3	20.9	21.7	21.4	21.4	
Mean	21.6	21.8	22.9+	22.3+	21.8	0.4
			Protein Percentage			
Warsaw, Va.	39.7	39.1	37.3	40.3	37.1	
Clinton, N.C.	43.5	41.6	41.3	45.1	43.6	
Clayton, N.C.	42.7	41.7	40.4	44.5	43.2	
Jay, Fla.	41.1	40.4	40.1	41.5	41.5	
Jackson, Tenn.	41.9	42.3	38.7	43.2	40.7	
Portageville, Mo.(A)	41.7	41.2	40.4	41.8	40.7	
Keiser, Ark.	38.1	37.2	36.0	39.3	38.2	
Stoneville, Miss.(A)	40.7	39.5	38.6	40.8	38.2	
Stuttgart, Ark.	44.1	43.3	41.5	44.9	42.9	
Mean	41.5	40.7-	39.4-	42.4+	40.7-	0.7
			Grams per 100 Seeds			
Warsaw, Va.	19.3	13.4	15.0	16.5	15.5	
Clinton, N.C.	18.0	12.7	14.5	16.4	14.7	
Clayton, N.C.	16.4	13.6	13.2	14.6	12.6	
Experiment, Ga.	21.7	17.4	19.6	20.3	18.6	
Jay, Fla.	21.2	15.4	16.9	18.5	17.2	
Jackson, Tenn.	19.1	14.6	15.0	16.9	16.4	
Portageville, Mo.(A)	17.6	15.0	15.7	16.3	16.3	
Keiser, Ark.	15.3	10.3	12.0	15.3	12.0	
Stoneville, Miss.(A)	16.7	12.3	15.1	15.6	14.4	
Sutttgart, Ark.	19.3	14.7	17.3	18.3	15.3	
Mean	18.5+	13.9	15.4+	16.9+	15.3+	0.8

Table 32. - Relative maturity data, days earlier (-) or later (+) than Lee 68, for the srains in Uniform Group VI, 1971

Location	Date planted	Lee 68 matured	Davis	D64-4636	Pickett 71	D67-3951	D67-4601
			East Coast				
Warsaw, Va.	5-25	10-28	+3	-5	+1	-7	-4
Petersburg, Va.	5-24	10-17	+2	-4	+6	-2	0
Holland, Va.	6-3	11-9	0	-9	-6	-9	-6
Plymouth, N.C.	5-10	10-22	+3	-2	0	-8	0
Clayton, N.C.	5-4	10-20	+2	-12	0	-6	0
Florence, S.C.	5-14	11-3	-2	-16	-7	-16	-6
Mean		10-27	+1	-8	-1	-8	-3
			Southeast				
Tifton, Ga.	5-5	10-5	+3	-6	0	-7	0
Quincy, Fla.	6-24	10-7	+2	-4	+2	+6	+5
Jay, Fla.	5-14	10-9	-4	-14	-2	-14	-6
Fairhope, Ala.	6-9	10-8	+2	+4	+7	+4	+2
Baton Rouge, La.	5-18	10-24	-8	-15	-5	-16	-8
Mean		10-11	-1	-7	0	-5	-1
			Upper and Central South				
Experiment, Ga.	5-9	10-16	-2	-13	+1	-13	-8
Jackson, Tenn.	5-6	10-17	0	-11	0	-4	-2
Verona, Miss.		10-18	0	-2	+1	-6	+4
Mean		10-17	-1	-9	+1	-8	-2
			Delta				
Portageville, Mo.(A)	5-28	10-20	+4	-6	0	-2	0
Portageville, Mo.(B)	6-8	10-21	+1	-6	+1	-3	-2
Keiser, Ark.	5-27	10-26	-5	-13	+2	-13	-6
Marianna, Ark.	6-14	10-24	+2	-11	+1	-3	0
Stoneville, Miss.(A)	5-17	10-13	-2	-12	0	-8	-2
Stoneville, Miss.(B)	5-27	10-19	+1	-10	0	-7	-5
St. Joseph, La.	5-18	10-8	-3	-7	0	-3	-4
Mean		10-19	0	-9	+1	-6	-3
			West				
Stuttgart, Ark.	5-20	10-20	-1	-8	-1	-8	-3
Curtis, La.	5-20	10-13	-7	-6	-3	-8	-9
Crowley, La.	5-18	10-14	-7	-13	0	-10	-2
Bixby, Okla.	5-21	10-28	-9	-7	+1	-8	+1
Lubbock, Texas [1]	5-14	10-23	+4	-1	-1	-10	-8
Mean		10-19	-6	-9	-1	-9	-3

[1]Not included in mean.

Table 32. - (continued)

Location	D68-180	D69-8178	N68-358	R67-141	R68-208	V67-447
			East Coast			
Warsaw, Va.	+2	-1	-3	-1	+2	-5
Petersburg, Va.	-1	-2	-1	0	0	-9
Holland, Va.	0	-4	-6	-6	-4	-16
Plymouth, N.C.	0	-2	-2	-4	-2	-8
Clayton, N.C.	-6	-10	-2	-2	-6	-16
Florence, S.C.	-12	-14	-16	-5	-6	-16
Mean	-3	-6	-5	-3	-3	-12
			Southeast			
Tifton, Ga.	+11	+24	0	+11	+1	-9
Quincy, Fla.	+5	-6	-4	+3	+5	-6
Jay, Fla.	0	-7	-2	0	-2	-18
Fairhope, Ala.	+10	+2	+4	+4	+7	+2
Baton Rouge, La.	-5	-16	-6	-5	-9	+4
Mean	+4	-1	-2	-3	0	-5
			Upper and Central South			
Experiment, Ga.	-6	-10	-2	-6	-6	-13
Jackson, Tenn.	-2	-4	-2	-2	-3	-13
Verona, Miss.	-1	-6	-4	0	-6	-20
Mean	-3	-7	-3	-3	-5	-15
			Delta			
Portageville, Mo.(A)	-1	-4	0	-3	-2	-5
Portageville, Mo.(B)	-2	-6	-3	-3	-1	-10
Keiser, Ark.	-9	-9	-7	-5	+1	-19
Marianna, Ark.	-2	-5	-2	+2	0	-9
Stoneville, Miss.(A)	-3	-8	-1	-3	-3	-13
Stoneville, Miss.(B)	-2	-5	-2	+1	+1	-11
St. Joseph, La.	-4	0	0	-3	-3	-9
Mean	-3	-5	-2	-2	-1	-11
			West			
Stuttgart, Ark.	-5	-7	-4	+1	-3	-13
Curtis, La.	-9	-14	-11	-14	-5	-17
Crowley, La.	-3	-13	-13	-13	-5	-15
Bixby, Okla.	-7	-5	0	-9	+3	-2
Lubbock, Texas[1]	+4	0	-1	+1	+3	-8
Mean	-6	-10	-7	-9	-3	-12

Table 33. - Plant height for the strains in Uniform Group VI, 1971

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-3951	D67-4601
			East Coast			
Warsaw, Va.	40	47	34	38	35	42
Petersburg, Va.	25	30	19	24	20	25
Holland, Va.	42	41	38	38	35	49
Plymouth, N.C.	36	43	34	37	29	40
Clinton, N.C.	23	26	20	22	17	25
Clayton, N.C.	26	36	27	30	29	33
Florence, S.C.	37	44	38	34	36	42
Mean	33	38	30	32	29	37
			Southeast			
Tifton, Ga.	20	35	22	26	19	30
Quincy, Fla.	22	24	20	22	17	23
Jay, Fla.	31	38	27	30	24	32
Fairhope, Ala.	29	35	23	31	19	31
Baton Rouge, La.	30	34	30	30	27	34
Mean	26	33	24	28	21	30
			Upper and Central South			
Belle Mina, Ala.	35	40	29	33	29	40
Experiment, Ga.	36	40	33	35	29	39
Jackson, Tenn.	46	54	42	43	39	53
Verona, Miss.	22	29	25	22	19	35
Mean	35	41	32	33	29	42
			Delta			
Portageville, Mo.(A)	36	38	32	34	31	36
Portageville, Mo.(B)	35	36	31	33	32	37
Keiser, Ark.	28	35	30	25	30	32
Marianna, Ark.	36	42	33	34	30	41
Stoneville, Miss.(A)	29	39	26	30	28	41
Stoneville, Miss.(B)	20	29	23	20	19	29
St. Joseph, La.	24	28	17	24	20	17
Mean	30	35	27	29	27	33
			West			
Stuttgart, Ark.	30	37	28	28	27	39
Curtis, La.	30	30	25	27	28	39
Crowley, La.	24	33	20	21	20	32
Bixby, Okla.	36	30	32	42	31	40
Lubbock, Texas[1]	25	31	24	26	24	30
Mean	30	33	26	30	27	38

1.. . included in mean.

Table 33. - (continued)

Location	D68-180	D69-8178	N68-358	R67-141	R68-208	V67-447
			East Coast			
Warsaw, Va.	39	40	41	41	38	37
Petersburg, Va.	23	22	25	23	22	20
Holland, Va.	40	41	41	42	41	41
Plymouth, N.C.	33	35	38	40	39	35
Clinton, N.C.	23	21	23	25	23	19
Clayton, N.C.	31	27	32	--	25	27
Florence, S.C.	40	35	37	37	36	34
Mean	33	32	34	35	32	30
			Southeast			
Tifton, Ga.	29	25	31	33	26	22
Quincy, Fla.	22	20	23	22	18	18
Jay, Fla.	32	34	34	32	31	27
Fairhope, Ala.	24	20	29	28	24	21
Baton Rouge, La.	32	31	32	29	30	27
Mean	28	26	30	29	26	23
			Upper and Central South			
Belle Mina, Ala.	36	32	39	37	35	27
Experiment, Ga.	38	35	41	38	34	35
Jackson, Tenn.	51	45	51	53	45	38
Verona, Miss.	27	18	26	23	19	19
Mean	41	33	39	38	33	30
			Delta			
Portageville, Mo.(A)	34	33	38	34	32	33
Portageville, Mo.(B)	32	32	36	33	32	29
Keiser, Ark.	31	27	34	32	29	29
Marianna, Ark.	36	36	36	37	35	34
Stoneville, Miss.(A)	32	31	34	32	29	26
Stoneville, Miss.(B)	21	22	23	26	18	18
St. Joseph, La.	28	20	28	26	18	19
Mean	31	29	33	31	28	27
			West			
Stuttgart, Ark.	27	30	35	33	28	24
Curtis, La.	29	25	30	26	31	19
Crowley, La.	24	27	36	30	25	26
Bixby, Okla.	29	42	42	33	34	36
Lubbock, Texas[1]	27	31	31	27	27	23
Mean	27	31	36	31	30	26

Table 34. - Lodging scores for the strains in Uniform Group VI, 1971

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-3951	D67-4601
			East Coast			
Warsaw, Va.	3.3	3.1	2.1	2.9	2.2	3.0
Petersburg, Va.	1.3	2.0	1.0	1.3	1.0	2.7
Holland, Va.	4.0	3.5	3.0	4.0	3.8	3.0
Plymouth, N.C.	3.7	3.0	3.0	3.0	3.0	3.0
Clinton, N.C.	3.0	2.7	1.7	2.7	1.7	3.0
Clayton, N.C.	2.3	3.0	2.0	3.0	2.0	3.0
Florence, S.C.	3.0	4.0	4.0	3.0	3.0	2.0
			Southeast			
Tifton, Ga.	1.3	3.0	1.0	2.0	1.0	1.7
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.	1.8	2.2	2.5	3.5	2.3	3.6
			Upper and Central South			
Belle Mina, Ala.	2.0	2.0	1.0	2.0	1.0	2.0
Experiment, Ga.	2.0	3.7	1.7	1.7	1.0	2.3
Jackson, Tenn.	3.0	3.0	1.0	3.0	3.0	3.0
			Delta			
Portageville, Mo.(A)	3.2	2.5	1.5	3.2	2.3	3.2
Portageville, Mo.(B)	2.8	1.8	1.7	3.2	2.3	2.8
Keiser, Ark.	3.0	1.0	1.3	2.0	2.3	3.3
Marianna, Ark.	4.0	3.7	3.0	4.0	3.0	4.0
Stoneville, Miss.(A)	3.0	3.0	2.0	3.0	2.7	3.0
Stoneville, Miss.(B)	2.0	2.0	1.7	2.0	2.0	2.0
St. Joseph, La.	2.0	2.0	2.0	2.0	2.0	3.0
			West			
Stuttgart, Ark.	2.8	1.5	1.2	2.8	2.8	2.5
Curtis, La.	1.0	1.5	1.3	1.5	1.2	1.5
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	2.3	2.0	3.0	3.0	3.7	2.0
Lubbock, Texas	4.0	2.5	2.5	3.5	2.5	3.5

Table 34. - (continued)

Location	D68-180	D69-8178	N68-358	R67-141	R68-208	V67-447
			East Coast			
Warsaw, Va.	2.7	1.9	2.7	2.1	1.9	1.9
Petersburg, Va.	1.0	1.0	1.7	1.0	1.0	1.0
Holland, Va.	3.5	2.3	2.8	2.5	2.2	2.5
Plymouth, N.C.	3.3	3.0	3.0	3.0	2.3	2.7
Clinton, N.C.	2.7	1.3	2.3	2.3	1.7	1.3
Clayton, N.C.	3.0	2.0	2.3	2.7	2.0	2.0
Florence, S.C.	3.0	3.0	4.0	2.0	2.0	3.0
			Southeast			
Tifton, Ga.	1.3	1.0	1.7	2.0	1.0	1.0
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.	4.6	1.6	2.0	2.5	1.5	1.0
			Upper and Central South			
Belle Mina, Ala.	2.0	2.0	2.0	2.0	1.7	1.0
Experiment, Ga.	1.3	1.3	1.7	2.0	1.3	1.3
Jackson, Tenn.	3.0	1.0	2.0	1.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	2.8	1.3	2.3	1.7	1.7	1.5
Portageville, Mo.(B)	2.0	1.7	1.7	1.7	1.5	1.5
Keiser, Ark.	2.0	1.0	2.0	1.3	1.0	1.0
Marianna, Ark.	4.0	2.3	3.0	2.7	2.7	3.0
Stoneville, Miss.(A)	3.0	2.0	3.0	2.3	2.0	1.3
Stoneville, Miss.(B)	1.3	1.3	1.7	1.7	2.0	1.3
St. Joseph, La.	3.0	2.0	2.0	2.0	1.0	2.0
			West			
Stuttgart, Ark.	1.2	1.0	1.3	1.2	1.0	1.0
Curtis, La.	1.2	1.2	1.0	1.0	1.2	1.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	4.7	2.7	3.3	2.3	1.7	3.0
Lubbock, Texas	3.0	2.0	2.5	2.5	2.5	2.5

Table 35. - Seed quality scores for the strains in Uniform Group VI, 1971

Location	Lee 68	Davis	D64-4636	Pickett 71	D67-3951	D67-4601
			East Coast			
Warsaw, Va.	3.2	3.0	1.8	3.0	2.8	2.2
Petersburg, Va.	1.0	1.0	2.0	2.0	1.0	1.0
Holland, Va.	3.2	2.5	3.2	3.0	3.7	3.5
Plymouth, N.C.	4.0	4.0	4.0	4.0	3.5	3.0
Clinton, N.C.	1.0	1.0	1.5	1.5	2.0	1.5
Clayton, N.C.	3.0	3.5	3.5	3.0	3.5	3.5
			Southeast			
Tifton, Ga.	2.2	2.5	2.5	2.3	3.0	3.0
Quincy, Fla.	3.3	2.3	3.3	2.7	5.0	4.3
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	2.7	1.5	2.5	2.0
Baton Rouge, La.	2.0	2.1	2.4	1.9	2.0	2.1
			Upper and Central South			
Experiment, Ga.	3.3	3.3	3.7	2.3	2.0	2.7
Jackson, Tenn.	2.0	2.0	2.0	2.0	4.0	2.0
			Delta			
Portageville, Mo.(A)	2.8	2.7	3.2	2.7	3.3	2.7
Portageville, Mo.(B)	2.5	2.7	2.5	2.0	3.2	3.0
Keiser, Ark.	2.3	2.7	3.2	2.5	3.5	2.8
Marianna, Ark.	2.7	2.5	2.5	2.7	3.2	3.0
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.3	2.0	2.0	2.7	2.0	2.0
St. Joseph, La.	2.1	1.5	2.0	1.5	2.4	2.1
			West			
Stuttgart, Ark.	1.7	1.8	2.3	1.7	2.5	3.0
Curtis, La.	1.7	2.0	1.3	1.9	1.5	2.3
Bixby, Okla.	1.0	1.0	1.0	1.7	1.7	1.3
Lubbock, Texas	2.0	1.0	2.0	1.0	2.0	2.0

Table 35. - (continued)

Location	D68-180	D69-8178	N68-358	R67-141	R68-208	V67-447
			East Coast			
Warsaw, Va.	2.3	2.0	2.5	2.3	2.4	2.1
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	2.0
Holland, Va.	3.3	3.2	2.7	3.5	2.5	3.5
Plymouth, N.C.	3.5	4.0	3.5	4.5	3.5	4.0
Clinton, N.C.	1.5	1.5	1.5	1.5	1.0	2.0
Clayton, N.C.	3.5	4.0	3.0	4.0	3.5	4.0
			Southeast			
Tifton, Ga.	3.5	2.8	2.7	3.0	2.3	2.7
Quincy, Fla.	4.7	3.0	4.3	2.0	2.0	2.7
Jay, Fla.	1.0	2.0	1.0	1.0	2.0	3.0
Fairhope, Ala.	2.0	2.0	2.0	1.0	1.0	1.0
Baton Rouge, La.	3.0	1.8	2.7	3.0	2.2	2.2
			Upper and Central South			
Experiment, Ga.	2.3	3.0	3.7	3.3	2.7	4.0
Jackson, Tenn.	4.0	3.0	3.0	2.0	2.0	3.0
			Delta			
Portageville, Mo.(A)	3.3	3.0	2.3	2.5	2.5	3.0
Portageville, Mo.(B)	3.8	2.8	1.8	2.2	1.8	2.2
Keiser, Ark.	3.5	3.5	2.3	2.8	2.3	3.0
Marianna, Ark.	3.3	3.0	2.8	2.5	2.2	3.0
Stoneville, Miss.(A)	2.7	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.7	2.0	2.0	2.3	2.3	2.0
St. Joseph, La.	3.0	2.1	2.1	2.2	2.2	2.0
			West			
Stuttgart, Ark.	3.0	2.7	1.7	2.2	1.7	2.8
Curtis, La.	2.5	2.0	1.3	2.1	2.0	1.5
Bixby, Okla.	1.7	1.3	1.0	1.0	1.0	2.0
Lubbock, Texas	1.5	1.5	1.0	1.5	1.0	2.5

PRELIMINARY GROUP VI

1971

Preliminary Group VI nurseries, including 34 experimental strains and the two checks Lee 68 and D64-4636, were grown at seven locations. The parentage of these strains is reported in Table 36. Performance data are summarized in Tables 37 through 42. The plantings at Plymouth were not harvested, because of a prolonged period of adverse weather which resulted in severely damaged seed. Differences among strains for seed yield were significant at the 5% level of confidence at five locations. The combined analysis of variance for seed yield also showed differences to be significant.

All but three strains were earlier maturing than Lee 68. Five strains had average seed yields significantly greater than for Lee 68, D69-8201, D69-8205, R69-186, R69-1151, and R69-1231. D69-8201 and D69-8205 have been selected to combine resistance to phytophthora rot, pythium, and soybean mosaic virus. Both strains have better shatter resistance than D69-8178 which was the top yielding strain in last year's Preliminary VI nursery.

D69-6344 showed no evidence of root-knot injury in the west Florida nematode nursery. It has also demonstrated a high level of resistance to other strains of root-knot nematodes which have given injury to Bragg. D69-6344 is also resistant to phytophthora rot. D69-6379 also has good resistance to root-knot nematodes.

Table 36. - Parentage of the strains in Preliminary Group VI, 1971

	Variety or strain	Parentage	Generation composited
1.	Lee 68		
2.	D64-4636		
3.	D68-5302	Semmes x D61-2694	F_5
4.	D68-9295	Pine Dell Perfection x Hill	F_8
5.	D69-5013	D63-6094 x Semmes	F_5
6.	D69-5065	D63-6094 x Semmes	F_5
7.	D69-5261	D63-6094 x Semmes	F_5
8.	D69-5305	D63-6094 x D62-7816	F_5
9.	D69-5331	D63-6094 x D62-7816	F_5
10.	D69-5339	D63-6094 x D62-7816	F_5
11.	D69-5416	D63-6094 x D62-7816	F_5
12.	D69-5496	D63-6094 x D62-7816	F_5
13.	D69-5640	D63-6094 x D64-5144	F_5
14.	D69-5963	D63-6094 x D62-7804	F_5
15.	D69-6128	D63-6094 x D62-7804	F_5
16.	D69-6144	D63-6094 x D62-7804	F_5
17.	D69-6344	D63-6094 x D62-6562	F_5
18.	D69-6379	D63-6094 x D62-6562	F_5
19.	D69-8155	Hood x Semmes	F_5
20.	D69-8201	Hood x Semmes	F_5
21.	D69-8205	Hood x Semmes	F_5
22.	D69-8494	D63-6094 x D61-4269	F_5
23.	N68-1663	N56-4202 x N57-6801	F_4
24.	N69-338	N55-47 x York	F_3
25.	N69-396	N55-47 x York	F_3
26.	N69-468	N55-395 x N56-4202	F_5
27.	N69-554	N55-395 x N56-4202	F_5
28.	N69-572	N55-395 x N56-4202	F_5
29.	N69-606	N55-395 x N56-4202	F_5
30.	N69-615	N55-395 x N56-4202	F_5
31.	R69-159	(R56-49 x PI 91120) x (R54-171-1 x R64-501)	F_5
32.	R69-186	(R56-49 x PI 91120) x (R54-171-1 x R64-501)	F_5
33.	R69-189	(R56-49 x PI 91120) x (R54-171-1 x R64-501)	F_5
34.	R69-1151	Davis x Bragg	F_4
35.	R69-1231	Davis x Bragg	F_4
36.	R70-700	Hood(8) x Arksoy	

Table 37. - General summary of performance for the strains in Preliminary Group VI, 1971

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Shatter resist.	P.R.	R-K.	F.E.	T.S.
Lee 68	37.9	10-18	30	21.8	41.8	1.0	1.0	5.0	1.0	1.0
D64-4636	40.5	-9	27	21.3	41.9	1.0	1.0	2.0	2.0	2.0
D68-5302	34.0	-1	28	18.3-	45.4+	1.0	1.0	4.5	3.0	2.0
D68-9295	36.6	-11	30	18.9-	41.3	1.0	1.0	4.5	4.0	2.0
D69-5013	38.1	-2	29	20.3-	42.6	1.0	1.0	4.5	1.0	3.0
D69-5065	38.1	-10	29	22.4	40.8	1.0	1.0	4.0	1.0	1.0
D69-5261	37.6	+2	32	21.2	41.4	1.0	1.0	4.5	1.0	1.0
D69-5305	33.9	-6	25	20.8-	42.3	2.0	1.0	3.0	1.1	1.0
D69-5331	36.1	-8	28	21.2	41.5	2.0	1.0	4.5	5.0	1.0
D69-5339	37.8	-9	28	21.8	40.7	1.0	1.0	5.0	5.0	2.0
D69-5416	34.8	-4	28	21.5	41.3	3.0	1.0	5.0	2.0	1.0
D69-5496	37.7	-10	28	22.0	40.1-	2.0	1.0	4.5	2.0	1.0
D69-5640	35.7	-6	28	18.3-	45.3+	1.0	1.0	4.5	3.0	1.0
D69-5963	32.0-	-14	30	18.5-	44.5+	1.0	1.0	4.5	3.0	1.0
D69-6128	35.5	-11	28	19.3-	44.8+	2.0	1.0	4.5	1.0	2.5
D69-6144	36.2	-5	30	19.3-	44.4+	1.0	1.0	4.5	2.0	3.0
D69-6344	35.0	-10	29	21.0-	39.9-	1.0	1.0	0	4.0	1.0
D69-6379	34.1	-13	27	19.8-	43.7+	1.0	1.0	1.0	1.0	2.0
D69-8155	36.9	-7	24	21.7	41.8	3.0	1.0	4.5	2.0	2.0
D69-8201	44.5+	-6	33	22.1	40.2-	1.0	1.0	5.0	1.0	1.0
D69-8205	42.3+	-3	29	21.2	41.4	1.0	1.0	3.5	1.0	1.0
D69-8494	35.0	-7	32	21.2	41.6	1.0	1.0	4.0	2.0	3.0
N68-1663	37.9	-12	27	21.9	40.8	2.0	1.0	4.5	2.0	2.0
N69-338	35.3	-4	28	22.2	40.6-	2.5	1.0	3.0	1.0	1.0
N69-396	35.0	-4	29	21.7	40.3-	1.0	1.0	4.5	2.0	2.0
N69-468	39.0	-1	34	21.6	40.5-	1.0	1.0	4.0	2.0	2.0
N69-554	36.7	0	34	22.2	40.9	2.0	1.0	4.0	1.0	2.0
N69-572	32.0-	-3	31	21.3	40.7	2.0	3.0	4.0	4.0	3.0
N69-606	37.8	-2	36	20.9-	42.0	2.0	1.0	4.0	3.0	1.0
N69-615	37.9	-1	35	21.1	42.0	1.0	1.0	4.5	2.0	3.0
R69-159	39.3	-5	30	22.0	42.5	1.0	1.0	4.5	2.0	1.0
R69-186	44.4+	+1	34	20.7-	42.8	1.0	1.0	5.0	2.0	3.0
R69-189	41.4	-2	27	22.2	40.8	1.0	1.0	3.5	1.0	3.0
R69-1151	43.2+	-5	28	21.8	39.9-	2.0	1.0	4.0	1.0	1.0
R69-1231	43.9+	-1	33	21.7	41.1	1.0	1.0	4.5	4.0	2.0
R70-700	38.6	-9	27	21.9	40.2-	2.5	1.0	4.0	2.0	2.0
L.S.D.(.05)	4.1			0.8	1.2					
L.S.D.(.01)	5.4			1.0	1.6					

Table 38. - Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1971

Strain	Petersburg, Va.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Jay, Fla.
Lee 68	35.6	38.7	30.1	41.9	36.8	44.3
D64-4636	41.4	42.0	34.5	44.0	36.5	44.7
D68-5302	38.1	29.9-	34.6	39.8	32.4	29.1-
D68-9295	38.8	38.7	29.9	40.8	39.5	32.2-
D69-5013	37.4	37.5	31.9	44.1	38.8	39.3
D69-5065	37.0	38.0	33.2	44.2	34.3	42.0
D69-5261	40.0	36.9	33.9	38.9	33.3	42.8
D69-5305	33.3	30.7-	33.7	41.9	28.5	35.2-
D69-5331	34.0	33.7	29.9	45.4	34.2	39.3
D69-5339	37.0	37.4	28.9	44.9	37.9	40.9
D69-5416	37.8	35.1	30.9	37.6	32.6	35.2-
D69-5496	41.0	37.1	31.8	46.5	27.0	42.7
D69-5640	33.7	36.5	30.7	39.8	35.5	37.8
D69-5963	33.0	32.4	22.7-	41.5	28.9	33.7-
D69-6128	35.5	41.7	27.3	37.8	32.9	37.9
D69-6144	39.7	39.2	29.4	38.7	33.9	37.1
D69-6344	38.8	40.5	28.9	40.8	28.1	32.9-
D69-6379	40.0	35.6	25.3	43.5	29.5	30.7-
D69-8155	33.7	41.4	32.6	44.4	36.2	32.9-
D69-8201	42.5+	46.2+	43.1+	49.6+	41.2	44.7
D69-8205	39.2	45.1	37.5+	46.5	38.7	46.9
D69-8494	34.4	38.3	33.1	32.2-	30.7	41.3
N68-1663	38.8	40.5	26.8	48.0	31.1	42.0
N69-338	41.4	32.3	34.9	37.1	29.1	37.1
N69-396	36.2	35.1	29.4	44.2	27.2	38.2
N69-468	37.0	36.5	34.7	50.1+	32.8	43.1
N69-554	37.7	38.3	31.4	41.2	29.4	43.0
N69-572	33.7	30.6-	28.0	36.8	24.9	37.8
N69-606	40.0	35.5	35.2	47.5	27.2	41.6
N69-615	36.3	38.1	33.4	45.3	29.3	45.0
R69-159	39.6	38.9	29.4	45.2	37.3	45.8
R69-186	40.6	41.6	39.5+	51.2+	47.3	46.5
R69-189	48.4+	42.1	33.0	46.8	36.5	41.6
R69-1151	44.5+	43.3	43.0+	50.5+	34.9	42.8
R69-1231	46.2+	40.9	35.6	54.0+	41.2	45.4
R70-700	45.4+	34.2	--	43.8	40.1	50.7
L.S.D.(.05)	6.8	7.1	7.3	6.8	N.S.	7.6
C.V.	9%	9%	11%	8%	20%	9%

Table 39. - Oil percentages for the strains in Preliminary Group VI, 1971

Strain	Petersburg, Va.	Portageville, Mo.	Stoneville, Miss.(A)	Jay, Fla.
Lee 68	20.6	21.3	22.9	22.4
D64-4636	21.4	20.4	21.9	21.4
D68-5302	18.0	18.2	18.9	17.9
D68-9295	18.4	18.7	18.5	19.8
D69-5013	19.1	20.3	20.4	21.4
D69-5065	21.3	21.8	22.9	23.6
D69-5261	20.9	20.1	22.0	21.6
D69-5305	19.0	20.8	22.7	20.8
D69-5331	19.5	21.0	21.9	22.5
D69-5339	21.4	21.0	22.5	22.2
D69-5416	20.4	21.2	23.2	21.0
D69-5496	20.9	20.9	23.3	23.0
D69-5640	17.3	18.5	18.9	18.5
D69-5963	18.3	18.4	18.7	18.6
D69-6128	18.8	18.9	20.2	19.3
D69-6144	18.7	19.3	20.5	18.8
D69-6344	20.6	20.6	21.4	21.3
D69-6379	18.7	19.4	20.9	20.1
D69-8155	20.6	20.8	22.9	22.3
D69-8201	21.1	21.0	23.3	23.1
D69-8205	19.8	20.8	22.9	21.2
D69-8494	19.8	21.3	22.2	21.5
N68-1663	20.2	21.0	23.2	22.1
N69-338	21.5	21.3	23.2	22.8
N69-396	20.6	20.8	22.7	22.6
N69-468	20.6	20.8	22.2	22.8
N69-554	20.8	21.8	22.9	23.1
N69-572	20.8	20.4	22.9	21.1
N69-606	20.6	20.1	21.4	21.6
N69-615	20.0	19.8	22.4	22.1
R69-159	21.3	22.1	22.7	21.8
R69-186	20.0	20.4	21.9	20.3
R69-189	21.4	21.9	22.9	22.7
R69-1151	21.1	21.7	22.4	21.8
R69-1231	20.9	20.9	22.7	22.3
R70-700	20.0	21.9	22.8	22.7

Table 40. - Protein percentages for the strains in Preliminary Group VI, 1971

Strain	Petersburg, Va.	Portageville, Mo.	Stoneville, Miss.(A)	Jay, Fla.
Lee 68	42.3	42.9	40.4	41.4
D64-4636	43.0	41.3	41.2	42.0
D68-5302	45.9	46.6	43.0	46.0
D68-9295	42.3	42.5	39.2	41.3
D69-5013	44.1	42.8	41.3	42.1
D69-5065	42.3	41.2	40.4	39.2
D69-5261	42.5	41.8	39.8	41.4
D69-5305	44.7	41.8	40.6	41.9
D69-5331	42.8	41.3	40.5	41.4
D69-5339	41.4	41.3	40.4	39.5
D69-5416	42.1	41.0	40.0	42.2
D69-5496	41.8	40.6	38.2	39.7
D69-5640	45.1	44.2	44.9	47.0
D69-5963	45.6	43.6	43.1	45.5
D69-6128	45.1	43.5	44.4	46.3
D69-6144	43.9	44.3	43.3	46.2
D69-6344	41.9	39.9	38.7	38.9
D69-6379	44.2	43.4	43.1	43.9
D69-8155	43.2	42.0	40.8	41.0
D69-8201	43.1	40.5	38.0	39.0
D69-8205	42.9	42.2	38.5	42.0
D69-8494	42.9	40.8	40.6	42.1
N68-1663	41.4	40.4	40.4	41.1
N69-338	41.6	41.2	39.6	40.0
N69-396	41.6	40.6	40.4	38.7
N69-468	41.9	40.8	39.5	39.6
N69-554	43.4	39.6	40.4	40.1
N69-572	41.6	40.9	39.9	40.4
N69-606	42.9	42.2	40.7	42.0
N69-615	42.7	42.5	40.7	41.9
R69-159	43.8	42.8	40.6	42.7
R69-186	43.7	42.0	41.7	43.8
R69-189	41.8	40.9	39.8	40.6
R69-1151	40.4	39.3	39.9	40.0
R69-1231	41.8	40.9	41.1	40.5
R70-700	41.4	40.9	39.2	39.3

Table 41. - Plant height for the strains in Preliminary Group VI, 1971

Strain	Petersburg, Va.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Jay, Fla.
Lee 68	30	36	31	31	23	31
D64-4636	24	33	30	28	20	29
D68-5302	24	34	26	30	22	30
D68-9295	30	34	34	28	25	28
D69-5013	25	34	30	31	24	28
D69-5065	27	34	35	32	21	27
D69-5261	32	36	34	34	26	32
D69-5305	22	33	23	30	20	24
D69-5331	24	34	29	31	22	29
D69-5339	26	32	31	28	22	28
D69-5416	26	36	31	28	22	24
D69-5496	27	30	30	29	22	27
D69-5640	28	33	23	31	24	29
D69-5963	32	35	30	30	24	31
D69-6128	26	35	32	30	22	30
D69-6144	28	35	31	31	22	30
D69-6344	26	34	24	33	24	30
D69-6379	24	36	31	26	20	25
D69-8155	20	31	22	27	19	23
D69-8201	30	39	33	33	27	34
D69-8205	30	35	30	31	22	26
D69-8494	32	36	35	32	22	34
N68-1663	28	33	28	29	21	22
N69-338	27	35	33	28	23	24
N69-396	24	37	36	32	21	21
N69-468	34	38	35	39	25	33
N69-554	32	41	30	37	32	34
N69-572	32	35	24	31	31	33
N69-606	28	35	35	35	22	30
N69-615	32	38	37	41	25	34
R69-159	30	38	27	31	23	29
R69-186	30	40	31	38	32	33
R69-189	26	35	24	32	24	30
R69-1151	24	34	31	27	21	29
R69-1231	32	38	34	37	25	30
R70-700	26	33	18	32	24	30

Table 42. - Seed quality scores for the strains in Preliminary Group VI, 1971

Strain	Petersburg, Va.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Jay, Fla.
Lee 68	1.0	3.5	2.8	2.0	2.0	1.0
D64-4636	1.0	3.5	3.5	2.0	2.0	1.0
D68-5302	1.0	3.5	2.0	2.5	2.0	1.0
D68-9295	2.0	3.5	3.0	2.0	2.0	2.0
D69-5013	1.0	3.5	2.3	2.0	2.0	2.0
D69-5065	1.0	3.0	3.3	2.0	2.0	1.0
D69-5261	1.5	4.3	3.5	2.0	2.0	1.0
D69-5305	1.0	3.8	2.8	2.0	3.0	2.0
D69-5331	1.0	3.3	2.8	2.0	2.0	1.0
D69-5339	1.0	3.3	2.3	2.0	2.0	1.0
D69-5416	1.0	3.0	2.5	2.0	2.0	2.0
D69-5496	1.0	3.3	3.0	2.0	2.0	1.0
D69-5640	1.0	3.0	2.0	2.0	2.0	2.0
D69-5963	2.0	3.5	2.5	2.0	2.0	2.0
D69-6128	1.0	3.3	2.8	2.0	2.0	2.0
D69-6144	1.0	3.5	2.0	2.0	2.0	1.0
D69-6344	3.0	5.0	2.8	2.0	2.0	2.0
D69-6379	3.0	5.0	3.0	2.0	2.5	2.0
D69-8155	1.0	3.0	3.3	2.0	2.0	2.0
D69-8201	1.0	2.8	3.3	2.0	2.0	2.0
D69-8205	2.0	3.0	2.3	2.0	2.0	2.0
D69-8494	1.0	3.5	2.3	2.0	2.0	2.0
N68-1663	2.0	3.3	2.8	2.0	2.0	1.0
N69-338	1.0	3.5	3.3	2.0	2.0	3.0
N69-396	1.0	3.0	2.5	2.0	2.0	1.0
N69-468	1.0	2.8	3.0	2.0	2.0	2.0
N69-554	1.0	2.8	1.8	2.0	2.0	1.0
N69-572	1.0	3.0	3.0	2.0	2.0	1.0
N69-606	1.0	3.8	3.0	2.0	2.0	1.0
N69-615	1.0	2.5	1.8	2.0	2.0	1.0
R69-159	1.0	3.3	3.0	2.0	2.0	1.0
R69-186	1.5	2.8	2.8	2.0	2.0	4.0
R69-189	1.0	3.3	3.3	2.0	2.0	2.0
R69-1151	1.0	3.0	2.8	2.0	2.0	2.0
R69-1231	1.0	3.3	3.5	2.0	2.0	1.0
R70-700	2.0	2.3	3.0	2.0	2.0	1.0

UNIFORM GROUP VII

1971

	Variety or strain	Parentage	Generation composited
1.	Bragg	Jackson x D49-2491	F_6
2.	Ransom	(N55-5931 x N55-3818) x D56-1185	F_5
3.	F66-242	F55-822 x (Roanoke x CNS)	F_9
4.	F66-550	Ogden x D53-1301	F_6
5.	D66-8556	Bragg x Semmes	F_5
6.	D67-5940	Semmes x D60-8107	F_5
7.	D67-6021	Semmes x D60-8107	F_5
8.	D67-6117	Semmes x D60-8107	F_5
9.	D68-78	Dyer x Bragg	F_5
10.	F66-698	(F55-224 x D55-4073) x (F58-5788 x D56-4065)	F_5
11.	N66-1136	N56-4202 x N57-6801	F_4
12.	N68-97	Dare x N60-5234	F_4

Background of strains used as parents:

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

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

N55-3818 is a selection from (N45-2994 x Ogden) x (N44-92 x N48-1867) 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.

F55-822 is the parent line of Bragg.

D53-1301 is a selection from the same cross as Hill but is of Lee maturity.

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.

D56-4065 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.

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.

* * * * *

Thirty Uniform Group VII nurseris were planted. Results from 26 nurseries are summarized in Tables 43 through 49. Table 43 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 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 in all regions.

Two strains, F62-242 and F66-550, have been grown three years. F62-242, which traces to the same parent plant as F63-4000 in Group VIII, averages slightly higher in yield in all areas than Bragg. F63-4000 is being increased for release. F66-550 has mean seed yields very similar to Bragg.

The three strains D66-8556, D67-5940, and D67-6021 show no advantage over Bragg in the East or Southeast but do have higher mean seed yields in the Delta and West.

Five strains were advanced from the 1970 Preliminary Group VII nursery. D67-6117 yielded well in the Delta but proved to be quite susceptible to shattering. D68-78 has a high level of resistance to both root-knot and cyst nematodes. Its mean yield was below that for Bragg in all areas. F66-698 yielded very well, especially in the Delta. N66-1136 had the best average yields of the new strains. N68-97 was no better than Bragg in any of the areas.

Root-knot ratings were made in a field planting in west Florida. Frogeye ratings were made in this same planting.

Table 43.- General summary of performance for the strains in Uniform Group VII, 1971

	Bragg	Ransom	F62-242	F66-550	D66-8556	D67-5940
Seed Yield - 1971						
East Coast	38.6	36.9	40.9	38.6	38.4	37.1
Southeast	43.4	45.2	45.6	41.3	42.9	43.2
Delta and West	37.6	35.4	40.2	36.8	41.4+	40.7+
- 1970-71						
East Coast	38.6	37.8	41.0	39.3	37.1	38.0
Southeast	38.6	40.3	40.1	37.1	38.4	36.6
Delta and West	36.1	34.9	39.3	35.6	38.5	38.9
- 1969-71						
East Coast	39.7	39.8	41.9	39.4		
Southeast	38.6	41.0	39.7	38.5		
Delta and West	36.0	35.2	39.1	36.4		
Oil Content - 1971	21.6	23.6+	20.5-	21.3	22.4+	22.1+
- 1970-71	21.5	23.8	20.6	21.6	22.4	22.0
- 1969-71	21.7	24.0	20.8	21.7		
Protein Content - 1971	41.5	40.6-	42.9+	41.2	41.7	42.4+
- 1970-71	41.5	40.3	42.8	40.8	41.4	42.4
- 1969-71	41.2	40.0	42.6	40.6		
Seed size	15.4	16.5	17.7+	13.2-	16.2	16.5
Maturity index	10-23	+1	+3	+4	-3	-7
Height	40	34	38	35	36	34
Shattering	1.0	1.3	1.3	1.3	1.0	2.8
Phytophthora rot	1.0	2.7	1.7	1.3	1.0	1.0
Root-knot	1.5	5.0	2.5	5.0	2.0	5.0
Cyst nematode	S	S	S	S	S	S
Frogeye	1.0	2.0	1.0	1.0	2.0	2.0
Target spot	2.3	2.0	1.3	1.7	2.0	1.3
Purple stain (%)	4.7	6.7	3.0	8.0	8.3	12.3
Flower color	W	P	P	P	W	P
Pubescence color	T	T	T	G	T	G
Pod wall color	T	T	T	T	T	T

Table 43. - (continued)

	D67-6021	D67-6117	D68-78	F66-698	N66-1136	N68-97
Seed Yield - 1971						
East Coast	35.4-	34.8-	36.2	37.2	40.8	37.7
Southeast	41.0	40.0	39.6-	41.2	43.5	42.8
Delta and West	39.3	42.1+	36.9	40.8+	38.1	37.9
- 1970-71						
East Coast	35.7					
Southeast	36.2					
Delta and West	37.2					
- 1969-71						
East Coast						
Southeast						
Delta and West						
Oil Content - 1971	18.6-	18.3-	21.7	19.9-	22.1+	21.3
- 1970-71	18.6					
- 1969-71						
Protein Content - 1971	45.1+	46.2+	42.8+	44.3+	41.5	43.0+
- 1970-71	44.9					
- 1969-71						
Seed size	12.6-	15.9	16.2	14.9	15.9	13.9-
Maturity index	0	-9	-1	0	-2	-1
Height	37	31	36	38	41	35
Shattering	1.0	3.0	1.0	1.0	1.0	1.5
Phytophthora rot	1.0	1.0	1.5	1.0	2.0	2.0
Root-knot	5.0	4.0	1.0	4.5	2.5	3.5
Cyst nematode	S	S	R	S	S	S
Frogeye	3.0	1.0	2.0	1.0	1.0	1.0
Target spot	1.7	1.3	2.7	2.0	2.7	2.0
Purple stain (%)	6.0	9.3	4.3	2.0	8.7	3.0
Flower color	P	P	W	P	W	P
Pubescence color	G	G	T	G	T	G
Pod wall color	T	T	T	T	T	T

Table 44. - Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1971

Location	Bragg	Ransom	F66-242	F66-550	D66-8556	D67-5940	D67-6021
East Coast							
Holland, Va.	27.7	31.7	30.3	30.4	27.7	24.3	30.1
Plymouth, N. C.	35.1	34.5	32.8	36.7	34.5	31.0	29.0-
Rocky Mt., N. C.	36.6	35.0	32.9	30.5-	31.5	25.9-	27.4-
Clayton, N. C.	33.9	29.7	36.8	32.6	37.5	41.4	32.5
Clinton, N. C.	35.6	37.9	37.4	39.1	32.8	37.5	31.8
Florence, S.C.(A)	52.5	46.7	57.6	54.4	54.2	52.8	50.6
Florence, S.C.(B)	51.1	42.8	56.2	45.2	51.3	52.8	52.0
Hartsville, S.C.	36.6	36.7	42.7	39.8	37.4	31.0	30.0
Mean	38.6	36.9	40.9	38.6	38.4	37.1	35.4-
Southeast							
Blackville, S. C.	36.5	39.5	37.4	31.0-	28.3-	32.6	33.4
Tallassee, Ala.	40.8	45.6	45.3	42.4	37.5	34.1	41.8
Experiment, Ga.	68.1	64.7	68.3	61.5	70.2	72.6	61.1
Tifton, Ga.	43.9	46.6	47.0+	37.6-	44.9	47.5+	43.6
Gainesville, Fla.	41.0	44.4	48.9+	43.0	40.9	45.6	38.7
Marianna, Fla.	33.3	38.4+	37.3	36.7	37.6	41.5+	35.5
Quincy, Fla.	31.9	32.9	34.0	33.3	34.4	28.0	33.6
Jay, Fla.	50.7	46.6	44.6	47.1	46.6	45.6	41.1
Fairhope, Ala.	48.6	51.2	54.1+	46.1	47.8	50.5	46.6
Baton Rouge, La.	41.2	47.3+	39.5	37.4	41.0	34.1-	36.7
Mean	43.4	45.2	45.6	41.3	42.9	43.2	41.0
Delta and West							
Stoneville, Miss.(A)	42.5	39.6	40.4	37.1	41.5	47.8	43.9
Stoneville, Miss.(B)	33.9	26.0-	31.0	31.0	36.4	31.5	32.5
Stuttgart, Ark.	46.0	48.1	50.8+	42.2	47.5	52.7+	47.4
Rohwer, Ark.	30.7	20.7-	39.0+	30.7	40.3+	39.7+	36.4
St. Joseph, La.	44.1	44.0	49.5	37.3-	46.7	48.2	39.8
Curtis, La.	20.4	27.7	32.2	27.9	39.5	34.5	28.8
Crowley, La.	41.3	40.1	44.7	36.3	38.3	36.4	38.0
Beaumont, Texas	41.9	43.5	38.6	42.7	38.6	34.9	38.2
Mean	37.6	35.4	40.2	36.8	41.4+	40.7+	39.3

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

Table 44. - (continued)

Location	D67-6117	D68-78	F66-698	N66-1136	N68-97	L.S.D. (.05)	C.V.
			East Coast				
Holland, Va.	27.9	27.0	29.7	31.3	28.6	N.S.	21%
Plymouth, N.C.	34.5	35.3	31.9	41.8+	34.6	5.8	10%
Rocky Mt., N.C.	28.3-	29.8-	31.3	36.0	31.5	5.6	11%
Clayton, N.C.	37.9	39.0	35.5	38.3	36.7	N.S.	16%
Clinton, N.C.	33.6	31.9	38.9	38.7	33.6	N.S.	12%
Florence, S.C.(A)	44.5-	49.2	51.3	53.5	52.0	5.9	7%
Florence, S.C.(B)	46.7	43.3	46.4	48.2	45.7	N.S.	17%
Hartsville, S.C.	25.4-	33.6	32.8	38.4	38.7	8.9	15%
Mean	34.8-	36.2	37.2	40.8	37.7	2.9	
			Southeast				
Blackville, S.C.	35.7	34.4	33.8	18.3-	34.4	4.6	8%
Tallassee, Ala.	32.7	44.4	37.9	44.2	37.7	N.S.	13%
Experiment, Ga.	61.3	59.4	56.6	67.3	61.6	N.S.	11%
Tifton, Ga.	44.9	40.2-	43.0	47.4+	47.8+	3.1	5%
Gainesville, Fla.	43.0	33.0-	42.6	44.0	41.7	5.1	7%
Marianna, Fla.	35.8	31.4	36.7	38.4+	36.5	4.5	7%
Quincy, Fla.	25.9-	29.8	36.1	31.2	34.6	5.7	10%
Jay, Fla.	40.8	41.6	39.1	45.4	42.4	N.S.	9%
Fairhope, Ala.	43.5-	43.5-	44.8	54.1+	49.2	4.7	6%
Baton Rouge, La.	36.6	38.1	41.2	44.5	42.2	4.9	7%
Mean	40.0	39.6-	41.2	43.5	42.8	3.1	
			Delta and West				
Stoneville, Miss.(A)	44.6	41.0	42.7	40.2	45.5	N.S.	15%
Stoneville, Miss.(B)	30.6	28.4	37.1	35.2	26.4-	6.8	13%
Stuttgart, Ark.	49.8	43.8	48.7	47.4	49.1	4.0	5%
Rohwer, Ark.	43.3+	32.0	44.7+	35.0	29.9	7.6	13%
St. Joseph, La.	50.3	44.6	39.0	47.8	42.9	6.3	8%
Curtis, La.	38.6	28.1	26.3	28.1	28.8	N.S.	25%
Crowley, La.	38.1	40.2	42.4	41.7	41.7	N.S.	12%
Beaumont, Texas	41.4	42.7	41.5	33.2	42.2	N.S.	12%
Mean	42.1+	36.9	40.8+	38.1	37.9	3.0	

Table 45. - Chemical composition and seed size for the strains in Uniform Group VII, 1971

Location	Bragg	Ranson	F66-242	F66-550	D66-8556	D67-5940
			Oil Percentage			
Clinton, N.C.	20.3	21.7	19.1	19.9	21.1	21.3
Clayton, N.C.	21.1	22.9	19.7	21.1	21.4	22.3
Blackville, S.C.	21.9	24.4	21.2	21.2	22.2	22.7
Tifton, Ga.	22.2	25.2	21.2	21.2	23.3	22.8
Gainesville, Fla.	22.2	24.2	21.3	22.3	22.7	23.0
Jay, Fla.	21.6	24.1	20.2	21.8	22.6	22.0
Baton Rouge, La.	21.5	23.7	20.1	21.3	23.1	21.0
Stoneville, Miss.(A)	22.9	23.2	21.4	21.9	23.5	23.9
Beaumont, Texas	20.5	22.6	19.9	20.7	21.4	19.9
Mean	21.6	23.6+	20.5-	21.3	22.4+	22.1+
			Protein Percentage			
Clinton, N.C.	41.7	42.4	43.9	41.7	42.6	43.5
Clayton, N.C.	40.7	39.6	42.3	39.3	41.2	41.9
Blackville, S.C.	41.1	40.3	41.9	40.5	41.5	40.8
Tifton, Ga.	43.3	41.5	44.5	41.4	42.8	45.2
Gainesville, Fla.	42.0	40.2	43.4	40.9	40.8	42.8
Jay, Fla.	41.2	39.5	42.9	41.2	41.8	41.7
Baton Rouge, La.	42.8	42.0	43.4	42.8	41.8	43.1
Stoneville, Miss.(A)	39.0	38.1	40.7	40.5	38.9	39.7
Beaumont, Texas	41.7	42.0	43.1	42.4	43.5	43.3
Mean	41.5	40.6-	42.9+	41.2	41.7	42.4+
			Grams per 100 Seeds			
Clinton, N.C.	14.2	14.4	16.1	12.3	15.1	16.7
Clayton, N.C.	14.8	14.4	15.2	11.8	14.6	15.6
Blackville, S.C.	14.0	14.5	16.0	11.5	16.0	15.0
Tifton, Ga.	15.3	16.9	18.7	13.1	16.6	17.4
Gainesville, Fla.	16.3	19.6	19.9	14.3	18.6	18.3
Jay, Fla.	17.1	18.4	20.1	15.7	17.6	17.7
Baton Rouge, La.	16.0	18.5	19.0	14.2	16.2	16.3
Experiment, Ga.	18.4	19.0	21.4	15.0	19.0	19.2
Stoneville, Miss.(A)	14.1	14.7	16.2	12.8	15.0	15.6
Beaumont, Texas	13.5	14.3	14.3	11.4	13.7	13.2
Mean	15.4	16.5	17.7+	13.2-	16.2	16.5

Table 45. - (continued)

Location	D67-6021	D67-6117	D68-78	F66-698	N66-1136	N68-97	L.S.D. (.05)
			Oil Percentage				
Clinton, N.C.	17.3	17.5	19.3	18.5	21.3	20.2	
Clayton, N.C.	18.8	18.6	20.9	19.7	22.2	21.2	
Blackville, S.C.	19.3	18.6	22.2	20.4	21.6	21.2	
Tifton, Ga.	19.3	18.9	22.9	20.9	21.9	21.9	
Gainesville, Fla.	19.6	19.5	22.3	21.0	22.8	22.2	
Jay, Fla.	18.8	18.0	22.1	20.3	22.4	21.8	
Baton Rouge, La.	17.6	17.7	22.1	18.8	22.0	21.3	
Stoneville, Miss.(A)	19.2	19.2	22.9	20.3	22.9	21.9	
Beaumont, Texas	17.4	16.7	20.9	18.9	21.6	20.2	
Mean	18.6-	18.3-	21.7	19.9-	22.1+	21.3	0.4
			Protein Percentage				
Clinton, N.C.	47.0	48.4	43.0	45.0	42.3	45.0	
Clayton, N.C.	45.1	45.2	41.3	44.6	40.3	42.4	
Blackville, S.C.	44.2	45.9	42.1	44.7	41.5	41.0	
Tifton, Ga.	47.1	43.7	45.4	42.9	42.6	43.3	
Gainesville, Fla.	45.0	46.4	43.2	44.3	43.1	43.3	
Jay, Fla.	44.6	46.1	43.1	44.4	39.5	42.4	
Baton Rouge, La.	45.2	46.5	43.0	46.3	43.2	44.3	
Stoneville, Miss.(A)	43.1	44.5	40.0	40.6	38.7	41.5	
Beaumont, Texas	44.9	48.7	44.2	45.9	42.5	43.6	
Mean	45.1+	46.2+	42.8+	44.3+	41.5	43.0+	0.8
			Grams per 100 Seeds				
Clinton, N.C.	12.0	15.7	13.2	14.4	14.2	13.2	
Clayton, N.C.	12.2	14.4	14.0	15.4	14.3	14.2	
Blackville, S.C.	12.0	15.0	15.0	13.5	15.5	12.5	
Tifton, Ga.	12.5	17.1	16.3	15.1	16.8	14.6	
Gainesville, Fla.	12.9	17.6	19.1	15.7	18.3	15.0	
Jay, Fla.	13.9	17.2	18.5	15.6	17.0	14.6	
Baton Rouge, La.	13.3	16.2	18.6	15.3	16.1	14.2	
Experiment, Ga.	14.3	17.4	18.5	17.0	18.7	16.5	
Stoneville, Miss.(A)	11.8	15.0	14.7	14.1	14.7	12.6	
Beaumont, Texas	11.5	13.5	14.2	12.4	13.6	11.3	
Mean	12.6-	15.9	16.2	14.9	15.9	13.9-	0.7

Table 46. - Relative maturity data, days earlier (-) or later (+), than Bragg for the strains in Uniform Group VII, 1971

Location	Date planted	Bragg matured	Ransom	F66-242	F66-550	D66-8556
		East Coast				
Holland, Va.	6-3	11-5	+4	+4	+7	-2
Plymouth, N.C.	5-10	10-30	0	+2	+2	-8
Rocky Mt., N.C.	5-25	10-28	+2	+3	+2	-4
Clayton, N.C.	5-4	10-24	-2	+2	+2	-9
Clinton, N.C.	5-21	10-24	+2	+4	+10	-2
Florence, S.C.(A)	5-14	11-10	+2	0	+2	-9
Florence, S.C.(B)	6-15	11-8	+2	+7	-2	-12
Hartsville, S.C.	6-7	10-28	+2	+2	+6	-1
Mean		10-31	+2	+3	+4	-6
		Southeast				
Blackville, S.C.	5-18	10-14	+2	+5	+6	+2
Tallassee, Ala.	5-21	10-23	+11	+8	+9	0
Experiment, Ga.	5-9	10-18	0	+1	+4	-4
Tifton, Ga.	5-5	10-7	0	+10	+11	-4
Gainesville, Fla.	6-7	10-19	+2	+3	+5	-2
Marianna, Fla.	6-30	10-23	+4	+4	-3	-6
Quincy, Fla.	6-24	10-11	+2	+2	+4	-6
Jay, Fla.	5-14	10-16	-1	0	+1	-11
Fairhope, Ala.	6-9	10-20	+6	0	-5	-5
Baton Rouge, La.	5-18	10-31	-2	0	+1	-8
Mean		10-18	+2	+3	+3	-4
		Delta and West				
Stoneville, Miss.(A)	5-17	10-22	-1	+2	+3	-4
Stoneville, Miss.(B)	5-27	10-24	-3	+4	+6	-3
Stuttgart, Ark.	5-20	10-20	0	0	+2	-5
Rohwer, Ark.	5-28	10-26	0	+4	+2	+1
St. Joseph, La.	5-18	10-15	+4	+3	+5	+3
Curtis, La.	5-20	10-25	0	-3	+1	-1
Crowley, La.	5-18	11-1	+2	-2	+4	-20
Beaumont, Texas	5-21	10-12	-2	+1	+6	0
Mean		10-22	0	+1	+4	-4

Table 46 - (continued)

Location	D67-5940	D67-6021	D67-6117	D68-78	F66-698	N66-1136	N68-97
			East Coast				
Holland, Va.	-2	+4	-5	0	+7	+4	+4
Plymouth, N.C.	-8	+6	-10	-2	0	-6	0
Rocky Mt., N.C.	-10	-6	-10	+2	+2	0	-2
Clayton, N.C.	-9	+2	-10	0	-2	+2	-2
Clinton, N.C.	-2	+2	-2	-2	+6	+2	+6
Florence, S.C.(A)	-19	-2	-19	-9	-11	-7	-2
Florence, S.C.(B)	-12	-4	-21	+7	-4	+4	-4
Hartsville, S.C.	-4	+1	-6	+1	+4	-1	+4
Mean	-8	0	-10	0	0	0	+1
			Southeast				
Blackville, S.C.	-4	+3	-7	0	+3	+6	+2
Tallassee, Ala.	+1	+8	+6	-2	+7	0	+3
Experiment, Ga.	-8	+2	-11	-2	0	-2	+1
Tifton, Ga.	-2	+6	-3	0	0	+1	+4
Gainesville, Fla.	0	+1	-6	+2	+1	-3	0
Marianna, Fla.	-7	-8	-13	-4	-2	-5	-6
Quincy, Fla.	-4	-3	-8	+1	+1	-4	-1
Jay, Fla.	-7	-1	-10	-2	-2	-8	-7
Fairhope, Ala.	-8	0	-13	-2	0	-2	-5
Baton Rouge, La.	-9	0	-16	0	-12	-3	-13
Mean	-5	+1	-8	-1	0	-2	-2
			Delta and West				
Stoneville, Miss.(A)	-5	+3	-7	-6	+1	-1	-3
Stoneville, Miss.(B)	-5	+2	-5	-4	+2	-4	-1
Stuttgart, Ark.	-6	-1	-7	-3	+1	-2	+1
Rohwer, Ark.	-4	+1	-6	+2	+3	+2	0
St. Joseph, La.	-2	-2	-5	0	-2	-3	-3
Curtis, La.	-15	-7	-17	-5	-1	-5	-2
Crowley, La.	-20	-6	-22	0	+2	-9	-7
Beaumont, Texas	-5	+3	-5	0	0	+3	-5
Mean	-8	0	-9	-2	+1	-2	-3

Table 47. - Plant height for the strains in Uniform Group VII, 1971

Location	Bragg	Ranson	F66-242	F66-550	D66-8556	D67-5940
			East Coast			
Holland, Va.	49	45	53	39	49	42
Plymouth, N.C.	47	39	47	43	49	43
Rocky Mt., N.C.	44	36	39	38	40	35
Clayton, N.C.	44	35	39	35	37	39
Clinton, N.C.	37	30	31	34	31	27
Florence, S.C.(A)	53	45	50	40	50	48
Florence, S.C.(B)	38	34	33	38	36	34
Hartsville, S.C.	44	41	42	39	43	36
Mean	45	38	42	38	42	38
			Southeast			
Blackville, S.C.	40	34	37	41	40	36
Tallassee, Ala.	36	26	34	28	28	32
Experiment, Ga.	46	38	45	40	41	44
Tifton, Ga.	37	25	32	31	31	29
Gainesville, Fla.	37	33	35	35	34	31
Marianna, Fla.	30	27	30	29	27	28
Quincy, Fla.	26	21	23	25	23	19
Jay, Fla.	41	32	35	32	34	34
Fairhope, Ala.	36	28	38	34	33	31
Baton Rouge, La.	36	30	36	30	32	29
Mean	37	30	35	33	32	31
			Delta and West			
Stoneville, Miss.(A)	45	34	45	36	39	39
Stoneville, Miss.(B)	37	29	33	26	27	25
Stuttgart, Ark.	45	35	44	35	42	34
Rohwer, Ark.	45	35	47	36	41	37
St. Joseph, La.	33	25	32	30	33	31
Curtis, La.	40	45	44	38	41	35
Crowley, La.	32	32	31	32	29	34
Beaumont, Texas	33	28	35	33	27	30
Mean	39	33	39	33	35	33

Table 47. - (continued)

Location	D67-6021	D67-6117	D68-78	F66-698	N66-1136	N68-97
			East Coast			
Holland, Va.	45	41	47	44	50	45
Plymouth, N.C.	45	39	45	43	50	42
Rocky Mt., N.C.	37	36	39	37	43	37
Clayton, N.C.	38	35	41	37	45	37
Clinton, N.C.	27	27	29	33	37	29
Florence, S.C.(A)	48	43	46	44	54	47
Florence, S.C.(B)	38	35	38	38	40	36
Hartsville, S.C.	39	37	39	42	48	41
Mean	40	37	41	40	46	39
			Southeast			
Blackville, S.C.	40	30	40	40	41	41
Tallassee, Ala.	30	23	29	32	35	30
Experiment, Ga.	41	38	43	42	50	43
Tifton, Ga.	34	25	30	31	39	34
Gainesville, Fla.	37	31	37	37	36	34
Marianna, Fla.	29	20	29	34	30	28
Quincy, Fla.	23	17	20	29	26	23
Jay, Fla.	39	27	34	37	38	33
Fairhope, Ala.	42	32	36	38	40	38
Baton Rouge, La.	38	30	31	37	36	31
Mean	35	27	33	36	37	34
			Delta and West			
Stoneville, Miss.(A)	40	34	37	39	43	39
Stoneville, Miss.(B)	26	24	29	33	35	26
Stuttgart, Ark.	37	34	38	40	47	39
Rohwer, Ark.	37	37	40	42	47	37
St. Joseph, La.	30	31	33	38	41	31
Curtis, La.	39	30	35	43	45	37
Crowley, La.	34	29	27	32	36	33
Beaumont, Texas	36	30	35	39	35	33
Mean	35	31	34	38	41	33

Table 48. - Lodging scores for the strains in Uniform Group VII, 1971

Location	Bragg	Ransom	F66-242	F66-550	D66-8556	D67-5940
			East Coast			
Holland, Va.	1.8	2.0	2.3	2.0	2.3	3.2
Plymouth, N.C.	3.0	3.0	3.7	4.0	2.7	3.0
Rocky Mt., N.C.	3.7	3.3	4.0	4.3	3.0	3.0
Clayton, N.C.	3.0	2.0	3.7	3.0	2.3	2.7
Clinton, N.C.	3.0	2.0	3.7	3.3	2.3	2.0
Florence, S.C.(A)	3.0	2.0	3.0	4.0	3.0	2.0
Florence, S.C.(B)	3.0	2.0	3.0	4.0	3.0	1.0
Hartsville, S.C.	3.3	2.7	3.3	4.2	3.5	3.2
			Southeast			
Blackville, S.C.	1.0	1.0	1.3	2.0	1.0	1.3
Tallassee, Ala.	2.0	1.0	2.0	2.0	1.0	2.0
Experiment, Ga.	2.3	1.0	2.0	2.3	1.0	1.0
Tifton, Ga.	2.3	1.7	1.7	3.3	1.3	1.0
Gainesville, Fla.	2.3	1.3	1.0	2.3	1.7	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	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.	2.8	2.2	3.0	3.0	2.3	1.7
			Delta and West			
Stoneville, Miss.(A)	3.0	2.7	3.7	3.0	2.7	2.0
Stoneville, Miss.(B)	2.0	1.0	2.0	2.0	1.7	1.0
Stuttgart, Ark.	2.7	1.2	2.7	2.7	1.8	1.2
Rohwer, Ark.	1.7	1.0	2.0	1.7	2.0	1.7
St. Joseph, La.	3.0	2.0	2.0	3.0	3.0	3.0
Curtis, La.	1.7	1.3	1.3	1.2	1.2	1.3
Crowley, La.	4.5	2.5	4.0	4.5	3.0	2.5
Beaumont, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 48. - (continued)

Location	D67-6021	D67-6117	D68-78	F66-698	N66-1136	N68-97
			East Coast			
Holland, Va.	1.8	3.2	2.2	2.0	2.0	1.7
Plymouth, N.C.	2.7	2.3	3.7	3.3	3.0	3.0
Rocky Mt., N.C.	2.7	3.0	4.0	4.3	3.0	4.0
Clayton, N.C.	2.0	2.0	3.0	3.0	3.0	3.0
Clinton, N.C.	2.0	2.0	2.7	3.3	2.3	2.7
Florence, S.C.(A)	2.0	3.0	3.0	3.0	2.0	3.0
Florence, S.C.(B)	2.0	3.0	4.0	3.0	1.0	3.0
Hartsville, S.C.	2.8	3.7	3.5	3.3	3.0	3.3
			Southeast			
Blackville, S.C.	1.3	1.0	1.7	1.3	1.0	1.7
Tallassee, Ala.	2.0	1.0	2.0	2.0	2.0	2.0
Experiment, Ga.	1.0	1.0	2.0	2.0	1.3	2.0
Tifton, Ga.	1.0	1.0	2.0	2.3	2.0	1.7
Gainesville, Fla.	1.0	1.0	2.7	2.0	1.7	1.7
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	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.	2.0	1.8	3.6	2.7	2.5	3.0
			Delta and West			
Stoneville, Miss.(A)	2.0	1.7	3.0	2.7	3.0	3.0
Stoneville, Miss.(B)	1.3	1.0	1.3	2.0	1.7	1.0
Stuttgart, Ark.	1.0	1.0	2.7	2.7	1.7	2.8
Rohwer, Ark.	1.0	1.0	1.7	1.3	2.0	2.0
St. Joseph, La.	2.0	2.0	3.0	2.0	3.0	3.0
Curtis, La.	1.3	1.3	1.7	1.6	1.7	1.4
Crowley, La.	1.5	1.0	4.5	3.5	1.5	4.0
Beaumont, Texas	1.0	1.0	1.0	2.0	1.0	1.0

Table 49. - Seed quality scores for the strains in Uniform Group VII, 1971

Location	Bragg	Ransom	F66-242	F66-550	D66-8556	D67-5940
			East Coast			
Holland, Va.	1.8	2.0	2.3	2.0	2.3	3.2
Plymouth, N.C.	4.0	4.0	4.0	3.0	4.0	5.0
Rocky Mt., N.C.	1.5	2.0	2.0	2.0	2.5	2.5
Clayton, N.C.	1.5	1.5	2.0	2.0	1.5	3.0
Clinton, N.C.	1.5	1.0	1.0	1.5	1.0	1.5
			Southeast			
Blackville, S.C.	3.3	3.7	2.7	2.0	4.3	4.3
Tallassee, Ala.	2.0	1.0	1.0	2.0	1.0	2.0
Experiment, Ga.	2.7	2.3	2.7	3.0	2.3	3.0
Tifton, Ga.	2.8	2.8	2.3	2.3	2.7	3.3
Gainesville, Fla.	2.0	2.0	1.3	1.0	2.0	2.0
Quincy, Fla.	3.0	3.0	3.3	3.3	3.3	4.0
Jay, Fla.	2.0	1.0	2.0	1.0	1.0	3.0
Fairhope, Ala.	1.0	1.3	1.3	2.0	1.7	2.3
Baton Rouge, La.	2.2	2.3	2.2	2.1	2.0	2.4
			Delta and West			
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
Stuttgart, Ark.	1.8	2.7	2.3	1.5	3.0	3.3
Rohwer, Ark.	2.7	3.3	2.7	2.3	2.8	3.5
St. Joseph, La.	1.6	1.6	1.8	1.7	1.4	1.5
Curtis, La.	1.3	2.3	1.5	2.0	4.0	1.3
Beaumont, Texas	2.0	2.0	2.0	3.0	2.0	1.0

Table 49. - (continued)

Location	D67-6021	D67-6117	D68-78	F66-698	N66-1136	N68-97
		East Coast				
Holland, Va.	1.8	3.2	2.2	2.0	2.0	1.7
Plymouth, N.C.	3.0	4.0	4.0	4.0	4.0	3.0
Rocky Mt., N.C.	2.0	2.5	1.5	2.0	2.0	2.0
Clayton, N.C.	2.0	3.0	1.5	2.0	1.5	2.0
Clinton, N.C.	1.5	1.5	1.0	1.0	1.0	1.0
		Southeast				
Blackville, S.C.	2.7	3.7	3.0	3.0	4.0	2.7
Tallassee, Ala.	1.0	2.0	1.0	1.0	1.0	1.0
Experiment, Ga.	2.0	3.3	2.0	2.7	2.3	2.7
Tifton, Ga.	3.8	3.0	3.2	2.7	2.7	2.7
Gainesville, Fla.	1.0	1.7	3.0	1.0	1.3	1.0
Quincy, Fla.	3.3	3.3	4.3	3.0	4.0	2.7
Jay, Fla.	2.0	2.0	2.0	1.0	3.0	1.0
Fairhope, Ala.	1.3	2.7	2.3	1.3	2.0	1.3
Baton Rouge, La.	2.1	2.1	2.2	2.2	2.3	1.7
		Delta and West				
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
Stuttgart, Ark.	1.7	2.8	3.0	2.8	2.7	1.7
Rohwer, Ark.	1.8	2.8	3.5	2.7	3.5	1.8
St. Joseph, La.	1.7	1.6	1.6	1.5	1.8	1.3
Curtis, La.	1.0	1.7	1.3	1.3	1.5	1.3
Beaumont, Texas	2.0	1.0	2.0	1.0	3.0	1.0

PRELIMINARY GROUP VII

1971

Preliminary Group VII nurseries, including 34 experimental strains and the two check varieties Bragg and Lee 68, were grown at eight locations. The parentage of these strains is reported in Table 50. Performance data from seven locations are summarized in Tables 51 through 56. Differences among strains for seed yield were significant at six locations. The combined analysis of variance showed differences among strains to be significant. There were no strains with a mean seed yield greater than that for Bragg, but there were seven strains which had significantly lower seed yields.

Five strains were weak in seed holding. Ten strains showed injury from phytophthora rot at Stoneville. Six strains were equal or superior to Bragg in reaction to root-knot nematodes in the planting in west Florida.

Table 50. - Parentage of strains in Preliminary Group VII, 1971

	Variety or strain	Parentage	Generation composited
1.	Bragg		
2.	Lee 68		
3.	D69-0263	Bragg(2) x D60-7965	F_5
4.	D69-0283	Bragg(2) x D60-7965	F_5
5.	D69-0413	Bragg(3) x D60-7965	F_4
6.	D69-0442	Bragg(3) x D60-7965	F_4
7.	D69-8309	D63-6094 x D61-4269	F_5
8.	D69-8362	D63-6094 x D61-4269	F_5
9.	D69-8386	D63-6094 x D61-4269	F_5
10.	D69-8551	D63-6094 x D61-4269	F_5
11.	D69-8765	Bragg x D65-7187	F_5
12.	D69-8805	Bragg x D65-7187	F_5
13.	F67-3673	Bragg x D60-8107	F_6
14.	F67-4153	Bragg(2) x D60-7965	F_4
15.	F67-4195	Bragg(2) x D60-7965	F_4
16.	F68-1211	Bragg(3) x D60-7965	F_4
17.	F68-1399	Bragg(3) x D60-7965	F_4
18.	F68-1577	Bragg(3) x D60-7965	F_4
19.	F68-1783	Bragg(3) x PI 96035	F_4
20.	F68-1933	Bragg(3) x D60-7965	F_4
21.	F68-1998	Bragg(3) x D60-7965	F_4
22.	F68-2254	Bragg(3) x D60-7965	F_4
23.	F68-3581	Bragg x F59-1505	F_4
24.	F69-1184	Bragg(3) x D60-7965	F_5
25.	F69-1186	Bragg(3) x D60-7965	F_5
26.	F69-1191	Bragg(3) x D60-7965	F_5
27.	F69-1638	Bragg(3) x D60-7965	F_5
28.	SC69-4106	Sel. from bulk population	
29.	T70-4	Bragg x PI 200,492	F_8
30.	T70-7	Bragg x PI 200,492	F_7
31.	N65-1125	(D58-1899 x D59-2205) x (N55-47 x D56-1215)	F_4
32.	N65-1468	(D58-1899 x D59-2205) x (N55-47 x D56-1215)	F_4
33.	N65-2163	(D58-1899 x D59-2205) x (N55-47 x D56-1215)	F_4
34.	N68-415	Dare x N60-5234	F_4
35.	N68-1708	N56-4202 x N57-6801	F_4
36.	N70-6000B	Bragg/Ransom mixture	

Table 51. - General summary of performance for the strains in Preliminary Group VII, 1971

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	Shatter resist.	P.R.	R-K.	F.E.	T.S.	% mottled seed
Bragg	39.1	10-19	38	21.7	41.3	1.0	1.0	1.5	1.0	1.0	10
Lee 68	34.8	-3	27	21.7	41.5	1.0	1.0	5.0	1.0	1.0	0
D69-0263	39.2	+2	42	18.6-	46.2+	1.0	1.0	2.0	1.0	1.0	0
D69-0283	36.5	+2	39	18.4-	46.1+	1.0	1.0	1.5	1.0	2.0	0
D69-0413	36.1	-1	36	18.7-	45.1+	1.0	1.0	3.0	1.0	2.0	25
D69-0442	39.4	0	38	19.4-	43.8+	1.0	1.0	3.0	1.0	2.0	0
D69-8309	33.2-	+2	31	20.1	41.7	1.0	1.0	4.0	3.0	1.0	12
D69-8362	34.7	0	33	20.7	42.6+	1.0	1.0	3.5	1.0	1.0	5
D69-8386	30.8-	+2	35	20.9	41.8	1.0	1.0	4.0	1.0	1.0	3
D69-8551	35.8	+2	35	20.7	40.7	1.0	1.0	4.0	2.0	3.0	3
D69-8765	39.2	-5	32	22.1	40.3	1.0	1.0	1.0	2.0	2.0	20
D69-8805	37.8	-4	33	21.7	39.9-	1.0	1.0	5.0	1.0	2.0	15
F67-3673	40.2	+6	43	18.5-	45.7+	1.0	1.0	1.0	1.0	2.0	0
F67-4153	39.9	+2	39	20.1	42.9+	1.0	1.0	2.0	1.0	1.0	3
F67-4195	37.4	+3	32	22.6+	40.0-	1.0	2.5	3.0	3.0	1.0	10
F68-1211	38.9	+1	34	21.7	41.7	1.0	1.5	2.0	1.0	1.0	0
F68-1399	36.5	-1	38	19.1-	45.5+	1.0	1.0	2.0	1.0	1.0	2
F68-1577	40.4	+3	38	20.7	41.6	1.0	1.5	2.0	1.0	1.0	0
F68-1783	35.5	-1	34	20.7	41.3	1.0	1.0	2.0	1.0	1.0	8
F68-1933	39.0	+3	37	21.0-	43.6+	1.0	1.0	2.5	1.0	1.0	10
F68-1998	35.9	-2	37	19.1-	44.6+	1.0	1.0	3.0	2.0	1.0	3
F68-2254	38.2	+3	43	21.1	42.9+	1.0	2.0	1.5	1.0	1.0	0
F68-3581	38.6	+3	37	21.8	40.2-	1.0	2.0	1.5	1.0	2.0	10
F69-1184	35.2	-3	35	18.7-	44.9+	1.0	1.0	2.0	1.0	1.0	5
F69-1186	33.1-	0	33	18.7-	45.0+	1.0	3.0	2.0	1.0	1.0	10
F69-1191	33.4-	-3	35	19.0-	45.6+	1.0	1.0	3.0	1.0	2.0	5
F69-1638	39.1	+3	38	20.9-	42.4+	1.0	1.0	3.0	1.0	1.0	3
SC69-4106	34.1	-3	29	21.7	42.2	1.0	2.0	3.5	1.0	1.0	2
T70-4	40.8	+3	36	20.4-	43.3+	1.0	1.5	1.0	2.0	1.0	0
T70-7	27.3-	+6	43	20.4-	41.4	1.0	5.0	2.5	2.0	3.0	0
N65-1125	30.7-	-5	32	20.6-	43.0+	1.8	3.0	3.5	3.0	1.0	0
N65-1468	31.0-	-1	30	20.3-	46.1+	3.0	4.0	2.5	1.0	2.0	0
N65-2163	34.0	-3	33	21.7	43.2+	3.0	2.5	3.5	1.0	1.0	5
N68-415	40.5	-3	37	22.2	41.8	2.0	1.0	3.0	2.0	2.0	0
N68-1708	30.4-	-1	25	22.1	41.1	2.5	3.5	4.5	3.0	2.0	0
N70-6000B	39.4	+2	36	22.3	40.9	1.0	2.0	3.0	1.0	2.0	3
L.S.D.(.05)	5.3			0.7	1.1						
L.S.D.(.01)	6.9			0.9	1.4						

Table 52. - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1971

Strain	Clinton, N.C.	Black-ville, S.C.	Jay, Fla.	Tallas-see, Ala.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	41.5	36.3	42.4	35.7	42.1	30.2	45.6
Lee 68	40.8	37.4	36.0-	30.9	35.9	29.7	33.1
D69-0263	41.9	35.3	44.2	35.3	39.3	36.1	42.2
D69-0283	39.8	29.0-	43.2	31.3	38.2	33.5	40.6
D69-0413	40.5	34.9	40.9	29.8	44.3	23.8	38.5
D69-0442	40.2	38.2	44.3	31.3	39.8	40.4	42.0
D69-8309	34.7	27.7-	44.3	36.1	29.8-	28.8	31.0
D69-8362	39.8	32.4	47.7+	36.3	31.9-	29.0	25.9-
D69-8386	38.9	27.6-	42.4	27.1	26.6-	31.1	22.2-
D69-8551	35.3	32.5	42.4	39.8	30.8-	36.8	33.2
D69-8765	42.6	38.3	42.4	38.1	46.4	40.4	26.4-
D69-8805	41.0	35.0	35.2-	27.4	43.8	44.8+	37.3
F67-3673	41.2	35.2	44.7	33.4	38.1	42.3	46.4
F67-4153	37.1	35.5	48.0+	34.1	39.3	44.0+	42.7
F67-4195	37.3	36.3	40.5	31.7	46.3	36.7	33.4
F68-1211	39.5	36.8	42.7	37.8	41.0	35.2	39.2
F68-1399	37.6	34.2	39.4	28.7	41.2	34.2	40.1
F68-1577	44.5	39.4	41.6	40.6	41.3	37.7	38.1
F68-1783	37.2	38.3	42.4	33.9	37.0	35.8	24.0-
F68-1933	43.1	33.4	48.7+	38.2	44.5	26.2	38.8
F68-1998	36.2	35.0	43.9	31.4	31.2-	36.6	37.0
F68-2254	34.3	36.5	44.3	43.7	36.1	29.8	43.1
F68-3581	38.7	35.1	43.8	39.9	37.7	38.0	37.5
F69-1184	38.8	34.2	37.5-	26.3-	34.0-	37.8	38.1
F69-1186	36.5	25.1-	45.0	34.1	32.9-	23.3	34.7
F69-1191	29.9	31.6	39.7	28.2	33.5-	32.2	38.8
F69-1638	40.2	39.8	39.4	35.4	41.6	38.6	38.6
SC69-4106	36.8	34.9	32.9-	31.5	37.9	35.3	29.4-
T70-4	49.8	37.8	42.4	35.8	47.4	33.7	38.6
T70-7	38.7	22.3-	40.1	28.8	27.7-	11.7-	22.0-
N65-1125	30.6	37.6	33.7-	24.9-	32.7-	32.5	23.4-
N65-1468	39.1	29.3-	41.2	24.9-	39.6	13.6-	29.6-
N65-2163	40.0	36.5	33.3-	22.7-	40.1	32.5	32.8
N68-415	50.9	40.0	38.2-	31.4	45.0	35.7	42.5
N68-1708	46.4	8.2-	45.4	24.2-	44.2	21.5	22.8-
N70-6000B	48.7	36.9	35.6-	33.2	43.0	36.0	42.3
L.S.D.(.05)	N.S.	5.8	3.7	8.6	7.1	12.9	14.7
C.V.	14%	8%	9%	13%	9%	19%	20%

Table 53. - Oil percentages for the strains in Preliminary Group VII, 1971

Strain	Clinton, N.C.	Jay, Fla.	Stoneville, Miss.(A)	Beaumont, Texas
Bragg	21.3	21.6	22.2	21.5
Lee 68	21.4	21.8	22.9	20.6
D69-0263	18.3	18.6	19.5	17.9
D69-0283	17.7	18.7	19.5	17.6
D69-0413	18.6	18.2	19.4	18.4
D69-0442	19.9	18.8	20.4	18.6
D69-8309	19.6	20.6	20.5	19.6
D69-8362	20.2	21.1	21.9	19.7
D69-8386	21.7	20.7	21.3	19.9
D69-8551	20.1	21.1	20.5	20.9
D69-8765	21.7	22.3	23.4	21.1
D69-8805	22.1	21.8	22.4	20.6
F67-3673	18.3	18.5	19.3	17.7
F67-4153	19.2	20.2	21.1	19.9
F67-4195	21.9	22.8	23.0	22.6
F68-1211	20.9	21.3	22.8	21.6
F68-1399	18.8	19.0	19.9	18.5
F68-1577	20.5	21.1	20.5	20.7
F68-1783	20.9	21.1	20.5	20.1
F68-1933	20.2	21.2	21.5	21.2
F68-1998	18.9	19.1	20.3	17.9
F68-2254	19.9	21.8	22.3	20.5
F68-3581	20.9	22.1	22.9	21.1
F69-1184	18.6	18.5	19.3	18.2
F69-1186	18.8	17.8	20.0	18.0
F69-1191	18.8	19.1	19.9	18.1
F69-1638	20.8	21.0	21.2	20.5
SC69-4106	21.5	21.3	23.0	21.0
T70-4	19.3	21.1	21.2	19.8
T70-7	19.4	20.8	21.7	19.6
N65-1125	20.2	20.6	21.0	20.5
N65-1468	20.3	20.6	20.7	19.7
N65-2163	21.4	22.1	23.0	20.1
N68-415	21.7	22.7	23.0	21.5
N68-1708	21.3	22.1	23.6	21.3
N70-6000B	21.5	22.6	23.0	22.0

Table 54. - Protein percentages for the strains in Preliminary Group VII, 1971

Strain	Clinton, N.C.	Jay, Fla.	Stoneville, Miss.(A)	Beaumont, Texas
Bragg	42.1	42.0	39.6	41.4
Lee 68	40.2	42.9	41.0	41.7
D69-0263	46.2	48.1	44.4	45.9
D69-0283	46.7	46.6	44.8	46.4
D69-0413	45.2	45.1	44.1	45.9
D69-0442	42.9	44.9	43.0	44.3
D69-8309	39.9	42.8	40.8	43.3
D69-8362	42.0	42.6	42.0	43.7
D69-8386	39.5	43.8	40.4	43.4
D69-8551	40.4	41.7	38.9	41.6
D69-8765	39.9	41.3	38.9	41.1
D69-8805	40.0	40.7	39.5	39.3
F67-3673	44.7	46.6	44.5	46.9
F67-4153	42.5	43.4	42.1	43.5
F67-4195	40.1	40.4	39.2	40.3
F68-1211	42.1	42.7	40.0	41.9
F68-1399	46.1	47.1	43.3	45.6
F68-1577	41.6	43.0	41.0	40.7
F68-1783	41.5	42.3	39.4	41.8
F68-1933	44.6	44.1	42.0	43.5
F68-1998	44.1	46.0	43.3	44.8
F68-2254	43.4	42.9	42.0	43.3
F68-3581	40.0	39.9	39.5	41.3
F69-1184	44.9	46.1	43.7	45.0
F69-1186	44.4	46.9	43.0	45.7
F69-1191	45.1	46.6	45.8	44.9
F69-1638	42.0	42.7	42.5	42.4
SC69-4106	40.9	43.3	41.4	43.1
T70-4	42.5	43.4	42.8	44.4
T70-7	40.6	43.4	39.5	42.2
N65-1125	42.5	44.1	42.1	43.4
N65-1468	46.8	46.2	44.1	47.1
N65-2163	42.1	44.1	41.2	45.2
N68-415	42.0	41.9	40.6	42.6
N68-1708	40.3	42.0	38.9	43.0
N70-6000B	40.7	41.7	40.3	41.0

Table 55. - Plant height for the strains in Preliminary Group VII, 1971

Strain	Clinton, N.C.	Black-ville, S.C.	Jay, Fla.	Tallas-see, Ala.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	40	40	39	33	46	34	33
Lee 68	30	31	30	25	28	20	25
D69-0263	42	47	41	37	46	39	45
D69-0283	40	46	42	38	41	34	35
D69-0413	38	38	37	33	44	30	34
D69-0442	39	38	36	35	43	34	38
D69-8309	32	37	32	28	31	28	32
D69-8362	32	38	34	29	35	30	35
D69-8386	34	40	35	33	37	31	34
D69-8551	34	41	36	31	38	32	32
D69-8765	36	35	30	27	39	28	26
D69-8805	35	37	32	30	40	30	26
F67-3673	46	43	44	38	47	45	39
F67-4153	42	42	41	32	41	40	33
F67-4195	32	37	33	29	35	29	32
F68-1211	33	36	33	29	42	32	36
F68-1399	40	39	39	35	40	35	37
F68-1577	41	42	39	35	42	36	34
F68-1783	33	34	33	31	39	35	32
F68-1933	40	41	41	32	40	31	33
F68-1998	34	42	37	35	43	37	31
F68-2254	44	48	41	41	47	42	36
F68-3581	37	37	37	32	40	36	37
F69-1184	36	37	36	30	40	35	33
F69-1186	34	30	30	30	40	30	36
F69-1191	34	31	38	33	43	31	32
F69-1638	38	39	37	36	41	34	40
SC69-4106	33	35	28	24	31	25	27
T70-4	43	34	35	32	42	33	30
T70-7	46	38	49	42	48	32	46
N65-1125	34	33	34	27	35	31	28
N65-1468	33	33	27	25	34	27	28
N65-2163	37	36	35	25	36	33	26
N68-415	39	42	39	28	40	37	31
N68-1708	30	--	22	24	27	22	22
N70-6000B	40	39	34	30	41	33	36

Table 56. - Seed quality scores for the strains in Preliminary Group VII, 1971

Strain	Clinton, N.C.	Black-ville, S.C.	Jay, Fla.	Tallas-see,	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Beaumont, Texas
Bragg	1.0	3.5	1.0	2.0	2.0	2.0	2.0
Lee 68	1.0	3.5	1.0	2.0	2.0	2.0	2.0
D69-0263	1.5	3.0	2.0	1.0	2.0	2.0	2.0
D69-0283	1.0	4.0	1.0	1.0	2.0	2.0	1.0
D69-0413	1.5	5.0	2.0	1.0	2.0	2.0	2.0
D69-0442	1.5	4.5	2.0	1.0	2.0	2.0	2.0
D69-8309	1.5	4.0	1.0	1.0	2.0	2.0	1.0
D69-8362	1.5	2.5	2.0	2.0	2.0	2.5	1.0
D69-8386	1.5	3.0	1.0	2.0	2.0	2.5	1.0
D69-8551	1.5	2.0	1.0	1.0	2.0	2.0	1.0
D69-8765	1.5	4.0	1.0	1.0	2.0	2.0	3.0
D69-8805	2.0	4.5	2.0	2.0	2.0	2.0	2.0
F67-3673	1.5	2.5	1.0	2.0	2.0	2.0	1.0
F67-4153	1.5	3.5	1.0	4.0	2.0	2.0	1.0
F67-4195	2.0	2.5	1.0	1.0	2.0	2.0	3.0
F68-1211	2.0	3.5	2.0	1.0	2.0	2.0	1.0
F68-1399	1.5	3.0	1.0	2.0	2.0	2.0	1.0
F68-1577	1.5	2.0	1.0	1.0	2.0	2.0	2.0
F68-1783	1.5	2.5	2.0	2.0	2.0	2.0	1.0
F68-1933	1.5	3.0	1.0	1.0	2.0	2.0	1.0
F68-1998	2.0	2.5	2.0	2.0	2.0	2.0	1.0
F68-2254	2.0	3.0	2.0	2.0	2.0	2.0	1.0
F68-3581	3.0	3.0	2.0	1.0	2.5	2.0	2.0
F69-1184	1.5	4.0	1.0	2.0	2.0	2.0	2.0
F69-1186	1.5	2.0	1.0	1.0	2.0	2.0	1.0
F69-1191	2.0	2.5	2.0	1.0	2.0	2.0	1.0
F69-1638	1.5	3.5	2.0	2.0	2.0	2.0	1.0
SC69-4106	2.0	4.0	1.0	2.0	2.0	2.0	1.0
T70-4	1.5	3.0	1.0	1.0	2.0	2.0	1.0
T70-7	1.5	2.5	1.0	2.0	2.0	2.5	1.3
N65-1125	1.5	2.5	1.0	1.0	2.0	2.0	3.0
N65-1468	1.5	2.0	2.0	1.0	2.0	2.0	2.0
N65-2163	2.0	3.0	2.0	2.0	2.0	2.0	3.0
N68-415	1.5	3.0	1.0	3.0	2.0	2.0	2.0
N68-1708	1.5	5.0	1.0	2.0	2.0	2.0	2.0
N70-6000B	1.5	3.0	2.0	2.0	2.0	2.0	1.0

UNIFORM GROUP VIII

1971

	Variety or strain	Parentage	Generation composited
1.	Hampton 266A	Majos x Lee	
2.	Hardee	D49-772 x Improved Pelican	F_7
3.	F63-4000	F55-822 x (Roanoke x CNS-4)	F_6
4.	F66-1109	F57-735 x D58-3358	F_6
5.	F66-1166	F57-735 x D58-3358	F_6
6.	F67-1806	F57-1471 x F58-3726	F_8
7.	Co68-38	Hampton 266 x Bragg	F_4
8.	Co68-41	Hampton 266 x Bragg	F_4
9.	F66-1062	F57-735 x D58-3358	F_6
10.	F66-1303	Hardee x D53-1301	F_7
11.	F68-1004	Bragg(3) x D60-7965	F_4
12.	F68-1018	Bragg(3) x D60-7965	F_4

Background for strains used as parents:

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

F55-822 is the parent line of Bragg.

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

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

F57-1471 is a selection from the cross D49-2491 x Majos.

F58-3726 is a selection from D49-772 x Improved Pelican.

D53-1301 is a selection from the same cross as Hill but is of Lee maturity.

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

Twenty-four Uniform Group VIII nurseries were planted. Results from 19 nurseries are summarized in Tables 57 through 63. Table 57 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 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. F63-4000 and F68-1018 were significantly higher in seed yield than Hampton 266A. F68-1018 was the highest yielding strain in Preliminary VIII in 1970.

F63-4000 has been grown four years. Its 3-year mean yield is 1.8 bushel, or nearly 5%, above Hampton 266A. Increase plantings were made in North Carolina, South Carolina, Georgia, Florida, Alabama, and Texas. Quality of planting seed was low and stands were poor. This has caused a delay in the naming and release of the strain.

F66-1109 and F66-1166 have been grown three years. Both are of approximately Hardee maturity and have higher mean seed yields. F66-1166 has a lower root-knot neamtode rating than Hardee.

Of the six strains grown only one year, all but F66-1303 ranked above Hampton 266A in seed yield. F68-1004 had the best root-knot nematode resistance.

Table 57. - General summary of performance for the strains in Uniform Group VIII, 1971

	Hampton 266A	Hardee	F63-4000	F66-1109	F66-1166	F67-1806
Seed Yield - 1971	36.9	34.2-	39.7+	38.0	37.7	33.9-
- 1970-71	36.1	33.4	38.3	36.8	36.7	34.9
- 1969-71	36.9	34.0	38.7	37.6	38.0	
Oil Content - 1971	22.5	20.6-	20.9-	22.3	22.1	20.6-
- 1970-71	22.8	21.0	21.0	22.4	22.4	20.7
- 1969-71	23.0	21.4	21.3	22.9	22.7	
Protein Content - 1971	41.0	43.4+	43.3+	42.5+	41.5	41.2
- 1970-71	40.0	42.4	42.8	41.9	40.6	40.6
- 1969-71	39.7	42.1	42.4	41.3	40.5	
Seed size	15.3	13.2-	17.7+	15.7	13.2-	15.7
Maturity index	10-29	+3	-1	+3	+5	+7
Height	38	43	34	39	42	41
Shatter resistance	1.0	1.3	1.3	1.0	1.8	1.3
Phytophthora rot	3.3	1.0	3.0	3.0	2.0	1.0
Root-knot nematode	2.5	3.0	1.0	4.0	2.0	4.5
Frogeye	1.0	1.0	1.0	1.0	1.0	1.0
Target spot	1.3	2.8	2.0	1.7	3.0	1.7
Flower color	P	W	P	W	W	P
Pubescence color	G	G	T	G	G	G
Pod wall color	Br	T	T	T	T	T

Table 57. - (continued)

	Co68-38	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018
Seed Yield - 1971	39.4	37.1	37.8	36.7	39.3	40.5+
- 1970-71						
- 1969-71						
Oil Content - 1971	23.3+	22.7	22.0	20.9-	21.8-	21.2-
- 1970-71						
- 1969-71						
Protein Content - 1971	40.9	40.1-	40.3-	43.6+	42.1+	41.8+
- 1970-71						
- 1969-71						
Seed size	16.4+	15.2	12.0-	15.3	13.8-	15.9
Maturity index	0	-2	+2	+3	+1	+1
Height	33	35	42	40	42	42
Shatter resistance	1.5	1.5	1.5	1.0	1.0	1.0
Phytophthora rot	3.0	4.0	3.0	2.7	2.0	1.3
Root-knot nematode	4.0	2.5	2.5	4.5	1.0	3.0
Frogeye	1.0	1.0	1.0	1.0	2.0	1.0
Target spot	1.0	1.3	2.0	2.8	3.3	2.0
Flower color	W	W	W	P	W	W
Pubescence color	T	G	G	G	T	T
Pod wall color	Br	Br	T	T	T	T

Table 58. - Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1971

Strain	Hampton 266A	Hardee	F63-4000	F66-1109	F66-1166	F67-1806	Co68-38
			South				
Clinton, N.C.	35.1	32.6	28.0	38.1	35.6	34.9	40.1
Florence, S.C.(A)	51.8	55.4	58.1	48.2	53.3	35.1-	51.8
Florence, S.C.(B)	48.4	53.2	57.1+	49.1	53.4	37.0-	54.2
Hartsville,S.C.	32.5	38.2	34.3	42.0+	42.4+	31.0	41.4+
Blackville, S.C.(A)	27.2	18.8-	31.0+	20.3-	22.1-	22.0-	33.3+
Blackville, S.C.(B)	23.5	17.6-	18.7-	22.7	21.8	18.9-	22.0
Experiment, Ga.	64.5	63.2	74.1	65.4	71.5	67.2	62.5
Tallassee, Ala.	40.7	36.5	47.0	36.0	40.9	45.9	47.0
Tifton, Ga.	32.0	24.6-	41.7+	39.9+	36.1	30.4	43.6+
Live Oak, Fla.	26.2	30.6	25.4	29.9	32.0+	29.7	24.9
Gainesville, Fla.	34.6	32.6	42.6+	36.6	38.0	35.4	37.3
Marianna, Fla.	29.6	28.7	29.8	37.2	31.3	35.8	29.8
Quincy, Fla.	26.5	23.9	27.1	26.2	30.1	22.4	25.8
Jay, Fla.	39.3	39.1	41.6	44.6	38.1	36.8	42.1
Fairhope, Ala.	44.5	44.8	49.6	46.5	50.0	51.4	49.2
Baton Rouge, La.	28.7	30.6	38.4	28.5	28.2	19.0	23.9
Stoneville, Miss.[1]	29.9	33.8	18.1-	28.1	34.7	34.0	22.8
Curtis, La.	36.3	18.4	27.2	33.4	28.4	32.7	34.5
Crowley, La.	39.9	34.9-	37.9	37.2	39.7	27.7-	44.6
Beaumont, Texas	39.7	25.0-	44.6	39.8	24.2	31.9	42.1
Mean	36.9	34.2-	39.7+	38.0	37.7	33.9-	39.4

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

[1]Not inculed in mean.

Table 58. - (continued)

Location	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018	L.S.D. (.05)	C.V.
			South				
Clinton, N.C.	32.4	34.4	32.6	32.3	32.8	N.S.	13%
Florence, S.C.(A)	54.9	53.0	58.3	66.5+	57.1	8.9	10%
Florence, S.C.(B)	51.1	56.6+	54.2	54.1	54.9	6.8	8%
Hartsville, S.C.	35.0	36.5	36.6	35.1	37.9	7.4	12%
Blackville, S.C.(A)	29.6	22.5-	26.0	27.1	31.9+	2.7	6%
Blackville, S.C.(B)	20.8	19.8-	21.1	21.7	25.3	3.6	10%
Experiment, Ga.	65.4	70.0	62.5	70.4	73.0	N.S.	8%
Tallassee, Ala.	36.1	35.2	41.4	39.1	37.6	6.6	10%
Tifton, Ga.	37.4	36.4	33.6	36.3	43.0+	5.9	10%
Live Oak, Fla.	25.5	32.2+	30.6	27.3	32.7+	5.0	10%
Gainesville, Fla.	40.5+	35.3	35.4	36.4	38.6	4.8	8%
Marianna, Fla.	28.5	33.8	35.7	28.8	32.5	N.S.	15%
Quincy, Fla.	25.0	26.3	25.0	24.6	29.7	N.S.	12%
Jay, Fla.	43.6	42.6	36.3	39.1	41.4	N.S.	10%
Fairhope, Ala.	52.8	51.1	46.8	52.0	50.1	N.S.	7%
Baton Rouge, La.	27.4	24.8	29.8	42.4	42.0	14.2	28%
Stoneville, Miss.[1]	5.6-	30.1	27.2	38.4+	42.3+	8.5	17%
Curtis, La.	22.0	30.2	30.2	35.9	21.7	N.S.	27%
Crowley, La.	35.3	36.8	30.7-	38.5	47.5+	4.8	8%
Beaumont, Texas	41.1	40.3	31.2	39.0	39.6	10.8	17%
Mean	37.1	37.8	36.7	39.3	40.5+	2.7	

Table 59. - Chemical composition and seed size for the strains in Uniform Group VIII, 1971

Location	Hampton 266A	Hardee	F62-4000	F66-1109	F66-1166	F67-1806	Co68-38
			Oil Percentage				
Blackville, S.C.(B)	22.7	21.2	21.2	22.4	21.8	19.6	23.1
Tifton, Ga.	21.5	2.02	21.2	22.5	22.1	21.4	24.2
Gainesville, Fla.	22.3	20.3	21.1	22.7	22.1	20.6	23.2
Jay, Fla.	22.6	20.8	20.8	22.5	23.3	20.9	23.4
Baton Rouge, La.	23.5	21.0	20.4	22.8	22.6	20.9	22.9
Beaumont, Texas	22.6	19.9	20.9	21.1	20.6	20.4	23.0
Mean	22.5	20.6-	20.9-	22.3	22.1	20.6-	23.3+
			Protein Percentage				
Blackville, S.C.(B)	39.6	41.8	41.0	40.1	40.3	41.1	38.3
Tifton, Ga.	41.5	43.1	44.1	42.9	42.4	40.2	40.8
Gainesville, Fla.	41.4	44.5	43.8	42.6	42.4	42.0	43.3
Jay, Fla.	41.3	43.5	43.6	42.1	40.0	40.8	41.3
Baton Rouge, La.	41.3	43.9	44.0	43.7	41.6	41.4	41.5
Beaumont, Texas	41.0	43.6	43.0	43.5	42.5	41.8	40.4
Mean	41.0	43.4+	43.3+	42.5+	41.5	41.2	40.9
			Grams per 100 Seeds				
Blackville, S.C.(B)	12.5	11.0	13.5	12.0	10.0	11.0	13.5
Tifton, Ga.	13.6	12.2	17.6	14.4	12.5	13.5	16.3
Gainesville, Fla.	15.6	14.0	20.5	17.0	13.8	15.5	18.1
Jay, Fla.	17.3	17.1	20.3	18.9	16.3	19.3	19.1
Baton Rouge, La.	19.0	15.1	20.7	17.7	16.3	21.1	17.5
Beaumont, Texas	13.9	9.6	13.5	14.2	10.4	14.0	13.7
Mean	15.3	13.2-	17.7+	15.7	13.2-	15.7	16.4+

Table 59. - (continued)

Location	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018	L.S.D. (.05)
			Oil Percentage			
Blackville, S.C.(B)	21.6	21.7	21.2	21.7	21.1	
Tifton, Ga.	22.8	21.9	20.9	21.2	21.7	
Gainesville, Fla.	22.7	21.7	21.3	21.8	20.9	
Jay, Fla.	22.9	22.9	21.1	22.1	21.1	
Baton Rouge, La.	23.5	22.0	21.1	22.5	21.1	
Beaumont, Texas	22.9	21.5	20.0	21.6	21.1	
Mean	22.7	22.0	20.9-	21.8-	21.2-	0.6
			Protein Percentage			
Blackville, S.C.(B)	38.0	38.2	41.4	40.6	39.5	
Tifton, Ga.	40.1	41.4	44.2	41.9	42.2	
Gainesville, Fla.	40.9	41.0	43.8	43.1	42.5	
Jay, Fla.	40.3	40.2	43.4	43.1	42.4	
Baton Rouge, La.	41.3	41.3	44.7	42.0	42.4	
Beaumont, Texas	39.9	39.9	44.0	41.7	41.5	
Mean	40.1-	40.3-	43.6+	42.1+	41.8+	0.7
			Grams per 100 Seeds			
Blackville, S.C.(B)	11.5	10.0	11.5	10.5	12.5	
Tifton, Ga.	15.0	11.7	14.8	12.6	15.4	
Gainesville, Fla.	17.3	12.2	16.5	14.1	15.8	
Jay, Fla.	17.4	13.9	18.0	16.2	19.2	
Baton Rouge, La.	17.3	14.6	18.0	17.4	18.5	
Beaumont, Texas	12.8	9.8	12.9	11.8	13.9	
Mean	15.2	12.0-	15.3	13.8-	15.9	1.0

Table 60. - Relative maturity, days earlier (-) or (later+) than Hampton 266A, for the strains in Uniform Group VIII

Location	Date planted	Hampton 266A	Hardee	F63-4000	F66-1109	F66-1166
			South			
Clinton, N.C.	5-21	11-6	+2	-8	-3	0
Florence, S.C.(A)	5-14	11-11	+4	0	-3	+5
Florence, S.C.(B)	6-15	11-12	+3	-2	-4	+6
Hartsville, S.C.	6-7	11-4	+5	-2	+5	+7
Blackville, S.C.	5-18	10-19	+3	0	+3	+5
Experiment, Ga.	5-9	10-28	+4	0	+7	+9
Tallassee, Ala.	5-21	11-2	0	+1	+3	+4
Tifton, Ga.	5-5	10-16	+3	+3	+5	+5
Live Oak, Fla.	6-23	10-22	+4	0	+5	+5
Gainesville, Fla.	6-7	10-24	+2	+2	+4	+3
Marianna, Fla.	6-30	10-27	+1	+2	+4	+2
Quincy, Fla.	7-24	10-15	+4	0	+3	+5
Jay, Fla.	5-14	10-28	+2	0	+1	0
Fairhope, Ala.	6-9	10-26	+8	0	+4	+10
Baton Rouge, La.	5-19	11-12	+3	+2	+4	+8
Stoneville, Miss.	5-6	10-25	+8	-2	+10	+11
Curtis, La.	5-20	10-30	+5	-5	+8	+9
Beaumont, Texas	5-21	10-21	-1	0	+2	-3
Mean		10-29	+3	-1	+3	+5

Table 60. - (continued)

Location	F67-1806	Co68-38	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018
			South				
Clinton, N.C.	0	0	-6	0	0	-3	-3
Florence, S.C.(A)	+5	-1	-3	+1	+1	+4	+2
Florence, S.C.(B)	+3	-4	-4	0	+1	-2	+3
Hartsville, S.C.	+7	-1	-2	+3	+5	-2	-2
Blackville, S.C.	+8	-2	0	+7	+6	+4	+1
Experiment, Ga.	+2	+1	0	+1	0	-4	+2
Tallassee, Ala.	+2	+1	0	-2	0	-2	+1
Tifton, Ga.	+10	+2	+1	+4	+3	+2	+1
Live Oak, Fla.	+7	+2	-2	+5	+3	+4	+1
Gainesville, Fla.	+6	-1	-1	+1	+1	0	+1
Marianna, Fla.	+6	+4	+1	+2	+3	0	-3
Quincy, Fla.	+17	0	-3	+5	+5	+2	-1
Jay, Fla.	+2	+2	+1	-2	+1	-3	0
Fairhope, Ala.	+8	0	-6	0	+8	+4	0
Baton Rouge, La.	+8	0	0	+2	+2	+1	+4
Stoneville, Miss.	+12	-1	-3	+9	+8	+4	+6
Curtis, La.	+6	+2	-1	+2	+6	-2	-3
Beaumont, Texas	+10	+1	+1	+3	+4	+3	+2
Mean	+7	0	-2	+2	+3	+1	+1

Table 61. - Plant height for the strains in Uniform Group VIII, 1971

Location	Hampton 266A	Hardee	F63-4000	F66-1109	F66-1166	F67-1806
			South			
Clinton, N.C.	37	38	27	35	38	36
Florence, S.C.(A)	48	52	48	46	49	46
Florence, S.C.(B)	42	44	38	42	42	44
Hartsville, S.C.	41	48	41	45	43	47
Blackville, S.C.(A)	45	50	36	44	48	46
Blackville, S.C.(B)	35	37	26	34	41	33
Experiment, Ga.	48	47	45	45	50	45
Tallassee, Ala.	38	41	32	40	38	41
Tifton, Ga.	36	47	26	36	39	36
Live Oak, Fla.	25	31	20	26	29	30
Gainesville, Fla.	41	45	35	40	43	43
Marianna, Fla.	32	35	32	35	35	39
Quincy, Fla.	28	27	20	28	28	34
Jay, Fla.	45	49	37	43	51	48
Fairhope, Ala.	42	46	33	42	47	43
Baton Rouge, La.	38	44	40	41	46	44
Stoneville, Miss.	28	39	26	32	39	31
Curtis, La.	42	48	39	42	44	44
Crowley, La.	36	42	36	42	44	42
Beaumont, Texas	40	51	37	41	46	47
Mean	38	43	34	39	42	41

Table 61. - (continued)

Location	Co68-38	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018
			South			
Clinton, N.C.	30	35	41	35	37	36
Florence, S.C.(A)	44	48	48	46	48	54
Florence, S.C.(B)	38	42	42	43	46	42
Hartwville, S.C.	42	43	49	45	47	47
Blackville, S.C.(A)	38	40	49	44	49	47
Blackville, S.C.(B)	30	32	39	36	39	38
Experiment, Ga.	47	48	51	49	53	53
Tallassee, Ala.	33	33	39	38	42	39
Tifton, Ga.	30	34	41	35	38	36
Live Oak, Fla.	22	21	28	27	30	32
Gainesville, Fla.	35	36	43	41	41	42
Marianna, Fla.	25	28	37	33	33	35
Quincy, Fla.	22	21	30	27	27	32
Jay, Fla.	38	42	45	44	48	46
Fairhope, Ala.	28	34	48	45	47	44
Baton Rouge, La.	28	36	40	39	42	39
Stoneville, Miss.	26	22	35	36	37	41
Curtis, La.	37	40	52	38	48	43
Crowley, La.	36	34	44	44	40	43
Beaumont, Texas	33	39	47	46	47	44
Mean	33	35	42	40	42	42

Table 62 - Lodging scores for the strains in Uniform Group VIII, 1971

Location	Hampton 266A	Hardee	F63-4000	F66-1109	F66-1166	F67-1806
			South			
Clinton, N.C.	3.0	3.3	2.5	3.0	3.0	4.0
Florence, S.C.(A)	3.0	3.0	2.0	3.0	3.0	4.0
Florence, S.C.(B)	4.0	4.0	3.0	4.0	4.0	5.0
Hartsville, S.C.	4.3	3.7	3.3	3.5	3.8	4.7
Blackville, S.C.(A)	3.3	2.3	1.3	2.7	3.0	3.3
Blackville, S.C.(B)	2.0	1.7	1.3	2.3	2.3	2.7
Experiment, Ga.	2.7	3.0	1.7	3.0	3.0	2.7
Tallassee, Ala.	3.0	3.0	1.0	3.0	3.0	3.0
Tifton, Ga.	1.3	3.5	2.0	2.0	2.3	3.5
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	2.3	1.3	1.0	2.3	2.3	3.0
Marianna, Fla.	1.0	1.0	1.0	2.0	2.0	2.7
Quincy, Fla.	1.0	1.3	1.0	1.0	1.0	3.0
Jay, Fla.	2.0	2.0	1.0	2.0	3.0	2.0
Fairhope, Ala.	2.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	4.3	4.0	3.2	4.3	4.2	4.4
Stoneville, Miss.	2.0	2.0	2.0	2.3	2.0	2.3
Curtis, La.	2.8	2.8	2.3	2.4	3.0	2.7
Crowley, La.	2.0	2.5	5.0	4.0	3.5	4.0
Beaumont, Texas	1.0	2.0	1.0	1.0	1.0	3.0

Table 62 - (continued)

Location	Co68-38	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018
			South			
Clinton, N.C.	2.3	2.7	3.3	3.0	3.0	3.3
Florence, S.C.(A)	3.0	3.0	3.0	2.0	3.0	4.0
Florence, S.C.(B)	2.0	3.0	4.0	3.0	3.0	3.0
Hartsville, S.C.	2.8	3.2	4.0	3.2	3.7	3.7
Blackville, S.C.(A)	1.7	1.7	3.0	1.3	3.0	3.0
Blackville, S.C.(B)	1.0	1.0	2.0	1.3	2.0	2.0
Experiment, Ga.	1.3	2.3	2.3	2.0	3.0	3.7
Tallassee, Ala.	1.0	2.0	3.0	3.0	3.0	3.0
Tifton, Ga.	1.0	2.0	3.5	3.0	3.0	3.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.3	1.0
Gainesville, Fla.	1.0	1.3	2.3	2.0	2.3	2.0
Marianna, Fla.	1.0	1.3	1.0	1.0	1.0	1.3
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.3
Jay, Fla.	1.0	2.0	3.0	2.0	3.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	3.3	3.5	4.1	4.3	3.3	3.5
Stoneville, Miss.	2.0	2.0	2.0	2.0	2.0	3.0
Curtis, La.	3.0	2.4	1.3	3.0	2.8	3.1
Crowley, La.	3.0	4.0	3.0	3.0	4.0	4.5
Beaumont, Texas	1.0	1.0	2.0	1.0	3.0	3.0

Table 63. - Seed quality scores for the strains in Uniform Group VIII, 1971

Location	Hampton 266A	Hardee	F63-4000	F66-1109	F66-1166	F67-1806
			South			
Clinton, N.C.	1.5	1.0	1.5	1.5	1.0	1.0
Blackville, S.C.(A)	3.0	2.0	1.7	2.0	3.3	1.7
Blackville, S.C.(B)	1.7	1.7	1.7	1.0	2.0	1.7
Experiment, Ga.	3.7	2.0	3.0	2.7	2.7	2.3
Tallassee, Ala.	2.0	1.0	1.0	2.0	2.0	1.0
Tifton, Ga.	2.7	2.3	2.5	2.3	2.3	2.5
Live Oak, Fla.	2.0	1.3	1.0	1.3	1.0	2.0
Gainesville, Fla.	1.7	1.0	1.7	1.7	1.0	1.3
Quincy, Fla.	1.7	3.0	1.7	1.7	2.7	4.7
Jay, Fla.	1.0	1.0	2.0	2.0	1.0	2.0
Fairhope, Ala.	2.3	1.3	1.7	1.7	2.0	1.7
Baton Rouge, La.	3.0	2.3	3.3	2.7	2.7	3.0
Stoneville, Miss.	2.0	2.3	2.0	2.0	2.0	2.3
Curtis, La.	2.4	1.5	1.7	1.3	1.8	1.7
Beaumont, Texas	3.0	1.0	3.0	2.0	2.0	1.0

Table 63. - (continued)

Location	Co68-38	Co68-41	F66-1062	F66-1303	F68-1004	F68-1018
			South			
Clinton, N.C.	1.5	1.5	1.5	1.5	1.0	1.0
Blackville, S.C.(A)	2.0	2.0	3.0	3.0	3.7	2.7
Blackville, S.C.(B)	2.0	1.7	2.3	1.7	2.0	2.0
Experiment, Ga.	3.0	3.7	2.3	2.7	2.3	2.3
Tallassee, Ala.	2.0	-	2.0	1.0	1.0	-
Tifton, Ga.	2.8	2.2	2.5	2.3	2.7	2.5
Live Oak, Fla.	3.5	2.7	1.0	1.3	2.0	2.0
Gainesville, Fla.	1.7	2.3	1.0	1.0	1.0	1.0
Quincy, Fla.	2.7	2.7	4.3	3.0	3.3	2.3
Jay, Fla.	3.0	1.0	1.0	2.0	2.0	1.0
Fairhope, Ala.	2.0	2.0	1.3	1.7	1.0	1.3
Baton Rouge, La.	4.0	2.9	3.9	2.6	2.4	2.7
Stoneville, Miss.	2.0	2.0	2.3	2.3	2.0	2.0
Curtis, La.	1.8	3.0	1.3	1.8	2.4	4.0
Beaumont, Texas	2.0	2.0	2.0	3.0	2.0	2.0

PRELIMINARY GROUP VIII

1971

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 64. Performance data from seven locations are summarized in Tables 65 through 70. Differences in seed yield were significant at the 5% level of confidence at all locations. The combined analysis of variance for seed yield showed differences in mean seed yields among strains to be significant. Hardee and seven experimental strains had significantly lower mean seed yields. There were no strains for which the mean seed yield was significantly higher at the 5% level of confidence.

Table 64. - Parentage of strains in Preliminary Group VIII, 1971

	Variety or strain	Parentage	Generation composited
1.	Hampton 266A		
2.	Hardee		
3.	Co68-47	Hampton 266 x Bragg	F_4
4.	Co69-92	Hampton 266 x Bragg	F_5
5.	Co69-94	Hampton 266 x Bragg	F_5
6.	Co69-99	Hampton 266 x Bragg	F_5
7.	Co69-103	D68-4300 x Hampton 266	F_4
8.	Co69-110	Hampton 266 x Bragg	F_5
9.	Co69-117	Hampton 266 x Bragg	F_5
10.	Co69-118	Hampton 266 x Bragg	F_5
11.	Co69-119	Hampton 266 x Bragg	F_5
12.	Co69-131	Co58-239 x Hampton 266	F_7
13.	F68-1025	Bragg(3) x D60-7965	F_4
14.	F68-1027	Bragg(3) x D60-7965	F_4
15.	F68-1033	Bragg(3) x D60-7965	F_4
16.	F68-1037	Bragg(3) x D60-7965	F_4
17.	F68-1062	Bragg(3) x D60-7965	F_4
18.	F68-1151	Bragg(3) x D60-7965	F_4
19.	F68-1426	Bragg(3) x D60-7965	F_4
20.	F68-1433	Bragg(3) x D60-7965	F_4
21.	F68-1441	Bragg(3) x D60-7965	F_4
22.	F68-3089	Bragg(2) x D60-7965	F_5
23.	F68-3090	Bragg(2) x D60-7965	F_5
24.	F68-3230	Bragg(2) x D60-7965	F_5
25.	F68-3769	Hardee x Lee	F_5
26.	F69-1716	Bragg(3) x D60-7965	F_5
27.	F69-1798	Bragg(2) x F59-2496	F_5
28.	F69-2112	Hardee x D53-1301	F_9
29.	F69-2132	F57-1471 x D53-1301	F_9
30.	F69-2633	Bragg x Semmes	F_8
31.	F69-4355	Bragg x Hardee	F_6
32.	F69-4386	Bragg x Hardee	F_6
33.	F69-4394	Bragg x Hardee	F_6
34.	F69-4406	Bargg x Hardee	F_6
35.	T70-142	Bragg x PI 200,492	F_7
36.	T70-1912	Bragg x PI 200,492	F_7

Table 65. - General summary of performance for the strains in Preliminary Group VIII, 1971

Strain	Seed yield	Mat. index	Ht.	Percent Oil	Percent Protein	P.R.	R.K.	F.E.	T.S.
Hampton 266A	35.7	10-27	38	21.9	40.5	2.5	2.5	1.0	1.5
Hardee	31.3-	+2	42	20.5-	43.4+	1.0	3.5	1.0	2.0
Co68-47	37.4	-1	33	22.0	41.1	1.5	4.0	1.0	1.5
Co69-92	34.5	0	35	21.8	41.3	2.0	5.0	2.0	1.5
Co69-94	31.5-	0	39	21.2	41.0	2.5	2.5	2.0	1.5
Co69-99	34.4	-2	34	21.1-	42.4+	3.5	4.0	1.0	2.3
Co69-103	36.2	+2	34	21.8	40.4	1.5	4.0	1.0	1.5
Co69-110	35.1	-1	35	22.4	40.7	3.0	4.0	2.0	2.0
Co69-117	37.3	+2	34	22.3	40.2	2.0	3.0	1.0	1.0
Co69-118	36.4	-4	35	21.0-	40.2	3.0	2.0	4.0	1.5
Co69-119	38.9	-3	33	23.0+	40.2	2.5	2.5	1.0	2.0
Co69-131	30.7-	+1	40	20.0-	43.2+	1.0	4.5	2.0	1.0
F68-1025	39.6	+2	42	21.7	42.6+	1.0	2.0	2.0	2.3
F68-1027	39.8	+3	40	22.2	41.9+	1.0	2.0	3.0	2.0
F68-1033	38.3	+3	37	21.7	42.4+	1.0	1.0	1.0	2.5
F68-1037	36.1	+3	37	21.9	42.2+	1.5	1.0	2.0	2.3
F68-1062	30.9-	0	40	19.9-	43.6+	2.5	2.0	1.0	2.5
F68-1151	38.4	-1	35	20.4-	42.5+	2.5	1.5	2.0	3.3
F68-1426	36.8	-1	32	21.3	42.4+	2.5	2.0	1.0	2.0
F68-1433	36.8	-4	34	21.1-	42.3+	3.5	2.5	1.0	2.5
F68-1441	38.0	-1	36	20.9-	42.3+	2.5	2.0	1.0	2.8
F68-3089	38.4	-4	40	20.7-	43.9+	1.0	2.5	1.0	2.3
F68-3090	36.6	-4	36	21.5	43.1+	1.0	1.0	1.0	2.5
F68-3230	34.1	-5	33	21.9	40.6	2.5	1.5	1.0	2.0
F68-3769	32.7	-2	39	21.6	42.2+	3.0	4.5	1.0	2.6
F69-1716	34.7	-1	35	21.2	42.2+	2.5	1.5	2.0	3.0
F69-1798	30.6-	-4	39	19.4-	43.9+	3.5	4.0	1.0	3.5
F69-2112	25.3-	0	31	21.7	41.1	2.0	5.0	1.0	2.0
F69-2132	35.0	+2	35	21.5	41.7+	1.5	4.5	2.0	2.0
F69-2633	32.5	-12	33	22.1	41.1	3.5	1.5	1.0	2.5
F69-4355	27.1-	+3	43	20.1-	44.1+	1.5	4.0	1.0	1.5
F69-4386	34.9	+2	41	21.2	43.1+	1.0	4.5	1.0	2.0
F69-4394	31.0-	+4	39	21.1-	42.2+	1.0	1.0	1.0	1.5
F69-4406	32.3	+1	41	20.8-	42.3+	3.0	4.0	1.0	3.0
T70-142	37.4	-7	30	23.2+	40.6	3.0	4.0	1.0	2.0
T70-1912	31.6	-13	23	21.8	41.2	1.0	5.0	1.0	2.5
L.S.D.(.05)	4.2			0.8	1.2				
L.S.D.(.01)	5.6			1.1	1.6				

Table 66. - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1971

Strain	Blackville, S.C.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Beaumont, Texas	Baton Rouge, La.	Stoneville, Miss.
Hampton 266A	20.2	42.3	27.8	42.4	41.5	36.7	39.4
Hardee	15.9-	36.3	24.5	36.0	31.9-	39.0	35.2
Co68-47	22.8	41.4	24.8	44.2	43.3	47.6+	37.7
Co69-92	20.1	38.3	23.3	43.2	41.0	42.2	33.7
Co69-94	18.7	36.8	23.3	40.9	40.3	33.8	26.5-
Co69-99	23.0	42.2	26.9	44.3	41.2	45.5	17.9-
Co69-103	22.2	39.7	30.9	44.3	39.1	39.8	37.7
Co69-110	20.8	40.0	27.8	47.7	37.4	46.1	25.8-
Co69-117	20.6	47.1	27.6	42.4	34.6	47.0+	41.9
Co69-118	20.9	46.4	27.0	42.4	43.0	45.6	29.8
Co69-119	23.2	45.5	31.3	42.4	45.4	49.8+	34.9
Co69-131	17.8	35.2-	24.5	35.2	32.1-	35.4	34.6
F68-1025	23.8+	43.2	27.4	44.7	43.3	46.0	49.2
F68-1027	21.4	51.1+	26.9	46.5	46.9	42.0	44.4
F68-1033	21.2	50.5+	28.9	40.5	34.0	47.2+	45.7
F68-1037	20.8	47.5	24.6	42.7	36.6	45.3	35.1
F68-1062	19.2	41.6	22.3-	39.4	29.0-	39.0	25.5-
F68-1151	25.7+	41.1	30.3	41.6	41.4	51.6+	37.2
F68-1426	21.7	44.2	28.5	42.4	42.0	44.1	34.4
F68-1433	24.1+	41.3	30.1	48.8	34.7	49.0+	29.7
F68-1441	21.3	46.7	28.1	43.9	42.4	52.0+	31.5
F68-3089	22.9	39.0	27.8	44.3	46.9	46.0	41.9
F68-3090	24.9+	42.5	29.5	43.5	35.4	40.5	40.2
F68-3230	22.4	43.3	27.8	37.5	29.8-	41.4	36.6
F68-3769	18.2	37.5	29.6	45.0	34.1	38.1	26.6-
F69-1716	20.4	41.8	25.3	39.7	41.4	47.6	26.4-
F69-1798	19.4	40.8	26.6	39.4	32.0	37.4	18.6-
F69-2112	9.3-	41.7	12.4-	32.9-	34.2	27.4	17.9-
F69-2132	18.0	40.6	25.4	42.4	42.2	47.0+	29.5
F69-2633	23.2	42.1	28.1	40.1	34.6	39.0	20.4-
F69-4355	15.5-	35.6-	18.3-	33.2-	25.2-	35.8	25.6-
F69-4386	21.2	44.1	27.0	41.2	34.2	37.2	39.8
F69-4394	15.9-	37.0	20.1-	33.3-	31.1-	44.4	35.5
F69-4406	19.5	39.1	22.8	38.2	33.8	44.7	28.0
T70-142	26.1+	37.3	32.2	45.4	42.8	48.0+	29.9
T70-1912	24.8+	39.4	23.5	35.6	28.1-	35.0	35.0
L.S.D.(.05)	3.2	6.1	5.3	7.3	8.2	8.0	12.2
C.V.	8%	7%	10%	9%	11%	9%	18%

Table 67. - Oil percentages for the strains in Preliminary Group VIII, 1971

Strain	Blackville, S.C.	Gainesville, Fla.	Jay, Fla.	Baton Rouge, La.
Hampton 266A	19.3	23.1	22.3	22.7
Hardee	18.6	21.3	21.8	20.4
Co68-47	19.1	23.2	23.0	22.5
Co69-92	19.3	23.1	23.1	21.6
Co69-94	19.1	21.8	21.5	22.2
Co69-99	18.8	22.6	22.1	20.9
Co69-103	19.7	23.6	22.3	21.6
Co69-110	20.2	23.3	23.0	23.0
Co69-117	19.7	23.9	22.8	22.8
Co69-118	19.0	22.2	21.3	21.6
Co69-119	21.9	23.3	23.0	23.8
Co69-131	18.0	21.3	20.5	20.1
F68-1025	20.3	22.3	21.8	22.5
F68-1027	20.2	23.6	22.3	22.7
F68-1033	19.8	23.2	21.8	22.0
F68-1037	20.3	23.2	22.0	22.0
F68-1062	18.6	20.8	20.1	20.1
F68-1151	19.3	20.9	20.8	20.6
F68-1426	19.7	21.9	21.2	22.2
F68-1433	20.1	21.7	21.0	21.7
F68-1441	19.1	21.9	21.6	21.1
F68-3089	19.6	21.4	20.6	21.1
F68-3090	20.4	22.8	21.6	21.3
F68-3230	21.2	22.4	22.1	22.0
F68-3769	20.4	21.9	22.1	21.8
F69-1716	19.9	21.9	21.7	21.2
F69-1798	18.5	20.4	19.3	19.4
F69-2112	20.2	22.2	22.8	21.7
F69-2132	18.7	23.4	21.8	22.2
F69-2633	21.1	23.4	21.8	22.2
F69-4355	17.1	21.8	21.1	20.3
F69-4386	19.4	22.3	21.7	21.3
F69-4394	17.8	22.4	21.7	22.4
F69-4406	18.3	22.4	21.3	21.3
T70-142	21.2	24.0	24.2	23.4
T70-1912	21.4	22.4	21.6	21.8

Table 68. - Protein percentages for the strains in Preliminary Group VIII, 1971

Strain	Blackville, S.C.	Gainesville, Fla.	Jay, Fla.	Baton Rouge, La.
Hampton 266A	39.9	40.8	40.1	41.0
Hardee	44.1	42.8	43.1	43.7
Co68-47	41.0	40.6	42.2	40.7
Co69-92	41.8	40.8	41.1	41.5
Co69-94	41.1	40.7	41.7	40.5
Co69-99	41.5	42.7	42.1	43.1
Co69-103	40.4	39.5	40.5	41.1
Co69-110	41.1	41.1	40.1	40.5
Co69-117	40.8	39.6	40.3	40.1
Co69-118	40.3	39.7	40.1	40.7
Co69-119	39.9	40.4	40.1	40.3
Co69-131	43.3	43.0	43.3	43.3
F68-1025	43.4	42.4	43.2	41.4
F68-1027	42.7	40.9	42.7	41.2
F68-1033	42.9	41.3	43.2	42.2
F68-1037	42.9	41.2	42.6	42.0
F68-1062	42.9	43.9	43.9	43.8
F68-1151	43.3	43.0	42.6	41.2
F68-1426	42.2	43.1	42.8	41.4
F68-1433	40.6	43.1	43.2	42.2
F68-1441	41.9	42.3	42.8	42.1
F68-3089	43.4	44.2	44.4	43.5
F68-3090	43.0	43.0	44.0	42.2
F68-3230	39.8	40.7	40.9	41.1
F68-3769	41.4	41.6	43.0	42.7
F69-1716	41.4	42.1	43.3	42.1
F69-1798	43.7	43.6	44.4	43.7
F69-2112	41.1	40.4	41.7	41.3
F69-2132	43.3	40.2	41.0	42.4
F69-2633	40.0	41.1	41.6	41.7
F69-4355	46.2	42.5	43.6	44.1
F69-4386	42.7	42.2	43.2	44.2
F69-4394	44.1	41.1	42.8	40.6
F69-4406	43.5	39.2	43.7	42.6
T70-142	40.4	41.1	40.3	40.5
T70-1912	39.6	41.2	41.5	42.6

Table 69. - Plant height for the strains in Preliminary Group VIII, 1971

Strain	Blackville, S.C.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.	Beaumont, Texas	Stone-ville, Miss.
Hampton 266A	38	35	26	44	40	48	33
Hardee	36	43	29	46	48	44	43
Co68-47	32	34	23	37	38	35	31
Co69-92	35	33	27	40	42	37	34
Co69-94	37	32	30	46	47	45	33
Co69-99	34	33	25	38	43	40	28
Co69-103	33	32	22	41	38	40	33
Co69-110	36	33	27	42	38	35	32
Co69-117	30	33	25	44	37	40	30
Co69-118	37	34	24	44	44	33	31
Co69-119	32	33	23	39	36	39	29
Co69-131	36	38	25	45	50	46	39
F68-1025	37	41	28	42	46	56	41
F68-1027	33	38	28	49	52	43	38
F68-1033	36	39	27	39	41	38	40
F68-1037	35	37	26	46	44	41	33
F68-1062	38	41	28	47	50	42	37
F68-1151	35	34	25	42	39	38	29
F68-1426	32	32	22	42	30	37	32
F68-1433	32	35	23	40	40	35	33
F68-1441	35	38	24	40	42	41	33
F68-3089	34	40	26	47	46	46	41
F68-3090	36	34	27	42	42	37	36
F68-3230	34	34	24	30	40	38	32
F68-3769	37	37	25	51	43	41	36
F69-1716	34	36	23	44	39	40	30
F69-1798	32	39	28	47	51	45	32
F69-2112	26	35	17	37	30	42	28
F69-2132	35	35	29	43	39	34	32
F69-2633	35	35	22	40	38	33	31
F69-4355	40	43	32	49	51	47	41
F69-4386	36	40	28	49	50	46	39
F69-4394	35	39	29	42	46	44	36
F69-4406	34	40	29	49	51	46	38
T70-142	31	29	22	32	35	31	27
T70-1912	24	24	17	25	26	23	23

Table 70. - Seed quality scores for the strains in Preliminary Group VIII, 1971

Strain	Blackville, S.C.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.	Beaumont, Texas	Stoneville, Miss.
Hampton 266A	2.0	2.0	1.0	1.0	2.4	4.0	2.0
Hardee	2.0	1.0	3.0	2.0	2.4	3.0	2.0
Co68-47	1.0	1.5	2.0	1.0	2.9	2.0	2.0
Co69-92	3.0	2.5	2.5	2.0	2.3	2.0	2.0
Co69-94	1.5	1.5	2.5	1.0	2.5	3.0	2.0
Co69-99	2.0	1.0	1.0	1.0	2.2	3.0	2.5
Co69-103	2.0	1.5	1.5	2.0	2.5	2.0	2.0
Co69-110	2.0	2.5	2.5	2.0	2.5	2.0	2.0
Co69-117	1.5	1.0	1.0	1.0	2.2	2.0	2.0
Co69-118	1.0	2.0	2.0	1.0	2.5	2.0	2.0
Co69-119	1.0	2.0	1.5	2.0	2.0	2.0	2.0
Co69-131	1.5	1.5	2.0	2.0	2.8	3.0	2.0
F68-1025	1.0	1.0	2.5	2.0	2.3	1.0	2.0
F68-1027	2.0	1.0	2.5	2.0	2.8	1.0	2.0
F68-1033	2.0	1.0	3.0	2.0	2.1	1.0	2.0
F68-1037	2.0	1.0	4.0	1.0	2.2	1.0	2.0
F68-1062	2.0	1.0	4.0	2.0	2.8	2.0	2.0
F68-1151	1.0	1.0	2.0	2.0	2.8	2.0	2.0
F68-1426	1.0	1.5	2.0	2.0	2.1	2.0	2.0
F68-1433	2.0	1.5	1.5	2.0	2.3	2.0	2.0
F68-1441	1.0	1.5	3.5	1.0	2.1	1.0	2.0
F68-3089	1.0	1.0	2.5	2.0	2.1	2.0	2.0
F68-3090	1.5	1.0	1.0	2.0	2.0	3.0	2.0
F68-3230	1.5	1.0	1.0	2.0	2.4	3.0	2.0
F68-3769	1.0	1.5	2.5	2.0	2.3	2.0	2.0
F69-1716	1.0	1.0	1.5	2.0	2.4	2.0	2.5
F69-1798	1.0	1.5	4.0	2.0	2.7	2.0	2.0
F69-2112	2.0	1.0	2.0	2.0	2.3	1.0	2.0
F69-2132	1.5	1.5	3.5	1.0	2.0	2.0	2.0
F69-2633	1.5	1.0	1.0	1.0	2.0	2.0	2.0
F69-4355	1.0	1.0	5.0	2.0	2.7	2.0	2.5
F69-4386	1.0	1.0	1.5	1.0	2.6	1.0	2.0
F69-4394	1.5	1.5	3.5	2.0	2.6	2.0	2.0
F69-4406	2.0	1.5	4.0	2.0	2.2	2.0	2.0
T70-142	1.0	2.0	2.5	1.0	2.0	2.0	2.0
T70-1912	1.5	2.0	2.0	2.0	2.6	3.0	2.0