U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1965 PART II. SOUTHERN STATES

UNITED STATES DEPARTMENT OF AGRICULTURE
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CROPS RESEARCH DIVISION
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RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS

PART II. SOUTHERN STATES

1965

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Compiled by:

Edgar E. Hartwig and Kathryn W. Jamison[1/]

From data supplied by:

E. L. Wisk, Delaware
B. E. Caldwell, Maryland
E. H. Beyer, Maryland
G. D. Jones, Orange, Va.
H. M. Camper, Warsaw, Va.
E. M. Dunton, Jr., Painter, Va.
A. V. Watts, Norfolk, Va.
M. T. Carter, Petersburg, Va.
M. W. Alexander, Holland, Va.
C. A. Brim, North Carolina
J. B. Pitner, Florence, S. C.
H. L. Musen, Blackville, S. C.
E. B. Eskew, Clemson, S. C.
H. W. Webb, Hartsville, S. C.
H. B. Harris, Experiment, Ga.
W. H. Marchant, Tifton, Ga.
J. K. Boseck, Belle Mina, Ala.
J. W. Langford, Tallassee, Ala.
H. F. Yates, Fairhope, Ala.
Kuell Hinson, Gainesville, Fla.
R. W. Lipscomb, Marianna, Fla.
R. W. Wallace, Quincy, Fla.
R. L. Smith, Jay, Fla.
J. F. Shane, Kentucky
Elmer Counce, Martin, Tenn.
Tom McCutchen, Milan, Tenn.
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G. D. Green, State College, Miss.
E. E. Hartwig, Stoneville, Miss.
N. A. Brown, Portageville, Mo.
Maxsie Taylor, Keiser, Ark.
F. J. Williams, Stuttgart, Ark.
J. L. Dameron, Marianna, Ark.
C. E. Caviness, Fayetteville, Ark.
J. P. Gray, Baton Rouge, La.
J. A. Hendrix, St. Joseph, La.
J. Y. Oakes, Curtis, La.
R. S. Matlock, Oklahoma
R. D. Staten, College Station, Texas

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NOT FOR PUBLICATION

1/ Agronomist and Statistical Clerk, respectively.

COOPERATING AGENCIES AND PERSONNEL

FOR THE

SOUTHERN REGION

Soybean Investigations, Beltsville, Maryland

Robert W. Howell, Leader

Laboratory Headquarters, Urbana, Illinois

J. L. Cartter, Agronomist-In-Charge
F. I. Collins, Chemist
O. A. Krober, Chemist

Southern Region Headquarters, Stoneville, Mississippi

Edgar E. Hartwig, Agronomist
Frederic L. Morgan, Pathologist
Kathryn W. Jamison, Statistical Clerk
Calton J. Edwards, Jr., Research Technician
J. Kenneth Buckner, Research Technician
Pat Butler, Research Technician

Raleigh, North Carolina

Charles A. Brim, Agronomist
John P. Ross, Pathologist
M. F. Young, Research Technician
Clifford Elledge, Research Technician[1/]

Gainesville, Florida

Kuell Hinson, Geneticist
Howard F. McGraw, Research Aid

1/ Full-time State employee.

STATE COLLABORATORS IN THE SOUTHERN REGION

W. C. Johnson
Alabama Agricultural Experiment Station
Auburn, Alabama

C. E. Caviness
Arkansas Agricultural Experiment Station
Fayetteville, Arkansas

R. L. Smith
West Florida Agricultural Experiment Station
Jay, Florida

H. B. Harris
Georgia Agricultural Experiment Station
Experiment, Georgia

J. P. Gray
Louisiana Agricultural Experiment Station
Baton Rouge, Louisiana

W. K. Porter, Jr.
Mississippi Agricultural Experiment Station
Delta Branch
Stoneville, Mississippi

C. A. Brim
North Carolina Agricultural Experiment Station
Raleigh, North Carolina

R. S. Matlock
Oklahoma Agricultural Experiment Station
Stillwater, Oklahoma

H. L. Musen
Edisto Experiment Station
Blackville, South Carolina

L. F. Seatz
Tennessee Agricultural Experiment Station
Knoxville, Tennessee

R. D. Staten
Texas Agricultural Experiment Station
College Station, Texas

T. J. Smith
Virginia Agricultural Experiment Station
Blacksburg, Virginia

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 group IV 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 check varieties are Kent, Hill, Hood, Lee, Bragg, and Bienville. At Stoneville, Miss., 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; Hood, October 8; Lee, October 16; Bragg, October 22, and Bienville, November 1.

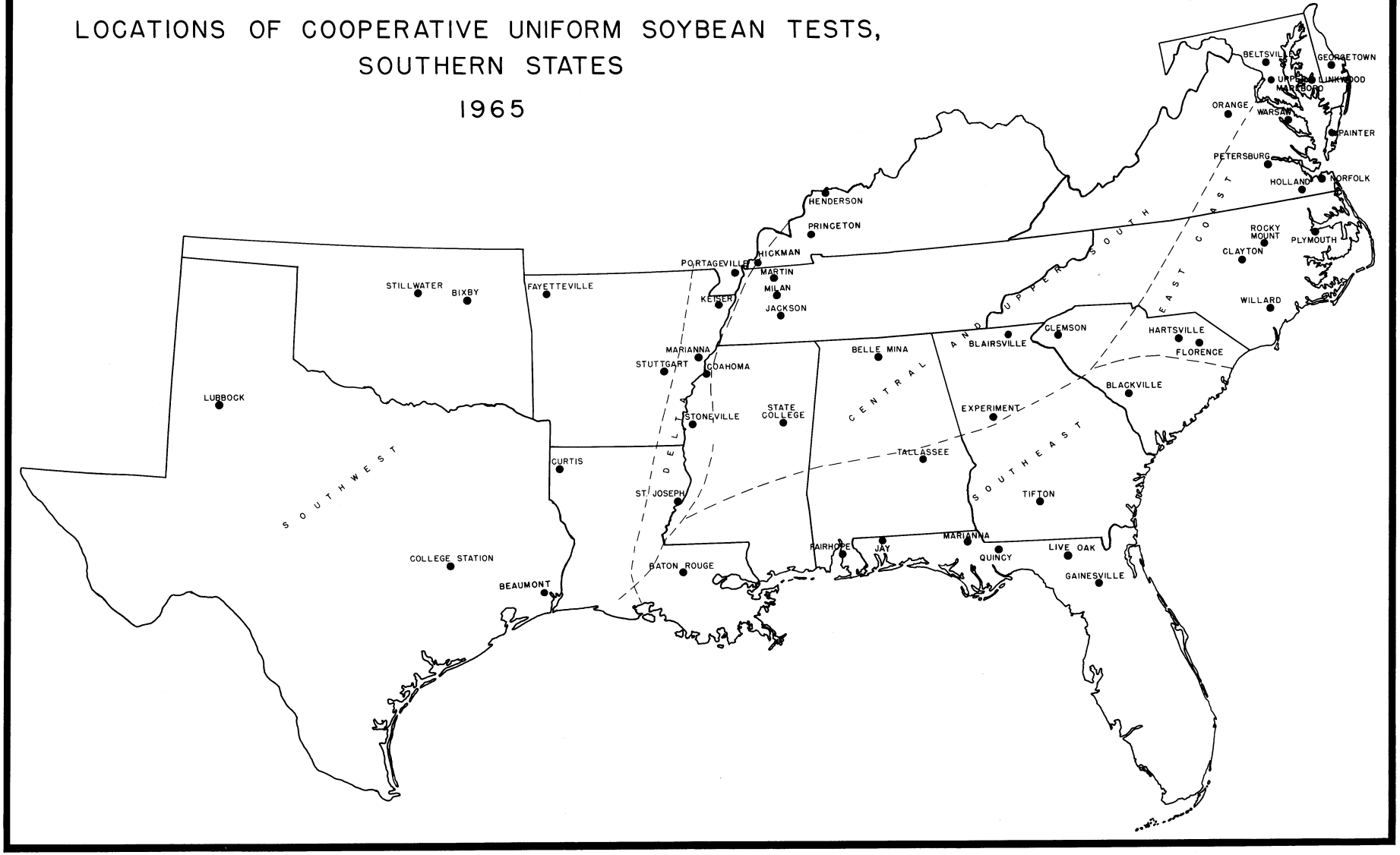
A wide range of soil and climatic conditions exist in the regions. As an aid in recognizing regional adaptation, the region has been subdivided into 5 rather broad areas which still represent a wide range of soil types. These are: (1) the East Coast, consisting of the Coastal Plain and Tidewater areas 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 valley soils and the high plains of Texas. In this area, many of the tests receive supplemental irrigation. A map is included to illustrate the 5 production areas.

On nearly all of the Coastal Plain, Piedmont, and loessal soils, 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 phosphorous 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.

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES

1965



As an indication of the temperature and rainfall pattern in areas where the tests are conducted, daily minimum and maximum temperatures and rainfall are reported for Plymouth, North Carolina; Blackville, South Carolina; Gainesville, Florida; Keiser, Arkansas; Stoneville, Mississippi; and Lubbock, Texas.

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 Exp. Sta. and U. S. Regional Soybean Laboratory
F	-	Florida Agr. Exp. Sta. and U. S. Regional Soybean Laboratory
Ga	-	Georgia Agricultural Experiment Station
L	-	Illinois Agr. Exp. Sta. and U. S. Regional Soybean Laboratory
La	-	Louisiana Agricultural Experiment Station
Md	-	Maryland Agr. Exp. Sta. and U. S. Regional Soybean Laboratory
N	-	North Carolina Agr. Exp. Sta. and U. S. Regional Soybean Laboratory
R	-	Arkansas Agricultural Experiment Station
S	-	Missouri Agr. Exp. Sta. 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 analyses, and fertilization

Location	Groups Grown IV	V	VI	VII	VIII	Soil type	Soil analyses P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
East Coast											
Upper Marlboro, Md.	1	1				Mommouth loamy f. sand	H	H	6.3	8-16-24	50.9 - G
Georgetown, Del.	1	1	1			Norfolk sandy loam	H+	M	6.3	0-45-90	40.4 - A
Linkwood, Md.	1*	1*	1*			Sassafras sandy loam	M	M	6.5	0-27-81	40.1 - A
Warsaw, Va.	1*	1*	1*			Sassafras sandy loam	M	M	6.4	0-0-0	29.6 - B
Painter, Va.	1	1	1			Sassafras f. sandy loam	VH	H	5.5	0-0-0	41.2 - B
Petersburg, Va.		1	1			Goldsboro f. sandy loam	VH	M	5.6	0-0-0	25.5 - C
Norfolk, Va.		1	1			Woodstown sandy loam	VH	H	6.2	0-0-0	17.1 - C
Holland, Va.		1	1			Woodstown loam f. sand	VH	M-	5.5	15-45-90	32.1 - A
Plymouth, N.C.		1*	1*			Portsmouth f. sandy loam	H	H	6.0	0-40-80	46.5 - C
Rocky Mt., N.C.[3]				1		Norfolk sandy loam	H	H	6.2	0-40-80	42.6 - D
Willard, N.C.			1	1*		Norfolk f. sandy loam	VH	M	5.6	0-40-80	50.1 - C
Clayton, N.C.[3]			1	1		Norfolk sandy loam	VH	M	6.0	0-40-80	48.6 - C
Florence, S.C.				1	1*	Marlboro f. sandy loam				0-0-0	47.5 - D
Hartsville, S.C.(A)			1	1	1	Norfolk sandy loam	M	M	6.3	0-40-80	45.8 - D
Hartsville, S.C.(B)					1	Coxville sandy loam	M	M	5.1	0-40-80	48.1 - F
Southeast											
Blackville, S.C.(A)				1*		Norfolk sandy loam	M	M	6.2	0-42-42	32.6 - D
Blackville, S.C.(B)					1*	Norfolk sandy loam	M	M	6.2	0-42-42	44.4 - F
Tallassee, Ala.			1	1*	1	Cahaba loamy f. sand	H	H	6.0	0-42-42	41.1 - D
Tifton, Ga.				1	1	Tifton pebbly loam	65	76	6.5	15-50-75	24.9 - F
Live Oak, Fla.				1	1*	Klej fine sand	32	189	5.8	0-70-140	48.1 - H
Gainesville, Fla.				1*	1*	Arredonda fine sand	60	137	5.5	0-45-90	23.4 - H
Quincy, Fla.			1	1	1*	Norfolk loamy f. sand	31	76	6.5	20-60-60	43.0 - F
Marianna, Fla.				1	1	Ruston sandy loam				24-72-72	28.5 - D
Jay, Fla.			1*	1*	1*	Tifton f. sandy loam				0-84-84	35.1 - D
Fairhope, Ala.			1	1	1	Marlboro f. sandy loam				0-42-42	40.3 - F
Baton Rouge, La.			1	1	1*	Olivier silt loam				15-60-60	38.9 - E
Upper & Central South											
Orange Va.	1	1				Starr clay loam	L	M	6.7	0-112-112	33.5 - A
Martin, Tenn.	1	1				Grenada silt loam	H	H	6.5	0-0-0	62.6 - A
Milan, Tenn.		1	1			Grenada sandy loam	L	M	6.8	0-60-60	42.2 - A
Jackson, Tenn.		1	1			Calloway silt loam	H	H	6.2	25-50-50	32.2 - C
Belle Mina, Ala.		1	1			Decatur sandy loam	M	M		0-40-40	40.2 - A
Blairsville, Ga.	1	1				Hiwassee loam	M	M	6.5	20-60-60	34.8 - G
Clemson, S.C.				1		Cecil sandy loam	L	M	6.0	0-84-84	40.7 - C
Experiment, Ga.		1	1	1*	1*	Lloyd sandy clay loam			6.2	20-60-60	
State College, Miss.		1	1	1		Verona fine sandy loam				0-60-60	33.1 - C

Location	Groups Grown IV	V	VI	VII	VIII	Soil type	Soil analyses P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
Delta											
Henderson, Ky.	1	1				Falaya silt loam	M	L	6.8	0-0-0	30.8 - C
Hickman, Ky.		1				Commerce silt loam		M	7.9	0-0-0	28.5 - A
Portageville, Mo.(A)[3]	1*	1*	1*			Salix silt loam				0-50-50	55.2 - B
Portageville, Mo.(B)	1*	1*	1*			Sharkey clay				0-50-50	32.5 - A
Keiser, Ark.(A)	1	1	1			Sharkey clay(overwash)					
Keiser, Ark.(B)	1	1*	1*			Sharkey clay	M	M	6.6	0-0-0	28.9 - C
Marianna, Ark.[3]	1	1	1			Richland silt loam	M	H	6.8	0-30-30	45.4 - C
Stoneville, Miss.(A)		1	1*	1*	1	Bosket f. sandy loam	M	M	6.1	0-0-0	36.0 - C
Stoneville, Miss.(B)	1*	1*	1*	1*		Sharkey clay	H	H	5.8	0-0-0	30.1 - I
St. Joseph, La.		1	1	1	1	Commerce sandy loam				0-0-0	32.7 - C
West											
Stuttgart, Ark.[3]		1	1	1		Crowley silt loam	M	L	6.5	0-48-48	44.3 - C
Curtis. La.		1	1	1	1	Yahola f. sandy loam				0-0-0	43.2 - C
Bixby, Okla.	1	1	1			Lonoke very f. sandy loam			7.4	0-0-0	46.6 - A

1/ Fertilizer applied converted to pounds of N, P_2O_5, K_2O; for example, 400# of 2-12-12 equals 8-48-48.

2/ A = Hill; B = Dare; C = Lee; D = Bragg; E = Bienville; F = Hampton; G = Kent; H = Hardee; I = Semmes

3/ Irrigated as needed.

* Preliminary nursery grown in a-dition to uniform nursery.

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 all 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 6 to 8 locations.

Planting Rate: All strains were packeted at the rate of 190 seeds for planting a 19-foot row. This gives a planting 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.

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 were determined from representative locations. Percentage composition of the seed is expressed on a moisture-free basis. All chemical analyses are made at Urbana, Illinois.

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

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

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

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

Maturity is taken as the date when the pods are dry and most of the leaves have dropped. Under most conditions, the stems are also dry. Maturity in all summaries is expressed as days earlier (-) or later (+) than a standard or reference variety. Reference varieties used for the different uniform tests are

as follows: Group IV, Kent; Group V, Hill; Group VI, Hood; Group VII, Bragg; and Group VIII, Bienville.

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 differences can exist between factors responsible for the poorer grades in different locations.

Ground cover scores were given to strains of IV maturity approximately 6 weeks after emergence. The estimates are recorded on a scale of 1 to 5 as follows:

1 - row middles filled
2 - 3 to 6" gap between rows
3 - 6 to 10" gap between rows
4 - 10 to 18" gap between rows
5 - 18 to 24" gap between rows

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 surrounding 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.

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

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 coefficient of variability are not included in calculating averages.

UNIFORM GROUP IV

1965

	Variety or Strain	Parentage	Generation Composited
1.	Kent	Lincoln x Ogden	F_7
2.	Scott	D49-2525 x L6-5679	F_4
3.	Clark 63	[Clark(5) x L49-4091] x [Clark(6) x Blackhawk]	
4.	Delmar	C799 x FC33243	F_6
5.	D60-5702	Hill x D53-354	F_5
6.	D60-5818	Hill x D53-354	F_5
7.	D61-214	D54-3270 x D54-2437	F_5
8.	C1278	Clark x C1069	F_6
9.	C1311	Wabash x C1069	F_6
10.	D62-6225	Hill x Sioux	F_5
11.	S59-119	S55-27 x S2-7160	F_5
12.	S62-4051	Scott(6) x Blackhawk	F_3

Background of strains used as parents:

D49-2525 is a sister strain of Lee from the cross S-100 x CNS.

L6-5679 is a selection from Lincoln x Richland which was tested in Uniform Group IV for the years 1949-1953.

L49-4091 is a pustule-resistant selection from [Lincoln(2) x Richland] x [Lincoln x CNS].

C799 is a selection from C143 x Lincoln. C143 is a selection from Dunfield x Midwest.

FC33243 is a type which has proved to be highly resistant to root-knot nematodes in Delaware.

D53-354 is a selection from D49-2525 x L6-5679 which was tested in Uniform Group IV for the years 1956-1958.

D54-3270 is a selection from D49-2525 x L6-5679 highly susceptible to phytophthora rot.

D54-2437 is a selection from N48-1394 x L6-5679 having a resistant reaction to phytophthora rot. It was tested in Uniform Group IV for the years 1957-1961.

C1069 is a sister strain of Kent from the cross Lincoln x Ogden.

S2-7160 is a sister strain of Scott from the cross D49-2525 x L6-5679.

Eighteen Group IVS nurseries were planted. Results of 17 are summarized in tables 1 through 7, with table 1 giving a general summary of agronomic qualities, chemical composition of the seed, and field reaction to disease. Two- and three-year data are reported for seed yield by production regions. Two- and three-year oil and protein percentages are also reported.

The group includes 7 strains that have been grown 3 years and 5 strains advanced from preliminary tests. Differences among strains for seed yield were significant in 11 of the 17 nurseries summarized. Differences were also observed in plant reaction to phytophthora rot and bacterial pustule and in development of Diaporthe phaseolorum var. sojae and purple stain on the seed.

Of the strains grown 3 years, D60-5702 has a lower average seed yield in the East Coast area than Kent or Delmar but is much superior to Kent in seed holding and seed quality and in resistance to Diaporthe and purple stain. Seed yield in the Delta has been superior to Kent or Delmar.

D60-5818 equals Kent and Delmar in the East Coast area and is superior in the Delta. D61-214 had a somewhat lower average yield than D60-5818 but has a higher degree of resistance to phytophthora rot. Both have produced good quality seed.

Of the strains grown one year, C1278 is highly susceptible to phytophthora rot, Diaporthe, and purple stain. Seed yield was below that for Kent in the East Coast and Delta. C1311 yielded well and seed was relatively free from development of Diaporthe or purple stain. Neither S59-119 or S62-4051 were outstanding. S62-4051 will be replaced by a Scott type having resistance to phytophthora rot and cyst nematodes.

Table 1. - General summary of performance for the strains in Uniform Group IV, 1965

	Kent	Scott	Clark 63	Delmar	D60-5702	D60-5818
Seed Yield - 1965						
East Coast	38.0	37.1	33.9	39.2	38.8	36.8
Upper & Central South	38.8	40.0	36.0	39.0	38.7	41.9
Delta	33.0	32.5	30.8	28.6	33.9	34.7
1964-65						
East Coast	37.2	36.5	33.6	36.6	34.9	35.8
Upper & Central South	39.2	37.3	34.5	36.2	36.9	39.9
Delta	33.9	33.4	32.0	30.2	34.7	35.9
1963-65						
East Coast	32.6	32.1	30.1	32.3	30.9	32.3
Delta	34.7	32.9	33.5	30.8	35.7	36.5
Oil Content - 1965	22.2	22.4	22.3	22.9+	22.4	21.6-
- 1964-65	22.2	22.2	22.4	22.7	22.2	21.6
- 1963-65	21.9	22.1	22.1	22.5	22.0	21.5
Protein Content - 1965	40.5	38.3-	40.1	39.9	39.8-	39.7-
- 1964-65	40.4	38.3	40.3	39.7	39.9	39.9
- 1963-65	40.5	38.1	40.3	39.7	39.9	39.6
Seed Size	17.1	14.6-	15.5-	16.0-	14.0-	14.1-
Maturity Index	9-28	+4	-8	+5	-2	+7
Seed Quality	2.4	2.5	2.5	2.4	2.0	2.3
Height	37	41	39	39	38	42
Shattering	3.5	2.5	1.5	1.5	1.0	1.0
Bacterial Pustule 1/	3.0	1.0	1.0	3.0	1.0	1.0
Phytophthora Rot 2/	3.0	3.0	1.0	3.8	1.0	1.0
Diaporthe phaseolorum 3/	2.2	2.0	3.5	1.5	1.3	1.5
Purple Stain 3/	2.5	1.5	2.5	1.8	1.3	1.0
Flower Color	P	P	P	W	W	W
Pubescence Color	T	G	T	G	G	G

1/ Stoneville data.
2/ Portageville data.
3/ Georgetown data.

Table 1. - (continued)

	D61-214	C1278	C1311	D62-6225	S59-119	S62-4051
Seed Yield - 1965						
East Coast	37.9	35.2	38.4	32.7	37.5	37.8
Upper & Central South	38.5	39.3	36.2	35.7	38.6	41.2
Delta	32.7	30.9	34.5	31.0	33.4	33.6
1964-65						
East Coast	35.9					
Upper & Central South	36.5					
Delta	33.9					
1963-65						
East Coast	31.6					
Delta	34.2					
Oil Content - 1965	22.4	22.2	22.4	18.0-	21.1-	22.5
- 1964-65	22.2					
- 1963-65	22.1					
Protein Content - 1965	39.4-	40.2	40.5	44.2+	40.6	38.1-
- 1964-65	39.1					
- 1963-65	39.1					
Seed Size	13.6-	17.0	15.4-	14.6-	14.0-	14.9-
Maturity Index	0	-6	0	0	-3	+3
Seed Quality	2.1	2.7	2.3	2.2	2.6	2.6
Height	39	37	42	31	39	41
Shattering	1.0	2.5	2.0	1.0	1.5	2.5
Bacterial Pustule[1/]	1.0	3.0	3.0	1.0	1.0	1.0
Phytophthora Rot[2/]	1.0	4.0	2.3	1.0	2.3	1.0
Diaporthe phaseolorum[3/]	1.3	3.5	2.0	1.3	3.0	2.0
Purple Stain[3/]	1.5	2.5	1.5	1.0	2.0	1.8
Flower Color	W	P	W	W	W	P
Pubescence Color	G	T	G	T	G	G

Table 2. - Seed yield, in bushels per acre, for the strains in Uniform Group IV, 1965

Location	Kent	Scott	Clark 63	Delmar	D60-5702	D60-5818	D61-214
East Coast							
Georgetown, Del.	35.7	34.6	21.9-	39.9	38.9	28.5	32.9
Upper Marlboro, Md.	50.9	46.1	43.9-	51.9	45.7-	44.7-	47.2
Linkwood, Md.	34.4	38.9+	32.0	40.2+	38.1	37.0	40.0+
Painter, Va.(A)	30.0	27.5	28.5	27.5	27.8	29.6	27.2
Painter, Va.(B)	42.6	39.7	41.1	42.9	42.7	45.0	43.6
Warsaw, Va.	34.1	36.0	35.8	32.8	39.4+	36.3	36.3
Mean	38.0	37.1	33.9	39.2	38.8	36.8	37.9
Upper and Central South							
Orange, Va.	37.2	46.0+	39.1	48.1+	42.4	42.1	40.4
Blairsville, Ga.	34.8	36.8	31.9	34.9	37.3	41.0+	39.5
Martin, Tenn.	54.2	47.4	44.7-	45.3-	46.9	50.6	44.5-
Princeton, Ky.	28.9	29.9	28.5	27.8	28.3	33.9	29.8
Mean	38.8	40.0	36.0	39.0	38.7	41.9	38.5
Delta							
Henderson, Ky.	30.8	26.7	30.2	23.3	27.9	28.9	26.9
Portageville, Mo.(A)	56.8	53.3	49.6	45.8	55.6	53.2	52.9
Portageville, Mo.(B)	15.3	19.2	17.1	7.9-	22.5+	23.8+	23.6+
Keiser, Ark.(B)	33.5	34.0	34.9	18.8	27.2	34.6	33.6
Marianna, Ark.	45.0	42.3	39.7	43.9	42.5	41.1	38.1
Stoneville, Miss.(B)	26.0	21.5	17.9	21.0	20.5	25.0	18.3
Bixby, Okla.	29.7	34.1	26.7	23.7-	35.1+	35.7+	34.1
Mean	33.0	32.5	30.8	28.6	33.9	34.7	32.7

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

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

Table 2. - (continued)

Location	C1278	C1311	D62-6225	S59-119	S62-4051	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	14.3-	29.2	32.8	28.3	35.8	11.2	21%
Upper Marlboro, Md.	47.7	48.8	43.0-	49.1	48.1	5.1	6%
Linkwood, Md.	37.8	42.5+	31.9	35.2	40.3+	4.3	7%
Painter, Va.(A)	29.2	29.6	23.7-	31.6	30.5	3.6	7%
Painter, Va.(B)	41.8	45.0	35.7-	45.6	36.0-	4.4	6%
Warsaw, Va.	40.4+	35.4	29.3-	35.1	36.3	3.0	5%
Mean	35.2	38.4	32.7	37.5	37.8	N.S.	
			Upper and Central South				
Orange, Va.	46.2+	36.4	41.2	43.8+	47.1+	6.3	9%
Blairsville, Ga.	34.6	37.5	30.1	35.6	33.4	5.0	8%
Martin, Tenn.	49.7	44.0-	41.5-	43.8-	55.8	7.9	10%
Princeton, Ky.	26.8	27.1	30.1	31.3	28.6	N.S.	12%
Mean	39.3	36.2	35.7	38.6	41.2	N.S.	
			Delta				
Henderson, Ky.	29.0	30.3	28.4	30.7	26.9	N.S.	15%
Portageville, Mo.(A)	54.7	58.4	42.7	52.3	49.9	N.S.	10%
Portageville, Mo.(B)	8.7-	20.6	24.7+	13.2	20.3	6.6	21%
Keiser, Ark.(B)	29.6	31.5	30.9	33.1	31.8	N.S.	13%
Marianna, Ark.	41.1	38.7	37.3	43.7	44.6	N.S.	7%
Stoneville, Miss.(B)	23.6	29.1	24.3	21.7	21.9	N.S.	19%
Bixby, Okla.	31.5	33.6	31.0	34.8+	35.9+	4.5	8%
Mean	30.9	34.5	31.0	33.4	33.6	N.S.	

Table 3. - Chemical composition and seed size for the strains in Uniform Group IV, 1965

Location	Kent	Scott	Clark 63	Delmar	D60-5702	D60-5818
			Oil Percentage			
Linkwood, Md.	20.9	21.0	21.2	22.8	21.1	20.6
Georgetown, Del.	22.9	21.9	21.8	22.1	20.8	20.8
Warsaw, Va.	21.6	21.4	21.3	21.9	21.6	21.5
Orange, Va.	22.1	21.7	21.5	22.0	22.5	21.5
Portageville, Mo.(A)	22.5	23.0	22.5	23.8	23.0	21.9
Keiser, Ark.(B)	22.7	23.4	22.7	23.9	23.1	23.3
Stoneville, Miss.(B)	23.3	24.8	25.6	24.5	24.5	21.3
Bixby, Okla.	21.7	21.9	22.1	22.0	22.3	21.9
Mean	22.2	22.4	22.3	22.9+	22.4	21.6-
			Protein Percentage			
Linkwood, Md.	41.3	37.7	40.9	40.3	41.1	40.4
Georgetown, Del.	41.3	40.8	40.9	41.5	41.4	42.0
Warsaw, Va.	41.4	39.6	41.7	40.8	41.1	39.7
Orange, Va.	40.7	37.8	40.0	39.0	38.7	39.4
Portageville, Mo.(A)	38.8	37.0	38.9	39.4	39.3	39.5
Keiser, Ark.(B)	40.4	38.1	39.7	39.9	39.6	39.4
Stoneville, Miss.(B)	38.8	35.6	38.2	36.7	36.8	35.5
Bixby, Okla.	41.0	39.4	40.3	41.3	40.5	41.6
Mean	40.5	38.3-	40.1	39.9	39.8-	39.7-
			Grams Per 100 Seeds			
Linkwood, Md.	16.7	15.3	16.3	17.6	14.4	14.7
Georgetown, Del.	20.1	17.5	17.3	19.3	15.0	16.3
Warsaw, Va.	15.5	14.3	14.7	14.8	13.4	13.6
Orange, Va.	22.0	16.0	19.0	20.0	15.0	15.0
Keiser, Ark.(B)	15.3	12.0	13.3	12.3	12.0	12.3
Stoneville, Miss.(B)	12.3	11.2	11.7	11.7	11.6	11.2
Bixby, Okla.	17.7	15.6	15.9	16.2	15.1	15.3
Mean	17.1	14.6-	15.5-	16.0-	14.0-	14.1-

Table 3. - (continued)

Location	D61-214	C1278	C1311	D62-6225	S59-119	S62-4051	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	22.0	21.5	21.5	16.9	20.2	21.5	
Georgetown, Del.	22.3	22.4	22.4	17.3	21.0	21.5	
Warsaw, Va.	21.9	21.8	21.8	16.5	20.0	21.9	
Orange, Va.	22.8	22.8	23.2	18.5	20.5	21.3	
Portageville, Mo.(A)	22.6	21.3	22.0	18.4	21.0	22.8	
Keiser, Ark.(B)	22.6	22.5	22.0	17.6	21.8	23.5	
Stoneville, Miss.(B)	23.3	24.0	24.3	19.9	23.4	25.6	
Bixby, Okla.	22.0	21.2	21.6	18.9	21.2	21.5	
Mean	22.4	22.2	22.4	18.0-	21.1-	22.5	0.6
			Protein Percentage				
Linkwood, Md.	39.9	41.5	41.5	45.5	42.0	38.0	
Georgetown, Del.	40.7	40.8	41.6	46.2	42.6	39.5	
Warsaw, Va.	40.1	41.1	41.4	46.6	41.5	38.2	
Orange, Va.	38.9	39.3	38.7	42.3	39.6	38.0	
Portageville, Mo.(A)	38.6	39.1	38.7	42.5	39.4	37.0	
Keiser, Ark.(B)	39.4	40.0	41.5	44.1	39.3	38.0	
Stoneville, Miss.(B)	37.0	38.3	38.0	42.4	38.2	35.7	
Bixby, Okla.	40.6	41.3	42.4	43.8	42.2	40.5	
Mean	39.4-	40.2	40.5	44.2+	40.6	38.1-	0.7
			Grams Per 100 Seeds				
Linkwood, Md.	14.4	17.3	15.6	15.6	14.4	15.2	
Georgetown, Del.	15.4	17.8	17.1	15.6	16.5	16.9	
Warsaw, Va.	13.3	16.3	14.2	13.9	13.3	13.8	
Orange, Va.	17.0	22.0	19.0	17.0	16.0	17.0	
Keiser, Ark.(B)	11.7	14.7	12.3	12.0	12.0	12.7	
Stoneville, Miss.(B)	9.8	13.0	11.8	11.3	10.8	11.7	
Bixby, Okla.	13.9	18.0	17.5	16.5	15.1	16.7	
Mean	13.6-	17.0	15.4-	14.6-	14.0-	14.9-	0.9

Table 4. - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV, 1965

Location	Date Planted	Kent Matured	Scott	Clark 63	Delmar	D60-5702
		East Coast				
Georgetown, Del.	5-18	10-2	+6	-9	+3	-2
Upper Marlboro, Md.	5-27	10-6	+3	-12	+3	0
Linkwood, Md.	5-18	10-24	+7	-6	+9	-1
Painter, Va.(A)	6-7	9-26	+3	-4	+4	-1
Painter, Va.(B)	6-7	10-2	0	-7	0	-7
Warsaw, Va.	5-20	9-24	+2	-6	+5	-2
Mean		10-3	+4	-7	+4	-2
		Upper and Central South				
Blairsville, Ga.	5-20	9-17	-1	-4	+1	-3
Martin, Tenn.	5-18	10-5	+10	-10	+5	+2
Princeton, Ky.	5-4	9-28	+8	-11	+10	-6
Mean		9-27	+6	-8	+5	-2
		Delta				
Henderson, Ky.	5-6	9-28	+5	0	+16	0
Portageville, Mo.(A)	5-14	9-23	+2	-13	+7	-3
Portageville, Mo.(B)	5-15	9-22	-5	-12	+7	-5
Keiser, Ark.(B)	5-14	9-25	0	-10	0	-8
Marianna, Ark.	5-24	9-24	+5	-7	-2	-2
Stoneville, Miss.(B)	5-20	9-11	0	-9	+4	-1
Bixby, Okla.	5-20	9-24	+22	-8	+11	+12
Mean		9-22	+4	-8	+6	-1

Table 4. - (continued)

Location	D60-5818	D61-214	C1278	C1311	D62-6225	S59-119	S59-4051
			East Coast				
Georgetown, Del.	+9	+4	-11	+4	+1	+4	+6
Upper Marlboro, Md.	+4	+2	-12	0	+3	-2	0
Linkwood, Md.	+7	+6	-7	+7	+3	-1	+5
Painter, Va.(A)	+3	0	-8	-1	0	+1	0
Painter, Va.(B)	+1	-3	-11	-1	-6	-5	-1
Warsaw, Va.	+3	+1	-6	+3	+1	-3	+2
Mean	+5	+2	-9	+2	0	-1	+2
			Upper and Central South				
Blairsville, Ga.	+1	0	-4	+1	+5	-2	0
Martin, Tenn.	+10	-3	-7	-3	-5	-5	+10
Princeton, Ky.	+12	+8	-11	+6	+4	+1	+4
Mean	+11	+2	-7	+1	+1	-2	+5
			Delta				
Henderson, Ky.	+16	+2	+7	+7	0	0	+7
Portageville, Mo.(A)	+7	+1	-3	0	-4	-4	-1
Portageville, Mo.(B)	0	-5	-12	-7	-3	-9	-4
Keiser, Ark.(B)	+4	-3	-7	-3	-5	-7	0
Marianna, Ark.	+5	+3	-7	-2	0	-5	+2
Stoneville, Miss.(B)	+3	0	-4	0	-2	-3	-1
Bixby, Okla.	+16	+1	0	+1	-1	-1	+19
Mean	+7	0	-4	0	-2	-4	+3

Table 5. - Plant height for the strains in Uniform Group IV, 1965

Location	Kent	Scott	Clark 63	Delmar	D60-5702	D60-5818
			East Coast			
Georgetown, Del.	39	38	38	40	41	38
Upper Marlboro, Md.	40	40	40	42	40	44
Linkwood, Md.	42	44	42	47	41	44
Painter, Va.(A)	33	41	40	34	36	40
Painter, Va.(B)	39	44	40	38	39	44
Warsaw, Va.	41	44	42	42	41	44
Mean	39	42	40	41	40	42
			Upper and Central South			
Orange Va.	34	41	35	42	40	42
Blairsville, Ga.	36	42	36	36	38	45
Martin, Tenn.	44	50	46	47	43	47
Princeton, Ky.	39	50	44	44	42	49
Mean	38	46	40	42	41	46
			Delta			
Henderson, Ky.	37	42	41	43	43	45
Portageville, Mo.(A)	43	48	42	47	44	50
Portageville, Mo.(B)	25	26	29	23	29	30
Keiser, Ark.(B)	30	31	32	32	30	35
Marianna, Ark.	41	43	40	43	42	46
Stoneville, Miss.(B)	27	26	29	29	24	31
Bixby, Okla.	38	44	41	40	40	39
Mean	34	37	36	37	36	39

Table 5. - (continued)

Location	D61-214	C1278	C1311	D62-6225	S59-119	S59-4051
			East Coast			
Georgetown, Del.	39	34	39	31	36	40
Upper Marlboro, Md.	42	34	42	36	39	36
Linkwood, Md.	40	40	49	29	42	44
Painter, Va.(A)	40	34	39	36	37	45
Painter, Va.(B)	43	37	43	35	40	45
Warsaw, Va.	40	41	42	33	42	43
Mean	41	37	42	33	39	42
			Upper and Central South			
Orange, Va.	33	37	39	34	32	42
Blairsville, Ga.	38	35	45	39	36	42
Martin, Tenn.	41	46	50	36	46	48
Princeton, Ky.	46	44	48	33	45	48
Mean	40	41	46	36	40	45
			Delta			
Henderson, Ky.	39	39	45	25	40	42
Portageville, Mo.(A)	47	43	52	31	50	47
Portageville, Mo.(B)	31	24	30	26	24	27
Keiser, Ark.(B)	34	31	34	26	32	30
Marianna, Ark.	42	40	42	35	43	43
Stoneville, Miss.(B)	29	26	34	22	29	26
Bixby, Okla.	44	40	43	27	44	43
Mean	38	35	40	27	37	37

Table 6 - Lodging scores for the strains in Uniform Group IV, 1965

Location	Kent	Scott	Clark 63	Delmar	D60-5702	D60-5818
			East Coast			
Georgetown, Del.	2.0	3.0	3.0	2.0	2.0	3.0
Upper Marlboro, Md.	2.5	3.5	2.5	2.8	3.0	3.0
Linkwood, Md.	1.8	2.8	3.8	2.3	3.2	3.5
Painter, Va.(A)	1.0	1.6	1.0	1.0	1.0	1.0
Painter, Va.(B)	1.0	1.7	1.0	1.0	1.3	1.6
Warsaw, Va.	1.2	1.3	1.7	1.3	1.7	1.3
			Upper and Central South			
Orange, Va.	1.7	2.7	1.3	1.0	1.7	2.0
Blairsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Martin, Tenn.	2.0	4.0	2.0	3.0	4.0	4.0
Princeton, Ky.	1.0	2.0	1.0	2.0	2.0	3.0
			Delta			
Henderson, Ky.	1.0	1.7	1.3	1.0	2.3	2.0
Portageville, Mo.(A)	1.8	3.2	2.6	2.8	2.7	3.3
Portageville, Mo.(B)	1.2	1.2	1.0	1.5	1.0	1.2
Keiser, Ark.(B)	1.0	2.0	2.7	1.7	2.3	3.0
Marianna, Ark.	2.0	1.7	2.0	2.0	3.0	2.7
Stoneville, Miss.(B)	2.0	1.7	2.0	2.0	1.7	2.0
Bixby, Okla.	1.0	1.0	1.0	1.0	3.0	2.0

Table 6. - (continued)

Location	D61-214	C1278	C1311	D62-6225	S59-119	S59-4051
			East Coast			
Georgetown, Del.	2.7	2.7	2.0	2.0	2.7	2.7
Upper Marlboro, Md.	3.8	1.8	2.3	3.3	2.3	2.8
Linkwood, Md.	3.7	2.3	1.7	2.0	3.5	2.7
Painter, Va.(A)	1.0	1.0	1.0	1.0	1.0	2.0
Painter, Va.(B)	1.8	1.0	1.2	1.3	1.8	1.8
Warsaw. Va.	2.0	1.0	1.1	1.2	1.7	1.5
			Upper and Central South			
Orange, Va.	3.0	1.7	1.7	2.0	1.3	2.7
Blairsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Martin, Tenn.	3.0	2.0	2.0	3.0	2.0	4.0
Princeton, Ky.	3.0	1.0	2.0	2.0	2.0	2.0
			Delta			
Henderson, Ky.	3.0	1.0	2.0	1.0	1.7	1.7
Portageville, Mo.(A)	3.8	1.9	1.8	1.3	2.9	3.3
Portageville, Mo.(B)	1.7	1.5	1.3	1.3	1.0	1.0
Keiser, Ark.(B)	3.0	1.3	1.3	1.3	2.0	1.7
Marianna, Ark.	3.0	1.7	2.3	2.7	2.3	2.3
Stoneville, Miss.(B)	2.0	1.7	2.0	1.0	2.0	2.0
Bixby, Okla.	3.0	1.0	1.0	1.0	1.0	2.0

Table 7. - Seed quality scores for the strains in Uniform Group IV, 1965

Location	Kent	Scott	Clark 63	Delmar	D60-5702	D60-5818
			East Coast			
Georgetown, Del.	2.5	2.7	4.0	1.5	2.0	2.5
Upper Marlboro, Md.	1.0	1.0	1.3	1.3	1.0	1.0
Linkwood, Md.	3.0	3.0	3.0	3.0	3.0	3.0
Painter, Va.(A)	1.9	2.7	1.8	2.2	1.8	3.0
Painter, Va.(B)	1.8	2.5	1.5	1.4	1.5	2.2
Warsaw, Va.	1.6	1.4	1.2	1.6	1.1	1.1
			Upper and Central South			
Orange, Va.	1.0	2.0	1.7	1.7	1.0	1.0
Princeton, Ky.	2.3	2.3	1.2	2.0	1.2	2.0
			Delta			
Henderson, Ky.	3.2	2.5	4.2	2.8	2.3	2.0
Portageville, Mo.(A)	2.0	2.3	1.0	1.3	1.8	1.7
Portageville, Mo.(B)	2.0	1.9	1.5	1.6	1.3	1.7
Keiser, Ark.(B)	4.0	4.0	4.0	4.0	3.3	4.0
Marianna, Ark.	4.0	4.0	4.7	4.0	4.0	3.7
Stoneville, Miss.(B)	3.3	3.0	2.7	4.3	2.7	3.0
Bixby, Okla.	3.0	2.0	3.0	4.0	2.0	3.0

Table. 7 - (continued)

Location	D61-214	C1278	C1311	D62-6225	S59-119	S59-4051
			East Coast			
Georgetown, Del.	2.7	3.3	2.7	2.0	3.7	2.5
Upper Marlboro, Md.	1.0	1.3	1.3	1.3	2.0	1.7
Linkwood, Md.	2.0	3.0	2.0	3.0	3.0	2.0
Painter, Va.(A)	2.2	2.2	1.7	2.9	2.5	3.2
Painter, Va.(B)	1.8	2.0	1.5	2.0	1.7	2.5
Warsaw, Va.	1.2	1.1	1.1	1.8	1.2	1.6
			Upper and Central South			
Orange, Va.	1.7	2.0	1.7	1.0	2.7	2.0
Princeton, Ky.	2.0	1.8	2.3	1.8	2.0	2.0
			Delta			
Henderson, Ky.	2.0	3.3	3.0	2.3	2.2	2.3
Portageville, Mo.(A)	1.3	1.3	1.9	1.8	2.1	2.3
Portageville, Mo.(B)	1.7	2.6	2.3	1.2	2.3	1.9
Keiser, Ark.(B)	3.0	4.0	3.7	3.0	4.0	4.0
Marianna, Ark.	4.0	4.7	4.0	3.7	4.0	4.7
Stoneville, Miss.(B)	3.0	3.0	2.7	2.7	3.0	3.0
Bixby, Okla.	2.0	3.0	3.0	2.0	3.0	3.0

PRELIMINARY GROUP IV

1965

Four Preliminary Group IV nurseries including 22 experimental strains along with Kent and Delmar were planted. The parentage of these strains is reported in table 8. Performance data are summarized in tables 9 through 14. On the basis of the combined analysis of variance, seed yield showed 4 strains, D61-198, S63-2580, S63-5300, and S63-6407, to have yields significantly higher than that of Kent. The planting at Stoneville was used for disease ratings only.

Seed yields on Portageville B (clay) are closely associated with ratings for phytophthora rot. The better-yielding strains were resistant or field tolerant. Differences in development of Diaporthe phaseolorum var. sojae on the seed at Georgetown, Delaware showed that differences of considerable magnitude existed among strains. Purple stain development was not particularly severe in any test.

Of the strains yielding significantly better than Kent, D61-198 has a high field resistance to phytophthora rot and received low scores for Diaporthe and purple stain. S63-2580, S63-5300, and S63-6407 have the field tolerant reaction to phytophthora rot of Lee. These strains also produced good quality seed with low scores for Diaporthe and purple stain. S63-3277 yielded slightly less than the above three, but was a few days earlier. It also had good quality seed. SL5 is a phytophthora rot and bacterial pustule resistant Kent. Although it yielded considerably better than Kent on clay at Portageville, its mean yield was similar to that of Kent.

Table 8 - Parentage of the strains in Preliminary Group IV, 1965

	Variety or strain	Parentage	Generation Composited
1.	Kent		
2.	Delmar		
3.	D61-198	D54-3270 x D54-2437	F_5
4.	D61-5612	D53-354(2) x (D54-2437(advanced to F_6 in bulk on clay)	F_3
5.	K720	Records destroyed by fire	
6.	K62-722	C1069 x Clark	F_7
7.	L9	Clark(6) x Chief	F_3
8.	L12	L6 x L11	F_4
9.	L62-1251	Clark(6) x T117	F_3
10.	SL5	[Kent(7) x L49-4196] x [Kent(8) x Mukden]	F_3
11.	S62-49	S2-7160 x C985	F_7
12.	S63-2408	Hood x Scott	F_5
13.	S63-2580	Lee x Scott	F_5
14.	S63-3277	Scott x Hill	F_5
15.	S63-3317	Scott x Hill	F_5
16.	S63-5300	Lee x Scott	F_5
17.	S63-6069	Hood x Scott	F_5
18.	S63-6366	Scott(2) x Lee	F_4
19.	S63-6369	Scott(2) x Lee	F_4
20.	S63-6370	Scott(2) x Lee	F_4
21.	S63-6407	Scott(2) x Lee	F_4
22.	UD61-1157	FC33243 x D49-2491	
23.	UD61-1161	FC33243 x D49-2491	
24.	UD61-1890	FC33243 x D49-2491	

Table 9. - General summary of performance for the strains grown in Preliminary Group IV, 1965

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter[1]	P.R.[2]	D.p.s[3]	Purple stain[4]
Kent	34.6	9-23	38	22.3	40.3	3.0	3.0	2.2	2.5
Delmar	35.3	+4	43	22.6	40.2	1.0	3.0	1.5	1.8
D61-198	39.9+	+8	45	21.4-	41.4	1.0	1.0	1.0	1.5
D61-5612	37.5	0	42	20.9-	40.6	1.0	1.0	2.5	1.5
K720	36.1	+2	42	21.5-	40.4	1.0	5.0	3.5	2.0
K62-722	35.9	+5	41	21.8	40.9	1.0	3.0	2.8	1.8
L9	34.3	+3	38	21.8	41.5	1.0	4.0	4.0	2.5
L12	35.0	-8	39	21.7	40.7	1.0	1.0	4.2	2.0
L62-1251	32.2	-11	28	21.9	41.3	1.0	3.0	3.3	1.8
SL5	34.8	-5	40	22.0	40.7	3.0	1.0	2.2	2.0
S62-49	34.1	0	41	22.2	39.4	1.0	2.0	2.2	1.8
S63-2408	37.8	+7	42	22.3	38.5-	3.0	1.0	1.5	2.0
S63-2580	38.9+	+5	41	21.9	39.7	1.0	2.0	1.3	1.5
S63-3277	38.2	0	42	22.6	37.9-	1.0	1.0	2.0	1.8
S63-3317	36.5	+5	43	22.3	40.2	1.0	1.0	1.3	1.5
S63-5300	39.4+	+6	42	21.4-	39.2	1.0	1.0	2.2	1.8
S63-6069	36.7	+4	47	22.1	39.6	1.0	1.0	1.0	1.5
S63-6366	36.4	+6	41	22.2	38.8-	1.0	3.0	2.3	1.8
S63-6369	35.7	+3	39	22.3	38.0-	3.0	3.0	2.3	2.0
S63-6370	36.2	+5	40	22.4	38.1-	1.0	3.0	2.0	1.5
S63-6407	38.6+	+2	41	21.7	40.3	1.0	1.0	2.0	1.5
UD61-1157	37.2	-1	41	22.4	40.7	1.0	3.0	2.0	2.3
UD61-1161	35.2	+13	48	21.8	40.8	1.0	2.0	1.5	1.0
UD61-1890	34.8	+12	46	21.9	41.0	1.0	3.0	2.5	1.5
L.S.D.(.05)	4.0			0.8	1.3				
L.S.D.(.01)	N.S.			1.0	1.7				

1/ Linkwood data
2/ Stoneville and Portageville data
3/ Georgetown data
4/ Georgetown and Warsaw data

Table 10. - Seed yield, in bushels per acre, for the strains in Preliminary Group IV, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.(A)	Portageville, Mo.(B)
Kent	37.0	32.0	58.6	11.2
Delmar	39.9	32.3	54.8	12.4
D61-198	40.2	37.5	59.7	23.9
D61-5612	33.7	35.3	66.0	20.8
K720	43.6+	32.1	57.2	7.5
K62-722	35.4	34.8	65.6	9.6
L9	34.3	36.2	53.5	11.2
L12	33.4	36.0	54.5	17.1
L62-1251	29.0-	35.6	53.5	10.3
SL5	32.4	33.9	55.7	20.6
S62-49	36.0	29.8	62.2	10.6
S63-2408	39.5	33.9	59.2	20.5
S63-2580	39.5	33.8	65.0	21.6
S63-3277	39.0	34.5	58.8	23.6
S62-3317	34.8	35.6	56.2	22.4
S63-5300	42.1	35.2	58.0	23.5
S63-6069	40.8	32.6	57.2	15.8
S63-6366	38.6	34.5	57.6	14.2
S63-6369	39.0	32.4	59.0	12.4
S63-6370	39.2	35.1	54.2	14.3
S63-6407	43.4+	34.7	55.0	20.4
UD61-1157	40.6	32.8	62.2	14.2
UD61-1161	34.6	36.3	51.4	17.9
UD61-1890	39.6	31.4	49.7	17.3
L.S.D.(.05)	6.3	N.S.	N.S.	
C.V.	8%	7%	12%	

Table 11. - Oil percentages for the strains in Preliminary Group IV, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.(A)
Kent	21.5	22.7	22.8
Delmar	22.6	22.5	22.7
D61-198	20.9	21.4	21.9
D61-5612	20.8	20.7	21.2
K720	21.1	20.8	22.7
K62-722	21.4	21.9	22.1
L9	21.5	21.2	22.7
L12	21.4	21.2	22.5
L62-1251	21.1	22.5	22.0
SL5	21.7	21.9	22.5
S62-49	22.1	21.7	22.9
S63-2408	21.3	22.3	23.2
S63-2580	21.3	21.3	23.2
S63-3277	22.2	22.0	23.6
S63-3317	22.0	22.0	22.9
S63-5300	20.9	21.3	22.1
S63-6069	21.7	22.0	22.7
S63-6366	21.5	22.6	22.5
S63-6369	21.8	22.3	22.9
S63-6370	22.3	21.9	22.9
S63-6407	21.2	21.2	22.8
UD61-1157	22.4	21.2	23.5
UD61-1161	21.7	22.4	21.3
UD61-1890	21.7	21.6	22.4

Table 12. - Protein percentages for the strains in Preliminary Group IV, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.(A)
Kent	41.5	41.6	37.7
Delmar	40.2	42.4	38.1
D61-198	42.8	42.0	39.3
D61-5612	41.3	40.9	39.5
K720	40.9	41.8	38.6
K62-722	41.6	41.9	39.3
L9	41.9	43.1	39.5
L12	41.8	42.2	38.1
L62-1251	42.0	41.9	39.9
SL5	42.0	43.2	36.8
S62-49	39.2	41.8	37.2
S63-2408	38.8	39.5	37.2
S63-2580	40.5	41.2	37.4
S63-3277	38.5	38.5	36.8
S63-3317	40.8	40.7	39.0
S63-5300	39.7	39.8	38.2
S63-6069	39.7	40.6	38.5
S63-6366	39.2	39.1	38.0
S63-6369	37.9	39.2	36.9
S63-6370	38.1	38.9	37.2
S63-6407	40.2	42.0	38.8
UD61-1157	40.4	42.0	39.8
UD61-1161	41.3	40.9	40.3
UD61-1890	41.4	41.9	39.8

Table 13 - Plant height for the strains in Preliminary Group IV, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.(A)	Portageville, Mo.(B)
Kent	44	39	40	23
Delmar	48	44	50	23
D61-198	48	44	59	29
D61-5612	42	44	48	30
K720	46	42	49	24
K62-722	42	44	51	22
L9	40	41	42	26
L12	40	44	39	29
L62-1251	28	30	32	22
SL5	44	41	40	28
S62-49	43	42	51	23
S63-2408	42	42	53	28
S63-2580	43	44	48	25
S63-3277	45	42	48	27
S62-3317	43	46	50	29
S63-5300	44	44	52	26
S63-6069	52	46	57	31
S63-6366	44	43	49	24
S63-6369	42	42	44	22
S63-6370	42	44	47	20
S63-6407	41	44	49	27
UD61-1157	44	44	46	22
UD61-1161	52	46	59	34
UD61-1890	51	46	57	27

Table 14 - Seed quality scores for the strains in Preliminary Group IV, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.(A)	Portageville, Mo.(B)
Kent	3.0	2.3	2.5	2.5
Delmar	3.0	1.8	1.3	2.5
D61-198	2.0	2.0	1.3	1.5
D61-5612	2.0	1.8	2.3	1.8
K720	2.0	2.0	1.8	2.5
K62-722	2.0	2.0	1.0	2.3
L9	3.0	1.8	1.0	2.5
L12	3.0	1.3	1.3	2.0
L62-1251	3.0	1.5	1.0	2.3
SL5	3.0	1.8	1.3	3.5
S62-49	3.0	1.5	1.5	2.5
S63-2408	3.0	2.0	2.5	2.3
S63-2580	2.0	1.8	2.0	2.3
S63-3277	2.0	2.0	2.3	2.0
S63-3317	2.0	1.5	1.8	2.3
S63-5300	2.0	1.8	2.0	2.0
S63-6069	3.0	2.3	3.0	3.0
S63-6366	3.0	2.3	2.3	2.5
S63-6369	3.0	1.8	2.5	2.0
S63-6370	2.0	2.0	2.5	2.3
S63-6407	2.0	2.0	2.3	3.0
UD61-1157	2.0	1.5	2.3	2.3
UD61-1161	2.0	2.5	1.0	2.5
UD61-1890	2.0	2.5	1.0	1.8

UNIFORM GROUP V

1965

	Variety or strain	Parentage	Generation Composited
1.	Hill	D632-15 x D49-2525	F_5
2.	Dorman	Dunfield x Arksoy	F_6
3.	F59-693	Hill x D52-810	F_5
4.	R60-66	Dortchsoy 67 x Lee	
5.	D61-901	Hill(2) x D51-4877	F_5
6.	N59-6913	Hill x D52-810	F_5
7.	V61-20	Dorman x Hood	
8.	D61-5141	Dorman(5) x PI 181,537	F_4
9.	D62-730	Dorman(5) x N48-1515	F_4
10.	D63-7320	Hill x [Lee(2) x Peking]	F_5
11.	N59-6873	Hill x D52-810	F_5
12.	R62-550	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_4

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 to 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.

D51-4877 is a selection from Roanoke x N45-745 which was included in Uniform Group VII for the years 1954-1956.

PI 181,537 is of Group I maturity, glabrous and has narrow leaves.

N48-1515 is a selection from Roanoke x N45-745 which was included in Uniform Group VI for the years 1954-1956.

R54-168 is a sister selection of Davis from the cross D49-2573 x N45-1497.

Dortchsoy 110 is a short, erect type selected from Wabash x Ogden.

Thirty-two Uniform Group V nurseries were planted. Results of 31 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. Two- and three-year oil and protein percentages are also reported.

Seed yield differences among strains were significant at 23 of the locations. The combined analysis of variance for mean seed yields by production regions showed differences among strains to be significant in all production regions.

D59-693 has been continued in the group as a later maturing check. D59-693 and Dare appear to have given very similar performance, based upon comparisons from different groups. The seed yield for R60-66 is slightly above that of D59-693, but is more subject to shattering and development of seed coat mottling.

Of the strains grown 2 years, D61-901 has yielded no better than Hill but represents a taller growth type. N59-6913 and V61-20 have both yielded well. V61-20 received the highest rating for development of Diaporthe on the seed at Georgetown.

Five strains have been grown only 1 year. D63-7320 combines resistance to root-knot nematodes with resistance to cyst nematodes. Its mean yield in the absence of nematodes was slightly below Hill, but at many of the locations its yield was equal to that of Hill.

D61-5141 and D62-730 were included to evaluate narrow leaf and resistance to bacterial pustule in a Dorman type. In the East Coast region mean yields for the two types were similar to that of Dorman. In the Upper and Central and Delta regions the pustule-resistant type had a definite yield advantage over Dorman. On the basis of regional means, the narrow-leaf type had a yield advantage over Dorman only in the Upper and Central region. This type has a somewhat higher number of seed per pod than Dorman. The mean number of seed per pod for Dorman was 2.72 at Stoneville and 2.64 at Linkwood, while the means for D61-5141 were 3.05 and 3.02 for these two locations. Field observations prior to maturity gave D61-5141 the appearance of having less lodging than Dorman. Lodging scores after maturity show no consistency in this regard.

Neither N59-6873 or R66-550 showed a yield advantage over D59-693. N59-6873 had greater amounts of shattering and showed more seed coat mottling than D59-693. Maturity of these two strains was relatively similar.

Table 15. - General summary of performance for the strains in Uniform Group V, 1965

	Hill	Dorman	D59-693	R60-66	D61-901	N59-6913
Seed Yield - 1965						
East Coast	35.5	36.0	37.6	38.9+	34.8	38.7+
Upper & Central South	38.3	35.9	41.1	42.0	38.0	41.8
Delta	33.3	31.5	36.8+	36.1	32.3	36.6+
West	37.3	35.8	38.1	42.3	39.4	38.3
- 1964-65						
East Coast	35.5	35.6	37.5	39.1	35.8	38.9
Upper & Central South	35.4	32.9	37.1	38.4	34.7	37.2
Delta	35.2	33.9	36.7	38.1	34.2	36.6
West	37.1	34.7	38.3	40.5	37.2	38.0
- 1963-65						
East Coast	34.0	34.0	36.5	37.3		
Upper & Central South	32.7	30.8	35.8	36.5		
Delta	35.3	34.4	37.3	38.7		
West	34.3	31.5	36.0	38.4		
Oil Content - 1965	21.8	22.0	21.6	21.7	21.3	21.4
- 1964-65	21.5	21.8	21.3	21.5	21.1	21.1
- 1963-65	21.3	21.6	21.1	21.3		
Protein Content - 1965	39.8	39.1-	40.7+	39.9	39.7	39.9
- 1964-65	39.8	38.9	40.4	39.7	39.3	40.0
- 1963-65	39.3	38.8	40.0	39.7		
Seed Size	13.3	14.6+	13.7	14.9+	13.0	13.4
Maturity Index	10-2	+2	+6	+2	+5	+4
Height	34	37	33	35	36	31
Bacterial Pustule	1.0	3.0	1.0	1.0	1.0	1.0
Phytophthora Rot	1.0	1.0	1.0	1.0	1.0	1.0
Diaporthe	1.5	1.3	1.3	1.8	1.3	1.3
Purple Stain	1.0	1.3	1.0	1.0	1.0	1.0
Shattering	1.0	2.0	1.0	3.0	1.0	2.0
Mottled Seed	2.0	1.0	2.0	3.0	4.0	2.0
Flower Color	W	W	W	P	W	W
Pubescence Color	T	G	G	G	T	G

Table 15 - (continued)

	V61-20	D61-5141	D62-730	D63-7320	N59-6873	R62-550
Seed Yield - 1965						
East Coast	40.4+	36.3	36.1	33.9	35.7	35.7
Upper & Central South	41.3	36.9	38.1	35.9	40.5	39.7
Delta	35.0	31.0	33.8	30.8	35.9	34.8
West	39.6	34.1	35.0	32.6	40.0	38.2
- 1964-65						
East Coast	40.9					
Upper & Central South	38.3					
Delta	36.3					
West	38.2					
- 1963-65						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1965	21.8	21.8	21.5	21.5	22.1	21.9
- 1964-65	21.6					
- 1963-65						
Protein Content - 1965	39.4	39.4	39.6	40.8+	40.1	41.1+
- 1964-65	39.0					
- 1963-65						
Seed Size	18.2+	14.4+	15.3+	15.8+	17.0+	15.0+
Maturity Index	+7	+1	+4	+5	+8	+8
Height	35	37	38	31	36	35
Bacterial Pustule	2.5	3.0	1.0	1.0	1.0	1.0
Phytophthora Rot	1.0	1.0	1.0	2.0	1.0	1.0
Diaporthe	2.5	1.5	1.3	1.8	1.5	1.3
Purple Stain	2.0	1.3	1.0	1.0	1.0	1.0
Shattering	2.5	2.5	2.5	1.5	2.5	1.2
Mottled Seed	1.0	2.0	1.0	2.0	4.0	2.0
Flower Color	P	W	W	P	W	P
Pubescence Color	G	G	G	T	T	T

Table 16. - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1965

Location	Hill	Dorman	D59-693	R60-66	D61-901	N59-6913	V61-20
			East Coast				
Georgetown, Del.	40.4	41.0	42.5	46.2+	41.6	46.5+	45.4+
Upper Marlboro, Md.	40.7	39.9	36.0-	41.3	37.0	37.0	43.4
Linkwood, Md.	40.1	38.0	39.7	41.7	37.3	40.9	44.3
Painter, Va.(A)	30.7	30.7	34.4	41.0	33.4	39.4	39.1
Painter, Va.(B)	40.1	47.0+	44.1	44.8	36.7	45.7+	43.7
Warsaw, Va.	30.7	31.0	33.0	35.8+	34.0	34.4+	40.4+
Petersburg, Va.	21.9	18.6	25.2	20.6	22.6	21.1	22.4
Norfolk, Va.*	15.6	10.4	14.7	14.9	11.2	12.7	10.4
Holland, Va.	32.1	33.7	34.1	37.6+	24.4-	37.2+	35.0
Plymouth, N. C.	43.2	44.2	49.5+	40.8	46.2	45.6	50.0+
Mean	35.5	36.0	37.6	38.9+	34.8	38.7+	40.4+
			Upper and Central South				
Orange, Va.	33.5	34.9	27.9	42.4+	31.4	33.8	44.9+
Martin, Tenn.	62.6	56.9	57.2	69.4	54.9	66.5	55.8
Milan, Tenn.	42.2	37.5	43.4	44.0	40.7	46.4	44.2
Jackson, Tenn.	28.2	27.5	29.3	25.5	33.9	31.2	28.2
Belle Mina, Ala.	40.2	38.2	42.7	42.5	41.1	42.7	42.4
Blairsville, Ga.	23.4	26.0	27.4	24.2	21.3	27.5	30.3+
Experiment, Ga.	38.1	34.1	59.8+	48.7	42.9	46.7	42.6
State College, Miss.	37.9	31.9	40.8	39.7	37.6	41.2	42.0
Mean	38.3	35.9	41.1	42.0	38.0	41.8	41.3
			Delta				
Henderson, Ky.	35.8	28.7-	38.6	39.1	38.4	36.3	33.4
Hickman, Ky.	28.5	24.2	35.8	33.7	30.5	32.0	33.5
Portageville, Mo.(A)	49.6	48.4	50.0	57.0+	49.0	54.3+	53.0
Portageville, Mo.(B)	30.9	28.6	31.8	30.5	23.5-	30.4	32.9
Keiser, Ark.(B)	27.4	30.2	33.9	34.5	33.3	35.3	34.7
Marianna, Ark.	36.7	37.6	43.6+	44.9+	41.0+	43.6+	41.3+
Stoneville, Miss.(A)	31.6	30.4	41.2+	40.9	31.6	38.3	38.7
Stoneville, Miss.(B)	20.5	17.4	20.4	17.7	16.8	19.8	17.1
St. Joseph, La.	32.4	34.4	41.9	41.9	32.4	40.3	31.5
Mean	33.3	31.5	36.8+	36.1	32.3	36.6+	35.0
			West				
Stuttgart, Ark.	37.8	38.3	34.7	37.6	35.8	37.2	40.4
Curtis, La.	27.3	31.7	40.8+	44.2+	40.0+	33.5+	35.5+
Bixby, Okla.	46.6	37.5-	38.8-	45.1	42.4	44.2	42.9
Mean	37.3	35.8	38.1	42.3	39.4	38.3	39.6

* Not included in mean.

Table 16. - (continued)

Location	D61-5141	D62-730	D63-7320	N59-6873	R62-550	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	41.3	42.8	34.6-	40.8	41.8	4.8	7%
Upper Marlboro, Md.	41.1	37.2	39.4	38.9	37.8	3.8	6%
Linkwood, Md.	40.7	35.3-	36.8	35.6	33.0-	4.7	7%
Painter, Va.(A)	37.6	33.9	30.1	32.6	32.4	N.S.	14%
Painter, Va.(B)	42.8	38.6	39.4	38.4	42.2	4.9	7%
Warsaw, Va.	33.4	32.9	32.2	34.6+	35.5+	3.7	7%
Petersburg, Va.	16.9	19.4	17.4	20.9	22.2	N.S.	14%
Norfolk, Va.*	11.9	11.5	12.3	15.4	15.6	N.S.	34%
Holland, Va.	29.5	34.1	33.5	31.1	28.3	5.1	9%
Plymouth, N. C.	43.5	50.5+	42.0	48.2	47.9	5.9	8%
Mean	36.3	36.1	33.9	35.7	35.7	2.5	
			Upper and Central South				
Orange, Va.	37.3	38.1	33.3	39.8	31.8	7.1	12%
Martin, Tenn.	59.0	62.6	56.3	54.5	54.0	N.S.	12%
Milan, Tenn.	39.8	34.1-	34.9-	43.6	45.2	6.1	9%
Jackson, Tenn.	24.6	23.0	20.9-	22.7	23.7	5.9	13%
Belle Mina, Ala.	33.6-	39.4	37.2	45.2+	42.9	4.1	6%
Blairsville, Ga.	26.9	26.2	30.3+	27.6	27.8+	4.4	10%
Experiment, Ga.	38.5	44.0	36.3	49.6	51.3+	12.4	17%
State College, Miss.	35.4	37.5	37.6	40.9	40.9	N.S.	10%
Mean	36.9	38.1	35.9	40.5	39.7	3.9	
			Delta				
Henderson, Ky.	31.1-	29.2-	33.1	32.7	35.2	4.4	8%
Hickman, Ky.	29.9	33.5	34.7	35.3	37.1	3.7	8%
Portageville, Mo.(A)	54.0	53.7	49.7	53.0	46.9	4.6	5%
Portageville, Mo.(B)	21.5-	33.6	18.9-	32.0	38.8+	6.2	13%
Keiser, Ark.(B)	27.5	31.2	28.7	37.4+	35.7+	8.3	16%
Marianna, Ark.	33.7	40.2+	36.4	39.4	44.8+	3.2	5%
Stoneville, Miss.(A)	34.1	33.2	32.7	39.0	29.5	7.7	13%
Stoneville, Miss.(B)	11.6-	16.6	11.5-	18.0	15.9	5.7	20%
St. Joseph, La.	33.6	33.1	29.3	40.8	33.3	N.S.	18%
Mean	31.0	33.8	30.8	35.9	34.8	3.3	
			West				
Stuttgart, Ark.	31.8	37.3	30.9	36.3	33.5	N.S.	9%
Curtis, La.	30.8	31.2	27.0	37.5+	34.5+	5.5	9%
Bixby, Okla.	39.6-	36.6-	40.0-	46.3	46.6	5.9	8%
Mean	34.1	35.0	32.6	40.0	38.2	N.S.	

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

Table 17. - Chemical composition and seed size for the strains in Uniform Group V, 1965

Location	Hill	Dorman	D59-693	R60-66	D61-901	N69-6913
			Oil Percentage			
Linkwood, Md.	21.5	20.9	21.8	21.6	20.7	21.3
Georgetown, Del.	21.0	21.0	20.9	21.4	20.2	21.0
Warsaw, Va.	23.0	23.1	22.5	22.5	22.5	22.8
Plymouth, N. C.	21.1	21.9	21.6	21.2	21.8	20.5
Henderson, Ky.	22.1	21.7	21.8	22.1	20.7	20.2
Portageville, Mo.(A)	21.4	21.7	21.6	21.8	21.0	21.0
Keiser, Ark.(B)	21.2	22.4	21.3	21.8	22.2	20.4
Stoneville, Miss.(A)	23.4	22.3	22.9	20.8	22.4	23.2
Stuttgart, Ark.	22.0	23.6	20.8	22.0	20.6	21.6
Bixby, Okla.	21.3	21.8	20.9	22.2	21.3	22.2
Mean	21.8	22.0	21.6	21.7	21.3	21.4
			Protein Percentage			
Linkwood, Md.	39.8	39.4	40.5	40.2	41.1	40.0
Georgetown, Del.	39.5	39.4	41.6	40.3	40.8	40.4
Warsaw, Va.	38.6	37.4	40.1	38.6	39.2	39.5
Plymouth, N. C.	39.6	38.1	39.1	38.2	38.5	39.0
Henderson, Ky.	40.3	41.4	41.5	41.1	41.1	41.3
Portageville, Mo.(A)	38.6	37.9	39.4	38.1	39.7	38.7
Keiser, Ark.(B)	40.4	38.7	40.0	39.1	36.8	38.8
Stoneville, Miss.(A)	39.9	39.2	41.2	40.9	39.9	39.6
Stuttgart, Ark.	41.6	40.0	42.2	42.3	40.7	41.8
Bixby, Okla.	40.0	39.6	41.0	40.0	39.5	39.6
Mean	39.8	39.1-	40.7+	39.9	39.7	39.9
			Grams per 100 Seeds			
Linkwood, Md.	14.2	15.9	15.1	16.9	14.2	14.8
Georgetown, Del.	15.1	17.5	15.9	16.7	14.0	15.8
Warsaw, Va.	13.6	15.8	15.2	16.0	14.7	14.1
Plymouth, N. C.	11.7	13.1	12.1	13.2	11.6	11.4
Henderson, Ky.	14.3	14.2	14.0	14.4	13.8	14.0
Keiser, Ark.(B)	11.0	12.0	12.7	12.7	11.3	11.7
Stoneville, Miss.(A)	13.4	14.9	13.8	14.9	12.8	13.3
Stuttgart, Ark.	11.7	13.3	11.7	13.0	11.7	12.0
Bixby, Okla.	14.4	14.9	13.2	16.0	13.3	13.3
Mean	13.3	14.6+	13.7	14.9+	13.0	13.4

Table 17. - (continued)

Location	V61-20	D61-5141	D62-730	D63-7320	N59-6873	R62-550	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	20.8	20.7	20.6	20.4	21.2	21.1	
Georgetown, Del.	21.1	21.0	21.0	20.9	21.1	21.9	
Warsaw, Va.	22.5	22.7	22.5	22.4	23.1	23.0	
Plymouth, N.C.	21.6	21.0	21.7	21.0	21.2	21.6	
Henderson, Ky.	21.1	20.9	20.5	20.9	21.3	20.3	
Portageville, Mo.(A)	20.9	21.2	20.2	22.1	22.0	21.4	
Keiser, Ark.(B)	22.4	22.4	22.4	21.8	23.4	22.9	
Stoneville, Miss.(A)	23.3	23.5	21.7	22.3	24.0	23.0	
Stuttgart, Ark.	22.1	22.4	22.4	21.5	21.7	22.0	
Bixby, Okla.	22.1	21.9	22.0	21.8	21.7	21.6	
Mean	21.8	21.8	21.5	21.5	22.1	21.9	N.S.
			Protein Percentage				
Linkwood, Md.	40.2	39.7	40.1	40.5	40.2	41.8	
Georgetown, Del.	39.6	39.6	39.6	41.1	40.9	41.2	
Warsaw, Va.	39.1	37.6	37.5	39.2	40.0	40.0	
Plymouth, N. C.	39.4	38.5	40.7	40.3	38.0	40.5	
Henderson, Ky.	40.8	41.6	41.6	42.3	42.1	42.1	
Portageville, Mo.(A)	37.9	38.5	38.0	37.7	39.0	39.6	
Keiser, Ark.(B)	38.1	37.6	38.4	40.0	38.8	39.3	
Stoneville, Miss.(A)	40.3	40.4	40.2	42.2	40.0	41.9	
Stuttgart, Ark.	40.0	40.3	40.5	43.7	42.9	43.8	
Bixby, Okla.	38.9	40.1	39.7	41.2	39.0	40.9	
Mean	39.4	39.4	39.6	40.8+	40.1	41.1+	0.6
			Grams per 100 Seeds				
Linkwood, Md.	18.2	15.6	16.1	16.0	17.4	15.2	
Georgetown, Del.	20.5	16.6	17.8	18.2	19.1	16.9	
Warsaw, Va.	19.0	15.0	16.6	15.9	18.2	15.5	
Plymouth, N. C.	16.5	12.1	13.8	15.2	15.1	13.3	
Henderson, Ky.	19.3	15.3	15.9	16.5	17.5	15.1	
Keiser, Ark.(B)	16.3	12.0	13.3	14.0	16.0	14.0	
Stoneville, Miss.(A)	18.2	13.8	14.6	17.0	15.8	15.4	
Stuttgart, Ark.	17.7	13.7	14.0	13.7	14.7	13.3	
Bixby, Okla.	18.5	15.3	15.5	15.9	18.4	16.0	
Mean	18.2+	14.4+	15.3+	15.8+	17.0+	15.0+	0.5

Table 18. - Relative maturity, days earlier (-) or later (+) than Hill, for the strains in Uniform Group V, 1965

Location	Date planted	Hill matured	Dorman	D59-693	R60-66	D61-901
			East Coast			
Georgetown, Del.	5-18	10-13	+5	+4	+3	+3
Linkwood, Md.	5-18	10-7	+8	+8	+3	+7
Painter, Va.(A)	6-7	10-8	+5	+6	+4	+6
Painter, Va.(B)	6-7	10-9	+9	+7	+7	+7
Warsaw, Va.	5-20	10-8	+4	+12	+2	+8
Petersburg, Va.	5-28	10-5	+2	+4	+2	+6
Holland, Va.	5-25	10-1	+7	+7	+3	+7
Plymouth, N. C.	5-11	9-20	+8	+11	+4	+12
Mean		10-5	+6	+7	+4	+7
			Upper and Central South			
Martin, Tenn.	5-18	10-10	+10	+15	+7	+15
Jackson, Tenn.	5-24	10-4	+3	+12	0	+7
Belle Mina, Ala.	5-14	10-12	-2	+2	-2	+2
Blairsville, Ga.	5-20	10-15	+1	0	+1	+1
Experiment, Ga.	6-10	9-23	0	+9	+2	+6
State College, Miss.	5-19	9-12	+3	+8	+3	+15
Mean		10-3	+3	+8	+2	+8
			Delta			
Henderson, Ky.	5-6	10-18	-4	-4	-4	0
Hickman, Ky.	5-14	10-2	+5	+12	+5	+12
Portageville, Mo.(A)	5-14	10-5	+4	+5	+3	+3
Portageville, Mo.(B)	5-15	10-4	0	+8	+2	+9
Keiser, Ark.(B)	5-14	9-27	0	+8	+3	+13
Marianna, Ark.	5-24	10-7	0	+5	+3	+7
Stoneville, Miss.(A)	5-24	9-23	+1	+6	+5	+8
Stoneville, Miss.(B)	5-20	9-16	-2	+9	+2	+11
St. Joseph, La.	5-11	9-6	0	+2	+2	+7
Mean		9-29	0	+6	+2	+8
			West			
Stuttgart, Ark.	5-12	9-17	0	+11	-1	+14
Curtis, La.	5-12	10-13	+3	-1	+2	-2
Bixby, Okla.	5-20	10-16	-16	-11	-12	-6
Mean		10-5	-4	0	-4	+2

Table 18. - (continued)

Location	N59-6913	V61-20	D61-5141	D62-730	D63-7320	N59-6873	R62-550
			East Coast				
Georgetown, Del.	+3	+9	+3	+3	+4	+5	+4
Linkwood, Md.	+6	+12	+6	+10	+3	+6	+12
Painter, Va.(A)	+6	+5	+6	+6	+1	+6	+5
Painter, Va.(B)	+5	+10	+6	+9	+4	+8	+6
Warsaw, Va.	+3	+11	+2	+4	+1	+8	+8
Petersburg, Va.	+3	+8	+3	+5	+2	+9	+6
Holland, Va.	+7	+7	+3	+7	+7	+10	+7
Plymouth, N. C.	+11	+22	+6	+12	+22	+14	+14
Mean	+6	+11	+4	+7	+6	+8	+8
			Upper and Central South				
Martin, Tenn.	+7	+12	+7	+10	+3	+20	+12
Jackson, Tenn.	+8	+6	+2	+4	+4	+12	+13
Belle Mina, Ala.	-2	+2	-2	-2	+2	+1	0
Blairsville, Ga.	0	0	0	-1	+4	+3	+3
Experiment, Ga.	+6	+8	0	+4	+7	+8	+9
State College, Miss.	+11	+13	+3	+3	+16	+8	+11
Mean	+5	+7	+2	+3	+6	+9	+8
			Delta				
Henderson, Ky.	0	-4	0	+10	0	+10	+14
Hickman, Ky.	+12	+12	+5	+5	+5	+12	+12
Portageville, Mo.(A)	+3	+8	+3	+5	+3	+5	+6
Portageville, Mo.(B)	+7	+7	0	+1	+4	+9	+9
Keiser, Ark.(B)	+8	+17	0	+5	+8	+15	+15
Marianna, Ark.	+1	+8	0	+1	+6	+8	+6
Stoneville, Miss.(A)	+6	+8	+1	+3	+10	+10	+11
Stoneville, Miss.(B)	+4	+2	-5	-1	+7	+11	+6
St. Joseph, La.	+6	+3	+1	+2	+8	+10	+8
Mean	+5	+7	0	+3	+6	+10	+10
			West				
Stuttgart, Ark.	+2	+13	-1	0	+11	+14	+11
Curtis, La.	-2	-1	+1	+1	-1	-1	0
Bixby, Okla.	-8	-4	-17	-6	-8	-6	-7
Mean	-3	+3	-6	-2	0	+2	+1

Table 19. - Plant height data for the strains in Uniform Group V, 1965

Location	Hill	Dorman	D59-693	R60-66	D61-901	N59-6913
			East Coast			
Georgetown, Del.	39	42	34	36	41	35
Upper Marlboro, Md.	37	42	35	40	42	35
Linkwood, Md.	36	40	35	38	36	36
Painter, Va.(A)	40	45	35	39	42	34
Painter, Va.(B)	38	43	36	40	40	36
Warsaw, Va.	37	40	34	36	38	32
Petersburg, Va.	30	37	28	29	34	26
Norfolk, Va.	30	29	27	29	32	26
Holland, Va.	34	37	33	35	38	34
Plymouth, N. C.	38	38	32	32	34	28
Mean	36	40	33	35	38	32
			Upper and Central South			
Orange, Va.	35	38	34	39	39	31
Martin, Tenn.	39	43	42	44	39	38
Jackson, Tenn.	42	44	44	44	46	44
Belle Mina, Ala.	34	33	34	36	35	32
Blairsville, Ga.	42	46	38	37	45	37
Experiment, Ga.	37	40	28	32	43	30
State College, Miss.	40	42	40	40	44	36
Mean	38	41	37	39	42	35
			Delta			
Henderson, Ky.	28	31	27	28	32	28
Hickman, Ky.	33	38	33	37	36	29
Portageville, Mo.(A)	37	39	38	40	39	37
Portageville, Mo.(B)	32	32	32	30	30	27
Keiser, Ark.(B)	32	32	30	31	34	29
Marianna, Ark.	38	44	37	39	43	38
Stoneville, Miss.(A)	33	37	34	36	42	31
Stoneville, Miss.(B)	20	19	22	23	21	20
St. Joseph, La.	30	31	30	30	33	26
Mean	31	34	31	33	34	29
			West			
Stuttgart, Ark.	23	23	25	28	26	23
Curtis, La.	15	15	19	20	17	18
Bixby, Okla.	33	35	36	35	37	34
Mean	24	24	27	28	27	25

Table 19. - (continued)

Location	V61-20	D61-5141	D62-730	D63-7320	N59-6873	R62-550
			East Coast			
Georgetown, Del.	42	44	46	34	39	41
Upper Marlboro, Md.	44	44	45	35	41	46
Linkwood, Md.	37	43	47	32	40	38
Painter, Va.(A)	42	45	44	34	43	43
Painter, Va.(B)	42	46	45	36	43	43
Warsaw, Va.	40	41	42	34	40	36
Petersburg, Va.	32	37	38	29	30	28
Norfolk, Va.	32	34	33	31	31	32
Holland, Va.	36	36	39	33	38	35
Plymouth, N. C.	30	38	40	32	32	32
Mean	38	41	42	33	38	37
			Upper and Central South			
Orange, Va.	40	39	45	34	39	41
Martin, Tenn.	45	48	50	38	40	40
Jackson, Tenn.	46	48	46	42	50	46
Belle Mina, Ala.	33	33	32	33	35	34
Blairsville, Ga.	46	48	49	42	48	44
Experiment, Ga.	35	40	37	30	40	36
State College, Miss.	37	44	43	36	44	36
Mean	40	43	43	36	42	40
			Delta			
Henderson, Ky.	29	32	31	24	31	32
Hickman, Ky.	32	36	38	29	37	39
Portageville, Mo.(A)	37	38	39	34	41	35
Portageville, Mo.(B)	31	29	36	26	31	35
Keiser, Ark.(B)	28	30	32	29	33	31
Marianna, Ark.	44	43	46	35	41	40
Stoneville, Miss.(A)	37	38	39	33	37	31
Stoneville, Miss.(B)	19	15	21	14	21	17
St. Joseph, La.	29	30	32	27	30	26
Mean	32	32	35	28	34	32
			West			
Stuttgart, Ark.	22	24	28	23	24	21
Curtis, La.	16	18	14	14	17	16
Bixby, Okla.	37	37	38	32	37	35
Mean	25	26	27	23	26	24

Table 20. - Lodging scores for the strains in Uniform Group V, 1965

Location	Hill	Dorman	D59-693	R60-66	D61-901	N59-6913
			East Coast			
Georgetown, Del.	2.5	4.0	2.0	2.5	2.2	1.5
Upper Marlboro, Md.	3.3	4.3	2.3	2.3	2.7	2.3
Linkwood, Md.	2.3	3.6	2.0	2.5	3.0	1.5
Painter, Va.(A)	2.0	2.5	1.5	2.0	2.3	1.2
Painter, Va.(B)	2.8	3.5	1.5	2.2	2.0	1.2
Warsaw, Va.	1.2	1.7	1.4	1.1	1.5	1.2
Petersburg, Va.	1.0	2.0	3.3	1.0	2.0	1.0
Norfolk, Va.	2.0	2.0	1.0	1.0	1.0	1.0
Holland, Va.	3.3	3.0	2.7	2.3	2.7	2.3
Plymouth, N. C.	2.0	3.0	2.0	2.0	2.0	2.0
			Upper and Central South			
Orange, Va.	2.3	3.7	1.7	2.7	2.7	2.0
Martin, Tenn.	4.0	4.0	3.0	4.0	4.0	3.0
Jackson, Tenn.	3.0	4.0	2.0	3.0	1.0	2.0
Belle Mina, Ala.	3.7	3.7	2.3	3.3	3.7	2.0
Blairsville, Ga.	2.3	3.0	1.3	1.3	2.3	1.0
Experiment, Ga.	1.0	2.0	1.0	1.0	2.0	1.0
State College, Miss.	2.0	4.0	2.0	2.0	3.0	2.0
			Delta			
Henderson, Ky.	1.0	1.3	1.0	1.3	1.7	1.3
Hickman, Ky.	1.8	2.0	1.0	1.7	1.1	1.0
Portageville, Mo.(A)	3.8	4.0	2.8	2.4	3.2	2.5
Portageville, Mo.(B)	2.5	2.5	1.9	2.2	1.8	1.6
Keiser, Ark.(B)	2.3	2.7	1.3	1.7	2.3	1.0
Marianna, Ark.	4.0	4.0	3.7	4.0	3.0	3.0
Stoneville, Miss.(A)	3.0	3.0	3.0	3.0	3.0	2.7
Stoneville, Miss.(B)	1.7	2.0	2.0	2.0	2.3	1.7
St. Joseph, La.	2.0	4.0	2.0	2.0	2.0	1.0
			West			
Stuttgart, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	2.0	3.0	2.0	3.0	2.0	1.0

Table 20. - (continued)

Location	V61-20	D61-5141	D62-730	D63-7320	N59-6873	R62-550
			East Coast			
Georgetown, Del.	3.0	3.8	4.5	2.5	2.8	2.5
Upper Marlboro, Md.	2.8	3.5	4.2	3.2	1.8	3.5
Linkwood, Md.	2.7	3.5	3.8	3.0	2.8	3.2
Painter, Va.(A)	2.0	2.2	3.0	2.7	1.2	1.5
Painter, Va.(B)	2.0	2.5	4.0	3.0	1.5	2.7
Warsaw, Va.	1.6	2.0	2.7	1.3	1.3	1.4
Petersburg, Va.	1.0	2.0	2.0	2.0	1.0	1.0
Norfolk, Va.	1.0	2.0	2.0	1.0	1.0	1.0
Holland, Va.	2.3	4.0	3.7	3.0	2.0	3.3
Plymouth, N. C.	2.0	2.0	3.0	2.0	2.0	3.0
			Upper and Central South			
Orange, Va.	2.0	3.7	4.3	2.7	2.7	3.0
Martin, Tenn.	3.0	4.0	4.0	4.0	3.0	4.0
Jackson, Tenn.	1.0	4.0	4.0	3.0	2.0	2.0
Belle Mina, Ala.	1.3	4.0	4.7	2.3	1.3	2.3
Blairsville, Ga.	1.7	2.0	3.0	2.7	1.7	2.0
Experiment, Ga.	1.0	1.0	2.0	1.0	1.0	1.0
State College, Miss.	2.0	3.0	4.0	3.0	3.0	2.0
			Delta			
Henderson, Ky.	1.0	2.0	1.7	1.0	1.0	1.3
Hickman, Ky.	1.0	1.3	2.2	1.5	1.0	2.3
Portageville, Mo.(A)	2.3	4.0	3.8	3.5	2.7	2.8
Portageville, Mo.(B)	1.8	1.9	2.6	2.5	1.5	2.0
Keiser, Ark.(B)	1.0	2.0	3.0	2.3	1.3	1.7
Marianna, Ark.	3.0	4.0	4.0	3.3	3.3	3.7
Stoneville, Miss.(A)	3.0	3.0	3.0	3.0	3.0	2.0
Stoneville, Miss.(B)	1.3	2.0	1.7	2.0	2.0	2.0
St. Joseph, La.	2.0	3.0	3.0	2.0	2.0	2.0
			West			
Stuttgart, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	1.0	3.0	3.0	2.0	3.0	2.0

Table 21. - Seed quality scores for the strains in Uniform Group V, 1965

Location	Hill	Dorman	D59-693	R60-66	D61-901	N59-6913
			East Coast			
Georgetown, Del.	2.3	1.7	2.0	2.7	2.7	2.0
Upper Marlboro, Md.	2.0	2.0	2.0	2.0	2.0	2.3
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Painter, Va.(A)	1.8	2.0	1.8	1.8	2.3	1.8
Painter, Va.(B)	1.8	1.3	1.5	2.0	1.9	1.3
Warsaw, Va.	1.7	1.2	1.0	1.7	1.2	1.0
Petersburg, Va.	1.0	1.7	1.7	1.3	1.7	1.0
Norfolk, Va.	1.0	1.0	1.0	1.0	2.0	1.0
Holland, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Plymouth, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	2.7	1.7
Blairsville, Ga.	2.0	1.0	2.0	1.3	2.7	2.0
Experiment, Ga.	1.0	1.0	1.3	1.7	2.7	1.7
State College, Miss.	4.0	3.0	1.0	2.0	2.0	1.0
			Delta			
Henderson, Ky.	1.0	1.5	1.2	1.5	1.7	1.3
Hickman, Ky.	1.7	2.7	2.0	2.0	2.3	2.3
Portageville, Mo.(A)	1.4	1.0	1.0	3.1	1.1	1.0
Portageville, Mo.(B)	1.3	1.4	1.1	1.5	1.0	1.0
Keiser, Ark.(B)	3.3	4.0	2.7	3.0	3.0	3.0
Marianna, Ark.	3.0	2.7	2.0	3.0	2.7	2.0
Stoneville, Miss.(A)	1.0	2.0	2.0	2.3	1.0	2.0
Stoneville, Miss.(B)	3.0	2.7	2.3	2.7	2.7	2.7
St. Jospeh, La.	3.0	2.0	1.0	1.0	2.0	1.0
			West			
Stuttgart, Ark.	3.7	3.3	3.0	3.3	2.7	3.0
Curtis, La.	3.0	1.0	1.0	1.0	2.0	2.0
Bixby, Okla.	1.0	2.0	2.0	2.0	2.0	2.0

Table 21. - (continued)

Location	V61-20	D61-5141	D62-730	D63-7320	N59-6873	R62-550
			East Coast			
Georgetown, Del.	2.2	2.0	1.8	2.5	3.3	3.2
Upper Marlboro, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Linkwood, Md.	2.0	2.0	2.0	3.0	2.0	2.0
Painter, Va.(A)	1.3	2.3	1.5	1.5	2.2	1.8
Painter, Va.(B)	1.3	1.7	1.3	1.7	2.3	1.5
Warsaw, Va.	1.3	1.5	1.3	1.5	1.0	1.0
Petersburg, Va.	2.0	2.7	2.6	2.0	1.7	1.3
Norfolk, Va.	1.0	1.0	2.0	1.0	1.0	1.0
Holland, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Plymouth, N. C.	1.5	1.5	1.5	1.5	1.5	1.0
			Upper and Central South			
Orange, Va.	1.0	2.3	1.0	1.0	1.7	1.0
Blairsville, Ga.	1.0	2.0	1.3	1.7	2.3	1.0
Experiment, Ga.	1.7	1.0	1.0	1.7	1.3	1.7
State College, Miss.	2.0	3.0	3.0	2.0	2.0	2.0
			Delta			
Henderson, Ky.	1.3	1.8	1.8	1.3	1.5	1.8
Hickman, Ky.	2.0	2.7	2.7	2.3	1.7	2.0
Portageville, Mo.(A)	1.1	1.5	1.4	1.4	1.1	1.2
Portageville, Mo.(B)	1.5	1.7	1.7	2.0	1.0	1.0
Keiser, Ark.(B)	3.0	3.7	3.7	4.0	3.0	3.0
Marianna, Ark.	2.7	2.7	2.3	3.0	2.7	2.7
Stoneville, Miss.(A)	2.0	2.0	2.0	2.3	2.0	2.7
Stoneville, Miss.(B)	3.0	3.0	2.7	4.3	2.7	4.3
St. Joseph, La.	3.0	1.0	2.0	5.0	2.0	3.0
			West			
Stuttgart, Ark.	3.0	3.7	3.7	4.3	2.7	4.0
Curtis, La.	3.0	3.0	2.0	4.0	3.0	3.0
Bixby, Okla.	2.0	2.0	2.0	2.0	2.0	2.0

PRELIMINARY GROUP V

1965

Six Preliminary Group V nurseries, including 20 experimental strains along with Hill, D59-693, and Dare as checks, were grown. The parentage of these strains is reported in table 22. Performance data are summarized in tables 21 through 28. Differences in seed yield were significant at only 3 of the 6 locations. The combined analysis of variance for seed yield showed differences to be significant. Only the check variety, D59-693, yielded significantly better than Hill. Seven strains yielded significantly less than Hill. Six of these were highly susceptible to phytophthora rot on clay.

Dare was included to determine the possibility of transferring it to Group V as a late check variety to replace D59-693. Dare averaged 2 days later than D59-693 and only 0.4 bushel lower in seed yield. It appears to fit Group V satisfactorily as to maturity.

There was a considerable difference among strains in development of phytophthora rot in plantings on clay at Portageville, Keiser, and Stoneville. Three strains, D63-6087, D63-6094, and D63-6117, carry the gene for resistance. Differences in development of Diaporthe and purple stain on the seed were small. Differences in percent mottled seed ranged from 1.2% to 34% at Warsaw.

The cyst-nematode-resistant strain D63-7327 was more susceptible to phytophthora rot than Hill. The strains D63-6094 and D63-6117 showed variability for maturity. These strains are resistant to phytophthora rot and appear to be resistant to most races of mildew.

The strains D63-6087, R62-59, and UD61-1806 appear to merit testing in Uniform Group V.

Table 22. - Parentage of the strains in Preliminary Group V, 1965

	Variety or strain	Parentage	Generation Composited
1.	Hill		
2.	D59-693		
3.	D61-858	Hill(2) x D52-4877	F_5
4.	D62-6289	Hill x Sioux	F_5
5.	D63-6087	Hill(4) x PI 171,442	F_4
6.	D63-6094	Hill(4) x PI 171,442	F_4
7.	D63-6117	Hill(4) x PI 171,442	F_4
8.	D63-6125	Hill(4) x PI 171,442	F_4
9.	D63-7327	Hill x [Lee(2) x Peking]	F_5
10.	Dare (N59-6972)	Hill x D52-810	F_5
11.	N61-4229	N55-47 x D56-1215	F_5
12.	N61-4235	N55-47 x D56-1215	F_5
13.	N61-4482	N55-47 x D56-1215	F_5
14.	N61-4492	N55-47 x D56-1215	F_5
15.	N62-2141	(N52-3908 x N51-1675) x (Ogden x Lee)	F_5
16.	R62-659	(R54-168 x Hill) x(Lee x Dortchsoy 110)	F_4
17.	R63-174	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5
18.	R63-190	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5
19.	UD61-1805	FC33243 x D49-2491	
20.	UD61-1806	FC33243 x D49-2491	
21.	UD61-1812	FC33243 x D49-2491	
22.	UD61-1824	FC33243 x D49-2491	
23.	UD61-1826	FC33243 x D49-2491	

Table 23. - General summary of performance for the strains grown in Preliminary Group V, 1965

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	P.R.[1/]	D.p.s.[2/]	P.S.[3/]	Percent mottling[4/]
Hill	31.3	10-1	33	21.7	39.1	1.0	1.5	1.0	14.5
D59-693	35.4+	+7	31	21.3	39.5	1.0	1.3	1.0	1.5
D61-858	32.3	+6	39	22.1	39.1	1.0	1.8	1.0	1.2
D62-6289	26.6-	-2	31	18.2-	44.0+	1.0	1.0	1.0	11.5
D63-6087	30.4	-2	32	21.8	39.9	1.0	1.0	1.0	6.5
D63-6094	30.9	+9	34	21.6	39.7	1.0	1.5	1.0	12.5
D63-6117	33.1	+9	35	21.7	39.0	1.0	1.5	1.0	3.5
D63-6125	32.1	+13	34	20.9-	40.4+	1.0	1.5	1.3	15.0
D63-7327	23.8-	0	26	22.0	40.6+	2.0	1.3	1.0	11.5
Dare	35.0	+9	33	22.4+	39.2	1.0	1.5	1.0	3.0
N61-4229	23.7-	+7	26	19.8-	44.7+	3.5	1.0	1.0	34.0
N61-4235	25.5-	+6	27	21.2	43.8+	3.5	1.5	1.3	27.5
N61-4482	30.6	+12	33	20.2-	43.6+	3.0	1.5	1.0	25.5
N61-4492	28.9	+8	34	20.2-	43.5+	3.5	1.5	1.0	26.5
N62-2141	27.7	+9	27	22.4+	39.8	3.0	1.5	1.3	3.0
R62-659	33.5	+7	34	22.0	41.0+	3.0	1.3	1.0	15.5
R63-174	32.3	+5	31	21.8	38.8	2.0	2.0	1.0	29.5
R63-190	31.1	+9	33	21.5	40.0	2.5	1.8	1.0	10.5
UD61-1805	29.0	+9	44	21.5	39.6	1.0	1.3	1.0	6.5
UD61-1806	31.9	+10	46	21.6	40.1	1.5	1.0	1.0	8.5
UD61-1812	26.8-	+13	47	22.2	39.1	3.0	2.0	1.5	1.5
UD61-1824	27.3-	+14	48	22.7+	40.0	3.5	1.8	1.3	16.0
UD61-1826	26.8-	+14	48	22.3	40.2+	3.0	1.5	1.5	2.5
L.S.D.(.05)	3.9			0.7	1.1				
L.S.D.(.01)	5.2			1.0	1.4				

1/ Portageville, Keiser, Stoneville data
2/ Georgetown data
3/ Warsaw and Georgetown data
4/ Warsaw data

Table 24. - Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.(A)	Portageville, Mo.(B)	Keiser, Ark.(B)	Stone-ville, Miss.(B)
Hill	33.7	28.2	42.3	47.4	34.2	24.8	18.6
D59-693	37.8	34.7+	43.9	59.8	31.6	28.8	21.3
D61-858	35.8	31.4	39.6	55.4	31.3	25.1	18.6
D62-6289	33.6	23.0-	36.4	48.2	25.7	13.2	16.7
D63-6087	34.5	29.9	41.3	51.5	39.8	18.0	13.2
D63-6094	32.3	29.9	42.6	45.5	32.0	25.5	16.3
D63-6117	34.7	33.8+	40.0	58.7	39.2	22.7	18.2
D63-6125	30.0	27.7	45.0	48.7	38.9	28.6	17.5
D63-7327	34.7	23.8-	31.6	43.5	24.1	11.6-	7.0-
Dare	37.5	35.9+	44.4	55.9	29.1	27.3	22.3
N61-4229	29.4	28.3	34.9	49.0	4.5	14.9	8.0-
N61-4235	38.8	29.8	23.8	55.9	16.4	9.9-	14.5
N61-4482	35.8	26.0	47.6	57.5	27.4	13.9	18.1
N61-4492	30.6	30.7	43.8	50.1	25.3	18.8	12.4
N62-2141	36.2	32.4+	38.9	51.1	22.4	11.2-	11.1-
R62-659	39.0	37.5+	43.5	51.1	26.2	21.9	20.4
R63-174	40.8	32.3+	38.7	55.7	20.3	23.7	20.3
R63-190	37.4	32.7+	35.8	62.8	21.0	21.9	17.0
UD61-1805	32.7	30.2	38.4	43.1	20.5	19.7	21.1
UD61-1806	35.6	27.5	52.2	41.1	28.4	18.6	22.5
UD61-1812	32.2	30.5	39.4	45.3	13.9	15.2	13.8
UD61-1824	33.0	29.5	45.5	43.6	11.4	13.0	15.4
UD61-1826	28.4	30.2	42.1	40.9	20.9	13.3	15.9
L.S.D.(.05)	N.S.	4.1	N.S.	N.S.		11.1	7.2
C.V.	9%	7%	15%	18%		28%	21%

Table 25. - Oil percentages for the strains in Preliminary Group V, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.(A)	Keiser Ark.(B)
Hill	21.6	23.1	21.6	21.1	21.1
D59-693	21.7	21.8	20.8	21.3	21.1
D61-858	21.7	23.2	21.5	21.5	22.4
D62-6289	18.0	18.7	18.8	17.4	18.2
D63-6087	21.5	22.9	21.9	21.3	21.2
D63-6094	21.1	22.3	22.2	20.5	21.7
D63-6117	21.4	22.6	22.1	21.0	21.5
D63-6125	20.7	21.6	21.2	20.2	20.8
D63-7327	21.4	23.2	21.6	21.9	21.7
Dare	22.4	23.0	22.7	20.2	23.6
N61-4229	18.5	20.0	20.7	19.0	20.7
N61-4235	20.4	22.0	21.6	20.6	21.4
N61-4482	19.4	20.6	19.6	19.5	22.0
N61-4492	19.4	20.3	21.0	19.6	20.6
N62-2141	21.8	23.1	22.7	22.3	21.9
R62-659	21.0	22.3	22.2	22.0	22.4
R63-174	20.9	21.9	22.3	21.3	22.5
R63-190	20.9	22.2	22.3	19.4	22.9
UD61-1805	21.1	22.2	21.6	20.8	21.7
UD61-1806	21.9	22.2	22.2	20.3	21.5
UD61-1812	21.5	23.8	23.2	20.4	22.2
UD61-1824	22.2	23.3	23.2	21.9	23.1
UD61-1826	22.1	23.6	22.8	21.3	21.7

Table 26. - Protein percentages for the strains in Preliminary Group V, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.(A)	Keiser, Ark.(B)
Hill	39.4	38.1	40.1	38.4	39.7
D59-693	40.1	40.9	38.3	39.1	39.3
D61-858	40.1	39.0	39.0	38.2	39.3
D62-6289	45.3	44.7	43.7	43.5	42.9
D63-6087	40.3	40.0	40.4	38.6	40.2
D63-6094	40.2	40.3	39.2	39.6	39.2
D63-6117	39.6	39.4	39.0	38.3	38.9
D63-6125	41.5	40.9	39.6	40.6	39.6
D63-7327	41.2	38.8	40.8	40.8	41.4
Dare	40.9	40.0	38.3	39.5	37.2
N61-4229	46.2	46.2	44.0	44.0	43.1
N61-4235	45.4	44.4	43.9	42.8	42.5
N61-4482	45.1	44.5	43.0	42.9	42.4
N61-4492	45.5	43.9	42.4	43.1	42.7
N62-2141	41.8	39.3	39.8	39.4	38.8
R62-659	43.6	41.0	40.0	39.8	40.4
R63-174	39.9	40.8	36.2	38.9	38.1
R63-190	39.7	41.6	39.4	40.4	39.1
UD61-1805	39.6	39.9	40.1	40.3	38.3
UD61-1806	40.2	40.1	40.2	40.6	39.3
UD61-1812	39.1	38.3	39.8	40.6	37.6
UD61-1824	39.5	40.8	40.4	40.0	39.3
UD61-1826	40.3	39.9	40.7	40.5	39.4

Table 27. - Plant height for the strains in Preliminary Group V, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.(B)	Stoneville, Miss.(B)
Hill	37	37	37	34	34	20
D59-693	34	36	29	34	31	20
D61-858	41	45	39	41	39	28
D62-6289	33	36	32	32	29	20
D63-6087	34	38	32	34	34	19
D63-6094	35	39	35	35	35	23
D63-6117	38	38	33	37	36	23
D63-6125	38	40	34	36	35	19
D63-7327	32	34	23	28	28	12
Dare	36	38	32	35	33	20
N61-4229	32	33	26	28	28	11
N61-4235	34	35	26	28	26	13
N61-4482	38	38	35	35	34	17
N61-4492	41	40	34	35	34	17
N62-2141	32	29	25	30	34	13
R62-659	38	41	33	36	34	22
R63-174	34	41	30	31	29	18
R63-190	38	41	28	36	35	20
UD61-1805	52	48	46	44	50	27
UD61-1806	52	46	48	48	53	30
UD61-1812	52	50	48	50	50	33
UD61-1824	53	50	54	48	50	33
UD61-1826	56	47	48	53	50	32

Table 28. - Seed quality scores for the strains in Preliminary Group V, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.(B)	Stoneville, Miss.(B)
Hill	2.0	1.8	1.5	2.3	3.5	3.0
D59-693	2.0	1.5	1.5	1.2	2.5	2.0
D61-858	2.0	1.2	1.5	1.3	3.0	3.0
D62-6289	3.0	2.0	1.5	3.3	3.5	3.0
D63-6087	2.0	1.5	1.5	2.1	3.0	3.5
D63-6094	2.0	1.5	1.5	1.7	3.0	3.0
D63-6117	2.0	1.2	1.0	1.2	3.0	3.0
D63-6125	2.0	1.2	1.5	1.3	2.5	2.5
D63-7327	3.0	1.5	1.5	3.2	4.0	4.5
Dare	2.0	1.0	1.5	1.0	2.0	2.5
N61-4229	2.0	1.2	1.5	1.7	3.5	3.0
N61-4235	2.0	1.8	1.5	1.9	3.0	3.0
N61-4482	2.0	1.8	1.5	1.5	3.5	2.5
N61-4492	2.0	1.8	1.5	1.8	3.5	1.5
N62-2141	3.0	1.2	1.5	1.9	3.0	3.5
R62-659	2.0	1.5	1.5	1.7	3.5	3.0
R63-174	2.0	2.0	2.0	3.3	4.0	3.0
R63-190	2.0	1.8	1.5	1.7	3.5	3.0
UD61-1805	2.0	1.5	1.5	2.4	3.5	3.5
UD61-1806	2.5	1.5	1.5	2.1	4.0	3.0
UD61-1812	3.0	1.5	3.0	1.9	3.5	4.0
UD61-1824	2.0	1.5	3.0	2.3	4.5	3.0
UD61-1826	3.0	1.8	3.0	2.1	4.0	3.0

UNIFORM GROUP VI

1965

	Variety or strain	Parentage	Generation Composited
1.	Hood	Roanoke x N45-745	F_6
2.	Lee	S-100 x CNS	F_6
3.	Dare (N59-6972)	Hill x D52-810	F_5
4.	Davis(R54-171-1)	D49-2573 x N45-1497	
5.	D60-9647	FC31745 x D49-2510	F_6
6.	D60-11,082	D49-2573 x Nansemond	F_6
7.	D61-2002	Hill x [D49-2491(2) x Tanner]	F_5
8.	D61-3791	D49-2491(6) x L3-2010	F_4
9.	D62-6913	Arksoy x D49-2491	F_6
10.	D62-6959	Arksoy x D49-2491	F_6
11.	Pickett(NC1-2-2)	[D49-2491(6) x Dorman] x [Lee(4) x Peking]	F_5
12.	R62-395	R54-168 x Hill	F_5

Background of strains used as parents:

N45-745 is a bacterial-pustule-resistant selection from Ogden x CNS.

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.

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.

FC31745 and Nansemond are farmer selections from southeastern Virginia.

D49-2491 is a sister strain to Lee.

L3-2010 is a high oil strain from C167 x L37-1355 previously tested in Group IV.

R54-168 is a sister strain to Davis.

Thirty-two Uniform Group VI nurseries were planted. Results of 30 are summarized in tables 29 through 35, with table 29 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 and oil and protein percentages.

Seed yield differences among strains were significant at 21 locations. The combined analysis of variance for mean seed yields by production regions show differences among strains to be significant in the East Coast and Southeast.

Three strains were named and released for production -- N59-6972 (Dare), R64-171-1 (Davis), and NC1-2-2 (Pickett). Dare is approximately a week earlier than Hood and should be shifted to Uniform Group V. Except for the Southeast, where Dare is too early, it has equalled or exceeded Hood in seed yield. Davis is later than Lee in the East Coast region but a few days earlier than Lee in the Delta. Davis is best suited for production on clay. It has field resistance to phytophthora rot. Only three of the Uniform Group VI nurseries were grown on clay. Pickett carries resistance to cyst nematodes and is intended for production only on cyst-nematode-infested soils. Its seed yield was significantly lower than Lee in the East, slightly higher in the Southeast, and slightly lower in the Delta and Upper and Central South.

The high-protein strain D60-9647 has averaged slightly below Lee in seed yield. D60-11,082 is a taller type, somewhat like Davis but somewhat earlier in maturity. It has produced higher seed yields than Davis in the East, somewhat lower yields in the Southeast, and slightly higher in other areas. With the release of Davis, there does not appear to be any need for further testing of D60-11,082.

D61-2002 is slightly earlier than Hood. The 2-year mean seed yields are lower than for Hood in all but the Delta region. It proved very susceptible to frogeye leaf spot at Willard.

Of the strains grown 1 year, none appears really outstanding. On the basis of the preliminary test, D61-3791 was considered to be several days earlier than Lee, but this difference was not recognized in these plantings. It does have somewhat higher oil content. D62-6913 and D62-6959 each carry the Arksoy type of resistance to phytophthora rot, but these strains are not consistent in seed yield. Seed yield of R62-395 was equal to that of Lee in the East and Delta and higher in the Southeast and Upper and Central South.

Table 29. - General Summary of the performance for the strains in Uniform Group VI, 1965

	Hood	Lee	Dare	Davis	D60-9647	D60-11,082
Seed Yield - 1965						
East Coast	38.2	36.6	38.4	32.1-	35.2	37.2
Southeast	36.0	30.4-	25.8-	35.9	32.4	29.8-
Upper & Central South	38.2	35.8	37.2	32.4	31.3	31.7
Delta	33.8	36.0	35.9	37.2	34.8	36.4
West	40.8	43.4	36.5	37.6	40.0	38.8
- 1964-65						
East Coast	38.1	35.1	38.4	33.4	34.7	36.9
Southeast	31.8	31.1	26.4	32.2	29.4	27.4
Upper & Central South	35.8	34.0	35.8	31.4	31.3	33.3
Delta	35.6	35.1	37.7	37.0	34.9	37.5
West	39.9	38.2	37.2	37.1	36.1	37.5
- 1963-65						
East Coast	36.6	34.9	37.6	33.0	33.5	35.9
Southeast	32.7	31.2	27.3	32.7	29.5	30.1
Upper & Central South	34.3	33.1	34.1	31.3	30.6	32.3
Delta	34.9	36.3	38.7	38.3	35.0	38.9
West	34.4	36.1	35.5	35.4	33.4	35.6
Oil Content - 1965	21.8	21.0-	23.0+	21.3-	18.9-	20.3-
- 1964-65	21.6	21.1	23.0	21.2	18.9	20.2
- 1963-65	21.4	20.9	22.8	21.0	18.8	20.1
Protein Content - 1965	40.2	41.5+	39.4-	40.2	46.8+	41.9+
- 1964-65	40.0	40.9	39.2	39.6	45.4	41.2
- 1963-65	39.7	40.6	38.8	39.3	45.0	40.9
Seed Size	15.4	13.9-	13.2-	15.4	18.3+	16.6+
Maturity Index	10-14	+6	-5	+7	+7	+4
Height	33	33	32	42	37	38
Bacterial Pustule	1.0	1.0	1.0	1.0	1.0	1.0
Purple Stain	2.0	1.0	1.0	1.0	1.0	1.3
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Diaporthe	1.5	1.3	1.8	1.0	1.5	1.0
Frogeye	2.0	2.0	1.0	4.0	2.0	4.0
Mottled Seed	1.0	3.0	1.0	1.0	4.0	3.0
Shattering	2.0	1.0	2.0	1.8	2.0	1.5
Flower Color	P	P	W	W	P	W
Pubescence Color	G	T	G	G	T	G

Table 29. - (continued)

	D61-2002	D61-3791	D62-6913	D62-6959	Pickett	R62-395
Seed Yield - 1965						
East Coast	37.4	35.7	34.1-	35.2	29.8-	36.2
Southeast	26.0-	34.3	29.9-	32.1	32.9	33.3
Upper & Central South	33.7	34.6	33.6	31.4	34.6	38.3
Delta	35.2	36.4	34.3	29.7	34.7	36.3
West	39.3	43.4	39.6	35.5	39.0	41.4
- 1964-65						
East Coast	36.6					
Southeast	25.7					
Upper & Central South	31.5					
Delta	36.8					
West	36.2					
- 1963-65						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1965	21.2-	21.8	20.6-	19.4-	21.2-	21.9
- 1964-65	21.1					
- 1963-65						
Protein Content - 1965	39.9	40.4	42.6+	43.4+	41.0+	41.0+
- 1964-65	39.3					
- 1963-65						
Seed Size	11.3-	14.7	13.3-	14.4-	13.7-	16.7+
Maturity Index	0	+6	+5	+5	+8	+5
Height	32	34	39	40	32	31
Bacterial Pustule	1.0	1.0	1.0	1.0	1.0	1.0
Purple Stain	1.0	1.0	1.0	1.3	1.0	1.0
Phytophthora rot	1.0	1.0	1.0	1.0	1.0	1.0
Diaporthe	1.5	1.3	1.3	1.0	1.3	1.0
Frogeye	4.0	4.0	-	2.0	4.0	1.0
Mottled Seed	3.0	2.5	3.0	1.0	2.5	3.0
Shattering	1.0	1.0	1.0	1.0	1.0	1.0
Flower Color	W	P	P	W	P	W
Pubescence Color	T	T	LT	G	G	G

Table 30. - Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1965

Location	Hood	Lee	Dare	Davis	D60-9647	D60-11,082	D61-2002
			East Coast				
Upper Marlboro, Md.	33.2	31.3	36.4	21.9-	30.5	32.1	35.0
Linkwood, Md.	30.8	31.9	37.5+	20.6-	30.0	33.7	39.0+
Painter, Va.(A)	39.9	33.3	34.3	33.6	34.8	35.5	33.3
Painter, Va.(B)	43.5	34.8-	41.2	29.8-	40.2	41.6	45.0
Warsaw, Va.	27.7	30.5+	29.6	21.2-	26.6	27.3	29.6
Petersburg, Va.	25.7	25.5	20.6	19.4	23.9	22.4	21.9
Norfolk, Va.1/	16.8	17.1	13.6	12.8	13.6	15.6	10.8
Holland, Va.2/	27.6	22.6-	24.3	22.9-	20.2-	20.0-	25.8
Plymouth, N. C.	41.1	46.5	48.5	49.4+	42.5	50.9+	40.2
Willard, N. C.	54.1	46.8	53.4	52.2	52.3	45.9	48.6
Clayton, N. C.	48.2	48.6	44.2	40.3	35.5-	45.5	44.4
Mean	38.2	36.6	38.4	32.1-	35.2	37.2	37.4
			Southeast				
Quincy, Fla.	29.0	22.3	20.3	27.5	25.5	22.3	16.6
Jay, Fla.	40.1	36.3-	33.4-	39.4	35.6-	36.3-	30.1-
Fairhope, Ala.	46.4	42.7	33.4-	46.2	41.5	38.4-	38.4-
Baton Rouge, La.	28.6	20.4-	16.0-	20.4-	27.1	22.1	19.0-
Mean	36.0	30.4-	25.8-	35.9	32.4	29.8-	26.0-
			Upper and Central South				
Milan, Tenn.	30.7	34.0	34.3	27.9	30.2	32.0	33.5
Jackson, Tenn.	27.7	32.2	28.2	23.8	27.7	24.3	25.2
Belle Mina, Ala.	44.0	34.6	39.5	35.5	34.1	42.1	34.4
Experiment, Ga.	56.1	45.1-	48.8-	42.4-	31.8-	31.7-	42.2-
State College, Miss.	32.6	33.1	35.2	32.5	32.8	28.3	33.4
Mean	38.2	35.8	37.2	32.4	31.3	31.7	33.7
			Delta				
Portageville, Mo.(A)	46.7	47.3	55.2+	45.0	45.7	53.1+	53.7+
Portageville, Mo.(B)	28.8	40.9+	35.3	40.8+	40.0+	42.3+	40.1+
Keiser, Ark.(B)	24.0	28.9	21.9	34.6	32.5	25.8	23.9
Marianna, Ark.	41.5	45.4	40.4	41.9	39.3	41.7	39.1
Stoneville, Miss.(A)	30.7	34.6	26.7	36.8+	35.1	35.2	31.1
Stoneville, Miss.(B)	19.5	25.5+	22.4	25.1+	24.4+	25.2+	23.7+
St. Joseph, La.	45.6	29.5-	49.6	36.5	26.8-	31.1-	34.7-
Mean	33.8	36.0	35.9	37.2	34.8	36.4	35.2
			West				
Stuttgart, Ark.	42.3	44.3	38.1-	42.5	43.7	42.3	42.0
Curtis, La.	32.8	43.2	30.0	29.7	43.3	32.8	31.3
Bixby, Okla.	47.3	42.8	41.5-	40.7-	38.9-	41.4-	44.6
Mean	40.8	43.4	36.5	37.6	40.0	38.8	39.3

1/ Not included in mean. 2/ Not included in mean, severe Mexican bean bettle feeding.

Table 30 - (continued)

Location	D61-3791	D62-6913	D62-6959	Pickett	R62-395	L.S.D. (.05)	C.V.
			East Coast				
Upper Marlboro, Md.	31.5	30.0	30.2	24.6-	31.7	3.6	7%
Linkwood, Md.	31.5	30.6	30.5	25.0-	28.4	5.8	11%
Painter, Va.(A)	31.5	33.3	31.9	28.5	34.8	N.S.	9%
Painter, Va.(B)	37.4	39.3	33.8-	31.9-	33.0-	7.5	12%
Warsaw, Va.	28.4	25.8	26.7	24.0-	31.2+	2.8	6%
Petersburg, Va.	23.7	22.4	22.9	24.2	25.2	N.S.	12%
Norfolk, Va. 1/	13.0	13.2	15.6	13.4	18.8	N.S.	27%
Holland, Va. 2/	22.5-	20.1-	23.6-	15.2-	23.4-	4.0	10%
Plymouth, N. C.	46.2	43.6	44.6	36.3	47.8	7.8	10%
Willard, N. C.	45.2-	45.3-	53.9	36.4-	52.4	8.7	10%
Clayton, N. C.	45.4	36.4-	42.1	37.5-	40.9	8.2	11%
Mean	35.7	34.1-	35.2	29.8-	36.2	3.1	
			Southeast				
Quincy, Fla.	27.8	24.7	29.0	27.4	25.9	2.6	6%
Jay, Fla.	35.6-	33.2-	39.2	33.7-	36.1-	3.1	5%
Fairhope, Ala.	45.9	39.1-	41.5	40.4-	43.5	5.1	7%
Baton Rouge, La.	27.7	22.7	18.7-	30.0	27.7	6.9	17%
Mean	34.3	29.9-	32.1	32.9	33.3	4.4	
			Upper and Central South				
Milan, Tenn.	30.7	30.2	27.1	25.9	33.2	N.S.	13%
Jackson, Tenn.	27.7	29.2	28.7	33.6	27.2	N.S.	17%
Belle Mina, Ala.	40.2	36.7	35.4	34.5	46.1	N.S.	11%
Experiment, Ga.	36.8-	45.9-	37.4-	42.3-	47.4-	5.8	8%
State College, Miss.	37.4	26.0	28.4	36.9	37.7	N.S.	14%
Mean	34.6	33.6	31.4	34.6	38.3	N.S.	
			Delta				
Portageville, Mo.(A)	49.0	46.2	41.9	45.1	48.6	5.3	7%
Portageville, Mo.(B)	38.1+	42.1+	34.0	42.6+	35.0	7.5	12%
Keiser, Ark.(B)	26.9	29.6	23.5	22.0	28.3	N.S.	19%
Marianna, Ark.	39.8	37.4	36.2	40.1	40.7	N.S.	13%
Stoneville, Miss.(A)	32.6	35.5	26.7	33.2	35.2	5.4	10%
Stoneville, Miss.(B)	27.9+	23.4+	23.8+	24.9+	26.2+	3.8	9%
St. Jospeh, La.	40.4	25.8-	22.0-	35.1-	39.9	9.5	16%
Mean	36.4	34.3	29.7	34.7	36.3	N.S.	
			West				
Stuttgart, Ark.	42.2	41.5	38.0-	43.2	44.5	4.0	6%
Curtis, La.	48.7+	40.7	30.0	40.3	33.8	11.3	18%
Bixby, Okla.	39.2-	36.5-	38.4-	33.5-	45.8	4.8	7%
Mean	43.4	39.6	35.5	39.0	41.4	N.S.	

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

Table 31. - Chemical composition and seed size for the strains in Uniform Group VI, 1965

Location	Hood	Lee	Dare	Davis	D60-9647	D60-11,082
			Oil Percentage			
Linkwood, Md.	20.7	20.1	22.2	19.4	19.3	20.1
Warsaw, Va.	22.4	20.4	22.3	20.5	18.1	20.0
Plymouth, N. C.	22.2	21.0	22.2	20.7	18.8	19.8
Clayton, N. C.	21.7	21.5	22.8	21.3	18.8	20.5
Jay, Fla.	22.8	21.2	24.4	22.5	19.7	20.8
Portageville, Mo.(A)	20.7	19.8	22.5	21.8	18.9	19.8
Keiser, Ark.(B)	22.6	22.3	24.0	22.3	19.1	20.4
Stoneville, Miss.(A)	22.5	21.4	24.0	22.3	18.5	20.8
Stuttgart, Ark.	21.2	21.1	23.0	21.2	18.6	19.6
Bixby, Okla.	21.1	20.8	22.8	21.4	19.2	20.8
Mean	21.8	21.0-	23.0+	21.3-	18.9-	20.3-
			Protein Percentage			
Linkwood, Md.	41.5	42.6	40.7	41.8	45.7	40.9
Warsaw, Va.	39.4	39.8	39.4	41.0	47.8	42.5
Plymouth, N. C.	39.0	40.1	38.1	39.5	45.6	41.2
Clayton, N. C.	39.4	40.9	39.1	40.5	46.2	42.0
Jay, Fla.	40.8	42.7	40.5	40.8	47.3	43.0
Portageville, Mo.(A)	40.3	42.0	39.1	39.2	46.2	41.3
Keiser, Ark.(B)	38.8	38.8	36.6	38.8	46.0	40.2
Stoneville, Miss.(A)	39.9	42.5	40.4	40.3	47.3	43.2
Stuttgart, Ark.	41.7	44.2	41.1	40.6	49.0	43.1
Bixby, Okla.	40.8	41.1	39.3	39.5	46.5	41.4
Mean	40.2	41.5+	39.4-	40.2	46.8+	41.9+
			Grams per 100 Seeds			
Linkwood, Md.	15.8	14.3	15.2	15.0	17.0	16.1
Warsaw, Va.	15.7	14.3	14.9	16.7	18.7	18.3
Plymouth, N. C.	14.8	12.5	12.2	15.5	20.0	17.1
Clayton, N. C.	14.8	15.3	12.4	14.8	17.6	16.1
Jay, Fla.	15.9	13.9	14.4	15.2	18.0	16.6
Keiser, Ark.(B)	15.7	13.3	11.3	16.3	18.0	16.0
Stoneville, Miss.(A)	14.4	13.0	14.0	14.4	18.2	17.1
Stuttgart, Ark.	14.7	15.0	11.7	15.7	20.3	14.7
Bixby, Okla.	16.9	13.4	12.3	15.3	17.1	17.0
Mean	15.4	13.9-	13.2-	15.4	18.3+	16.6+

Table 31. - (continued)

Location	D61-2002	D61-3791	D62-6913	D62-6959	Pickett	R62-395	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	20.7	20.2	20.2	19.1	20.6	21.2	
Warsaw, Va.	21.4	21.5	19.8	18.8	20.7	21.1	
Plymouth, N. C.	20.7	22.2	21.0	19.4	21.3	21.4	
Clayton, N. C.	21.8	21.8	21.0	20.0	21.2	21.5	
Jay, Fla.	21.5	21.7	20.3	20.3	22.0	22.2	
Portageville, Mo.(A)	20.8	21.3	20.4	18.8	20.6	21.1	
Keiser, Ark.(B)	22.0	24.1	20.6	19.1	22.7	23.7	
Stoneville, Miss.(A)	21.6	22.1	21.3	19.8	21.3	21.9	
Stuttgart, Ark.	20.5	21.3	20.7	19.0	21.0	21.7	
Bixby, Okla.	20.9	22.1	20.5	20.1	20.9	22.7	
Mean	21.2-	21.8	20.6-	19.4-	21.2-	21.9	0.5
			Protein Percentage				
Linkwood, Md.	39.8	40.2	43.4	43.6	41.9	40.7	
Warsaw, Va.	39.6	41.1	43.7	44.2	41.4	42.3	
Plymouth, N. C.	38.8	39.0	42.1	43.0	39.9	39.9	
Clayton, N. C.	39.8	40.5	42.9	43.9	41.4	42.9	
Jay, Fla.	42.7	43.4	44.1	44.5	42.4	43.4	
Portageville, Mo.(A)	40.2	40.3	41.3	43.1	41.3	40.8	
Keiser, Ark.(B)	36.9	36.2	42.1	42.5	36.4	36.5	
Stoneville, Miss.(A)	40.2	41.5	42.0	43.2	41.7	42.2	
Stuttgart, Ark.	41.1	42.0	43.1	44.7	42.5	42.4	
Bixby, Okla.	39.6	39.3	41.7	41.0	41.5	39.1	
Mean	39.9	40.4	42.6+	43.4+	41.0+	41.0+	0.8
			Grams per 100 Seeds				
Linkwood, Md.	11.5	14.8	14.5	16.0	14.7	15.5	
Warsaw, Va.	12.5	15.1	14.2	15.2	14.6	17.6	
Plymouth, N. C.	10.6	14.8	14.1	14.2	13.8	15.4	
Clayton, N. C.	10.8	15.0	12.6	13.0	13.8	17.7	
Jay, Fla.	10.9	15.3	13.5	15.1	14.6	17.2	
Keiser, Ark.(B)	10.3	13.3	13.0	13.3	12.0	14.7	
Stoneville, Miss.(A)	11.4	14.8	12.4	13.0	12.2	18.4	
Stuttgart, Ark.	12.0	15.0	13.0	14.0	14.0	17.3	
Bixby, Okla.	11.3	13.9	12.3	15.6	13.3	16.3	
Mean	11.3-	14.7	13.3-	14.4-	13.7-	16.7+	0.9

Table 32. - Relative maturity data, days earlier (-) or later (+) than Hood, for the strains in Uniform Group VI, 1965

Loaction	Date planted	Hood matured	Lee	Dare	Davis	D60-9647	D60-11,082
			East Coast				
Painter, Va.(A)	6-7	10-20	+1	-3	+10	+6	+3
Painter, Va.(B)	6-7	10-22	-2	-5	+8	+6	+5
Warsaw, Va.	5-20	10-24	+4	-3	+15	+11	+10
Petersburg, Va.	5-27	10-16	+12	-4	+8	+19	+9
Holland, Va.	5-25	10-15	0	-7	+3	0	0
Plymouth, N. C.	5-11	10-10	+11	-9	+8	+8	+6
Willard, N. C.	5-13	10-8	+6	-4	+6	+4	+4
Clayton, N. C.	5-3	10-11	+9	-4	+11	+11	+9
Mean		10-16	+5	-5	+9	+8	+6
			Southeast				
Quincy, Fla.	6-29	10-16	-4	-9	+6	-5	+4
Jay, Fla.	6-21	10-9	+4	-8	+6	+5	+2
Fairhope, Ala.	6-9	10-4	+6	-3	+6	+6	0
Baton Rouge, La.	6-2	10-10	+7	-20	+2	+10	-2
Mean		10-10	+3	-10	+5	+4	+1
			Upper and Central South				
Belle Mina, Ala.	5-14	10-14	+7	-1	+6	+8	+8
Experiment, Ga.	6-10	10-7	+11	-7	+14	+18	+13
State College, Miss.	7-19	10-12	+11	-15	+3	+8	+3
Mean		10-11	+10	-8	+8	+11	+8
			Delta				
Portageville, Mo.(A)	5-14	10-22	+5	-8	+5	+5	+3
Portageville, Mo.(B)	5-15	10-17	+12	-4	+11	+13	+7
Keiser, Ark.(B)	5-14	10-22	+10	-14	+10	+10	+5
Marianna, Ark.	5-24	10-23	+6	-12	+8	+5	+1
Stoneville, Miss.(A)	5-24	10-10	+8	-6	+4	+8	+2
Stoneville, Miss.(B)	6-22	10-20	+5	-8	+2	+1	0
St. Joseph, La.	5-11	9-24	+10	0	+1	+10	+1
Mean		10-15	+8	-7	+6	+7	+3
			West				
Stuttgart, Ark.	5-12	10-9	+15	-10	+16	+17	+2
Curtis, La.	5-12	10-22	0	+1	+1	+3	+1
Bixby, Okla.	-	10-18	+7	-3	+7	+8	+6
Mean		10-16	+7	-4	+8	+9	+3

Table 32. - (continued)

Location	D61-2002	D61-3791	D62-6913	D62-6959	Pickett	R62-395
			East Coast			
Painter, Va.(A)	-5	+1	0	+3	+7	+5
Painter, Va.(B)	-5	+3	+2	+2	+3	+2
Warsaw, Va.	-3	0	+8	+9	+8	+12
Petersburg, Va.	+2	+11	+10	+7	+14	+10
Holland, Va.	-4	0	0	0	+3	0
Plymouth, N. C.	0	+9	+8	+8	+12	+6
Willard, N. C.	-4	+2	+2	+8	+6	+2
Clayton, N. C.	0	+4	+6	+9	+11	+9
Mean	-2	+4	+5	+6	+8	+6
			Southeast			
Quincy, Fla.	-11	+2	-11	-2	+6	+3
Jay, Fla.	-4	+1	+5	+1	+7	+6
Fairhope, Ala.	+6	+6	+6	+6	+6	+6
Baton Rouge, La.	-7	+13	+2	-3	+12	+5
Mean	-4	+6	0	0	+8	+5
			Upper and Central South			
Belle Mina, Ala.	+1	+7	+1	+8	+8	+11
Experiment, Ga.	0	+10	+11	+10	+11	+14
State College, Miss.	+1	+5	+3	+3	+8	0
Mean	0	+7	+5	+7	+9	+8
			Delta			
Portageville, Mo.(A)	-1	+2	+5	+3	+5	+3
Portageville, Mo.(B)	0	+8	+11	+11	+11	+6
Keiser, Ark.(B)	+3	+8	+7	+9	+8	+1
Marianna, Ark.	-3	+7	+4	+4	+8	+2
Stoneville, Miss.(A)	+2	+8	+5	+5	+10	+2
Stoneville, Miss.(B)	-2	+2	+2	+2	+4	+4
St. Joseph, La.	+8	+12	+1	+2	+11	+1
Mean	+1	+7	+5	+5	+8	+3
			West			
Stuttgart, Ark.	+3	+15	+13	+15	+15	+4
Curtis, La.	-1	+1	+6	+1	0	-1
Bixby, Okla.	0	+7	+8	+7	+8	0
Mean	0	+8	+9	+8	+8	+1

Table 33. - Plant height for the strains in Uniform Group VI, 1965

Location	Hood	Lee	Dare	Davis	D60-9647	D60-11,082
			East Coast			
Upper Marlboro, Md.	41	41	40	50	43	41
Linkwood, Md.	36	36	36	48	41	39
Painter, Va.(A)	39	40	43	50	44	46
Painter, Va.(B)	41	41	43	50	43	47
Warsaw, Va.	33	38	35	46	40	42
Petersburg, Va.	36	36	28	38	33	38
Norfolk, Va.	28	38	29	38	36	40
Holland, Va.	34	34	35	41	36	39
Plymouth, N. C.	27	30	29	42	35	39
Willard, N. C.	33	33	36	47	37	40
Clayton, N. C.	36	33	34	45	33	40
Mean	35	36	35	45	38	41
			Southeast			
Quincy, Fla.	20	18	17	26	19	21
Jay, Fla.	31	31	29	36	32	33
Fairhope, Ala.	22	24	18	28	25	27
Baton Rouge, La.	20	22	22	28	24	24
Mean	23	24	22	30	25	26
			Upper and Central South			
Jackson, Tenn.	48	44	46	50	46	54
Belle Mina, Ala.	40	36	36	45	44	45
Experiment, Ga.	34	34	36	39	36	38
State College, Miss.	39	40	39	45	45	45
Mean	40	39	39	45	43	46
			Delta			
Portageville, Mo.(A)	42	38	39	52	44	44
Portageville, Mo.(B)	37	40	32	50	42	43
Keiser, Ark.(B)	32	36	30	46	41	36
Marianna, Ark.	39	41	39	44	43	44
Stoneville, Miss.(A)	34	34	33	39	37	42
Stoneville, Miss.(B)	25	27	21	33	30	33
St. Joseph, La.	29	27	26	38	34	31
Mean	34	35	31	43	39	39
			West			
Stuttgart, Ark.	28	24	24	39	34	33
Curtis, La.	16	18	14	30	23	19
Bixby, Okla.	32	37	32	43	42	38
Mean	25	26	23	37	33	30

Table 33. - (continued)

Location	D61-2002	D61-3791	D62-6913	D62-6959	Pickett	R62-395
		East Coast				
Upper Marlboro, Md.	40	40	42	46	39	35
Linkwood, Md.	38	37	42	39	35	33
Painter, Va.(A)	46	43	48	50	42	40
Painter, Va.(B)	45	42	49	51	43	38
Warsaw, Va.	41	39	43	45	38	36
Petersburg, Va.	35	34	41	35	33	33
Norfolk, Va.	36	38	42	40	34	31
Holland, Va.	38	37	40	41	33	33
Plymouth, N. C.	31	30	37	40	23	29
Willard, N. C.	35	36	42	41	33	37
Clayton, N. C.	36	33	38	39	31	34
Mean	38	37	42	42	35	34
		Southeast				
Quincy, Fla.	19	20	23	26	18	19
Jay, Fla.	31	31	36	34	30	30
Fairhope, Ala.	27	28	31	31	21	19
Baton Rouge, La.	25	26	30	22	22	18
Mean	26	26	30	28	23	22
		Upper and Central South				
Jackson, Tenn.	48	46	46	54	44	48
Belle Mina, Ala.	35	40	43	43	35	35
Experiment, Ga.	40	29	42	37	32	33
State College, Miss.	42	41	45	50	38	36
Mean	41	39	44	46	37	38
		Delta				
Portageville, Mo.(A)	40	42	46	46	39	36
Portageville, Mo.(B)	38	34	42	44	36	33
Keiser, Ark.(B)	32	35	37	41	34	29
Marianna, Ark.	42	42	41	45	39	38
Stoneville, Miss.(A)	37	35	42	40	33	34
Stoneville, Miss.(B)	29	29	32	33	27	24
St. Joseph, La.	31	28	35	38	26	25
Mean	36	35	39	41	34	31
		West				
Stuttgart, Ark.	26	24	35	37	24	24
Curtis, La.	18	20	24	30	18	15
Bixby, Okla.	37	34	44	43	38	31
Mean	27	26	34	37	27	23

Table 34. - Lodging scores for the strains in Uniform Group VI, 1965

Location	Hood	Lee	Dare	Davis	D60-9647	D60-11,082
			East Coast			
Upper Marlboro, Md.	3.2	4.0	3.3	3.2	2.5	3.7
Linkwood, Md.	3.1	3.1	1.7	3.0	3.2	3.1
Painter, Va.(A)	1.7	3.5	1.3	2.5	2.0	2.6
Painter, Va.(B)	1.9	2.2	1.5	3.9	2.1	2.8
Warsaw, Va.	1.4	2.8	1.3	3.5	2.8	1.9
Petersburg, Va.	1.0	2.0	1.0	1.0	1.0	1.0
Norfolk, Va.	2.0	3.0	1.0	2.0	2.0	2.0
Holland, Va.	2.7	3.0	2.7	2.3	2.7	2.7
Plymouth, N. C.	2.0	2.0	2.0	2.0	3.0	3.0
Willard, N. C.	3.0	3.0	2.0	4.0	4.0	3.0
Clayton, N. C.	4.0	4.0	2.0	3.0	3.0	3.0
			Southeast			
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	2.0	1.0	2.0	1.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	3.0	2.0	2.0	3.0	2.0
			Upper and Central South			
Jackson, Tenn.	1.0	3.0	1.0	1.0	2.0	2.0
Belle Mina, Ala.	2.7	3.7	2.3	5.0	3.7	4.7
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	3.0	4.0	2.0	3.0	4.0	4.0
			Delta			
Portageville, Mo.(A)	3.3	2.8	3.2	3.7	2.3	3.0
Portageville, Mo.(B)	2.5	2.7	1.7	1.8	2.3	2.3
Keiser, Ark.(B)	2.3	2.3	2.0	2.3	3.3	2.0
Marianna, Ark.	3.7	3.7	4.0	3.3	4.0	3.0
Stoneville, Miss.(A)	3.0	3.0	3.0	3.0	3.0	3.0
Stoneville, Miss.(B)	2.7	2.7	2.0	3.0	2.7	3.0
St. Joseph, La.	2.0	2.0	2.0	3.0	3.0	3.0
			West			
Stuttgart, Ark.	1.7	2.3	1.0	2.7	3.0	2.3
Curtis, La.	2.0	1.0	1.0	2.0	2.0	1.0
Bixby, Okla.	2.0	2.0	2.0	2.0	2.0	2.0

Table 34. - (continued)

Location	D61-2002	D61-3791	D62-6913	D62-6959	Pickett	R62-395
			East Coast			
Upper Mrlboro, Md.	4.2	3.3	3.7	3.3	3.3	3.2
Linkwood, Md.	3.2	2.7	3.8	3.7	2.4	1.8
Painter, Va.(A)	2.5	2.0	3.7	2.0	2.3	1.9
Painter, Va.(B)	2.3	1.5	3.0	2.7	1.8	1.5
Warsaw, Va.	2.2	1.7	2.8	1.7	2.1	1.5
Petersburg, Va.	1.3	1.3	1.3	1.3	2.0	1.3
Norfolk, Va.	2.0	3.0	3.0	3.0	3.0	2.0
Holland, Va.	3.7	2.3	3.3	2.3	3.0	2.0
Plymouth, N. C.	2.0	2.0	3.0	2.0	2.0	2.0
Willard, N. C.	3.0	2.0	3.0	3.0	2.0	3.0
Clayton, N. C.	3.0	3.0	3.0	3.0	3.0	2.0
			Southeast			
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	2.0	2.0	3.0	2.0	3.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	3.0	3.0	2.0	2.0	2.0
			Upper and Central South			
Jackson, Tenn.	2.0	2.0	3.0	3.0	2.0	2.0
Belle Mina, Ala.	3.7	3.3	5.0	4.3	2.7	3.0
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	2.0	3.0	4.0	4.0	3.0	3.0
			Delta			
Portageville, Mo.(A)	2.7	2.8	3.1	2.8	2.9	2.5
Portageville, Mo.(B)	2.4	2.7	2.5	2.3	2.4	1.8
Keiser, Ark.(B)	1.7	1.7	2.0	2.3	1.0	1.3
Marianna, Ark.	3.7	3.0	3.7	4.0	3.7	4.0
Stoneville, Miss.(A)	3.0	3.0	3.0	3.0	3.0	3.0
Stoneville, Miss.(B)	2.3	3.0	2.7	2.7	2.3	2.3
St. Joseph, La.	2.0	2.0	3.0	3.0	2.0	2.0
			West			
Stuttgart, Ark.	2.0	2.3	2.7	3.0	1.0	1.7
Curtis, La.	2.0	2.0	2.0	2.0	2.0	1.0
Bixby, Okla.	2.0	2.0	2.0	2.0	2.0	2.0

Table 35. - Seed quality scores for the strains in Uniform Group VI, 1965

Location	Hood	Lee	Dare	Davis	D60-9647	D60-11,082
			East Coast			
Upper Marlboro, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Linkwood, Md.	3.0	2.0	2.0	2.0	3.0	2.0
Painter, Va.(A)	1.2	1.9	1.3	1.9	3.0	2.0
Painter, Va.(B)	1.5	1.9	1.3	1.7	3.2	2.2
Warsaw, Va.	1.0	1.0	1.0	1.5	2.0	1.2
Petersburg, Va.	1.7	1.0	1.0	1.0	2.0	2.3
Norfolk, Va.	1.0	1.0	1.0	2.0	2.0	1.0
Holland, Va.	1.0	1.5	1.0	1.0	1.5	1.0
Plymouth, N. C.	1.0	1.0	1.0	1.0	1.0	1.0
Willard, N. C.	1.0	1.0	1.0	1.0	1.0	1.5
Clayton, N. C.	1.5	1.0	1.5	1.5	2.0	2.0
			Southeast			
Quincy, Fla.	3.0	3.0	3.0	2.0	4.0	4.0
Jay, Fla.	1.0	1.0	2.0	1.0	2.0	2.0
Fairhope, Ala.	3.0	2.0	3.3	1.7	2.7	3.3
Baton Rouge, La.	2.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Milan, Tenn.	2.0	2.0	2.0	1.0	2.0	3.0
Jackson, Tenn.	2.0	1.0	1.0	2.0	2.0	3.0
Experiment, Ga.	1.0	1.0	1.0	1.0	3.0	2.0
State College, Miss.	2.0	2.0	3.0	2.0	2.0	2.0
			Delta			
Portageville, Mo.(A)	1.3	1.6	1.4	1.0	1.3	3.9
Portageville, Mo.(B)	1.3	1.0	1.0	1.2	1.9	1.3
Keiser, Ark.(B)	2.7	2.3	2.3	2.7	4.0	3.0
Marianna, Ark.	2.0	2.0	2.7	2.0	3.0	2.0
Stoneville, Miss.(A)	2.0	1.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	1.0	1.0	1.0	1.0	1.0	1.0
St. Joseph, La.	2.0	2.0	2.0	2.0	3.0	2.0
			West			
Stuttgart, Ark.	3.0	2.0	2.0	2.3	4.0	2.3
Curtis, La.	4.0	2.0	4.0	2.0	2.0	3.0
Bixby, Okla.	2.0	2.0	1.0	2.0	3.0	1.0

Table 35. - (continued)

Location	D61-2002	D61-3791	D62-6913	D62-6959	Pickett	R62-395
		East Coast				
Upper Marlboro, Md.	2.0	2.0	2.0	2.7	2.0	2.0
Linkwood, Md.	2.0	2.7	2.0	2.0	2.0	2.0
Painter, Va.(A)	2.2	2.3	2.0	1.3	1.8	1.9
Painter, Va.(B)	2.3	2.2	2.0	1.5	1.7	1.3
Warsaw, Va.	1.0	1.3	1.5	1.3	1.2	1.7
Petersburg, Va.	1.3	1.0	1.0	1.3	1.0	1.0
Norfolk, Va.	2.0	2.0	1.0	1.0	1.0	1.0
Holland, Va.	1.0	1.0	1.5	1.0	1.5	1.0
Plymouth, N. C.	1.5	1.0	1.0	1.0	1.0	1.0
Willard, N. C.	1.5	1.0	1.0	1.5	1.0	1.0
Clayton, N. C.	1.5	1.5	3.0	2.0	1.5	1.5
		Southeast				
Quincy, Fla.	4.0	3.0	3.0	2.0	2.0	3.0
Jay, Fla.	3.0	1.0	2.0	1.0	1.0	2.0
Fairhope, Ala.	4.0	2.3	3.7	3.3	2.0	3.3
Baton Rouge, La.	1.0	1.0	1.0	2.0	1.0	1.0
		Upper and Central South				
Milan, Tenn.	3.0	3.0	2.0	3.0	2.0	2.0
Jackson, Tenn.	1.0	2.0	2.0	2.0	2.0	2.0
Experiment, Ga.	1.7	1.0	1.3	1.0	1.0	1.7
State College, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
		Delta				
Portageville, Mo.(A)	1.5	2.9	1.4	3.5	2.7	1.4
Portageville, Mo.(B)	1.4	1.2	1.2	1.7	1.2	1.0
Keiser, Ark.(B)	3.0	2.7	2.7	3.0	2.7	2.0
Marianna, Ark.	2.3	1.7	2.3	2.0	2.0	2.3
Stoneville, Miss.(A)	1.0	1.0	1.0	2.0	1.0	2.0
Stoneville, Miss.(B)	1.0	1.0	1.0	1.0	1.0	1.0
St. Joseph, La.	2.0	2.0	2.0	2.0	1.0	2.0
		West				
Stuttgart, Ark.	2.0	2.7	2.7	2.3	2.0	2.0
Curtis, La.	3.0	2.0	1.0	1.0	1.0	5.0
Bixby, Okla.	2.0	2.0	2.0	2.0	3.0	1.0

PRELIMINARY GROUP VI

1965

Eight Preliminary Group VI nurseries were grown. The parentage for the strains included is reported in table 36. Performance data are summarized in tables 37 through 42. Differences in seed yield were significant at 7 of the 8 locations. The combined analysis of variance for seed yield data showed 5 strains to have seed yields significantly above Hood and 9 strains to have yields significantly below Hood. Of the strains yielding significantly above Hood, not any were significantly above Lee. Nineteen strains had seed yields significantly below that for Lee.

Differences were observed for shattering, development of downy mildew and phytophthora rot in the field and Diaporthe and purple stain on the seed. Seed coat mottling at Warsaw ranged from none on Hood to 53.5% on N61-4196. Seed quality was generally good.

D62-7816 and D63-6292 with narrow leaves and D63-6933 with oval leaves and low number of seeds per pod yielded very well. These three strains were the top ranking strains in the test.

Table 36. - Parentage of the strains in Preliminary Group VI, 1965

	Variety or strain	Parentage	Generation Composited
1.	Hood		
2.	Lee		
3.	D60-6022	Hill x D49-2491	F_5
4.	D61-864	Hill(2) x D51-4877	F_5
5.	D61-929	Hill(2) x D51-4877	F_5
6.	D61-994	Hill(2) x D51-4877	F_5
7.	D61-3512	D49-2491(6) x PI 174,862	F_5
8.	D62-3106	D49-2491 x T122	F_9
9.	D62-3768	D49-2491(4) x PI 163,453	F_4
10.	D62-3862	D49-2491(4) x PI 163,453	F_4
11.	D62-6342	Pine Dell Perfection x Hill	F_5
12.	D62-7038	Arksoy x D49-2491	F_6
13.	D62-7041	Arksoy x D49-2491	F_6
14.	D62-7131	Arksoy x D49-2491	F_6
15.	D62-7816	D49-2491(5) x PI 181,537	F_5
16.	D63-3933	D49-2491(5) x T122	F_4
17.	D63-6274	Lee(2) x [Clark(2) x T109]	F_5
18.	D63-6292	Lee(2) x [Clark(2) x T109]	F_5
19.	F61-1626	Palmetto x D49-2491	F_7
20.	F62-1134	F57-871 x F57-879	F_5
21.	N61-4058	N55-47 x D56-1215	F_5
22.	N61-4075	N55-47 x D56-1215	F_5
23.	N61-4104	N55-47 x D56-1215	F_5
24.	N61-4188	N55-47 x D56-1215	F_5
25.	N61-4194	N55-47 x D56-1215	F_5
26.	N61-4196	N55-47 x D56-1215	F_5
27.	N61-4366	N55-47 x D56-1215	F_5
28.	N61-4439	N55-47 x D56-1215	F_5
29.	N62-136	D58-1899 x D59-2205	F_4
30.	N62-153	D58-1899 x D59-2205	F_4
31.	N62-166	D58-1899 x D59-2205	F_4
32.	R63-163	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5
33.	R63-544	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5
34.	R63-558	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5
35.	UD61-1036	FC33243 x D49-2491	
36.	UD61-1845	FC33243 x D49-2491	

Table 37. - General summary of performance for the strains in Preliminary Group VI, 1965

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter 1/	Mil-dew 2/	P.R. 3/	D.ps. 4/	P.S. 4/	% mottled seed 5/
Hood	34.1	10-15	36	21.9	39.4	2.0	3.0	1.7	1.5	2.0	0.0
Lee	36.0	+7	36	21.3	40.7+	1.0	3.0	1.0	1.3	1.0	7.0
D60-6022	35.8	-4	34	20.9-	41.8+	1.0	1.0	1.0	1.3	1.0	11.0
D61-864	33.1	-2	37	21.6	39.8	1.8	2.0	1.0	1.5	1.0	9.0
D61-929	37.0+	-2	36	21.2	39.5	1.5	2.0	1.0	1.8	1.3	4.0
D61-994	34.2	-2	42	22.7+	38.4	1.5	2.0	1.0	1.5	1.0	8.5
D61-3512	32.7	+4	34	19.0-	43.8+	1.0	3.0	1.0	1.5	1.0	4.0
D62-3106	32.6	+8	36	20.0-	43.7+	1.0	3.0	1.0	1.3	1.0	9.5
D62-3768	35.4	+5	32	20.4-	42.8+	1.0	3.0	1.0	1.0	1.0	29.0
D62-3862	34.0	-1	32	18.8-	44.7+	1.5	2.0	1.0	1.3	1.0	11.0
D62-6342	32.5	0	40	18.8-	42.3+	2.0	1.0	1.0	2.0	2.0	17.5
D62-7038	34.4	+5	41	21.1-	41.4+	1.8	2.0	1.0	1.5	1.0	9.5
D62-7041	34.5	+7	36	19.6-	42.2+	1.0	3.0	1.0	1.3	1.0	13.5
D62-7131	32.0	+8	36	20.4-	41.7+	1.0	3.0	1.0	1.0	1.0	2.5
D62-7816	37.0+	+6	33	21.4	40.6	1.0	2.0	1.2	1.0	1.0	17.0
D63-3933	37.8+	+1	36	22.0	40.5	1.0	2.0	1.2	2.0	1.0	5.5
D63-6274	31.7	+3	32	19.8-	42.1+	1.5	3.0	1.7	1.3	1.0	32.5
D63-6292	38.6+	+5	36	20.6-	41.1+	1.0	2.0	1.3	1.5	1.0	20.5
F61-1626	30.6	+10	43	19.1-	44.1+	1.8	1.0	1.0	1.5	1.3	6.5
F62-1134	31.5	+8	34	19.8-	45.1+	1.0	3.0	1.0	1.0	1.0	10.5
N61-4058	30.1-	+3	40	21.0-	44.1+	3.5	1.0	2.0	2.5	1.0	50.5
N61-4075	26.1-	+5	39	20.1-	44.7+	2.5	1.0	2.5	2.0	1.0	49.0
N61-4104	29.9-	-3	34	22.2	43.3+	3.2	1.0	2.8	2.0	1.0	15.5
N61-4188	23.7-	0	37	19.8-	44.1+	4.5	2.0	3.5	1.5	1.0	32.5
N61-4194	29.2-	+4	33	20.2-	45.5+	4.3	2.0	3.3	1.5	1.0	26.0
N61-4196	31.2-	+2	40	19.1-	44.9+	3.5	2.0	2.5	1.3	1.0	53.5
N61-4366	30.8-	+4	35	20.6-	44.5+	3.0	1.0	1.8	1.3	1.0	12.0
N61-4439	33.3	-1	33	20.8-	44.9+	1.8	3.0	2.3	1.5	1.0	49.0
N62-136	34.2	+5	33	20.8-	43.1+	1.0	2.0	1.0	1.5	1.0	0.0
N62-153	30.5-	+4	34	17.4-	47.4+	1.0	2.0	1.0	1.5	1.0	2.0
N62-166	33.3	0	34	18.7-	45.9+	1.0	3.0	1.0	1.3	1.0	5.0
R63-163	31.7	0	37	21.8	40.5	1.0	3.0	1.0	2.0	1.0	1.5
R63-544	36.9+	+5	35	22.0	39.4	1.0	2.0	1.0	1.5	1.0	4.0
R63-558	35.4	0	40	22.0	39.3	2.0	3.0	1.0	2.0	1.0	3.5
UD61-1036	32.0	+1	50	21.6	39.7	3.0	1.0	2.7	2.5	2.0	6.0
UD61-1845	29.4-	+2	48	21.4	40.5	3.0	1.0	3.3	2.0	1.5	1.0
L.S.D.(.05)	2.8			0.8	1.3						
L.S.D.(.01)	3.7			1.1	1.7						

1/ Stoneville and Plymouth data
2/ Stoneville data
3/ Portageville, Keiser, and Stoneville data
4/ Georgetown data
5/ Warsaw and Plymouth data

Table 38. - Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1965

Strain	Link-wood, Md.	Warsaw, Va.	Plymouth, N.C.	Portage-ville, Mo.(A)	Portage-ville, Mo.(B)	Keiser, Ark.	Stone-ville, Miss(A)	Stone-ville, Miss(B)	Jay, Fla.
Hood	36.0	34.2	48.6	50.1	36.7	13.0	26.9	31.8	38.7
Lee	27.2-	31.0	48.9	54.3	43.2	27.1+	34.9	36.3	34.4
D60-6022	36.7	34.8	40.2	53.7	47.8	13.3	35.4+	42.8+	32.3-
D61-864	33.6	35.0	40.5	50.3	37.5	12.6	28.7	38.8	31.2-
D61-929	44.2+	30.0	43.4	58.5	47.1	18.0	35.7+	38.9	33.4-
D61-994	38.2	28.0-	42.7	47.9	44.3	14.8	36.2+	40.1+	28.0-
D61-3512	33.0	31.2	36.1	47.7	42.7	14.5	29.0	39.0	33.7-
D62-3106	26.8-	28.4-	42.0	49.0	42.4	19.7	31.7	36.8	29.8-
D62-3768	31.4	27.6-	45.3	51.4	43.7	21.2	37.1+	40.8+	32.3-
D62-3862	34.6	30.0	42.2	53.1	40.4	18.6	28.9	38.2	33.0-
D62-6342	35.0	26.6-	49.2	41.1	46.7	14.5	25.1	38.7	26.9-
D62-7038	29.8	28.6	38.4	48.7	49.6	28.5+	30.6	37.6	33.0-
D62-7041	36.3	32.3	46.4	51.2	39.6	21.5+	32.9	35.8	25.8-
D62-7131	28.8-	26.9-	45.4	45.1	35.2	22.8+	27.5	31.7	32.6-
D62-7816	30.0	32.4	47.6	56.6	43.8	24.6+	31.2	40.8+	39.4
D63-3933	42.1	28.6	49.4	58.6	37.6	22.9+	41.2+	40.3+	30.2-
D63-6274	29.6	34.1	40.8	51.7	36.5	14.5	28.6	34.8	27.6-
D63-6292	31.6	30.9	53.6	61.0	41.4	23.2+	38.3+	43.6+	36.2
F61-1626	26.6-	26.5-	40.8	40.4	36.7	23.1+	27.3	28.3	33.4-
F62-1134	27.2-	25.5-	40.1	43.9	39.4	19.8	26.6	33.2	37.6
N61-4058	30.2	25.5-	45.9	45.4	28.7	16.5	26.5	28.9	30.5-
N61-4075	25.0-	25.7-	40.2	40.0	23.0	5.4	27.7	23.4-	29.7-
N61-4104	33.8	30.5	36.8	41.4	32.6	10.5	26.8	31.0	33.0-
N61-4188	23.7-	25.6-	39.9	35.9	19.6	8.0	23.1	19.9-	21.2-
N61-4194	34.8	29.2	40.0	47.6	42.6	1.0	24.7	27.3	31.6-
N61-4196	34.3	32.0	51.3	42.5	40.8	12.1	27.6	27.7	23.0-
N61-4366	38.2	30.3	34.3	51.9	38.4	5.9	31.3	32.9	28.7-
N61-4439	32.4	28.2-	45.9	55.6	39.3	11.6	34.4	38.6	28.0-
N62-136	30.0	31.2	43.2	54.8	39.1	25.3+	29.0	31.7	36.2
N62-153	27.0-	27.4-	40.7	44.6	33.0	19.7	29.4	31.2	30.1-
N62-166	30.8	29.2	49.7	44.9	36.2	19.3	31.9	30.3	34.8
R63-163	29.5-	30.0	35.2	49.8	44.5	14.8	30.2	33.7	33.0-
R63-544	29.6	31.7	53.6	54.8	49.3	22.4+	33.0	38.2	34.8
R63-558	37.0	26.8-	52.5	49.1	50.5	17.3	27.6	40.4+	31.9-
UD61-1036	34.2	31.6	43.2	40.8	40.4	10.7	30.8	29.5	35.5
UD61-1845	32.1	33.5	49.2	35.4	24.2	7.6	28.4	21.8-	33.0-
L.S.D.(.05)	6.4	5.8	N.S.	9.0		8.5	8.5	7.4	4.5
C.V.	10%	10%	14%	10%		26%	14%	11%	7%

Table 39. - Oil percentages for the strains in Preliminary Group VI, 1965

Strain	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)
Hood	22.3	22.1	20.2	22.8
Lee	20.8	21.5	20.6	22.2
D60-6022	20.5	20.4	20.6	21.9
D61-864	20.8	22.0	21.2	22.2
D61-929	21.1	21.4	20.4	21.9
D61-994	22.4	22.2	22.2	23.9
D61-3512	19.2	19.0	18.7	19.1
D62-3106	20.1	20.4	19.0	20.5
D62-3768	20.2	20.4	20.6	20.3
D62-3862	18.7	18.7	18.8	18.8
D62-6342	19.0	19.0	18.2	18.9
D62-7038	19.7	21.8	21.0	21.9
D62-7041	19.4	20.1	19.7	19.3
D62-7131	18.9	20.7	21.0	21.0
D62-7816	20.3	21.7	21.2	21.6
D63-3933	21.7	21.2	21.4	23.5
D63-6274	20.0	19.9	19.4	20.0
D63-6292	20.4	20.4	20.4	21.3
F61-1626	18.3	20.0	18.4	19.7
F62-1134	18.6	20.2	18.9	21.4
N61-4058	20.2	21.3	21.2	21.1
N61-4075	19.0	20.3	19.8	21.2
N61-4104	21.6	22.3	21.4	23.4
N61-4188	19.8	19.6	19.5	20.4
N61-4194	19.2	20.1	19.4	21.9
N61-4196	18.6	19.4	18.3	20.0
N61-4366	20.5	20.4	19.4	22.0
N61-4439	20.0	21.2	20.0	21.8
N62-136	20.0	21.3	20.1	21.8
N62-153	16.9	17.6	17.5	17.6
N62-166	19.4	18.9	16.9	19.4
R63-163	22.5	21.3	21.3	22.0
R63-544	22.3	21.8	20.6	23.1
R63-558	22.3	21.8	20.2	23.5
UD61-1036	22.2	21.7	20.2	22.1
UD61-1845	21.9	21.8	20.0	21.8

Table 40. - Protein percentages for the strains in Preliminary Group VI, 1965

Strain	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)
Hood	39.5	39.5	40.3	38.3
Lee	41.4	40.6	41.9	38.8
D60-6022	43.7	42.0	40.8	40.5
D61-864	41.6	38.9	39.4	39.2
D61-929	40.2	39.4	40.4	37.8
D61-994	38.6	39.8	38.8	36.5
D61-3512	43.7	45.6	43.7	42.0
D62-3106	43.8	43.9	45.8	41.2
D62-3768	44.0	42.2	44.1	40.8
D62-3862	46.3	45.2	44.2	43.2
D62-6342	43.4	41.9	42.8	41.1
D62-7038	43.6	42.0	40.8	39.1
D62-7041	44.0	43.0	41.5	40.3
D62-7131	44.1	41.9	41.3	39.4
D62-7816	42.2	40.8	39.9	39.6
D63-3933	42.5	40.9	40.8	37.8
D63-6274	43.6	42.0	42.1	40.5
D63-6292	43.3	40.9	41.3	38.7
F61-1626	46.0	43.7	44.7	41.9
F62-1134	46.5	45.4	46.2	42.3
N61-4058	45.9	44.2	43.7	42.6
N61-4075	47.9	41.9	45.1	44.0
N61-4104	44.2	44.5	43.4	41.1
N61-4188	46.6	43.6	43.8	42.4
N61-4194	46.9	46.0	46.4	42.6
N61-4196	47.6	43.9	45.6	42.6
N61-4366	46.5	44.2	44.4	43.0
N61-4439	47.6	44.1	44.1	43.8
N62-136	44.5	42.6	44.1	41.1
N62-153	49.3	46.2	47.5	46.6
N62-166	47.4	45.6	47.5	43.1
R63-163	40.9	40.7	40.8	39.5
R63-544	40.1	40.4	38.8	38.3
R63-558	39.1	39.5	39.5	39.2
UD61-1036	39.8	40.5	39.6	38.9
UD61-1845	41.1	40.7	41.0	39.3

Table 41. - Plant height for the strains in Preliminary Group VI, 1965

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Jay, Fla.
Hood	39	32	37	41	35	35	33	31
Lee	36	40	33	44	33	36	30	31
D60-6022	36	34	30	35	35	37	35	29
D61-864	38	40	37	40	33	35	35	32
D61-929	37	40	32	40	37	38	33	31
D61-994	40	41	45	46	36	43	44	34
D61-3512	34	35	30	37	31	35	37	30
D62-3106	38	42	31	39	34	37	31	31
D62-3768	30	33	31	34	31	37	30	29
D62-3862	36	33	28	35	31	33	30	27
D62-6342	42	40	44	44	36	39	37	31
D62-7038	44	44	42	43	38	42	41	32
D62-7041	34	38	36	37	35	42	40	29
D62-7131	36	39	36	40	35	37	30	32
D62-7816	38	38	32	38	28	33	26	30
D63-3933	41	42	32	39	33	38	30	32
D63-6274	38	32	23	36	41	30	31	26
D63-6292	45	40	30	39	32	35	31	30
F61-1626	42	44	42	49	42	41	43	36
F62-1134	36	35	34	40	32	34	29	30
N61-4058	42	39	42	45	36	39	40	31
N61-4075	42	38	38	44	36	42	36	31
N61-4104	40	35	35	39	33	33	27	27
N61-4188	42	42	44	36	30	42	33	31
N61-4194	38	32	32	39	--	30	25	27
N61-4196	44	42	40	46	36	46	33	31
N61-4366	40	40	33	38	32	35	32	29
N61-4439	38	36	35	36	31	34	28	28
N62-136	36	38	30	38	34	31	25	27
N62-153	37	39	32	34	34	36	33	29
N62-166	36	36	34	39	31	33	32	31
R63-163	40	42	32	44	35	35	31	31
R63-544	35	35	35	37	32	39	36	30
R63-558	40	40	37	49	33	41	40	31
UD61-1036	50	50	50	57	36	50	56	43
UD61-1845	48	52	46	55	38	50	47	44

Table 42. - Seed quality scores for the strains in Preliminary Group VI, 1965

Strain	Link-wood, Md.	Warsaw, Va.	Plymouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville Miss.(A)	Stone-ville, Miss.(B)	Jay, Fla.
Hood	3.0	1.2	1.0	1.0	3.0	1.0	2.0	1.0
Lee	2.0	1.5	1.0	1.3	2.0	1.0	1.0	1.0
D60-6022	2.0	1.8	1.0	2.4	3.5	1.0	2.0	2.0
D61-864	2.0	1.5	1.5	1.9	3.0	1.5	2.0	3.0
D61-929	2.0	1.8	1.5	2.2	3.5	2.0	2.0	2.0
D61-994	2.0	1.8	1.5	1.9	4.0	1.5	2.0	3.0
D61-3512	2.0	1.5	1.0	1.9	2.5	1.0	1.0	1.0
D62-3106	2.0	1.5	1.0	1.9	3.0	1.0	2.0	2.0
D62-3768	2.0	1.5	1.0	1.5	2.0	1.0	1.0	2.0
D62-3862	2.0	1.5	1.0	1.8	2.0	1.0	1.0	3.0
D62-6342	2.0	1.5	1.5	2.8	3.0	2.0	3.0	4.0
D62-7038	2.0	1.5	1.0	1.8	2.0	1.0	1.0	2.0
D62-7041	2.0	1.8	1.5	1.9	2.5	1.0	1.0	2.0
D62-7131	2.0	1.5	1.0	1.3	2.5	1.0	1.5	1.0
D62-7816	2.0	1.5	1.0	1.3	2.0	1.0	1.0	1.0
D63-3933	2.0	1.2	1.0	1.2	2.5	1.0	1.0	2.0
D63-6274	2.0	1.5	1.5	2.3	2.0	1.0	2.0	2.0
D63-6292	2.0	1.5	1.5	1.0	2.0	1.0	1.0	2.0
F61-1626	2.0	1.5	1.5	2.4	2.0	2.0	2.0	2.0
F62-1134	2.0	1.8	1.0	2.7	2.5	2.0	2.0	1.0
N61-4058	2.0	2.0	1.5	1.4	2.0	2.0	2.0	2.0
N61-4075	2.0	2.0	1.5	1.4	2.0	2.0	2.0	2.0
N61-4104	2.0	1.5	1.5	1.9	2.5	2.0	2.0	2.0
N61-4188	2.0	1.8	2.0	1.4	2.5	2.0	2.0	2.0
N61-4194	2.0	2.8	2.0	1.8	---	2.0	2.0	3.0
N61-4196	2.0	1.5	1.0	1.2	2.5	2.0	2.0	2.0
N61-4366	2.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0
N61-4439	2.0	1.8	1.5	1.7	2.0	2.0	2.0	3.0
N62-136	2.0	1.2	1.0	1.9	3.0	2.0	1.0	2.0
N62-153	2.0	1.2	1.0	1.5	2.0	1.0	1.0	2.0
N62-166	2.0	1.2	1.5	1.4	3.0	1.5	1.0	2.0
R63-163	2.0	1.5	1.5	1.4	2.0	2.0	2.0	3.0
R63-544	2.0	1.0	1.5	1.7	1.5	1.5	1.5	2.0
R63-558	2.0	1.5	1.5	1.3	3.0	2.5	2.0	3.0
UD61-1036	2.0	1.5	2.0	2.4	2.5	2.0	2.5	3.0
UD61-1845	2.0	2.8	2.0	2.4	2.5	3.0	2.5	3.0

UNIFORM GROUP VII

1965

	Variety or strain	Parentage	Generation Composited
1.	Bragg	Jackson x D49-2491	F_6
2.	Lee	S100 x CNS	F_6
3.	Semmes(D60-12,327)	D51-5427 x D49-2491	F_6
4.	D60-8107	D51-4877 x D55-4168	F_5
5.	F59-1851	D51-5091 x Jackson	F_5
6.	F59-1505	Jackson x D49-2491	F_5
7.	N60-5174	D55-4110 x N56-4071	F_5
8.	D61-5264	Lee x PI 200,532	F_7
9.	F60-2252	D51-4877 x D51-5091	F_6
10.	F61-1864	Palmetto x D49-2491	F_7
11.	F62-1770	F57-871 x F57-873	F_5
12.	F62-2184	F57-873 x F57-868	F_5

Background of strains used as parents:

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

D51-5427 is a subline of N45-1497, a high oil line selected from Ralsoy x Ogden.

D55-4168 is a high protein strain selected from Ogden x Biloxi.

D51-5091 is a rather tall selection from Roanoke x N45-745 which was included in Uniform Group VII nursery for the years 1954-1957. D51-4877 is a rather short type included for the years 1954-1956.

D55-4110 is a high protein selection from Ogden x CNS which was included in Uniform Group VII for the years 1958 and 1959.

N56-4071 is a selection from N46-1703 x D49-2525 which was included in Preliminary Group VI in 1958.

PI 200,532 is a glabrous type of VII maturity resistant to phytophthora rot.

F57-871, F57-873, and F57-868 are F_3 lines selected from D49-2491(2) x Biloxi.

Twenty-eight Uniform Group VII nurseries were planted. Results of 23 of these plantings are summarized in tables 43 through 49, with table 43 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 and oil and protein percentages.

The strain D60-12,327 was named Semmes and released for production in Arkansas and Mississippi. It is particularly suited for production on low-lying, poorly drained clay where its high degree of resistance to phytophthora rot aids in reducing the hazards of production. Only one Group VII nursery was grown on clay. The first planting on clay at Stoneville was made May 20, just preceding a 3.5-inch rain. Stand ratings for the two phytophthora rot resistant strains, Semmes and D61-5264, were 1.7 and 2.0 as compared with 3.3 for Lee, 4.0 for Bragg, and 4.7 for F59-1505. Because of generally poor stands for the nursery, it was replanted June 20.

All strains held their seed satisfactorily, except D60-8107 and F62-2184. Frogeye developed on all but Lee, F62-1770, and F62-2184 at Willard.

The high protein strains D60-8107 and N60-5174 have not produced as consistently as Lee or Bragg.

Table 43. - General summary of performance for the strains in Uniform Group VII, 1965

	Bragg	Lee	Semmes	D60-8107	F59-1851	F59-1505
Seed Yield - 1965						
East Coast	41.9	41.9	38.0	42.0	43.0	43.4
Southeast	32.7	30.3	29.4	28.6	32.2	32.0
Upper & Central South	38.8	36.8	32.2	37.0	37.8	37.9
Delta & West	35.2	32.4	30.5	29.3	32.1	34.7
- 1964-65						
East Coast	41.5	40.7	37.5	40.8	41.2	43.7
Southeast	33.2	31.6	29.7	29.0	33.3	33.4
Delta & West	36.9	36.5	33.1	32.8	36.4	38.0
- 1963-65						
East Coast	40.6	40.0	36.4	39.6	40.6	
Southeast	30.8	30.4	27.9	27.7	31.6	
Delta & West	38.2	37.2	34.8	33.9	36.7	
Oil Percentage - 1965	21.5	21.2	20.9	18.9-	21.5	21.0
- 1964-65	21.5	21.6	21.0	19.6	21.6	21.0
- 1963-65	21.5	21.4	21.0	19.0	21.6	
Protein Percentage - 1965	41.1	42.4+	41.2	46.0+	39.9-	40.2-
- 1964-65	40.6	41.9	40.9	45.3	39.6	39.9
- 1963-65	40.0	41.4	40.6	44.8	39.4	
Seed Size	15.6	13.7-	14.4-	14.6-	13.8-	16.9+
Maturity Index	10-24	-5	-4	-6	0	0
Height	39	29	34	38	36	40
Shattering	1.3	1.3	1.5	3.0	1.7	1.0
Bacterial Pustule	1.0	1.0	1.0	1.0	1.0	1.0
Frogeye	4.0	2.0	4.0	4.0	4.0	4.0
Phytophthora Rot	1.0	1.0	1.0	1.0	2.5	1.5
Flower Color	W	P	P	P	W	P
Pubescence Color	T	T	G	T	G	T

Table 43. - (continued)

	N60-5174	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184
Seed Yield - 1965						
East Coast	39.1	39.6	39.2	35.2	41.2	40.4
Southeast	30.0	30.8	31.8	32.5	31.7	30.5
Upper & Central South	34.9	35.6	35.6	35.2	37.2	38.6
Delta & West	28.5	31.4	31.8	31.5	33.5	32.9
- 1964-65						
East Coast	37.9					
Southeast	30.1					
Delta & West	31.0					
- 1963-65						
East Coast						
Southeast						
Delta & West						
Oil Percentage - 1965	19.1-	19.9-	21.9	20.9	20.8-	21.2
- 1964-65	19.1					
- 1963-65						
Protein Percentage - 1965	46.1+	40.4-	39.6-	41.0	42.5+	42.3+
- 1964-65	46.0					
- 1963-65						
Seed Size	16.2	13.5-	14.0-	14.0-	14.6-	14.4-
Maturity Index	+3	+2	+2	0	+2	0
Height	35	35	42	30	33	33
Shattering	1.3	1.5	1.5	1.5	1.7	2.5
Bacterial Pustule	1.0	1.0	1.0	1.0	1.0	1.0
Frogeye	4.0	4.0	4.0	4.0	2.0	1.0
Phytophthora Rot	1.7	1.0	1.7	2.0	1.7	1.7
Flower Color	P	P	W	P	P	P
Pubescence Color	G	T	G	T	T	T

Table 44. - Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1965

Location	Bragg	Lee	Semmes	D60-8107	F59-1851	F59-1505	N60-5174
			East Coast				
Rocky Mount, N. C.	42.6	36.2	35.7	41.8	38.9	40.2	40.6
Clayton, N. C.	31.8	34.2	33.4	37.5	27.1	33.6	24.2
Willard, N. C.	37.8	50.1+	37.3	38.9	40.5	41.7	34.2
Florence, S.C.(A)	47.5	48.6	44.7	51.4	57.4	54.6	49.6
Florence, S.C.(B)	45.9	39.2	38.0	38.0	46.5	39.9	42.4
Hartsville, S. C.	45.8	43.1	38.7-	44.1	47.8	50.5	43.6
Mean	41.9	41.9	38.0	42.0	43.0	43.4	39.1
			Southeast				
Blackville, S. C.	32.6	32.2	29.3	31.9	35.2	35.2	28.8
Tallassee, Ala.	41.1	35.6	32.7	29.3-	36.1	33.3	33.8
Tifton, Ga.	15.6	18.4	14.6	13.9	13.1	17.3	15.1
Live Oak, Fla.	45.0	34.6-	39.8-	39.4-	48.4	47.9	40.5
Marianna, Fla.	28.5	25.6	24.5	23.1-	21.5-	22.2-	26.0
Quincy, Fla.	30.5	28.2	28.1	23.2-	32.3	30.1	28.4
Jay, Fla.	35.1	35.1	33.0	28.2-	35.6	26.8-	34.6
Fairhope, Ala.	40.2	39.8	36.6	39.0	39.9	46.5+	35.9
Baton Rouge, La.	20.2	17.4	21.3	25.2	23.0	23.0	21.6
Mean	32.7	30.3	29.4	28.6	32.2	32.0	30.0
			Upper and Central South				
Clemson, S. C.	33.7	40.7+	30.5	34.4	33.5	29.5	30.5
Experiment, Ga.	42.3	33.2	39.1	38.1	40.4	44.2	38.4
State College, Miss.	40.3	36.4	27.1	38.4	39.5	39.9	35.8
Mean	38.8	36.8	32.2	37.0	37.8	37.9	34.9
			Delta and West				
Stoneville, Miss.(A)	34.8	36.0	33.2	32.0	30.9	40.9+	26.8-
Stoneville, Miss.(B)	31.0	24.0-	30.1	21.4-	23.7-	24.5-	22.2-
St. Joseph, La.	30.6	32.7	25.4	32.0	36.5	32.9	25.2
Stuttgart, Ark.	43.3	43.7	41.1	32.6-	40.2	45.0	34.9-
Curtis, La.	49.2	32.7	33.2	35.2	42.2	40.2	37.5
College Station, Texas	22.4	25.3	20.2	22.8	19.1	24.7	24.1
Mean	35.2	32.4	30.5	29.3	32.1	34.7	28.5

(+) - 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	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184	L.S.D. (.05)	C.V.
			East Coast				
Rocky Mount, N. C.	38.4	39.7	36.8	37.3	35.1	N.S.	10%
Clayton, N. C.	28.8	30.4	29.5	29.6	29.9	N.S.	16%
Willard, N. C.	39.4	41.8	34.2	49.2+	41.7	6.8	10%
Florence, S.C.(A)	47.9	40.8	40.3	51.2	50.9	N.S.	12%
Florence, S.C.(B)	40.6	36.2	36.3	41.3	42.6	N.S.	12%
Hartsville, S. C.	42.5	46.0	34.3-	38.7-	41.9	4.8	7%
Mean	39.6	39.2	35.2	41.2	40.4	4.2	
			Southeast				
Blackville, S. C.	31.2	32.4	30.5	27.3	33.4	N.S.	9%
Tallassee, Ala.	36.8	35.6	47.2	35.9	36.3	9.1	15%
Tifton, Ga.	14.5	16.8	14.5	16.0	14.1	3.0	14%
Live Oak, Fla.	41.7	40.7	45.5	46.3	41.5	5.1	7%
Marianna, Fla.	28.8	23.9	27.9	30.4	27.3	4.7	11%
Quincy, Fla.	30.7	30.5	35.7+	28.4	29.0	3.5	7%
Jay, Fla.	31.8	35.4	32.6	33.4	31.7	4.6	8%
Fairhope, Ala.	37.3	39.4	38.7	39.9	35.5-	4.5	7%
Baton Rouge, La.	19.3	25.7	14.8	22.7	21.3	N.S.	28%
Mean	30.8	31.8	32.5	31.7	30.5	N.S.	
			Upper and Central South				
Clemson, S. C.	33.2	33.3	29.9	36.4	36.2	4.9	9%
Experiment, Ga.	34.0	38.0	42.0	36.6	40.0	N.S.	16%
State College, Miss.	39.6	35.5	34.0	38.5	39.7	6.9	11%
Mean	35.6	35.6	35.2	37.2	38.6	N.S.	
			Delta and West				
Stoneville, Miss.(A)	30.8	33.7	36.3	31.8	30.9	5.1	9%
Stoneville, Miss.(B)	23.6-	24.2-	24.1-	25.5-	22.5-	5.4	13%
St. Joseph, La.	27.9	29.7	30.1	31.1	32.4	N.S.	17%
Stuttgart, Ark.	39.8	42.8	39.9	40.4	42.5	4.6	7%
Curtis, La.	47.8	37.0	34.5	47.2	42.2	N.S.	20%
College Station,Texas	18.7	23.6	23.9	25.2	26.7	N.S.	17%
Mean	31.4	31.8	31.5	33.5	32.9	N.S.	

Table 45. - Chemical composition and seed size for the strains in Uniform Group VII, 1965

Location	Bragg	Lee	Semmes	D60-8107	F59-1851	F59-1505	N60-5174
				Oil Percentage			
Clayton, N. C.	20.2	20.9	20.8	20.2	20.6	19.0	16.7
Hartsville, S. C.	22.5	20.9	18.7	19.3	22.0	21.9	19.4
Blackville, S. C.	20.0	20.3	20.4	18.0	20.5	21.0	19.7
Tallassee, Ala.	21.9	21.2	21.5	18.4	21.0	21.4	18.1
Live Oak, Fla.	23.1	23.0	23.0	19.8	23.6	21.7	20.6
Jay, Fla.	21.5	20.6	20.5	18.7	21.1	20.4	18.9
Stoneville, Miss.(A)	21.6	20.8	20.7	18.5	21.7	21.2	18.7
Stuttgart, Ark.	21.3	21.0	21.1	18.2	21.4	21.1	19.1
St. Joseph, La.	21.2	21.7	21.5	19.3	21.5	21.5	20.3
Mean	21.5	21.2	20.9	18.9-	21.5	21.0	19.1-
				Protein Percentage			
Clayton, N. C.	43.2	43.7	42.4	46.5	41.8	41.4	47.7
Hartsville, S. C.	38.2	38.6	38.1	43.6	37.5	37.4	42.9
Blackville, S. C.	42.2	42.0	42.5	45.4	40.4	40.3	46.4
Tallassee, Ala.	40.0	40.0	39.1	44.1	38.8	38.3	43.6
Live Oak, Fla.	41.5	43.1	40.6	47.2	38.9	40.4	46.8
Jay, Fla.	41.7	45.2	43.1	47.4	41.8	42.5	47.7
Stoneville, Miss.(A)	40.1	41.9	40.7	46.9	39.9	40.1	47.4
Stuttgart, Ark.	41.1	44.0	42.0	47.5	40.0	41.5	47.5
St. Joseph, La.	41.8	43.0	42.7	45.1	40.3	40.0	45.3
Mean	41.1	42.4+	41.2	46.0+	39.9-	40.2-	46.1+
				Grams per 100 Seeds			
Clayton, N. C.	13.1	13.4	14.1	14.2	11.8	15.0	15.1
Hartsville, S. C.	13.7	11.9	13.7	13.9	13.6	15.6	14.5
Blackville, S. C.	14.3	11.7	13.7	13.0	13.3	16.5	18.0
Tallassee, Ala.	17.1	13.5	13.9	12.0	13.7	16.7	16.3
Live Oak, Fla.	17.4	16.3	16.0	15.8	15.8	19.8	18.7
Jay, Fla.	16.8	15.2	16.3	15.1	14.7	17.7	16.7
Experiment, Ga.	20.1	15.9	16.7	19.1	17.3	19.9	18.6
Stoneville, Miss.(A)	14.6	12.7	13.1	14.8	12.8	16.2	13.4
Stuttgart, Ark.	16.3	15.0	16.0	16.7	14.3	18.3	17.3
St. Joseph, La.	12.3	11.5	10.0	11.0	10.3	13.0	13.0
Mean	15.6	13.7-	14.4-	14.6-	13.8-	16.9+	16.2

Table 45. - (continued)

Location	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184	L.S.D. (.05)
			Oil Percentage			
Clayton, N. C.	17.6	20.0	19.9	19.3	19.9	
Hartsville, S. C.	20.1	22.6	21.2	21.7	22.0	
Blackville, S. C.	20.4	22.2	20.6	21.0	20.9	
Tallassee, Ala.	20.1	21.7	21.2	20.8	20.5	
Live Oak, Fla.	21.8	25.3	22.2	21.4	22.4	
Jay, Fla.	19.0	19.7	19.7	20.4	20.7	
Stoneville, Miss.(A)	20.0	22.1	21.0	21.5	21.8	
Stuttgart, Ark.	19.8	21.4	21.0	20.9	20.4	
St. Joseph, La.	20.5	22.0	21.7	20.6	21.9	
Mean	19.9-	21.9	20.9	20.8-	21.2	0.7
			Protein Percentage			
Clayton, N. C.	42.6	41.6	40.2	43.7	43.4	
Hartsville, S. C.	38.7	36.8	38.9	39.1	39.2	
Blackville, S. C.	39.9	40.0	40.0	42.4	41.5	
Tallassee, Ala.	39.6	38.7	39.9	40.7	42.0	
Live Oak, Fla.	39.8	39.0	41.0	42.9	42.4	
Jay, Fla.	42.1	41.1	43.7	45.5	43.6	
Stoneville, Miss.(A)	40.4	38.6	41.7	41.9	42.2	
Stuttgart, Ark.	40.2	40.0	41.8	43.6	43.7	
St. Joseph, La.	40.6	40.8	42.1	42.9	42.3	
Mean	40.4-	39.6-	41.0	42.5+	42.3+	0.7
			Grams per 100 Seeds			
Clayton, N. C.	11.9	12.0	12.7	13.0	13.2	
Hartsville, S. C.	12.8	13.0	10.7	12.5	12.8	
Blackville, S. C.	14.0	13.7	13.7	15.5	15.3	
Tallassee, Ala.	15.4	16.8	15.3	16.8	16.7	
Live Oak, Fla.	14.7	15.1	15.1	15.6	16.1	
Jay, Fla.	13.1	14.9	15.6	14.9	13.7	
Experiment, Ga.	17.5	15.5	16.0	16.2	15.1	
Stoneville, Miss.(A)	12.0	11.7	13.2	13.4	13.5	
Stuttgart, Ark.	13.7	15.3	15.0	14.7	16.0	
St. Joseph, La.	10.3	11.5	12.3	13.0	11.3	
Mean	13.5-	14.0-	14.0-	14.6-	14.4-	0.9

Table 46. - Relative maturity data, days earlier (-) or later (+), than Bragg for the strains in Uniform Group VII, 1965

Location	Date planted	Bragg matured	Lee	Semmes	D60-8107	F59-1851
		East Coast				
Rocky Mount, N. C.	5-17	10-26	-12	-8	-10	+2
Clayton, N. C.	5-3	10-28	-8	-8	-2	-6
Willard, N. C.	5-13	10-24	-10	-8	-10	-2
Florence, S. C.(A)	5-12	10-26	-6	-3	-6	+3
Florence, S. C. (B)	6-23	10-25	-5	-1	-5	+1
Hartsville, S. C.	5-25	10-24	-8	-4	-5	+7
Mean		10-26	-8	-5	-6	+3
		Southeast				
Blackville, S. C.	5-8	10-21	-10	-9	-11	+7
Tallassee, Ala.	6-22	10-27	-4	-2	-7	+4
Tifton, Ga.	5-31	10-22	-4	-2	-6	-5
Marianna, Fla.	6-21	10-27	-3	-6	-7	-3
Quincy, Fla.	6-29	10-22	-8	+1	-9	0
Jay, Fla.	6-21	10-22	-9	-6	-8	-1
Fairhope, Ala.	6-9	10-15	-5	-5	-5	0
Baton Rouge, La.	6-2	10-22	-5	+2	-17	-2
Mean		10-22	-6	-3	-9	0
		Upper and Central South				
Clemson, S. C.	5-26	10-27	-8	0	-1	+2
Experiment, Ga.	6-10	10-25	-5	-3	-1	+3
State College, Miss.	5-19	10-28	+8	+2	+5	+5
Mean		10-27	-2	0	+1	+3
		Delta and West				
Stoneville, Miss.(A)	5-24	10-27	-7	-4	-7	+1
Stoneville, Miss.(B)	6-22	10-30	-6	-3	-7	0
St. Joseph, La.	5-11	10-8	0	-8	-8	-5
Stuttgart, Ark.	5-12	10-28	-4	-4	-4	0
Curtis, La.	5-12	10-24	+2	-9	-10	-4
College Station, Texas	6-18	11-1	-4	0	-2	-2
Mean		10-25	-3	-5	-6	-2

Table 46. - (continued)

Location	F59-1505	N60-5174	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184
			East Coast				
Rocky Mount, N. C.	+4	+6	+4	+2	0	-8	+4
Clayton, N. C.	0	0	0	-2	-6	0	0
Willard, N. C.	-2	+6	+2	0	-8	+4	+2
Florence, S. C.(A)	-1	+4	0	+3	0	-1	-2
Florence, S. C. (B)	-3	+4	+1	+4	+4	+2	+2
Hartsville, S. C.	+2	+8	+4	+5	-1	+7	+4
Mean	0	+5	+2	+2	-2	0	+2
			Southeast				
Blackville, S. C.	+2	+9	+6	+7	-2	+7	0
Tallassee, Ala.	-1	+7	+4	+7	+2	+5	+3
Tifton, Ga.	+6	+5	+6	+5	+5	+8	+2
Marianna, Fla.	-4	-1	-2	+1	-2	+3	-1
Quincy, Fla.	+1	+3	+4	+2	+3	+3	+2
Jay, Fla.	-2	+5	0	+3	+1	-1	-4
Fairhope, Ala.	-5	+3	+3	0	0	+3	0
Baton Rouge, La.	+1	0	-2	+3	+3	-2	+2
Mean	0	+4	+2	+4	+1	+3	0
			Upper and Central South				
Clemson, S. C.	+1	+4	+1	+3	-1	+5	+1
Experiment, Ga.	+1	+1	+2	0	-3	+1	-2
State College, Miss.	+2	+1	+2	+1	+2	+1	+1
Mean	+1	+2	+2	+1	0	+2	0
			Delta and West				
Stoneville, Miss.(A)	+1	-2	0	+1	-2	+1	+1
Stoneville, Miss.(B)	-1	+1	+1	+1	0	+1	0
St. Joseph, La.	-1	+7	+6	+1	+1	0	-1
Stuttgart, Ark.	-1	+1	+1	+1	-3	0	0
Curtis, La.	+3	+3	+2	+3	+2	+1	+3
College Station, Texas	0	0	0	-2	-2	0	-2
Mean	0	+2	+2	0	0	0	0

Table 47. - Plant height for the strains in Uniform Group VII, 1965

Location	Bragg	Lee	Semmes	D60-8107	F59-1851	F59-1505
			East Coast			
Rocky Mount, N. C.	48	39	42	49	47	51
Clayton, N. C.	44	33	40	41	38	48
Willard, N. C.	49	32	43	48	43	51
Florence, S. C.(A)	40	32	40	38	40	45
Florence, S. C.(B)	43	34	32	37	39	39
Hartsville, S. C.	46	31	37	41	39	46
Mean	45	34	39	42	41	47
			Southeast			
Blackville, S. C.	41	34	37	42	39	46
Tallassee, Ala.	38	31	30	38	32	39
Tifton, Ga.	40	27	34	37	33	42
Live Oak, Fla.	31	23	28	32	37	33
Marianna, Fla.	36	30	36	35	34	38
Quincy, Fla.	23	17	19	22	23	22
Jay, Fla.	36	31	37	36	35	38
Fairhope, Ala.	29	27	26	26	29	27
Baton Rouge, La.	20	25	21	28	20	28
Mean	33	27	30	33	31	35
			Upper and Central South			
Clemson, S. C.	46	35	41	45	43	50
Experiment, Ga.	47	37	37	44	39	44
State College, Miss.	52	36	44	50	50	55
Mean	48	36	41	46	44	50
			Delta and West			
Stoneville, Miss.(A)	51	37	41	45	45	48
Stoneville, Miss.(B)	33	28	29	33	31	33
St. Joseph, La.	38	28	35	42	40	45
Stuttgart, Ark.	47	25	35	38	42	45
Curtis, La.	32	17	27	38	36	36
College Station, Texas	21	15	21	23	21	20
Mean	37	25	31	37	36	38

Table 47. - (continued)

Location	N60-5174	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184
		East Coast				
Rocky Mount, N. C.	45	39	49	35	39	37
Clayton, N. C.	32	37	49	32	34	34
Willard, N. C.	42	41	50	35	42	39
Florence, S. C.(A)	35	37	43	29	37	35
Florence, S. C.(B)	38	41	44	35	37	37
Hartsville, S. C.	43	37	36	33	34	35
Mean	39	39	45	33	37	36
		Southeast				
Blackville, S. C.	35	35	45	32	36	35
Tallassee, Ala.	35	36	38	31	33	35
Tifton, Ga.	36	37	45	30	38	34
Live Oak, Fla.	27	30	31	29	31	31
Marianna, Fla.	32	34	38	33	34	34
Quincy, Fla.	21	26	27	21	20	23
Jay, Fla.	35	35	40	33	35	36
Fairhope, Ala.	29	30	30	22	23	25
Baton Rouge, La.	24	26	30	22	26	20
Mean	30	32	36	28	31	30
		Upper and Central South				
Clemson, S. C.	45	39	51	36	39	36
Experiment, Ga.	42	38	48	35	37	36
State College, Miss.	50	41	60	40	40	40
Mean	46	39	53	37	39	37
		Delta and West				
Stoneville, Miss.(A)	43	43	53	35	37	37
Stoneville, Miss.(B)	29	32	34	27	28	30
St. Joseph, La.	34	34	48	33	34	35
Stuttgart, Ark.	36	33	53	26	31	30
Curtis, La.	24	30	46	21	30	30
College Station, Texas	23	19	22	14	17	20
Mean	32	32	43	26	30	30

Table 48. - Lodging scores for the strains in Uniform Group VII, 1965

Location	Bragg	Lee	Semmes	D60-8107	F59-1851	F59-1505
			East Coast			
Rocky Mount, N. C.	4.0	4.0	3.0	3.0	4.0	3.0
Clayton, N. C.	3.7	3.2	2.3	3.3	2.7	3.0
Willard, N. C.	3.0	3.0	3.0	3.0	3.0	3.0
Florence, S. C.(A)	2.0	2.0	1.0	1.0	1.0	2.0
Florence, S. C.(B)	2.0	1.0	1.0	2.0	1.0	1.0
Hartsville, S. C.	3.1	1.9	1.3	3.3	3.2	3.4
			Southeast			
Blackville, S. C.	1.5	1.5	1.5	2.3	2.5	2.3
Tallassee, Ala.	2.0	1.0	1.0	1.0	1.0	2.0
Tifton, Ga.	1.5	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	2.0	1.0	1.0	2.0	1.3	1.7
Marianna, Fla.	2.0	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.	3.0	2.0	1.0	1.0	1.0	2.0
Fairhope. Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	3.0	2.0	3.0	2.0	2.0	3.0
			Upper and Central South			
Clemson, S. C.	2.2	1.5	1.3	2.0	2.5	2.2
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	3.0	3.0	2.0	2.0	3.0	2.0
			Delta and West			
Stoneville, Miss.(A)	3.0	3.0	2.0	2.3	3.0	3.0
Stoneville, Miss.(B)	3.0	3.0	2.0	2.0	2.3	3.0
St. Joseph, La.	3.0	2.0	2.0	3.0	3.0	4.0
Stuttgart, Ark.	3.0	2.0	2.3	2.3	3.0	3.0
Curtis, La.	2.0	1.0	2.0	3.0	3.0	3.0
College Station, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 48. - (continued)

Location	N60-5174	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184
		East Coast				
Rocky Mount, N. C.	3.0	4.0	3.0	4.0	4.0	4.0
Clayton, N. C.	3.0	3.3	3.3	2.8	3.3	3.3
Willard, N. C.	3.0	3.0	4.0	3.0	4.0	4.0
Florence, S. C.(A)	3.0	2.0	2.0	1.0	3.0	3.0
Florence, S. C.(B)	2.0	2.0	1.0	1.0	4.0	2.0
Hartsville, S. C.	2.9	2.4	3.9	1.0	2.8	2.2
		Southeast				
Blackville, S. C.	1.7	1.3	3.2	1.5	1.8	1.8
Tallassee, Ala.	1.0	2.0	2.0	1.0	2.0	2.0
Tifton, Ga.	1.8	1.0	1.0	1.0	1.3	1.0
Live Oak, Fla.	1.3	2.0	2.0	1.0	1.7	1.7
Marianna, Fla.	1.0	3.0	1.0	2.0	2.0	2.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	3.0	3.0	2.0	1.0	2.0	3.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	3.0	2.0	2.0	2.0	3.0
		Upper and Central South				
Clemson, S. C.	2.3	3.0	3.0	1.1	3.2	2.7
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	3.0	2.0	2.0	2.0	3.0	3.0
		Delta and West				
Stoneville, Miss.(A)	3.0	3.0	3.0	2.7	3.0	3.0
Stoneville, Miss.(B)	3.0	3.0	3.0	2.0	3.0	3.0
St. Joseph, La.	3.0	3.0	4.0	3.0	4.0	4.0
Stuttgart, Ark.	3.0	3.0	3.0	1.0	3.3	3.3
Curtis, La.	2.0	2.0	3.0	2.0	3.0	2.0
College Station, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 49. - Seed quality scores for the strains in Uniform Group VII, 1965

Location	Bragg	Lee	Semmes	D60-8107	F59-1851	F59-1505
			East Coast			
Rocky Mount, N. C.	1.0	1.0	1.5	1.0	1.5	1.0
Clayton, N. C.	1.0	1.5	1.5	1.5	1.5	1.0
Willard, N. C.	1.0	1.0	1.5	1.0	1.5	1.0
Hartsville, S. C.	2.0	2.0	2.0	3.0	3.0	2.0
			Southeast			
Blackville, S. C.	1.5	1.5	2.0	1.5	2.0	1.5
Tallassee, Ala.	2.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	1.3	1.0	1.3	2.0	1.3	1.0
Quincy, Fla.	2.0	2.0	2.0	3.0	2.0	2.0
Jay, Fla.	1.0	1.0	1.0	2.0	2.0	2.0
Fairhope, Ala.	1.0	1.3	1.7	2.0	1.7	1.3
Baton Rouge, La.	1.0	1.0	2.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	2.0	2.0	2.5	3.5	3.0	2.0
Experiment, Ga.	2.0	1.7	2.3	2.0	2.0	1.3
State College, Miss.	2.0	3.0	2.0	2.0	2.0	2.0
			Delta and West			
Stoneville, Miss.(A)	3.0	3.0	2.0	2.3	3.0	3.0
Stoneville, Miss.(B)	1.0	1.0	1.0	1.0	1.0	1.0
St. Joseph, La.	1.0	2.0	1.0	3.0	1.0	1.0
Stuttgart, Ark.	2.0	2.3	2.7	3.0	3.0	2.0
Curtis, La.	1.0	2.0	2.0	1.0	2.0	2.0
College Station, Texas	1.0	2.0	1.5	1.7	1.7	1.0

Table 49. - (continued)

Location	N60-5174	D61-5264	F60-2252	F61-1864	F62-1770	F62-2184
		East Coast				
Rocky Mount, N. C.	1.0	1.5	1.5	1.5	1.0	1.0
Clayton, N. C.	1.0	1.5	1.5	1.5	1.5	1.5
Willard, N. C.	1.0	1.5	1.0	1.5	1.0	1.0
Hartsville, S. C.	1.0	2.0	2.0	2.0	2.0	2.0
		Southeast				
Blackville, S. C.	1.5	2.0	2.0	1.5	1.5	2.0
Tallassee, Ala.	1.0	1.0	2.0	1.0	1.0	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	2.0	2.0	2.0	2.0	2.0	2.0
Jay, Fla.	1.0	2.0	1.0	1.0	1.0	2.0
Fairhope, Ala.	2.0	2.0	1.0	1.3	1.7	2.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
		Upper and Central South				
Clemson, S. C.	1.5	3.0	2.5	2.0	2.5	2.0
Experiment, Ga.	1.0	2.0	1.7	1.3	1.3	1.3
State College, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
		Delta and West				
Stoneville, Miss.(A)	3.0	3.0	3.0	2.7	3.0	3.0
Stoneville, Miss.(B)	1.0	1.0	1.0	1.0	1.0	1.0
St. Joseph, La.	1.0	1.0	3.0	1.0	1.0	1.0
Stuttgart, Ark.	2.3	2.0	2.7	2.3	2.3	2.7
Curtis, La.	1.0	1.0	2.0	2.0	1.0	2.0
College Station, Texas	1.0	1.5	1.5	2.0	1.0	1.0

PRELIMINARY GROUP VII

1965

Eight Preliminary Group VII nurseries were planted. The parentage for the strains included is reported in table 50. Performance data are summarized in tables 51 through 56. Yield data were not presented for Stoneville clay, since stands of some strains were reduced so severely by phytophthora rot.

There were no strains having a mean yield for all locations above the yield for Bragg. Eleven strains yielded significantly less than Bragg.

Twenty-one strains were equal to Lee in seed holding. Bragg and 8 strains showed no mildew development at Stoneville. Target spot development was not heavy and only 2 strains showed a relatively heavy score. Frogeye leaf spot development was heavy at Willard. Lee and 9 strains were resistant. Seed coat mottling was not severe except for 4 strains selected for resistance to root-knot nematodes from Laredo x D49-2491.

Although frogeye leaf spot development was rather heavy at Willard, the mean yield for 7 resistant lines resulting from intercrossing sublines of D49-2491(2) x Biloxi was 42.2 bushels, while the mean yield of 5 infested lines from the same parentage was 43.1 bushels. However, Bragg was heavily infected and yielded well below Lee at Willard.

The 4 strains from Laredo x D49-2491 have fairly good agronomic qualities. These lines should be considered primarily as a source of breeding material with high resistance to root-knot nematodes.

Table 50. - Parentage of strains in Preliminary Group VII, 1965

	Variety or strain	Parentage	Generation Composited
1.	Bragg		
2.	Lee		
3.	D60-8758	D51-4877 x D55-4168	F_5
4.	D61-4269	D49-2491(6) x Barchet	F_4
5.	D62-7543	Laredo x D49-2491	F_8
6.	D62-7562	Laredo x D49-2491	F_8
7.	D62-7639	Laredo x D49-2491	F_8
8.	D62-7677	Laredo x D49-2491	F_8
9.	D63-B1	Bragg x D60-12,327	Bulk F_4
10.	F62-1003	F57-871 x F57-879*	F_5
11.	F62-1008	F57-871 x F57-879	F_5
12.	F62-1058	F57-871 x F57-879	F_5
13.	F62-1064	F57-871 x F57-879	F_5
14.	F62-1080	F57-871 x F57-879	F_5
15.	F62-1170	F57-871 x F57-879	F_5
16.	F62-1188	F57-871 x F57-879	F_5
17.	F62-1767	F57-871 x F57-873	F_5
18.	F62-2013	F57-873 x F57-868	F_5
19.	F62-2220	F57-871 x F57-879	F_5
20.	F62-2366	F57-869 x F57-879	F_5
21.	F62-2511	F57-871 x F57-878	F_5
22.	F62-2550	D49-2491(3) x Biloxi	F_7
23.	F62-2580	D49-2491(3) x Biloxi	F_7
24.	F62-2613	D49-2491(3) x Biloxi	F_7
25.	F62-2961	D51-5091 x N50-2542	F_8
26.	F62-3414	Seminole x D49-2491	F_8
27.	F62-3461	D51-5091 x N50-2542	F_8
28.	F62-3515	D51-5091 x N50-2542	F_8
29.	F62-3749	Jackson x D49-2491	F_5
30.	N55-47	Roanoke x Hawkeye	F_5
31.	N60-5234	D55-4110 x N56-4071	F_4
32.	N60-5243	D55-4110 x N56-4071	F_4
33.	N61-4199	N55-47 x D56-1215	F_5
34.	N61-4211	N55-47 x D56-1215	F_5
35.	N61-4489	N55-47 x D56-1215	F_5
36.	N62-1356	N55-2934 x N55-5787	F_4

* Strains F57-871, F57-879, F57-873, F57-868, F57-869, and F57-878 were F_3 lines from D49-2491(2) x Biloxi.

Table 51. - General summary of performance for the strains in Preliminary Group VII, 1965

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter	Mil-dew	P.R.	T.S.	Frog-eye	Percent Mottling
Bragg	38.2	10-24	42	21.2	41.4	1.0	1.0	1.0	1.0	5.0	3
Lee	35.2	-9	32	21.0	42.8+	1.5	3.0	1.0	1.0	2.0	1
D60-8758	37.7	-3	43	21.4	42.6+	3.5	1.0	1.0	1.0	4.0	17
D61-4269	37.2	+1	35	21.0	41.5	1.0	2.0	1.0	1.0	1.0	2
D62-7543	27.5-	-7	28	18.2-	43.1+	2.5	2.0	2.5	1.0	4.0	25
D62-7562	29.5-	-8	30	17.9-	43.1+	2.0	1.0	3.0	1.0	4.0	39
D62-7639	31.9-	-3	31	19.3-	40.5	2.0	2.0	1.5	1.0	4.0	35
D62-7677	30.6-	0	34	19.0-	41.1	2.8	1.0	2.5	1.0	4.0	56
D63-B1	36.0	0	41	20.9	42.3	1.2	1.0	1.0	1.0	4.0	0
F62-1003	33.9	+4	37	20.0-	44.8+	1.1	3.0	1.0	2.0	1.0	0
F62-1008	33.1-	+7	35	21.2	44.1+	1.2	3.0	3.0	1.0	4.0	0
F62-1058	35.6	0	36	20.3-	45.0+	1.3	2.0	1.0	2.0	1.0	5
F62-1064	34.3	+4	36	19.9-	44.8+	1.2	3.0	2.0	1.0	1.0	0
F62-1080	34.3	-1	37	20.5	44.3+	1.2	3.0	1.0	1.0	1.0	2
F62-1170	33.6	+5	39	20.4	44.1+	1.1	3.0	1.0	2.0	1.0	3
F62-1188	35.5	0	34	20.5	43.3+	1.0	3.0	3.5	1.0	1.0	2
F62-1767	35.8	+3	36	21.1	42.5+	1.5	3.0	1.0	1.0	4.0	2
F62-2013	35.3	+3	38	20.8	43.8+	1.8	3.0	3.0	3.0	4.0	3
F62-2220	34.1	+5	40	19.9-	43.7+	1.0	3.0	3.0	1.0	4.0	2
F62-2366	33.9	-3	36	21.5	42.1	1.5	3.0	2.5	2.0	4.0	2
F62-2511	34.3	0	38	20.3-	44.5+	1.2	3.0	3.0	2.0	2.0	8
F62-2550	33.4	0	37	21.0	43.7+	2.5	3.0	3.0	1.0	4.0	2
F62-2580	34.0	+4	39	20.2-	43.8+	1.1	2.0	1.5	2.0	4.0	12
F62-2613	35.3	+3	37	20.2-	44.4+	1.8	3.0	2.0	1.0	4.0	14
F62-2961	32.9-	+4	51	20.6	42.3	1.0	2.0	3.0	1.0	4.0	5
F62-3414	34.3	-2	44	21.2	41.7	1.3	3.0	1.0	1.0	4.0	2
F62-3461	34.8	-1	39	20.5	42.8+	1.1	1.0	1.5	1.0	4.0	6
F62-3515	34.3	+6	49	21.5	41.5	1.1	3.0	1.0	1.0	4.0	0
F62-3749	33.4	+5	42	22.1+	40.0-	1.2	1.0	2.0	1.0	4.0	3
N55-47	29.7-	-9	35	20.0-	43.9+	4.0	2.0	2.5	3.0	4.0	0
N60-5234	34.8	-8	27	19.6-	45.8+	2.8	3.0	1.0	1.0	4.0	0
N60-5243	28.8-	-12	27	19.4-	46.0+	3.8	2.0	2.0	1.0	4.0	1
N61-4199	30.3-	-10	30	19.2-	44.8+	4.5	1.0	2.0	1.0	4.0	1
N61-4211	29.7-	-13	37	19.3-	45.9+	2.0	1.0	1.5	2.0	4.0	0
N61-4489	34.1	-4	38	20.6	44.1+	2.6	1.0	1.5	2.0	2.0	1
N62-1356	32.4-	0	38	21.5	41.1+	4.3	3.0	1.0	1.0	4.0	0
L.S.D.(.05)	4.9			0.9	1.1						
L.S.D.(.01)	6.4			1.1	1.4						

Table 52. - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1965

Strain	Willard, N.C.	Blackville, S.C.	Experiment, Ga.	Tallassee, Ala.	Gainesville, Fla.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	36.5	23.7	56.4	46.3	27.6	37.6	39.0
Lee	48.2+	33.2+	39.2	40.9	15.4-	32.6	37.0
D60-8758	45.1	32.0+	51.8	45.6	24.2	33.3	32.2-
D61-4269	52.6+	33.6+	49.7	39.2	18.0-	36.5	31.6-
D62-7543	34.0	22.6	29.5	33.7	13.3-	29.4-	30.2-
D62-7562	36.9	31.0+	31.4	36.1	15.9-	28.7-	26.4-
D62-7639	40.0	30.1	33.7	34.7	19.6-	35.1	30.5-
D62-7677	35.0	24.9	43.8	34.4	16.8-	29.0-	30.6-
D63-B1	40.9	29.2	52.6	40.9	21.6-	35.2	32.0-
F62-1003	42.8	28.5	43.3	36.1	27.9	31.2-	27.7-
F62-1008	44.3	24.5	35.4	39.5	23.4	36.6	27.9-
F62-1058	46.6	25.7	45.0	39.5	27.5	35.1	30.2-
F62-1064	39.8	27.6	49.6	36.1	30.0	29.8	27.4-
F62-1080	42.1	32.3+	41.1	38.2	21.5-	31.9-	33.2
F62-1170	44.7	28.8	35.3	36.4	28.9	31.9-	29.1-
F62-1188	45.7	26.7	46.3	39.8	24.3	38.0	27.9-
F62-1767	44.5	26.3	49.5	39.5	30.7	30.5-	29.5-
F62-2013	37.5	25.0	53.0	42.9	24.7	32.3-	32.0-
F62-2220	46.3	25.1	50.2	35.1	24.9	31.2-	26.3-
F62-2366	42.8	30.5	40.9	41.9	22.3	30.5-	28.9-
F62-2511	33.9	27.4	47.4	42.2	24.3	32.6	32.6-
F62-2550	35.7	28.6	39.3	43.6	24.3	33.0	29.2-
F62-2580	40.9	29.0	35.2	41.5	28.0	35.1	27.8-
F62-2613	39.5	27.7	44.1	46.7	27.7	31.9-	29.5-
F62-2961	30.5	31.0+	47.3	38.1	26.8	30.8-	25.7-
F62-3414	36.2	30.7+	42.5	37.5	26.5	36.2	30.9-
F62-3461	32.9	29.9	54.6	41.2	25.0	35.5	24.5-
F62-3515	32.0	27.0	51.1	41.5	25.4	36.9	25.9-
F62-3749	19.3-	30.7+	45.8	43.6	19.2	38.7	26.7-
N55-47	30.8	24.1	50.8	37.1	12.8-	32.2-	21.6-
N60-5234	52.0+	24.3	43.5	41.9	14.0-	36.2	31.1-
N60-5243	43.5	18.3	39.0	32.7	13.6-	25.5-	29.0-
N61-4199	39.1	23.8	46.9	27.9	14.8-	32.3-	27.2-
N61-4211	37.2	26.5	38.5	36.4	13.6-	31.9-	24.0-
N61-4489	40.1	29.0	41.0	37.1	20.0-	37.6	33.8
N62-1356	52.6+	24.0	39.1	25.2	22.8	39.1	24.4-
L.S.D.(.05)	10.4	6.5	N.S.	N.S.	5.7	5.0	5.8
C.V.	13%	12%	18%	13%	12%	7%	10%

Table 53. - Oil percentages for the strains in Preliminary Group VII, 1965

Strain	Willard, N.C.	Blackville, S.C.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	21.4	20.3	21.8	21.3
Lee	21.2	21.1	20.4	21.3
D60-8758	21.2	22.0	21.2	21.0
D61-4269	21.1	21.4	19.9	21.7
D62-7543	18.5	17.8	17.7	18.9
D62-7562	17.9	18.4	17.9	17.4
D62-7639	19.3	19.4	19.4	19.2
D62-7677	19.2	18.9	18.4	19.4
D63-B1	21.1	20.4	20.4	21.5
F62-1003	19.6	20.5	19.1	20.8
F62-1008	21.8	21.6	19.9	21.6
F62-1058	20.0	20.4	20.1	20.5
F62-1064	19.9	20.2	19.2	20.4
F62-1080	19.8	21.3	20.4	20.4
F62-1170	20.1	21.3	19.3	20.9
F62-1188	20.5	20.4	19.6	21.4
F62-1767	20.8	21.6	20.4	21.5
F62-2013	20.8	20.4	20.9	21.1
F62-2220	19.2	21.2	18.8	20.3
F62-2366	20.9	22.1	20.8	22.1
F62-2511	19.4	20.8	19.9	20.9
F62-2550	20.6	20.9	20.4	22.0
F62-2580	19.5	20.8	19.5	20.8
F62-2613	19.3	21.2	19.4	21.0
F62-2961	19.4	21.7	20.5	20.9
F62-3414	21.0	20.9	21.2	21.7
F62-3461	19.9	21.6	20.4	20.2
F62-3515	20.4	22.9	21.3	21.2
F62-3749	20.6	22.8	21.9	22.9
N55-47	19.8	20.3	20.6	19.3
N60-5234	19.3	19.2	19.6	20.1
N60-5243	18.4	19.0	20.7	19.5
N61-4199	18.7	18.9	19.4	19.6
N61-4211	19.0	19.3	20.2	18.7
N61-4489	20.4	20.7	21.0	20.4
N62-1356	21.3	20.8	22.2	21.7

Table 54. - Protein percentages for the strains in Preliminary Group VII, 1965

Strain	Willard, N.C.	Blackville, S.C.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	41.4	42.3	40.6	41.3
Lee	42.7	42.2	43.9	42.2
D60-8758	42.7	41.4	43.9	42.5
D61-4269	42.5	39.7	43.1	40.8
D62-7543	42.5	42.5	45.2	42.1
D62-7562	42.3	41.6	45.5	42.9
D62-7639	40.2	39.4	41.6	40.7
D62-7677	40.4	41.3	42.0	40.7
D63-B1	41.7	42.4	43.9	41.3
F62-1003	46.0	44.1	45.4	43.5
F62-1008	43.8	42.6	46.7	43.4
F62-1058	45.7	44.1	45.7	44.5
F62-1064	45.1	44.2	45.6	44.4
F62-1080	45.4	42.9	45.0	43.7
F62-1170	45.0	43.3	45.2	42.8
F62-1188	43.4	43.1	43.5	43.2
F62-1767	42.1	42.0	43.6	42.4
F62-2013	44.3	43.8	44.1	43.0
F62-2220	44.2	44.0	43.8	42.7
F62-2366	42.5	41.5	43.2	41.3
F62-2511	45.0	44.5	44.2	44.3
F62-2550	44.2	43.7	44.2	42.5
F62-2580	44.4	43.5	44.4	42.9
F62-2613	44.4	43.7	45.4	44.1
F62-2961	43.1	41.9	42.4	41.7
F62-3414	41.5	41.6	42.8	41.0
F62-3461	42.8	42.7	42.5	43.3
F62-3515	41.8	41.0	41.6	41.5
F62-3749	41.0	40.6	40.5	38.0
N55-47	43.7	44.2	43.7	44.1
N60-5234	46.0	45.2	46.5	45.5
N60-5243	46.1	46.0	46.4	45.5
N61-4199	43.9	45.5	44.4	45.5
N61-4211	45.8	45.9	45.1	46.8
N61-4489	44.0	44.7	44.5	43.3
N62-1356	40.6	41.6	40.4	41.7

Table 55. - Plant height for the strains in Preliminary Group VII, 1965

Strain	Willard, N.C.	Blackville, S.C.	Experiment, Ga.	Tallassee, Fla.	Gainesville, Fla.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	44	42	43	42	31	37	53
Lee	36	31	34	33	19	32	40
D60-8758	50	43	46	39	32	39	50
D61-4269	40	36	34	33	27	35	38
D62-7543	27	28	31	25	17	29	36
D62-7562	32	25	36	32	18	32	37
D62-7639	34	30	34	28	21	30	39
D62-7677	39	35	39	30	23	32	40
D63-B1	46	44	45	40	29	38	45
F62-1003	42	37	38	38	32	35	37
F62-1008	42	27	36	34	29	36	41
F62-1058	39	37	39	32	27	35	46
F62-1064	39	35	42	34	28	36	40
F62-1080	40	36	42	33	28	34	43
F62-1170	44	38	40	38	31	36	48
F62-1188	41	35	34	30	28	35	38
F62-1767	44	34	34	36	29	35	42
F62-2013	42	37	46	37	27	36	42
F62-2220	44	39	47	39	29	38	42
F62-2366	39	35	40	36	24	36	42
F62-2511	37	35	46	36	33	36	43
F62-2550	40	40	40	36	28	36	42
F62-2580	43	40	41	36	30	37	43
F62-2613	40	37	38	35	30	36	42
F62-2961	51	55	55	46	36	42	72
F62-3414	55	49	45	42	36	29	53
F62-3461	47	44	38	35	23	36	51
F62-3515	54	45	53	46	31	45	69
F62-3749	51	45	44	43	31	40	40
N55-47	44	36	38	29	23	36	42
N60-5234	30	22	27	31	15	32	31
N60-5243	28	29	38	27	14	26	30
N61-4199	36	28	36	26	17	29	39
N61-4211	46	40	43	31	23	35	43
N61-4489	41	38	42	35	29	38	46
N62-1356	44	41	41	27	27	38	49

Table 56. - Seed quality scores for the strains in Preliminary Group VII, 1965

Strain	Willard, N.C.	Experiment, Ga.	Tallassee, Ala.	Gainesville, Fla.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	1.0	1.5	1.0	3.0	1.0	1.0
Lee	1.0	1.0	1.5	3.5	1.0	1.0
D60-8758	1.5	2.0	1.5	4.0	2.0	2.5
D61-4269	1.0	1.0	1.0	2.0	2.0	1.5
D62-7543	2.0	2.0	1.0	2.0	2.0	2.0
D62-7562	2.0	2.0	1.0	2.0	2.0	2.0
D62-7639	1.5	2.5	1.0	1.0	3.0	2.0
D62-7677	2.0	3.0	1.0	1.0	2.0	2.0
D63-B1	1.0	2.0	1.5	3.0	2.0	1.0
F62-1003	1.0	1.0	1.5	1.0	2.0	2.0
F62-1008	1.0	1.5	2.0	1.0	2.0	2.0
F62-1058	1.0	1.5	1.0	1.0	1.0	2.0
F62-1064	1.0	1.0	2.0	1.0	1.0	2.0
F62-1080	1.0	1.0	1.0	1.0	1.0	1.5
F62-1170	1.0	2.0	1.5	1.0	2.0	2.0
F62-1188	1.0	1.0	1.0	1.0	1.0	1.5
F62-1767	1.0	1.0	1.0	1.0	2.0	1.0
F62-2013	1.0	1.0	1.0	1.5	2.0	1.0
F62-2220	1.0	1.5	1.0	1.0	1.0	2.0
F62-2366	1.0	1.5	1.0	2.0	1.0	2.0
F62-2511	1.0	1.5	1.0	1.5	1.0	1.0
F62-2550	1.5	1.5	1.0	1.0	1.0	1.5
F62-2580	1.0	1.5	1.0	1.0	1.0	2.0
F62-2613	1.0	1.0	1.0	1.0	1.0	1.0
F62-2961	1.0	3.0	1.5	2.0	2.0	2.0
F62-3414	1.0	1.0	1.0	1.5	1.0	1.0
F62-3461	1.0	1.0	1.0	1.5	1.0	1.0
F62-3515	1.0	2.0	1.5	2.5	1.0	2.0
F62-3749	1.5	1.0	1.0	1.0	1.0	1.0
N55-47	1.5	1.0	1.5	2.0	1.0	1.0
N60-5234	1.5	1.5	1.5	4.0	2.0	2.0
N60-5243	1.0	1.5	1.5	3.5	2.0	2.0
N61-4199	1.0	1.0	1.0	3.5	1.0	2.0
N61-4211	1.0	1.5	1.5	2.0	1.0	2.0
N61-4489	1.5	1.5	1.5	2.5	1.0	2.0
N62-1356	1.0	1.0	1.5	2.5	1.0	2.0

UNIFORM GROUP VIII

1965

	Variety or strain	Parentage	Generation Composited
1.	Bienville	Pelican #2 x Ogden	
2.	Coker Hampton	Majos x Lee	
3.	Hardee	D49-772 x Improved Pelican	
4.	F59-2008	D49-2491(2) x Improved Pelican	F_5
5.	La59-72-11	Pelican #2 x Ogden	
6.	F61-3118	D51-5091 x Jackson	F_7
7.	F61-3132	D51-5091 x Jackson	F_7
8.	La61-55-3	Pelican #2 x Ogden	
9.	F59-2043	D49-2491(2) x Improved Pelican	F_5
10.	F61-2886	D49-2491(2) x Improved Pelican	F_7
11.	F62-1091	F57-871 x F57-879	F_5
12.	La63-72-2	Volstate x Creole	

Background of 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.

D49-2491 is a selection from S-100 x CNS closely related to Lee.

D51-5091 is a tall selection from Roanoke x N45-745 which was included in Uniform Group VII nursery for the years 1954-1957.

F57-871 and F57-879 are F_3 lines selected from D49-2491(2) x Biloxi.

Twenty Uniform Group VIII nurseries were planted. Results of 18 are summarized in tables 57 through 63, with table 57 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 and oil and protein percentages.

Seed yield differences among strains were significant at 13 locations. The major area of adaptation of Group VIII strains is in the Southeast. The combined analysis of variance of mean seed yields for the Southeast showed differences among strains to be significant.

The two strains grown 3 years, F59-2008 and La59-72-11, show no consistent advantage over the check varieties. Three strains, F61-3118, F61-3132, and La61-55-3, have been grown 2 years. F61-3118 has produced good yields in both years.

Four strains were grown 1 year. The differences between F59-2043 and F61-2886 are small. F61-2886 appears somewhat more desirable. F62-1091 and La63-72-2 produced lower yields than Hampton at most locations.

Table 57. - General summary of performance for the strains in Uniform Group VIII, 1965

	Bienville	Hampton	Hardee	F59-2008	La59-72-11	F61-3118
Seed Yield - 1965 Southeast	39.6	40.8	36.2-	35.6-	37.7	37.5
- 1964-65 Southeast	36.1	37.6	34.8	33.5	35.2	36.3
- 1963-65 Southeast	33.9	36.0	32.6	31.8	33.4	
Oil Percentage - 1965	22.1	23.2+	21.7	22.0	22.3	22.4
- 1964-65	21.9	22.7	21.4	21.8	22.3	22.2
- 1963-65	21.5	22.3	21.4	21.6	21.5	
Protein Percentage - 1965	40.3	38.2-	41.0	39.5	39.8	38.9-
- 1964-65	40.3	38.0	40.7	39.3	39.9	39.1
- 1963-65	40.5	38.2	40.6	39.3	40.3	
Seed Size	16.9	17.4	16.0	13.9-	15.9-	16.8
Maturity Index	10-30	0	+5	+2	-3	+3
Height	39	34	38	37	32	46
Bacterial Pustule	3.0	1.0	1.0	1.0	3.0	1.0
Shattering	2.0	1.3	1.2	1.0	1.9	1.7
Seed Mottling	1.0	1.0	2.3	1.0	1.0	1.0
Flower Color	P	P	W	P	P	W
Pubescence Color	T	G	G	T	G	G

Table 57. - (continued)

	F61-3132	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2
Seed Yield - 1965						
Southeast	36.8-	38.2	34.7-	35.7-	36.0-	33.1-
- 1964-65						
Southeast	35.9	35.7				
- 1963-65						
Southeast						
Oil Percentage - 1965	22.7+	22.5	21.0-	21.2-	21.7	20.9-
- 1964-65	22.4	22.0				
- 1963-65						
Protein Percentage - 1965	39.0-	40.0	41.6+	41.4+	41.8+	40.4
- 1964-65	39.0	40.3				
- 1963-65						
Seed Size	16.9	17.0	15.8-	14.1-	16.7	16.2
Maturity Index	+1	0	+4	+4	-1	0
Height	42	40	40	41	32	38
Bacterial Pustule	1.0	3.0	1.0	1.0	1.0	1.0
Shattering	1.7	1.8	1.0	1.2	1.8	2.0
Seed Mottling	1.0	1.0	2.0	1.0	1.0	3.0
Flower Color	W	P	P	P	P	W
Pubescence Color	G	T	T	T	T	T

Table 58. - Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1965

Location	Bienville	Hampton	Hardee	F59-2008	La59-72-11	F61-3118	F61-3132
			Southeast				
Florence, S. C.(A)	52.8	55.1	47.0	51.9	46.7	37.6-	45.8
Florence, S. C.(B)	44.2	50.2+	35.3-	37.3-	44.0	32.5-	33.2-
Hartsville, S. C.(A)	43.7	42.9	44.7	41.4	40.9	50.8	48.8
Hartsville, S. C.(B)	46.2	48.1	43.8	37.3-	45.8	46.7	46.4
Blackville, S. C.(A)	32.5	34.7	33.7	31.5	37.0	34.5	35.5
Blackville, S. C.(B)	40.6	44.4	39.2	33.8-	39.6	41.0	39.0
Tallassee, Ala.	37.2	41.1	32.2	38.3	38.3	31.3	29.2
Tifton, Ga.	20.7	24.9	21.3	16.4	16.8	19.1	17.6
Live Oak, Fla.	42.0	47.0+	48.1+	46.0	40.1	51.1+	48.6+
Gainesville, Fla.*	19.8	20.6	23.4	24.7	13.6	--	--
Marianna, Fla.	28.8	25.1	22.1	28.0	22.9	25.8	25.3
Quincy, Fla.	41.4	43.0	41.0	39.6	41.3	39.3	36.9-
Jay, Fla.	41.8	43.5	34.6-	33.0-	40.4	45.1	42.3
Fairhope, Ala.	37.1	40.3	35.5	34.8	35.1	38.7	39.9
Baton Rouge, La.	38.9	23.5-	20.1-	24.1-	33.6	25.8-	20.2-
Mean	39.6	40.8	36.2-	35.6-	37.7	37.5	36.8
			West				
St. Joseph, La.	27.0	32.7	27.2	29.5	22.7	22.7	29.0

*Not included in mean

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

Table 58. - (continued)

Location	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2	L.S.D. (.05)	C.V.
			Southeast				
Florence, S. C.(A)	48.2	42.6-	49.1	51.6	46.3	9.3	11%
Florence, S. C. (B)	45.8	34.8-	36.4-	44.0	34.6-	4.4	7%
Hartsville, S. C.(A)	43.2	42.4	42.2	41.9	33.3	5.5	8%
Hartsville, S. C.(B)	44.0	37.1-	38.5-	39.5-	40.3-	5.5	8%
Blackville, S. C.(A)	32.3	26.2	30.0	28.4	27.9	4.9	9%
Blackville, S. C.(B)	41.8	35.0-	34.8-	38.5	35.6-	3.9	6%
Tallassee, Ala.	39.0	35.2	35.2	31.6	30.4	N.S.	15%
Tifton, Ga.	22.4	19.7	19.2	14.9-	17.7	5.0	18%
Live Oak, Fla.	41.6	44.0	40.7	46.6+	38.1	4.6	6%
Gainesville, Fla.*	17.6	23.1	19.1	18.2	22.9	N.S.	20%
Marianna, Fla.	27.2	27.5	30.1	23.9	22.6	N.S.	12%
Quincy, Fla.	43.9	40.7	41.8	39.0	37.0-	3.2	5%
Jay, Fla.	38.5-	33.9-	35.6-	36.8-	30.8-	2.7	4%
Fairhope, Ala.	35.5	33.5	34.1	35.5	31.7-	4.1	7%
Baton Rouge, La.	23.5-	26.1-	26.3-	26.1-	31.6	8.1	18%
Mean	38.2	34.7-	35.7-	36.0-	33.1-	2.6	
			West				
St. Joseph, La.	22.4	22.9	24.0	20.4	20.0-	6.7	16%

Table 59. - Chemical composition and seed size for the strains in Uniform Group VIII, 1965

Location	Bienville	Hampton	Hardee	F59-2008	La59-72-11	F61-3118
			Oil Percentage			
Hartsville, S. C.(A)	22.3	22.8	21.2	21.9	23.1	22.2
Blackville, S. C.(B)	22.5	22.9	21.6	21.8	22.5	22.7
Tallassee, Ala.	22.2	23.0	20.5	21.0	22.5	21.8
Tifton, Ga.	21.7	21.3	21.8	21.0	20.3	21.6
Live Oak, Fla.	20.7	23.5	22.6	22.6	22.0	23.4
Quincy, Fla.	23.5	24.7	22.9	23.3	23.3	23.5
Jay, Fla.	21.7	22.7	20.8	20.6	21.3	20.7
Baton Rouge, La.	21.9	24.8	21.9	23.7	23.7	23.6
Mean	22.1	23.2+	21.7	22.0	22.3	22.4
			Protein Percentage			
Hartsville, S. C.(A)	38.5	35.6	38.2	37.4	38.5	37.5
Blackville, S. C.(B)	39.5	38.8	40.2	39.7	38.9	37.7
Tallassee, Ala.	38.7	37.0	42.0	38.9	39.2	39.3
Tifton, Ga.	41.4	38.9	42.0	41.0	42.7	40.9
Live Oak, Fla.	40.6	38.8	41.5	40.0	41.0	39.2
Quincy, Fla.	40.2	41.6	41.0	39.6	39.9	38.8
Jay, Fla.	41.1	39.4	43.0	41.7	41.8	40.4
Baton Rouge, La.	42.5	35.8	40.1	37.3	36.1	37.7
Mean	40.3	38.2-	41.0	39.5	39.8	38.9-
			Grams per 100 Seeds			
Hartsville, S. C.(A)	14.0	14.5	13.4	12.4	14.4	14.5
Blackville, S. C.(B)	17.3	18.0	17.7	14.7	18.0	15.2
Tallassee, Ala.	19.8	19.0	17.7	14.7	16.1	17.8
Tifton, Ga.	17.6	17.2	16.6	13.7	15.4	17.6
Live Oak, Fla.	16.0	18.2	16.3	14.7	16.8	18.2
Quincy, Fla.	16.3	16.7	14.3	14.3	13.7	16.7
Jay, Fla.	17.3	18.1	16.2	12.8	16.7	17.6
Mean	16.9	17.4	16.0	13.9-	15.9-	16.8

Table 59. - (continued)

Location	F61-3132	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2	L.S.D. (.05)
			Oil Percentage				
Hartsville, S. C.(A)	22.4	22.2	20.7	21.6	21.9	20.6	
Blackville, S. C.(B)	22.8	22.6	20.9	21.5	22.1	21.2	
Tallassee, Ala.	21.8	22.9	20.5	20.5	21.4	20.3	
Tifton, Ga.	21.7	22.4	19.9	20.1	19.6	20.4	
Live Oak, Fla.	23.9	23.2	21.3	21.8	20.8	21.8	
Quincy, Fla.	23.8	23.6	23.0	22.4	23.4	21.7	
Jay, Fla.	21.3	20.9	19.7	19.0	20.8	19.6	
Baton Rouge, La.	23.8	22.5	22.2	22.3	23.5	21.8	
Mean	22.7+	22.5	21.0-	21.2-	21.7	20.9-	0.6
			Protein Percentage				
Hartsville, S. C.(A)	37.4	38.8	39.1	38.7	39.0	38.4	
Blackville, S. C.(B)	38.3	39.3	41.2	39.9	42.2	40.2	
Tallassee, Ala.	39.8	39.0	41.0	41.5	41.1	40.0	
Tifton, Ga.	40.5	41.7	43.5	43.4	44.5	41.5	
Live Oak, Fla.	38.7	41.3	43.4	42.8	42.7	41.5	
Quincy, Fla.	38.8	40.1	41.2	41.6	42.4	42.3	
Jay, Fla.	41.0	41.5	44.4	45.1	43.7	42.0	
Baton Rouge, La.	37.7	38.2	39.0	38.2	38.8	37.5	
Mean	39.0-	40.0	41.6+	41.4+	41.8+	40.4	0.9
			Grams per 100 Seeds				
Hartsville, S. C.(A)	14.5	14.6	12.7	11.3	13.3	13.3	
Blackville, S. C.(B)	16.0	17.0	15.0	13.6	17.7	17.5	
Tallassee, Ala.	18.3	18.8	18.0	14.8	18.4	18.0	
Tifton, Ga.	17.3	18.7	16.3	15.6	15.4	16.4	
Live Oak, Fla.	18.8	16.2	16.8	15.3	19.5	16.1	
Quincy, Fla.	15.3	16.3	15.7	13.3	15.7	15.3	
Jay, Fla.	17.8	17.7	16.2	14.5	16.8	16.5	
Mean	16.9	17.0	15.8-	14.1-	16.7	16.2	1.0

Table 60. - Relative maturity, days earlier (-) or later (+) than Bienville, for the strains in Uniform Group VIII, 1965

Location	Date planted	Bienville matured	Hampton	Hardee	F59-2008	La59-72-11
			Southeast			
Florence, S.C.(A)	5-12	10-29	+3	+7	-1	-1
Florence, S.C.(B)	6-23	10-31	+2	+5	-3	-11
Hartsville, S.C.(A)	5-25	11-1	0	+6	0	-3
Hartsville, S.C.(B)	6-22	11-3	0	+5	+3	-2
Blackville, S.C.(A)	5-8	10-30	-3	+3	-2	-5
Blackville, S.C.(B)	6-25	11-2	0	+5	+1	-2
Tallassee, Ala.	6-22	11-4	0	+3	+1	-2
Tifton, Ga.	5-31	11-1	-2	+4	+2	-2
Live Oak, Fla.	6-3	10-23	+2	+4	+3	+3
Marianna, Fla.	6-21	11-4	-1	+4	+5	-8
Quincy, Fla.	6-29	11-1	-1	+8	+1	-6
Jay, Fla.	6-21	10-31	+2	+3	-5	-5
Fairhope, Ala.	6-9	10-20	0	+8	+2	0
Baton Rouge, La.	6-2	10-28	+11	+6	+13	+2
Mean		10-30	0	+5	+2	-3
			West			
St. Joseph, La.	5-11	10-26	0	+2	0	-1

Table 60. - (continued)

Location	F61-3118	F61-3132	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2
			Southeast				
Florence, S.C.(A)	+2	+2	+2	+2	0	-2	-1
Florence, S.C.(B)	+3	-1	+3	+1	+2	-2	+4
Hartsville, S.C.(A)	0	-1	0	+2	+3	-2	0
Hartsville, S.C.(B)	0	0	+2	+4	+4	0	+1
Blackville, S.C.(A)	0	-2	+1	+2	+3	-3	-1
Blackville, S.C.(B)	0	-1	0	+3	+3	-2	+2
Tallassee, Ala.	+2	+1	0	+4	+4	-2	+3
Tifton, Ga.	+3	+3	+3	+4	+4	0	+5
Live Oak, Fla.	+2	+2	0	+5	+5	0	-1
Marianna, Fla.	+3	+1	0	+4	+3	0	-2
Quincy, Fla.	+4	+2	0	+2	+3	-1	-1
Jay, Fla.	+2	+2	0	+2	+1	-5	-4
Fairhope, Ala.	0	0	+2	+8	+5	0	0
Baton Rouge, La.	+15	+9	0	+11	+9	0	+8
Mean	+3	+1	0	+4	+4	-1	0
			West				
St. Joseph, La.	0	0	+2	+2	+3	-2	+3

Table 61. - Plant height for the strains in Uniform Group VIII, 1965

Location	Bienville	Hampton	Hardee	F59-2008	La59-72-11	F61-3118
			Southeast			
Florence, S.C.(A)	42	39	48	36	34	57
Florence, S.C.(B)	43	38	42	37	35	43
Hartsville, S.C.(A)	47	39	49	46	38	53
Hartsville, S.C.(B)	45	39	43	40	36	51
Blackville, S.C.(A)	44	44	45	46	38	53
Blackville, S.C.(B)	37	34	35	34	29	45
Tallassee, Ala.	41	35	32	36	34	42
Tifton, Ga.	35	30	35	32	32	45
Live Oak, Fla.	35	33	38	37	29	37
Gainesville, Fla.	27	27	31	34	26	35
Marianna, Fla.	40	36	37	38	32	44
Quincy, Fla.	32	24	27	34	23	35
Jay, Fla.	39	34	42	38	33	45
Fairhope, Ala.	34	35	32	33	28	40
Baton Rouge, La.	38	28	34	40	38	60
Mean	39	34	38	37	32	46
			West			
St. Joseph, La.	42	38	54	42	33	68

Table 61. - (continued)

Location	F61-3132	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2
			Southeast			
Florence, S.C.(A)	53	43	38	43	38	42
Florence, S.C.(B)	40	44	38	40	36	39
Hartsville, S.C.(A)	53	49	49	50	39	43
Hartsville, S.C.(B)	47	47	47	48	37	41
Blackville, S.C.(A)	46	48	47	47	38	47
Blackville, S.C.(B)	38	39	41	39	32	36
Tallassee, Ala.	40	41	40	42	29	37
Tifton, Ga.	42	36	39	39	28	35
Live Oak, Fla.	37	35	39	40	33	34
Gainesville, Fla.	32	33	37	37	27	32
Marianna, Fla.	42	40	40	42	36	37
Quincy, Fla.	34	32	30	32	20	28
Jay, Fla.	42	41	38	42	36	41
Fairhope, Ala.	33	36	36	35	20	33
Baton Rouge, La.	46	43	38	46	30	40
Mean	42	40	40	41	32	38
			West			
St. Joseph, La.	60	46	48	52	34	55

Table 62. - Lodging scores for the strains in Uniform Group VIII, 1965

Location	Bienville	Hampton	Hardee	F59-2008	La59-72-11	F61-3118
			Southeast			
Florence, S.C.(A)	3.0	2.0	3.0	5.0	2.0	3.0
Florence, S.C.(B)	2.0	2.0	2.0	5.0	2.0	3.0
Hartsville, S.C.(A)	2.9	2.0	2.8	4.6	3.2	3.4
Hartsville, S.C.(B)	3.4	2.7	2.8	4.6	3.7	3.2
Blackville, S.C.(A)	2.7	1.3	2.2	4.7	2.5	3.5
Blackville, S.C.(B)	1.5	1.2	1.7	3.0	1.5	1.7
Tallassee, Ala.	3.0	2.0	3.0	4.0	2.0	2.0
Tifton, Ga.	1.5	1.0	1.0	1.5	1.3	1.5
Live Oak, Fla.	2.0	1.7	2.0	2.7	1.3	2.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	2.0	1.0	1.0	2.0	2.0	2.0
Quincy, Fla.	1.0	1.0	1.0	2.0	1.0	1.0
Jay, Fla.	2.0	3.0	3.0	3.0	2.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	3.0	3.0	3.0	3.0	3.0	3.0
			West			
St. Joseph, La.	4.0	4.0	5.0	5.0	3.0	5.0

Table 62. - (continued)

Location	F61-3132	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2
			Southeast			
Florence, S.C.(A)	3.0	3.0	4.0	5.0	1.0	5.0
Florence, S.C.(B)	3.0	3.0	5.0	5.0	1.0	4.0
Hartsville, S.C.(A)	3.3	3.0	3.8	4.2	1.1	4.2
Hartsville, S.C.(B)	3.2	3.3	4.0	4.6	1.5	4.1
Blackville, S.C.(A)	3.0	2.8	4.8	4.7	1.0	4.7
Blackville, S.C.(B)	1.8	1.5	2.5	3.0	1.2	2.2
Tallassee, Ala.	2.0	4.0	4.0	5.0	1.0	5.0
Tifton, Ga.	1.3	1.0	1.8	2.5	1.0	2.0
Live Oak, Fla.	2.0	2.0	2.7	3.0	1.0	2.3
Gainesville, Fla.	1.0	1.0	1.0	1.7	1.0	1.3
Marianna, Fla.	1.0	1.0	2.0	3.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	2.0	1.0	2.0
Jay, Fla.	3.0	2.0	5.0	3.0	1.0	3.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	3.0	3.0	3.0	4.0	2.0	3.0
			West			
St. Joseph, La.	5.0	4.0	5.0	5.0	2.0	5.0

Table 63. - Seed quality scores for the strains in Uniform Group VIII, 1965

Location	Bienville	Hampton	Hardee	F59-2008	La59-72-11	F61-3118
			Southeast			
Hartsville, S.C.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Blackville, S.C.(A)	1.0	1.5	1.5	2.0	1.0	1.0
Blackville, S.C.(B)	1.0	1.5	1.5	1.5	1.5	1.0
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	2.0
Tifton, Ga.	2.0	2.0	2.0	2.0	2.0	2.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	2.3	1.0	1.0	2.0	1.0
Quincy, Fla.	2.0	2.0	3.0	3.0	2.0	3.0
Jay, Fla.	1.0	1.0	2.0	1.0	1.0	1.0
Fairhope, Ala.	1.7	2.0	1.0	1.0	1.7	1.3
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
St. Joseph, La.	1.0	2.0	1.0	1.0	2.0	3.0

Table 63. - (continued)

Location	F61-3132	La61-55-3	F59-2043	F61-2886	F62-1091	La63-72-2
			Southeast			
Hartsville, S.C.(A)	2.0	2.0	2.0	2.0	2.0	3.0
Blackville, S.C.(A)	1.5	1.0	2.5	1.5	1.5	2.5
Blackville, S.C.(B)	1.0	1.0	2.0	2.0	1.5	2.0
Tallassee, Ala.	2.0	1.0	1.0	1.0	1.0	1.0
Tifton, Ga.	2.0	2.0	2.0	2.0	2.0	2.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.7	1.0	1.0	1.3	1.0
Quincy, Fla.	2.0	2.0	3.0	3.0	3.0	3.0
Jay, Fla.	1.0	1.0	2.0	2.0	1.0	2.0
Fairhope, Ala.	1.7	1.7	2.0	1.0	2.0	1.7
Baton Rouge, La.	1.0	1.0	2.0	1.0	1.0	1.0
			West			
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0

PRELIMINARY GROUP VIII

1965

Eight Preliminary Group VIII nurseries were grown. The parentage for the strains included is reported in table 64. Performance data are summarized in tables 65 through 70. Differences among strains were significant on the basis of the combined anlaysis of variance of seed yields from 4 locations. Although there were no strains having a yield significantly higher than Hampton, Hardee and 9 strains had a higher mean yield than Hampton. Four strains had seed yields significantly below the yield of Hampton.

Nine strains had shattering scores above 2, while 8 strains were given target spot ratings above 2.

Table 64. - Parentage of strains in Preliminary Group VIII, 1965

	Variety or strain	Parentage	Generation Composited
1.	Hampton		
2.	Bienville		
3.	Hardee		
4.	Coker 102	Rogue in Yelnanda	
5.	Coker 2404	Yelnanda x Lee	
6.	Coker 3207	Majos x Lee	
7.	Coker 3208	Majos x Lee	
8.	D60-7965	D55-4090 x D55-4159	F_5
9.	F61-3149	D55-4090 x D55-4156	F_6
10.	F62-3180	La59-1-4 x D51-4877	F_6
11.	F62-3187	La49-1-4 x D51-4877	F_6
12.	F62-3193	La49-1-4 x D51-4877	F_7
13.	F62-3195	La49-1-4 x D51-4877	F_7
14.	F62-3717	La49-1-4 x D51-4877	F_7
15.	F62-3733	PI 159,924 x D51-4969	F_6
16.	F63-3540	CNS-4 x Biloxi	F_9
17.	F63-3799	Ototan x D49-2491	F_7
18.	F63-3905	F55-1031 x (Roanoke x CNS-4)	F_6
19.	F63-3938	Seminole x D55-822	F_6
20.	F63-3957	Seminole x F55-822	F_6
21.	F63-3967	Seminole x F55-822	F_6
22.	F63-3999	F55-822 x (Roanoke x CNS-4)	F_6
23.	F63-4000	F55-822 x (Roanoke x CNS-4)	F_6
24.	F63-4315	Hardee x (Biloxi x F55-224)	F_5
25.	F63-4325	Hardee x (Biloxi x F55-224)	F_5
26.	F63-4349	Hardee x (Biloxi x F55-224)	F_5
27.	F63-4368	Hardee x (Biloxi x F55-224)	F_5
28.	F63-4400	(Biloxi x F55-224) x (F55-80 x D55-4073)	F_5
29.	F63-4486	(Biloxi x F55-224) x (F55-80 x D55-4073)	F_5
30.	F63-4488	(Biloxi x F55-224) x (F55-80 x D55-4073)	F_5
31.	La62-159	Ogden x Creole	
32.	La62-203	Pelican 2 x Ogden	
33.	La63-15-6	Pelican 2 x Ogden	
34.	La63-49-1	Volstate x Creole	
35.	La63-56-1	Pelican 2 x Ogden	
36.	La63-345	Ogden x Creole	

Table 65. - General summary of performance for the strains in Preliminary Group VIII, 1965

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter	B.P.	T.S.
Hampton	37.0	10-31	29	23.1	39.1	1.0	1.0	1.0
Bienville	36.7	-2	35	22.3-	41.2+	3.3	3.0	1.0
Hardee	38.3	+2	36	22.2-	42.0+	1.3	1.0	2.0
Coker 102	32.5	0	41	21.8-	43.3+	1.5	1.0	4.0
Coker 2404	32.0	0	32	20.7-	44.6+	2.3	1.0	1.0
Coker 3207	38.4	0	32	23.2	39.9	1.3	1.0	1.0
Coker 3208	36.2	-2	24	23.3	40.4+	1.3	1.0	1.0
D60-7965	29.9-	-4	33	19.1-	49.0+	3.0	1.0	1.0
F61-3149	31.6	0	40	20.4-	46.4+	1.0	1.0	1.0
F62-3180	40.2	0	33	22.3-	40.9+	2.5	1.0	1.0
F62-3187	37.3	+3	38	21.8-	41.0+	1.8	1.0	2.0
F62-3193	39.0	+3	37	21.9-	41.9+	1.8	1.0	1.5
F62-3195	37.7	+2	37	21.8-	41.9+	1.8	1.0	1.5
F62-3717	36.0	+1	38	21.2-	40.8+	1.5	1.0	1.5
F62-3733	33.0	0	37	21.5-	43.0+	2.3	1.0	2.5
F63-3540	27.6-	-1	38	18.4-	47.5+	5.0	1.0	2.5
F63-3799	32.8	+4	40	19.7-	42.7+	1.8	1.0	1.5
F63-3905	32.6	-2	40	21.0-	42.7+	3.5	1.0	3.5
F63-3938	37.6	-1	34	21.9-	43.5+	1.3	1.0	2.0
F63-3957	27.6-	+2	41	21.9-	45.5+	1.0	1.0	1.5
F63-3967	34.1	+3	40	21.5-	43.0+	1.5	1.0	2.0
F63-3999	37.8	-3	33	20.9-	44.5+	2.0	1.0	1.0
F63-4000	41.4	-1	32	21.3-	43.4+	1.3	1.0	1.0
F63-4315	35.2	+2	40	20.5-	45.2+	1.5	1.0	3.0
F63-4325	34.3	+2	36	21.4-	44.8+	1.8	1.0	2.0
F63-4349	35.2	-3	37	21.9-	44.8+	2.3	1.0	1.5
F63-4368	33.2	0	39	19.6-	45.6+	1.5	1.0	2.0
F63-4400	31.7	0	41	17.9-	48.6+	1.3	1.0	3.0
F63-4486	33.7	0	37	20.2-	45.0+	1.5	1.0	2.0
F63-4488	34.9	-1	38	19.9-	46.1+	1.8	1.0	2.5
La62-159	34.4	-2	33	20.7-	42.4+	2.0	1.0	1.0
La62-203	34.0	-6	25	22.2-	41.6+	2.0	3.0	---
La63-15-6	37.8	-2	36	21.8-	41.8+	2.0	3.0	1.0
La63-49-1	33.3	-1	35	20.9-	41.8+	2.5	3.0	1.5
La63-56-1	32.0	+4	36	20.6-	42.6+	1.0	3.0	4.0
La63-345	28.8-	+4	43	20.9-	42.3+	2.0	4.0	1.0
L.S.D.(.05)	5.7			0.8	1.0			
L.S.D.(.01)	7.6			1.0	1.3			

Table 66. - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1965

Strain	Florence, S.C.*	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.*	Quincy, Fla.*	Jay, Fla.	Baton Rouge, La.*
Hampton	51.2	41.6	46.7	19.8	44.5	40.1	13.9
Bienville	49.5	36.5	40.8	29.5+	44.4	39.8	35.7+
Hardee	40.5-	42.8	49.0	23.4	42.3	38.0	20.6
Coker 102	46.7	29.1	39.4-	26.6+	36.7	34.8-	16.0
Coker 2404	42.2-	32.3	43.2	18.4	27.1	34.1-	12.2
Coker 3207	32.2-	38.5	50.2	21.3	40.6	43.8	15.1
Coker 3208	47.0	36.7	43.0	22.6	41.9	42.6	18.1
D60-7965	40.5-	24.0	40.4	22.6	33.4	32.6-	13.1
F61-3149	31.8-	30.2	39.4-	25.9+	33.1	31.2-	13.9
F62-3180	47.4	43.0	47.4	28.5+	41.4	42.0	16.4
F62-3187	44.6-	41.4	42.4	23.2	42.4	42.6	13.9
F62-3193	46.0	40.6	47.5	26.5+	40.8	41.6	14.7
F62-3195	41.9-	34.2	47.0	26.5+	42.4	43.0	16.4
F62-3717	39.8-	34.9	37.8-	29.2+	42.2	42.0	11.8
F62-3733	29.1-	34.9	38.7-	24.1	42.4	34.4-	15.1
F63-3540	32.9-	23.3	33.9-	26.6+	23.9	26.5-	12.2
F63-3799	30.1-	28.6	38.8-	29.6+	36.1	34.4-	13.9
F63-3905	43.3-	34.0	41.7	20.3	29.9	34.4-	24.0+
F63-3938	44.6-	36.0	46.8	29.2+	40.3	38.7	14.7
F63-3957	42.2-	35.0	38.6-	19.2	32.1	17.6-	21.0
F63-3967	40.8-	29.4	47.0	24.3	32.4	35.8	16.0
F63-3999	42.9-	36.0	49.0	26.0+	27.4	40.5	18.5
F63-4000	50.2	40.3	53.6+	29.6+	29.9	42.0	16.0
F63-4315	29.4-	33.9	48.2	33.4+	25.4	25.5-	13.5
F63-4325	35.3-	36.8	41.3	26.8+	29.9	32.3-	21.5+
F63-4349	39.4-	34.4	49.3	24.2	30.7	33.0-	18.1
F63-4368	38.7-	36.0	38.6-	27.3+	29.3	30.8-	12.6
F63-4400	35.6-	32.1	35.0-	25.7+	26.1	34.0-	11.8
F63-4486	38.0-	36.8	35.8-	27.5+	28.4	34.8-	19.8
F63-4488	33.9-	38.4	42.1	26.1+	29.8	33.0-	15.6
La62-159	35.3-	37.1	41.3	26.9+	28.8	32.3-	29.4+
La62-203	49.5	39.5	36.7-	19.2	32.1	40.5	15.2
La63-15-6	46.3	42.2	41.7	28.0+	38.3	39.5	23.6+
La63-49-1	39.1-	34.6	38.4-	25.1	30.7	35.1-	18.5
La63-56-1	34.6-	27.7	40.4	24.8	39.5	35.1-	17.6
La63-345	28.7-	31.6	32.2-	20.6	37.7	28.7-	13.4
L.S.D.(.05)	6.0	N.S.	6.4	6.1	--	4.6	7.5
C.V.	7%	16%	7%	12%	--	6%	22%

* Not included in mean - Florence, late arrival; Quincy, 1 replication; and Baton Rouge, high C.V.

Table 67. - Oil percentages for the strains in Preliminary Group VIII, 1965

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.
Hampton	22.0	23.8	24.0	22.4
Bienville	23.2	23.1	21.7	21.2
Hardee	21.8	22.9	23.4	20.8
Coker 102	21.6	23.0	22.2	20.3
Coker 2404	21.8	21.2	21.0	18.8
Coker 3207	23.8	23.2	23.1	22.7
Coker 3208	24.0	23.0	23.9	22.2
D60-7965	19.0	19.7	19.5	18.1
F61-3149	19.9	21.2	20.7	19.6
F62-3180	22.7	22.7	22.7	21.0
F62-3187	22.9	22.7	21.5	20.0
F62-3193	22.0	22.8	22.2	20.6
F62-3195	22.1	22.5	22.1	20.3
F62-3717	20.8	22.2	22.3	19.3
F62-3733	21.7	22.1	22.1	20.2
F63-3540	18.6	19.6	18.7	16.8
F63-3799	19.3	20.5	20.2	18.9
F63-3905	21.6	22.4	21.5	18.5
F63-3938	22.1	22.6	22.3	20.7
F63-3957	22.0	23.0	22.1	20.5
F63-3967	20.8	22.6	22.2	20.4
F63-3999	21.2	21.5	21.0	19.9
F63-4000	21.9	21.4	21.8	20.0
F63-4315	20.4	21.2	21.3	19.1
F63-4325	21.2	22.5	21.8	20.2
F63-4349	22.7	22.8	22.0	20.1
F63-4368	20.0	20.4	21.0	17.0
F63-4400	18.4	18.1	18.1	16.8
F63-4486	20.8	20.8	21.1	17.9
F63-4488	20.1	21.6	18.9	19.0
La62-159	21.3	21.8	20.8	18.8
La62-203	23.1	23.4	21.7	20.6
La63-15-6	22.0	22.7	21.8	20.6
La63-49-1	21.0	22.0	21.6	19.0
La63-56-1	20.4	22.2	20.5	19.4
La63-345	20.3	22.6	21.3	19.5

Table 68. - Protein percentages for the strains in Preliminary Group VIII, 1965

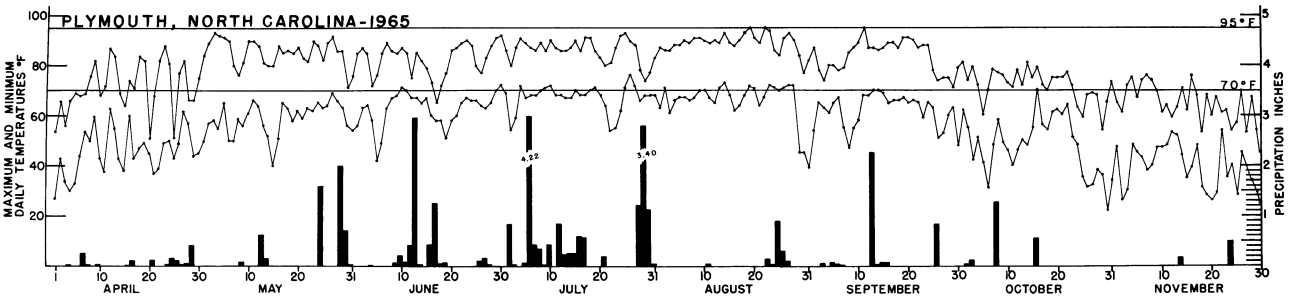
Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.
Hampton	37.2	38.9	41.3	38.9
Bienville	38.7	40.6	44.1	41.5
Hardee	40.2	41.6	44.0	42.3
Coker 102	41.6	41.3	46.4	44.0
Coker 2404	41.9	43.3	47.2	46.1
Coker 3207	38.0	39.0	42.6	39.9
Coker 3208	38.5	39.2	43.6	40.2
D60-7965	47.2	48.0	51.4	49.5
F61-3149	45.4	44.5	48.9	46.9
F62-3180	39.2	39.3	43.2	41.7
F62-3187	38.1	40.4	43.8	41.7
F62-3193	40.6	40.8	44.0	42.3
F62-3195	40.4	40.4	44.5	42.4
F62-3717	40.0	40.0	42.2	41.0
F62-3733	41.3	42.0	45.2	43.6
F63-3540	46.3	45.7	50.0	48.1
F63-3799	39.9	43.2	44.8	42.8
F63-3905	40.3	40.8	45.9	43.6
F63-3938	41.6	42.6	46.0	43.8
F63-3957	43.4	46.1	47.7	44.7
F63-3967	41.5	42.9	44.3	43.4
F63-3999	42.5	43.8	46.9	44.9
F63-4000	41.7	42.5	45.2	44.3
F63-4315	43.5	44.6	46.9	45.6
F63-4325	43.2	44.9	46.1	44.9
F63-4349	42.6	44.1	46.5	46.1
F63-4368	43.6	45.3	47.5	45.9
F63-4400	46.5	48.2	50.8	48.7
F63-4486	41.6	44.2	47.7	46.5
F63-4488	44.1	45.6	48.7	46.0
La62-159	39.7	41.2	45.4	43.4
La62-203	39.4	40.7	43.9	42.4
La63-15-6	38.9	41.8	44.2	42.4
La63-49-1	40.0	41.1	43.9	42.0
La63-56-1	40.9	41.2	44.3	43.8
La63-345	42.2	39.6	43.3	44.0

Table 69. - Plant height for the strains in Preliminary Group VIII, 1965

Strain	Florence, S.C.	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Hampton	31	28	32	27	22	34	26
Bienville	40	38	35	32	28	39	35
Hardee	41	37	41	32	29	43	30
Coker 102	43	39	41	39	34	43	45
Coker 2404	39	32	38	32	22	37	25
Coker 3207	31	35	35	25	27	36	38
Coker 3208	30	26	26	18	20	31	18
D60-7965	37	29	36	33	27	42	25
F61-3149	44	35	41	40	32	45	44
F62-3180	39	28	33	28	26	39	38
F62-3187	43	36	34	33	33	42	46
F62-3193	40	40	35	33	32	39	42
F62-3195	37	37	35	34	32	40	46
F62-3717	43	41	40	34	33	44	28
F62-3733	33	37	43	36	32	41	38
F63-3540	41	38	41	38	32	41	34
F63-3799	46	37	44	39	33	43	36
F63-3905	44	43	38	34	31	44	48
F63-3938	38	34	37	35	30	38	28
F63-3957	44	43	44	39	32	42	40
F63-3967	50	37	42	36	30	44	43
F63-3999	40	31	36	36	26	36	28
F63-4000	38	30	35	30	23	35	35
F63-4315	47	38	44	37	31	42	42
F63-4325	37	38	39	35	25	41	36
F63-4349	41	37	38	35	31	43	35
F63-4368	40	41	41	37	31	43	38
F63-4400	46	40	43	41	30	46	44
F63-4486	43	37	39	35	28	41	38
F63-4488	42	39	40	34	31	40	42
La62-159	37	35	33	27	26	40	36
La62-203	35	25	24	23	18	34	28
La63-15-6	38	34	35	33	30	43	38
La63-49-1	39	32	33	30	27	41	42
La63-56-1	34	35	35	32	29	40	44
La63-345	50	45	44	36	34	47	48

Table 70. - Seed quality scores for the strains in Preliminary Group VIII, 1965

Strain	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Hampton	1.0	3.0	3.0	1.0	1.0
Bienville	1.0	1.0	2.0	1.0	1.0
Hardee	1.0	1.0	2.0	1.0	1.0
Coker 102	1.0	2.0	2.0	1.0	2.0
Coker 2404	1.0	2.0	2.0	1.0	1.0
Coker 3207	1.0	3.0	2.0	1.0	1.0
Coker 3208	1.0	3.5	3.0	1.0	1.0
D60-7965	1.0	1.0	4.0	2.0	1.0
F61-3149	1.0	1.0	2.0	1.0	1.0
F62-3180	1.0	2.5	2.0	1.0	1.0
F62-3187	1.0	1.5	3.0	1.0	1.0
F62-3193	1.0	1.5	2.0	1.0	1.0
F62-3195	1.0	1.5	2.0	1.0	1.0
F62-3717	1.0	1.0	1.0	1.0	1.0
F62-3733	1.0	1.0	3.0	2.0	1.0
F63-3540	1.0	1.0	2.0	1.0	1.0
F63-3799	1.0	1.0	4.0	2.0	1.0
F63-3905	1.0	1.0	2.0	1.0	1.0
F63-3938	1.0	1.0	2.0	1.0	1.0
F63-3957	2.0	1.0	2.0	1.0	2.0
F63-3967	1.0	1.0	3.0	1.0	1.0
F63-3999	1.0	1.0	3.0	1.0	1.0
F63-4000	1.0	2.0	3.0	2.0	1.0
F63-4315	1.0	1.0	2.0	1.0	1.0
F63-4325	1.0	1.0	2.0	1.0	1.0
F63-4349	1.0	1.0	2.0	1.0	1.0
F63-4368	1.0	1.0	2.0	1.0	1.0
F63-4400	1.0	1.0	3.0	1.0	1.0
F63-4486	1.0	1.0	2.0	1.0	1.0
F63-4488	1.0	1.0	1.0	1.0	1.0
La62-159	1.0	1.0	3.0	1.0	1.0
La62-203	1.0	2.0	2.0	1.0	1.0
La63-15-6	1.0	1.0	3.0	1.0	1.0
La63-49-1	1.0	1.0	4.0	2.0	1.0
La63-56-1	1.0	1.0	3.0	1.0	1.0
La63-345	1.0	1.0	4.0	1.0	2.0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70°F
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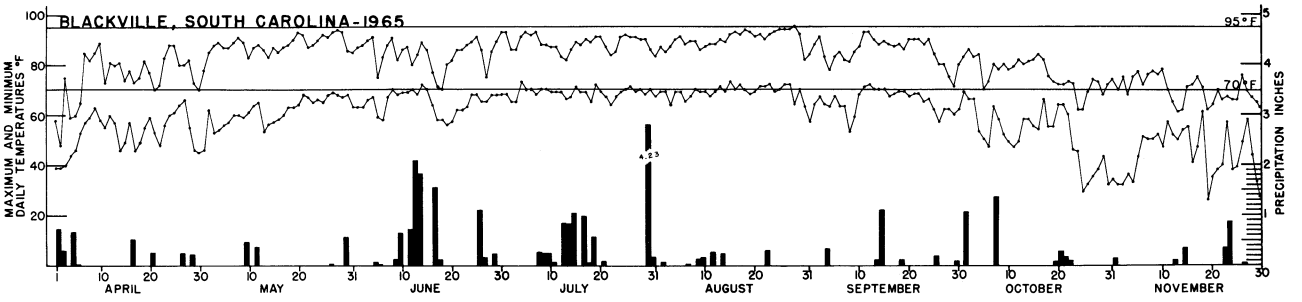
3.40
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER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PRECIPITATION INCHES
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4.23
APRIL
MAY
JUNE
JULY
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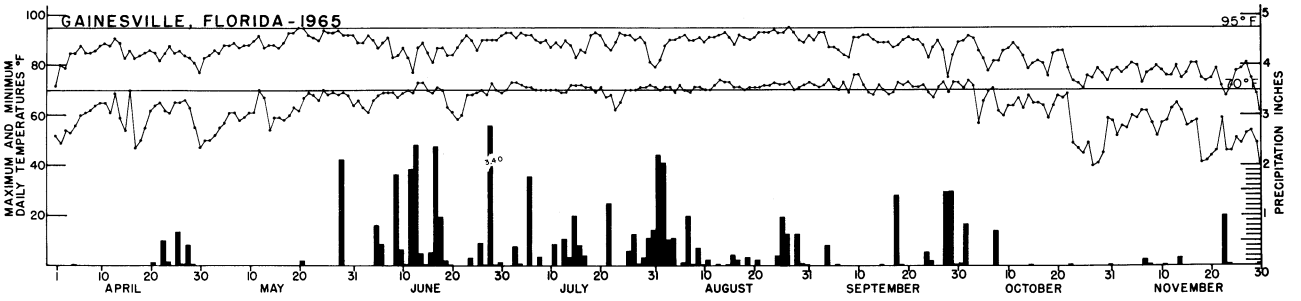
NOVEMBER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PRECIPITATION INCHES
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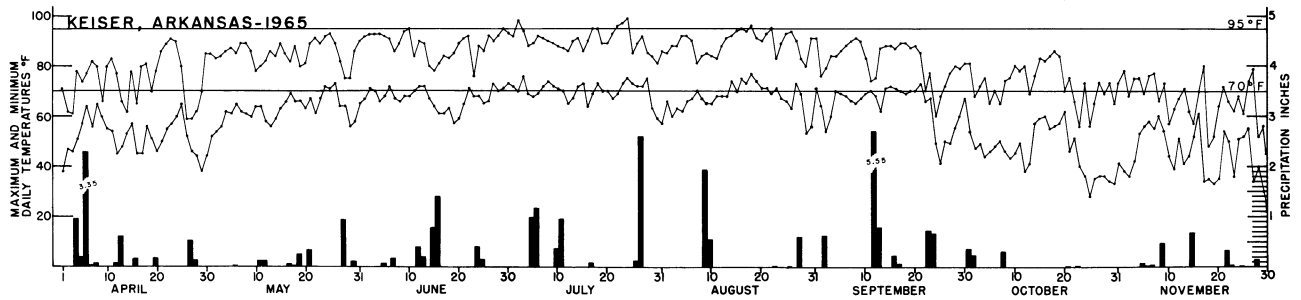
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


KEISER, ARKANSAS-1965
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
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70°F
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5.55
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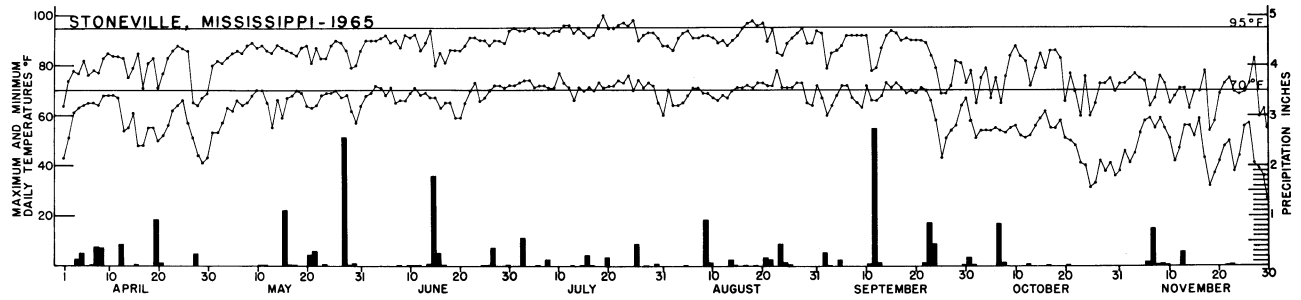
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


STONEVILLE, MISSISSIPPI-1965
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PRECIPITATION INCHES
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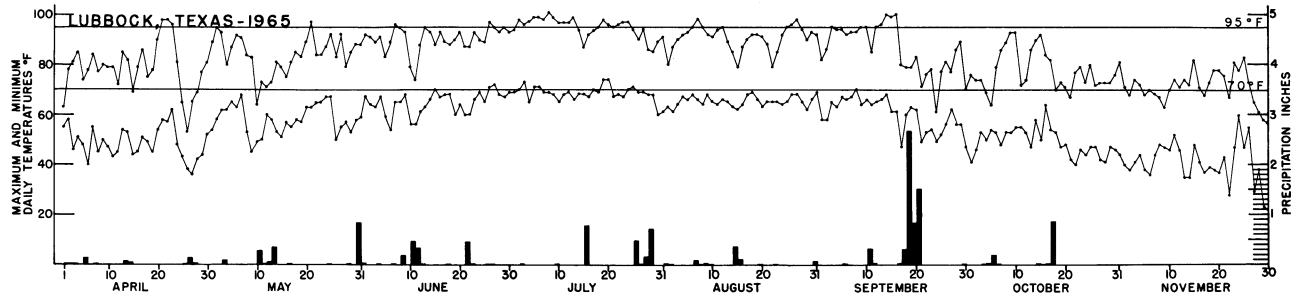
SEPTEMBER
OCTOBER
NOVEMBER


LUBBOCK, TEXAS-1965
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SEPTEMBER
OCTOBER
NOVEMBER