U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

THE UNIFORM SOYBEAN TESTS

SOUTHERN STATES

1966

RSLM 228

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

THE UNIFORM SOYBEAN TESTS

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1966

RSLM 228

Compiled by:

Edgar E. Hartwig and Kathryn W. Jamison

From data supplied by:

E. L. Wisk, Delaware
H. W. Crittenden, Delaware
B. E. Caldwell, 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.
J. D. Hicks, Hartsville, S. C.
H. B. Harris, Experiment, Ga.
M. B. Parker, Blairsville, Ga.
W. H. Marchant, Tifton, Ga.
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J. W. Langford, Tallassee, Ala.
H. F. Yates, Fairhope, Ala.
Kuell Hinson, Gainesville, Fla.
R. W. Lipscomb, Marianna, Fla.
W. H. Chapman, Quincy, Fla.
R. L. Smith, Jay, Fla.
J. F. Shane, Kentucky
Elmer Counce, Martin, Tenn.
Tom McCutchen, Milan, Tenn.
J. R. Overton, Jackson, Tenn.
E. E. Hartwig, Stoneville, Miss.
L. A. Duclos, Portageville, Mo.
Maxsie Taylor, Keiser, Ark.
F. J. Williams, Stuttgart, Ark.
J. L. Dameron, Marianna, Ark.
C. E. Caviness, Fayetteville, Ark.
C. G. Shepherd, Baton Rouge, La.
R. N. Flint, St. Joseph, La.
J. L. Rabb, Curtis, La.
J. H. Davis, Crowley, La.
R. S. Matlock, Oklahoma
J. R. Wood, Beaumont, Texas

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COOPERATING AGENCIES AND PERSONNEL

FOR THE

SOUTHERN REGION

Soybean Investigations, Beltsville, Maryland

B. E. Caldwell, Leader

Laboratory Headquarters, Urbana, Illinois

R. L. Cooper, Agronomist-In-Charge
R. L. Bernard, Research Geneticist
F. I. Collins, Oil Chemist
O. A. Krober, Protein Chemist
R. E. Johnson, Plant Physiologist
R. W. Rinne, Plant Physiologist
W. L. Ogren, Plant Physiologist

Southern Region Headquarters, Stoneville, Mississippi

Edgar E. Hartwig, Agronomist
B. L. Keeling, 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
W. M. Schutz, Geneticist
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

L. E. Ensminger
Alabama Agricultural Experiment Station
Auburn, Alabama

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

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

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

C. G. Shepherd
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

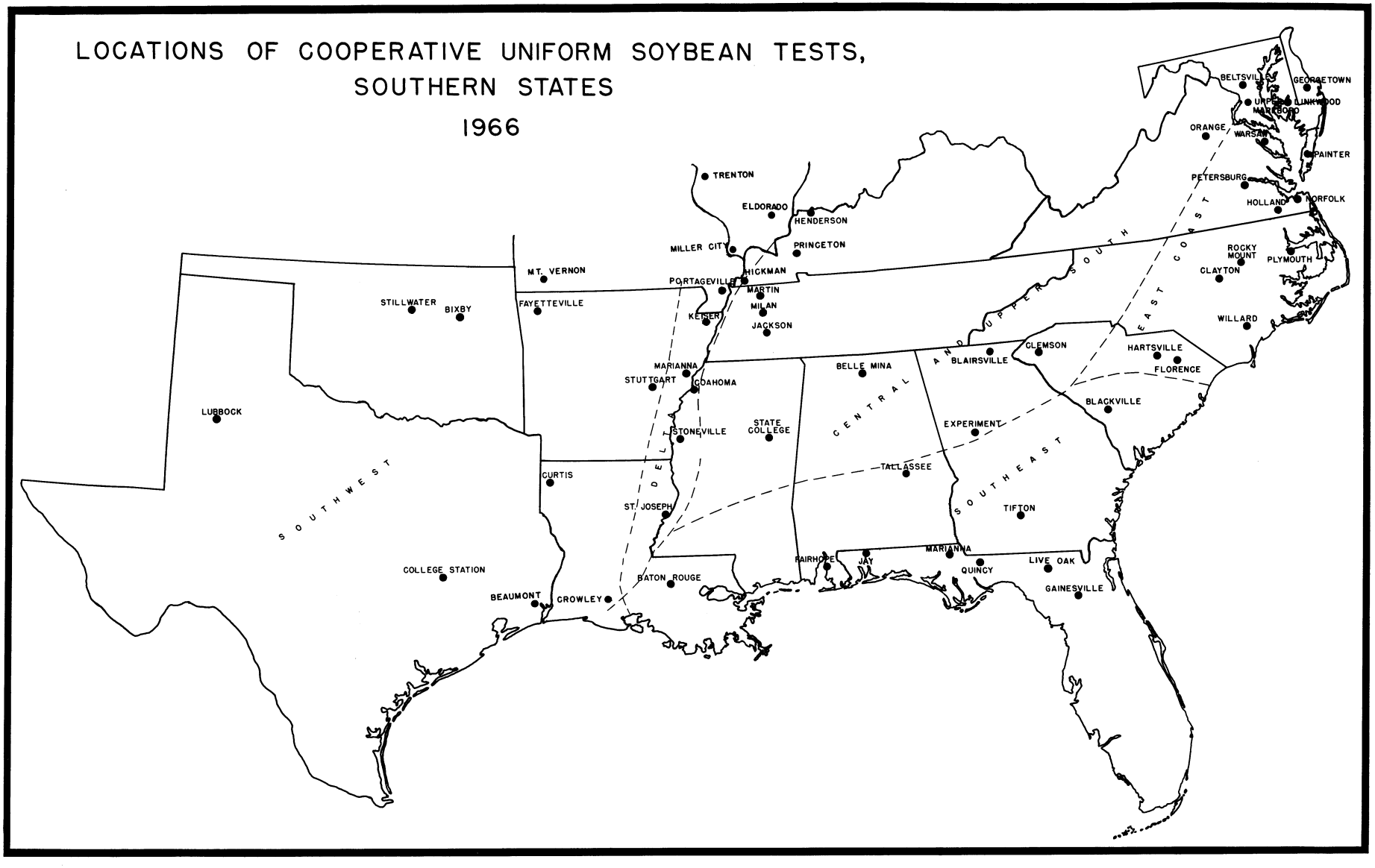
The program of the U. S. Regional Soybean Laboratory has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs 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 groups IV-S through VIII are grown in the Southern part. Within their area of adaptation, there is a maturity range of 12 to 18 days within each maturity class. The best standard varieties available of each maturity class are used as check varieties with which to compare new strains as to seed yield, chemical composition, maturity, height, lodging, seed quality, and reaction to diseases. For the groups grown in the Southern area, the major check varieties are Kent, Hill, Dare, Hood, Lee, Bragg, and Hampton. At Stoneville, Miss., where all maturity classes will mature, the approximate maturity dates of these varieties, when planted during the first half or May, are: Kent, September 8; Hill, September 20; Dare, October 1; Hood, October 8; Lee, October 16; Bragg, October 22; and Hampton, 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 five rather broad areas which still represent a wide range of soil types. These are: (1) the East Coast, consisting of the Coastal Plain and Tidewater areas of the Eastern Shore of Maryland, Virginia, North Carolina, and the upper half of South Carolina; (2) the Southeast, consisting primarily of the Coastal Plain soils of the Gulf Coast area, but also including similar soil from South Carolina southward; (3) the Upper and Central South, including the Piedmont and loessal hill soils east of the Mississippi River; (4) the Delta area, composed of the alluvial soils along the Mississippi River from southern Missouri, southward; and (5) the Southwest, comprising Arkansas and Louisiana (outside the Delta), and Oklahoma and Texas. In the Southwest area, the potential soybean-growing areas would include the alluvial river valley soils, the Gulf Coast of Louisiana and Texas, and the high plains of Texas. In this area, several of the tests receive supplemental irrigation. A map is included to illustrate the five production areas.

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

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES 1966



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

STRAIN IDENTIFICATION

The strains designated by number carry a letter prefix. This letter identifies wher 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 analysis, 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				Monmouth loamy fine sand					
Georgetown, Del.	1	1				Norfolk sandy loam	H	M	6.3	0-30-60	33.3 - G
Linkwood, Md.	1*	1*	1			Sassafras sandy loam					36.4 - B
Warsaw, Va.	1*	1*	1			Sassafras sandy loam	M	M	6.4	0-0-0	18.9 - B
Painter, Va.	1	1	1			Sassafras f. sandy loam	VH	H	5.5	0-0-0	44.3 - C
Petersburg, Va.		1	1*			Goldsboro f. sandy loam	VH	M-	6.0	0-0-0	38.7 - C
Norfolk, Va.		1	1			Woodstown sandy loam	VH	H	5.5	0-42-42	38.1 - C
Holland, Va.		1	1			Woodstown loam f. sandy	H	M	5.9	0-0-0	40.5 - A
Plymouth, N.C. [3]		1*	1*			Portsmouth f. sandy loam	H	H	6.0	0-40-80	38.8 - C
Rocky Mt., N.C. [3]				1		Norfolk sandy loam	H	H	6.2	0-40-80	35.9 - D
Willard, N.C.			1	1*		Norfolk f. sandy loam	VH	M	5.6	0-40-80	47.3 - C
Clayton, N.C. [3]			1	1		Norfolk sandy loam	VH	M	6.0	0-40-80	34.9 - D
Florence, S.C.				1	1*	Marlboro f. sandy loam				0-0-0	39.2 - D
Hartsville, S.C.(A)				1	1	Norfolk sandy loam				0-40-80	39.5 - D
Hartsville, S.C.(B)					1	Coxville sandy loam				0-40-80	44.9 - F
Southeast											
Blackville, S.C.(A)				1*	1	Norfolk sandy loam	VH	H-	6.0	0-30-60	29.8 - D
Blackville, S.C.(B)					1*	Norfolk sandy loam	VH	H-	6.0	0-30-60	31.4 - F
Tallassee, Ala.				1*	1	Cahaba loamy f. sand	H	H	6.0	0-42-42	29.6 - D
Tifton, Ga.				1	1	Tifton pebbly loam	H	M	6.3	0-60-120	36.9 - F
Live Oak, Fla.				1	1*	Klej fine sand	H	H	5.8	0-70-140	42.7 - H
Gainesville, Fla.				1*	1*	Arredonda fine sand	H	H	5.6	0-40-80	46.8 - H
Quincy, Fla.			1	1	1*	Norfolk loamy f. sand	H	H	6.7	20-60-60	43.2 - F
Marianna, Fla.				1	1	Ruston sandy loam				24-72-72	50.5 - D
Jay, Fla.			1*	1*	1*	Tifton f. sandy loam				0-70-70	41.8 - F
Fairhope, Ala.			1	1	1	Marlboro f. sandy loam				0-50-50	61.1 - F
Poplarville, Miss.				1	1	Sawyer f. sandy loam	L-	L-	6.5	0-80-80	42.0 - D
Baton Rouge, La.			1	1	1*	Olivier silt loam					
Upper & Central South											
Orange, Va.	1	1				Starr clay loam	M	M+	6.6	0-112-112	28.9 - G
Trenton, Ill.		1								0-0-0	45.2 - G
Eldorado, Ill.		1								14-42-14	59.4 - G

Location	Groups grown IV	V	VI	VII	VIII	Soil type	Soil analyses P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
Upper & Central South(cont'd)											
Princeton, Ky.	1	1					M	M	7.5	0-0-0	39.3 - A
Martin, Tenn.	1	1				Grenada silt loam					
Milan, Tenn.		1	1			Grenada silt loam	L	H	6.9	0-60-60	35.6 - C
Jackson, Tenn.		1	1			Grenada silt loam	H	H	7.1	0-65-125	31.7 - A
Belle Mina, Ala.		1	1			Decatur sandy loam				0-60-60	33.9 - A
Blairsville, Ga.	1	1				Hiwassee loam	M	M	6.5	0-70-70	38.8 - G
Clemson, S.C.				1		Cecil sandy loam	H+	M-	5.7	0-84-84	28.9 - D
Experiment, Ga.		1	1	1*	1*	Cecil sandy clay loam			6.2	20-60-60	44.1 - C
State College, Miss.		1	1	1		Verona fine sandy loam				0-60-60	42.3 - C
Delta											
Miller City, Ill.	1	1								0-0-0	37.8 - G
Henderson, Ky.	1	1				Falaya silt loam	H	L	5.9	0-90-90	53.0 - G
Hickman, Ky.		1				Commerce silt laom	H	H	6.9	0-0-0	44.4 - A
Portageville, Mo.(A)	1*	1*	1*			Salix silt loam				0-50-50	39.1 - B
Portageville, Mo.(B)	1*	1*	1*			Sharkey clay				0-50-50	38.0 - A
Keiser, Ark.(B)[3]	1	1*	1*			Sharkey clay	M	H	6.7	0-0-0	31.0 - C
Marianna, Ark.[3]	1	1	1			Richland silt loam	M	M	7.3	0-30-30	38.3 - C
Stoneville, Miss.(A)		1	1*	1*	1	Bosket f. sandy loam	M	H+	6.3	0-0-0	38.8 - C
Stoneville, Miss.(B)	1*	1*	1*	1*		Sharkey clay	H	M+	6.4	0-0-0	38.0 - I
St. Joseph, La.		1	1	1	1	Commerce sandy loam				0-0-0	56.0 - C
West											
Stuttgart, Ark.[3]		1	1	1		Crowley silt loam	VL	L	6.0	0-48-48	45.0 - C
Curtis, La.		1	1	1	1	Yahola f. sandy loam				0-0-0	44.0 - C
Bixby, Oka.[3]	1	1	1			Lonoke very f. sandy loam			7.4	0-0-0	27.6 - A
Dumas, Texas[3]	1	1									39.0 - J
Lubbock, Texas[3]		1	1			Amarillo f. sandy loam				0-0-0	28.9 - C
Crowley, La.			1	1	1	Crowley silt loam				0-60-30	52.8 - D
Beaumont, Texas				1	1	Beaumont clay				32-40-0	50.9 - D

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; J = Clark 63

3/ Irrigated as needed.

*preliminary nursery grown in addition 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 groups. Row widths at the different locations vary from 36 to 40 inches. An attempt was made to follow the best cultural and management practices in conducting these strain comparisons.

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

Planting Rate: All strains were packeted 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 seeds.

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

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

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

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

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

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 surround lesion
5 - leaves covered with lesions and much necrosis

B. Root and Stem

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

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

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

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 IVS

1966

	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 FC 33243	F_6
5.	S5	Scott with resistance to C.N. and P.R.	F_4
6.	D60-5818	Hill x D53-354	F_5
7.	D61-214	D54-3270 x D54-2437	F_5
8.	C1311	Wabash x C1069	F_6
9.	S63-2580	Lee x Scott	F_5
10.	S63-3277	Scott x Hill	F_5
11.	S63-6407	Scott(2) x Lee	F_5
12.	Patterson		

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.

FC 33243 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.

Twenty-two Group IVS nurseries were planted. Results of 17 nurseries are summarized in Tables 1 through 7, with Table 1 giving a general summary of agronomic qualitites, chemical composition of the seed, and field reaction to disease development. 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 included four named varieties, two strains evaluated 3 years or more, one strain tested 2 years, four strains advanced from the Preliminary IVS nursery, and one strain, S5, entered with no previous testing. S5 was developed by backcrossing. Scott was the recurrent parent in two breeding systems -- one to add resistance to cyst nematodes and the other to add resistance to phytophthora rot. The phytophthora-rot-resistant type was crossed with the cyst-nematode-resistant type and lines resistant to both diseases were selected. S5 is being increased for release and will be named. The mean yield for S5 was below the mean for Scott in each production region. It averaged 3 inches taller and 4 days earlier than Scott.

The two strains D60-5818 and D61-214, which have been grown 3 years, are superior to Kent in seed quality and shatter resistance and have greater disease resistance; but seed yields are no better than Kent. C1311, tested 2 years, shows no superiority over Kent. The three selections from Missouri are superior to Kent in nearly all qualities excpet yield. The variety Patterson, released for production in west Texas by the High Plains Research Foundation, was low in seed yield, susceptible to diseases, and lodged badly.

Table 1. - General summary of performance for the strains in Uniform Group IV, 1966

	Kent	Scott	Clark 63	Delmar	S5	D60-5818
Seed Yield - 1966						
East Coast	31.3	31.5	31.1	27.6	29.3	31.3
Upper & Central South	43.9	40.2	40.6	40.4	37.4	37.3
Delta	41.4	39.0	39.3	36.2	38.0	38.6
West	28.0	22.9	26.5	25.0	22.1	25.7
1965-66						
East Coast	34.7	34.3	32.5	33.4	--	34.1
Upper & Central South	41.4	40.1	38.3	39.7	--	39.6
Delta	37.2	35.8	35.1	32.4	--	36.7
1964-66						
East Coast	35.2	34.8	32.8	33.6	--	34.3
Upper & Central South	40.8	38.3	36.5	37.6	--	39.0
Delta	36.4	35.3	34.4	32.2	--	36.8
Oil Content - 1966	21.6	20.9-	21.6	21.5	22.0	20.7-
- 1965-66	21.9	21.7	22.0	22.2	--	21.2
- 1964-66	22.0	21.7	22.1	22.3	--	21.3
Protein Content - 1966	40.3	37.9-	40.6	40.4	37.4-	39.1-
- 1965-66	40.4	38.1	40.4	40.2	--	39.4
- 1964-66	40.4	38.2	40.4	39.9	--	39.6
Seed Size	16.4	14.1-	14.8-	14.9-	14.4-	13.5-
Maturity Index	10-1	+1	-7	+4	-3	-7
Seed Quality	2.4	2.4	2.5	2.0	2.5	2.0
Height	36	39	37	40	42	38
Shattering	3.5	1.7	1.0	1.0	2.0	1.0
Bacterial Pustule[1/]	3.0	1.0	1.0	3.0	1.0	1.0
Phytophthora Rot[1/]	2.0	2.0	1.0	2.5	1.0	1.0
Seed Coat Mottling(%)[2/]	31.3	3.3	21.7	18.7	1.0	7.7
Flower Color	P	P	P	W	P	W
Pubescence Color	T	G	T	G	G	G
Pod Wall Color	B	B	B	B	B	T

1/ Stoneville data
2/ Warsaw data

Table 1. - (continued)

	D61-214	C1311	S63-2580	S63-3277	S63-6407	Patterson
Seed Yield - 1966						
East Coast	29.4	32.4	30.6	31.2	31.4	28.7
Upper & Central South	38.9	42.8	39.4	41.0	40.1	37.2
Delta	36.1	40.9	39.8	40.7	42.1	36.0
West	27.9	27.1	25.8	28.4	28.4	24.4
1965-66						
East Coast	33.7	35.4				
Upper & Central South	38.7	39.5				
Delta	34.4	37.7				
1964-66						
East Coast	33.7					
Upper & Central South	37.3					
Delta	34.6					
Oil Content - 1966	21.3	21.6	21.3	22.0	20.9-	21.1
- 1965-66	21.9	22.0				
- 1964-66	21.9					
Protein Content - 1966	39.1-	40.7	39.2-	37.4-	39.7	39.3-
- 1965-66	39.3	40.6				
- 1964-66	39.1					
Seed Size	12.3-	14.7-	13.7-	14.7-	14.6-	13.7-
Maturity Index	+1	+1	+2	0	+1	-4
Seed Quality	2.0	2.2	2.1	2.1	2.2	2.5
Height	38	41	39	38	37	37
Shattering	1.0	3.0	1.0	1.0	1.0	2.3
Bacterial Pustule[1/]	1.0	3.0	1.0	1.0	1.0	4.0
Phytophthora Rot[1/]	1.0	2.0	1.0	1.0	1.0	2.5
Seed Coat Mottling(%)[2/]	2.7	4.3	6.3	0.7	15.0	51.0
Flower Color	W	W	P	P	P	W
Pubescence Color	G	G	G	G	G	G
Pod Wall Color	B	B	seg	B	T	T

Tabe 2. - Seed yield, in bushels per acre, for the strains in Uniform Group IV, 1966

Location	Kent	Scott	Clark 63	Delmar	S5	D60-5818	D61-214
East Coast							
Georgetown, Del.*	33.3	29.5	28.4	34.7	22.4	31.0	31.3
Linkwood, Md.	32.1	32.6	27.2-	29.6	31.8	32.7	27.0-
Painter, Va.	41.1	40.3	43.1	36.7	33.8-	39.4	40.7
Warsaw, Va.	20.7	21.7	23.0+	16.4-	22.4+	21.6	20.4
Mean	31.3	31.5	31.1	27.6	29.3	31.3	29.4
Upper and Central South							
Orange, Va.*	28.9	30.5	34.8	21.6	31.3	33.7	29.6
Blairsville, Ga.	38.8	26.5	28.2	39.5	20.8	30.0	30.2
Princeton, Ky.	38.8	38.6	41.2	37.2	34.0	22.6-	27.8-
Trenton, Ill.	45.3	44.0	41.1	42.5	40.6	43.3	43.4
Eldorado, Ill.	59.4	53.4-	54.2-	49.7-	51.4-	54.5-	57.2
Miller City, Ill.	37.8	38.6	38.4	32.7	40.3	36.2	36.0
Mean	43.9	40.2	40.6	40.4	37.4	37.3	38.9
Delta							
Henderson, Ky.	53.0	41.7-	53.0	48.2	44.1-	42.7-	38.6-
Portageville, Mo.(A)	43.7	42.0	39.7	37.9-	41.7	42.7	41.2
Portageville, Mo.(B)*	33.0	33.0	29.9	27.9	30.9	29.6	27.2
Keiser, Ark.*	18.9	19.7	15.9	18.9	18.0	22.1	22.2
Stoneville, Miss.(B)	35.7	39.1	34.7	30.8-	35.2	39.1	37.4
Mean	41.4	39.0	39.3	36.2	38.0	38.6	36.1
West							
Bixby, Okla.	16.8	15.5	13.9	14.4	17.3	18.9	20.8+
Dumas, Texas	39.1	30.4-	39.0	35.6	26.8-	32.4-	34.9-
Mean	28.0	22.9	26.5	25.0	22.1	25.7	27.9

* Not included in mean

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

Table 2. - (continued)

Location	C1311	S63-2580	S63-3277	S63-6407	Patterson	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.*	29.8	37.1	24.7	22.7	18.3	N.S.	22%
Linkwood, Md.	34.6	31.4	32.8	33.2	29.0	4.6	9%
Painter, Va.	41.6	38.2	40.2	39.2	35.5-	5.0	8%
Warsaw, Va.	21.0	22.2	20.6	21.7	21.7	1.4	4%
Mean	32.4	30.6	31.2	31.4	28.7	N.S.	
			Upper and Central South				
Orange, Va.*	37.8	30.3	31.1	30.8	29.8	N.S.	30%
Blairsville, Ga.	34.9	28.4	30.2	27.3	36.3	6.9	13%
Princeton, Ky.	35.7	34.6	32.6-	35.7	35.0	5.4	9%
Trenton, Ill.	46.8	41.2	43.8	47.0	40.3	N.S.	8%
Eldorado, Ill.	55.8	56.7	57.3	54.1-	50.7-	3.7	4%
Miller City, Ill.	41.0	36.3	41.3	36.5	23.5-	6.2	10%
Mean	42.8	39.4	41.0	40.1	37.2	N.S.	
			Delta				
Henderson, Ky.	50.3	43.8-	46.4-	51.2	49.4	6.4	8%
Portageville, Mo.(A)	41.8	42.1	42.5	40.2	38.9-	N.S.	6%
Portageville, Mo.(B)*	29.2	30.6	35.5	35.3	21.5	N.S.	23%
Keiser, Ark.*	22.7	29.1	27.1	22.2	16.6	N.S.	22%
Stoneville, Miss.(B)	42.4+	42.5+	38.6	41.8+	34.3	4.3	7%
Mean	40.9	39.8	40.7	42.1	36.0	N.S.	
			West				
Bixby, Okla.	15.4	20.6	21.5+	18.6	17.0	4.0	13%
Dumas, Texas	38.8	31.0-	35.2-	38.8	31.7-	3.8	18%
Mean	27.1	25.8	28.4	28.4	24.4	N.S.	

Table 3. - Chemical composition and seed size for the strains in Uniform Group IV, 1966

Location	Kent	Scott	Clark 63	Delmar	S5	D60-5818
			Oil Percentage			
Linkwood, Md.	21.3	21.5	21.9	22.3	23.1	20.9
Warsaw, Va.	21.7	21.8	21.2	20.2	22.4	19.8
Orange, Va.	22.5	21.5	22.3	21.7	22.5	21.5
Miller City, Ill.	21.1	19.0	20.2	19.2	20.0	18.2
Henderson, Ky.	21.7	19.9	20.9	20.0	20.9	19.7
Portageville, Mo.(A)	20.9	20.8	21.8	22.0	21.7	20.8
Keiser, Ark.	22.9	22.1	22.5	23.1	22.9	21.7
Stoneville, Miss.(B)	22.1	23.4	23.7	23.7	24.2	23.2
Bixby, Okla.	20.6	18.4	19.8	21.4	20.0	20.9
Mean	21.6	20.9-	21.6	21.5	22.0	20.7-
			Protein Percentage			
Linkwood, Md.	39.5	35.8	40.5	40.0	36.6	38.0
Warsaw, Va.	41.8	40.2	43.0	43.7	39.3	42.9
Orange, Va.	39.8	38.0	39.5	41.2	36.9	36.8
Miller City, Ill.	43.1	40.0	43.5	42.6	37.5	41.7
Henderson, Ky.	39.5	37.2	39.6	40.4	36.2	38.8
Portageville, Mo.(A)	39.7	37.3	39.4	38.3	36.0	37.9
Keiser, Ark.	38.9	36.6	39.2	37.4	37.2	37.9
Stoneville, Miss.(B)	38.3	35.1	36.9	37.6	35.3	35.8
Bixby, Okla.	41.9	41.1	43.9	42.4	41.5	41.9
Mean	40.3	37.9-	40.6	40.4	37.4-	39.1-
			Grams per 100 Seeds			
Linkwood, Md.	16.8	15.4	14.5	16.2	15.6	15.1
Warsaw, Va.	13.2	11.6	12.3	12.9	11.9	10.2
Orange, Va.	17.0	15.3	17.3	17.3	16.7	15.0
Miller City, Ill.	19.7	14.5	18.2	14.3	14.7	14.3
Henderson, Ky.	20.3	16.8	17.5	15.7	16.1	14.8
Keiser, Ark.	14.3	12.0	13.0	12.3	12.7	11.7
Stoneville, Miss.(B)	12.8	11.0	11.9	11.2	11.6	11.2
Bixby, Okla.	17.2	15.9	13.6	19.2	15.9	15.5
Mean	16.4	14.1-	14.8-	14.9-	14.4-	13.5-

Table 3. - (continued)

Location	D61-214	C1311	S63-2580	S63-3277	S63-6047	Patterson	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	20.8	22.8	23.0	23.2	21.8	21.4	
Warsaw, Va.	21.3	21.2	20.9	20.6	20.5	20.8	
Orange, Va.	22.6	22.0	21.7	23.4	22.1	22.5	
Miller City, Ill.	20.3	19.5	19.3	20.0	17.8	18.9	
Henderson, Ky.	20.4	21.0	20.1	21.1	19.7	19.5	
Portageville, Mo.(A)	20.1	21.8	20.1	21.5	20.9	21.6	
Keiser, Ark.	21.6	22.5	22.3	22.9	22.8	22.7	
Stoneville, Miss.(B)	23.5	23.7	23.7	24.3	22.8	22.8	
Bixby, Okla.	20.9	20.1	20.6	21.4	20.0	19.5	
Mean	21.3	21.6	21.3	22.0	20.9-	21.1	0.6
			Protein Percentage				
Linkwood, Md.	39.5	39.7	38.0	36.1	38.2	39.4	
Warsaw, Va.	39.6	41.6	41.6	40.9	42.2	41.5	
Orange, Va.	38.1	39.5	38.1	36.2	39.0	38.1	
Miller City, Ill.	41.0	45.5	41.5	38.9	42.2	43.4	
Henderson, Ky.	38.9	39.3	38.5	35.1	39.4	38.9	
Portageville, Mo.(A)	38.8	40.0	39.8	37.7	39.9	37.1	
Keiser, Ark.	38.8	38.8	38.0	36.6	38.4	36.7	
Stoneville, Miss.(B)	36.1	37.7	36.1	35.2	36.6	36.2	
Bixby, Okla.	40.7	44.6	40.9	40.1	41.0	42.4	
Mean	39.1-	40.7	39.2-	37.4-	39.7	39.3-	0.8
			Grams per 100 Seeds				
Linkwood, Md.	12.4	15.1	14.9	16.6	15.7	15.6	
Warsaw, Va.	8.8	10.9	10.6	10.2	11.8	11.5	
Orange, Va.	14.0	16.0	16.7	16.0	16.3	14.0	
Miller City, Ill.	12.5	17.9	14.0	16.3	15.6	15.0	
Henderson, Ky.	14.4	17.2	15.6	17.6	16.2	16.8	
Keiser, Ark.	11.3	12.0	12.0	12.7	12.7	10.7	
Stoneville, Miss.(B)	10.2	12.8	11.4	12.4	12.2	11.9	
Bixby, Okla.	15.1	15.3	14.6	16.3	16.0	14.4	
Mean	12.3-	14.7-	13.7-	14.7-	14.6-	13.7-	1.0

Table 4. - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV, 1966

Location	Date planted	Kent matured	Scott	Clark 63	Delmar	S5
		East Coast				
Georgetown, Del.	6-7	10-12	0	-5	0	0
Linkwood, Md.	6-2	10-5	+2	-16	+2	-6
Warsaw, Va.	5-17	9-19	-1	-7	+7	-3
Mean		10-2	0	-9	+3	-3
		Upper and Central South				
Orange, Va.	5-18	9-25	+1	-5	+15	-2
Blairsville, Ga.	5-30	9-23	0	-3	+1	-1
Princeton, Ky.	5-11	10-2	-5	-10	-1	-6
Trenton, Ill.	6-4	10-13	+4	-8	+7	-1
Eldorado, Ill.	5-31	10-9	+2	-8	+3	0
Miller City, Ill.	6-4	10-8	+2	-8	+1	-2
Mean		10-3	0	-7	+4	-2
		Delta				
Henderson, Ky.	6-2	10-17	+9	-5	+9	-5
Portageville, Mo.(A)	5-21	10-1	+2	-7	+3	-5
Portageville, Mo.(B)		10-8	-1	-11	+1	-4
Keiser, Ark.	5-11	9-24	+3	0	+2	+1
Stoneville, Miss.(B)	5-11	9-8	+1	-6	+3	0
Mean		9-30	+3	-6	+4	-3
		West				
Bixby, Okla.	5-19	9-27	0	-10	+9	0

Table 4. - (continued)

Location	D60-5818	D61-214	C1311	S63-2580	S63-3277	S63-6407	Patterson
			East Coast				
Georgetown, Del.	+3	-1	+2	+1	-1	0	-5
Linkwood, Md.	+3	-1	+3	+1	+1	+3	-12
Warsaw, Va.	+4	+1	+5	0	+2	-1	-7
Mean	+3	0	+3	0	0	0	-8
			Upper and Central South				
Orange, Va.	+10	+5	+15	+8	-1	-1	-5
Blairsville, Ga.	+2	+1	+3	0	+2	0	-3
Princeton, Ky.	-2	-6	-4	-5	-5	-4	-17
Trenton, Ill.	+4	+1	-2	+3	+3	+5	-3
Eldorado, Ill.	+2	+2	-5	+2	-2	+1	-8
Miller City, Ill.	+3	+2	-3	+3	+2	+2	-8
Mean	+3	0	0	+2	0	0	-7
			Delta				
Henderson, Ky.	+9	+9	+9	+9	+9	+9	-5
Portageville, Mo.(A)	+2	+3	0	+2	-4	+3	-7
Portageville, Mo.(B)	+1	-3	0	-3	-3	-2	-9
Keiser, Ark.	+3	+1	+2	+2	+1	+1	0
Stoneville, Miss.(B)	+5	+2	0	+3	+1	+3	-4
Mean	+4	+3	+2	+3	0	+3	-5
			West				
Bixby, Okla.	+4	0	-6	-2	-3	-1	-13

Table 5. - Plant height for the strains in Uniform Group IV, 1966

Location	Kent	Scott	Clark 63	Delmar	S5	D60-5818
			East Coast			
Georgetown, Del.	29	32	27	34	31	35
Linkwood, Md.	36	39	39	41	47	40
Painter, Va.	38	43	42	42	50	41
Warsaw, Va.	30	34	33	36	39	35
Mean	33	37	35	38	42	38
			Upper and Central South			
Orange, Va.	33	40	36	35	42	39
Blairsville, Ga.	34	35	33	36	36	35
Princeton, Ky.	33	37	37	40	38	32
Trenton, Ill.	42	42	42	46	47	41
Eldorado, Ill.	47	51	46	49	52	48
Miller City, Ill.	44	48	46	48	52	43
Mean	39	42	40	42	45	40
			Delta			
Henderson, Ky.	44	45	45	48	43	44
Portageville, Mo.(A)	41	50	42	52	50	45
Portageville, Mo.(B)	34	40	33	35	41	34
Keiser, Ark.	22	23	22	29	25	26
Stoneville, Miss.(B)	38	41	39	43	45	45
Mean	36	40	36	41	41	39
			West			
Bixby, Okla.	27	29	24	29	34	26

Table 5. - (continued)

Location	D61-214	C1311	S63-2580	S63-3277	S63-6407	Patterson
			East Coast			
Georgetown, Del.	32	36	33	31	29	27
Linkwood, Md.	43	39	41	39	42	39
Painter, Va.	44	44	40	42	42	41
Warsaw, Va.	33	34	34	37	35	33
Mean	38	38	37	37	35	35
			Upper and Central South			
Orange, Va.	35	44	39	33	34	37
Blairsville, Ga.	31	37	35	35	34	34
Princeton, Ky.	33	36	37	35	35	34
Trenton, Ill.	43	46	43	43	43	46
Eldorado, Ill.	51	50	48	49	48	50
Miller City, Ill.	45	48	47	46	46	37
Mean	40	44	42	40	40	40
			Delta			
Henderson, Ky.	40	50	42	46	42	47
Portageville, Mo.(A)	44	52	49	44	46	45
Portageville, Mo.(B)	32	37	34	36	40	29
Keiser, Ark.	24	29	25	27	21	24
Stoneville, Miss.(B)	41	46	39	43	42	45
Mean	36	43	38	39	38	38
			West			
Bixby, Okla.	31	27	32	29	30	28

Table 6. - Lodging scores for the strains in Uniform Group IV, 1966

Location	Kent	Scott	Clark 63	Delmar	S5	D60-5818
			East Coast			
Georgetown, Del.	1.7	3.0	2.3	2.0	3.0	3.0
Linkwood, Md.	1.1	1.4	1.1	1.1	1.4	1.3
Painter, Va.	1.3	3.0	1.8	2.2	2.5	2.0
Warsaw, Va.	1.0	1.3	1.1	1.2	1.3	1.2
			Upper and Central South			
Orange, Va.	1.3	2.0	2.0	1.3	1.7	2.0
Blairsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Princeton, Ky.	1.0	2.0	2.0	1.0	1.0	1.0
Trenton, Ill.	2.6	3.4	2.5	3.0	3.6	3.2
Eldorado, Ill.	1.7	2.0	2.4	1.5	2.4	2.1
Miller City, Ill.	1.8	2.1	2.6	2.9	3.4	2.4
			Delta			
Henderson, Ky.	1.0	1.0	1.0	1.0	1.0	1.0
Portageville, Mo.(A)	1.7	2.0	2.0	1.3	2.7	2.7
Portageville, Mo.(B)	1.3	2.0	1.7	1.7	2.0	1.3
Keiser, Ark.	1.7	2.0	2.0	1.0	3.7	2.3
Stoneville, Miss.(B)	1.7	2.0	2.0	2.0	2.7	1.7
			West			
Bixby, Okla.	1.0	1.0	1.0	1.0	2.0	1.0

Table 6. - (continued)

Location	D61-214	C1311	S63-2580	S63-3277	S63-6407	Patterson
			East Coast			
Georgetown, Del.	3.0	2.7	3.0	2.3	2.3	3.7
Linkwood, Md.	1.3	1.2	1.3	1.2	1.4	1.3
Painter, Va.	3.0	1.3	1.6	2.2	2.5	3.2
Warsaw, Va.	1.3	1.0	1.3	1.1	1.2	1.3
			Upper and Central South			
Orange, Va.	2.7	1.0	2.0	1.0	1.3	1.7
Blairsville, Ga.	1.0	1.0	1.0	1.0	1.0	2.7
Princeton, Ky.	2.0	1.0	2.0	1.0	2.0	2.0
Trenton, Ill.	3.9	2.9	3.7	2.4	3.3	3.2
Eldorado, Ill.	2.4	2.7	2.1	1.3	1.8	2.8
Miller, City, Ill.	2.3	2.5	2.6	1.3	2.8	2.2
			Delta			
Henderson, Ky.	1.0	1.0	1.0	1.0	1.0	1.7
Portageville, Mo.(A)	3.0	1.0	2.0	1.0	2.0	2.7
Portageville, Mo.(B)	1.3	1.0	1.7	1.3	2.0	1.0
Keiser, Ark.	2.3	1.7	2.0	1.0	2.7	3.0
Stoneville, Miss.(B)	2.7	2.0	2.0	1.7	2.0	4.0
			West			
Bixby, Okla.	1.0	1.0	2.0	1.0	1.0	1.0

Table 7. - Seed quality scores for the strains in Uniform Group IV, 1966

Location	Kent	Scott	Clark 63	Delmar	S5	D60-5818
			East Coast			
Georgetown, Del.	1.7	3.0	3.3	1.3	4.7	2.0
Linkwood, Md.	3.0	3.0	3.0	3.0	3.0	2.7
Painter, Va.	2.5	2.0	2.8	1.6	1.8	1.6
Warsaw, Va.	2.2	2.6	2.4	2.6	2.4	2.8
			Upper and Central South			
Orange, Va.	2.7	3.0	1.3	3.7	2.0	3.3
Blairsville, Ga.	2.3	1.3	1.7	1.0	1.3	1.7
Princeton, Ky.	2.0	2.0	2.0	3.0	2.0	3.0
Trenton, Ill.	1.5	1.7	1.5	1.5	1.5	1.5
Eldorado, Ill.	2.0	1.8	2.2	1.3	2.2	1.0
Miller City, Ill.	2.2	2.3	2.8	1.7	2.3	1.5
			Delta			
Henderson, Ky.	2.2	1.2	1.5	1.0	1.3	1.2
Portageville, Mo.(A)	2.7	3.0	4.0	2.3	3.0	2.7
Portageville, Mo.(B)	3.0	3.0	2.3	1.7	2.7	2.0
Keiser, Ark.	3.3	3.3	4.0	3.0	3.7	2.7
Stoneville, Miss.(B)	2.3	2.3	2.0	3.0	3.0	2.0
			West			
Bixby, Okla.	2.0	2.0	2.0	2.0	2.0	2.0

Table 7. - (continued)

Location	D61-214	C1311	S63-2580	S63-3277	S63-6407	Patterson
			East Coast			
Georgetown, Del.	2.0	1.7	2.0	3.3	2.3	3.3
Linkwood, Md.	3.0	3.0	2.0	3.0	3.0	3.0
Painter, Va.	2.0	1.8	2.3	1.6	2.3	2.5
Warsaw, Va.	2.0	2.4	2.2	2.4	2.6	2.4
			Upper and Central South			
Orange, Va.	3.7	4.0	2.3	3.0	2.3	2.3
Blairsville, Ga.	1.3	2.0	2.0	1.3	1.0	2.0
Princeton, Ky.	2.0	3.0	2.0	3.0	2.0	2.0
Trenton, Ill.	1.5	1.5	1.5	1.7	1.5	2.0
Eldorado, Ill.	1.5	1.2	1.2	1.3	1.3	1.8
Miller City, Ill.	1.7	1.7	1.7	1.7	2.0	2.8
			Delta			
Henderson, Ky.	1.0	1.0	1.2	1.0	1.0	1.8
Portageville, Mo.(A)	2.7	2.0	3.0	2.3	3.0	3.0
Portageville, Mo.(B)	1.0	2.3	2.7	2.3	3.0	2.7
Keiser, Ark.	2.7	2.7	2.7	3.3	3.3	3.3
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.3
			West			
Bixby, Okla.	2.0	3.0	2.0	2.0	2.0	2.0

PRELIMINARY GROUP IVS

1966

Four Preliminary Group IVS nurseries,including 33 experimental strains and the varieties Kent, Delmar, and Scott, were grown. A single row of each of these strains was grown for observation at two Illinois locations. The parentage of these strains is reported in Table 8. Performance data are summarized in Table 9 through 14.

Nearly all strains of Group IV maturity, which have been grown in previous tests, have had an indeterminate growth type. Thirty of the 33 experimental strains have a determinate growth type. All of these lines had been selected for late flowering, so as to obtain adequate height. The three indeterminate type strains were from the backcrossing program to convert D49-2491 to an earlier maturing type.

The combined analysis of variance for seed yield did not show any of the determinate type strains to be superior in yield to Kent at the 5 percent level of significance, but 12 strains did have a higher average mean seed yield than Kent. All were superior in seed holding, all produced superior quality seed, and all were resistant to bacterial pustule and phytophthora rot. Twelve were nearly free of seed coat mottling. All were lower in oil content than Kent.

Eight strains appear to have sufficient merit to be advanced to Group IVS. These are: D64-3146, D65-2262, D65-2276, D65-2284, D65-2291, D65-2304, D65-2367, and D65-2385.

Table 8. - Parentage of the strains in Preliminary Group IV, 1966

	Variety or strain	Parentage	Generation composited
1.	Kent		
2.	Delmar		
3.	Scott		
4.	D64-3129	D49-2491(5) x Hawkeye	F_4
5.	D64-3146	D49-2491(5) x Hawkeye	F_4
6.	D64-3077	D49-2491(5) x Hawkeye	F_4
7.	D65-2262	D54-2437 x PI 261,467	F_5
8.	D65-2267	D54-2437 x PI 261,467	F_5
9.	D65-2272	D54-2437 x PI 261,467	F_5
10.	D65-2276	D54-2437 x PI 261,467	F_5
11.	D65-2284	D54-2437 x PI 261,467	F_5
12.	D65-2285	D54-2437 x PI 261,467	F_5
13.	D65-2291	D54-2437 x PI 261,467	F_5
14.	D65-2296	D54-2437 x PI 261,467	F_5
15.	D65-2304	D54-2437 x PI 171,450	F_5
16.	D65-2306	D54-2437 x PI 171,450	F_5
17.	D65-2312	D54-2437 x PI 171,450	F_5
18.	D65-2313	D54-2437 x PI 171,450	F_5
19.	D65-2317	D54-2437 x PI 171,450	F_5
20.	D65-2325	D54-2437 x PI 171,450	F_5
21.	D65-2330	D54-2437 x PI 171,450	F_5
22.	D65-2335	D54-2437 x PI 171,450	F_5
23.	D65-2342	D54-2437 x PI 171,450	F_5
24.	D65-2352	D54-2437 x PI 171,450	F_5
25.	D65-2356	D54-2437 x PI 171,450	F_5
26.	D65-2367	D54-2437 x PI 171,450	F_5
27.	D65-2371	D54-2437 x PI 171,450	F_5
28.	D65-2375	D54-2437 x PI 171,450	F_5
29.	D65-2380	D54-2437 x PI 171,450	F_5
30.	D65-2385	D54-2437 x PI 171,450	F_5
31.	D65-2387	D54-2437 x PI 171,450	F_5
32.	D65-2391	D54-2437 x PI 171,450	F_5
33.	D65-2393	D54-2437 x PI 171,450	F_5
34.	D65-2402	D54-2437 x PI 171,450	F_5
35.	D65-2413	D54-2437 x PI 171,450	F_5
36.	D65-2434	D54-2437 x PI 171,450	F_5

Table 9. - General summary of performance for the strains grown in Preliminary Group IV, 1966

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Seed quality	Shatter[1]	P.R.[1]	% seed mottled[2]
Kent	27.6	9-29	34	22.3	39.4	3.0	4.0	2.5	13.0
Delmar	27.4	+8	35	23.1	38.2-	2.8	1.5	2.5	7.5
Scott	32.2+	+3	40	22.3	36.5-	3.0	2.5	2.0	1.5
D64-3129	31.3	-8	48	22.4	40.5	2.5	1.5	1.0	27.0
D64-3146	31.7	-3	37	21.7	40.5	2.1	1.5	1.0	10.0
D64-3077	29.0	-13	37	21.9	40.4	2.5	3.0	2.0	12.5
D65-2262	31.5	+5	31	20.6-	38.5	1.7	1.0	1.0	0.0
D65-2267	25.1	-16	20	21.0-	39.4	2.1	4.0	1.0	1.5
D65-2272	27.5	+2	33	20.9-	38.7	2.0	1.0	1.0	0.0
D65-2276	28.7	+6	37	20.0-	38.6	2.2	1.5	1.0	1.5
D65-2284	29.9	+7	33	20.7-	38.7	1.8	1.5	1.0	0.5
D65-2285	27.3	+5	34	20.3-	38.7	1.9	1.0	1.0	0.0
D65-2291	28.2	-1	33	21.2-	38.2-	2.1	1.5	1.0	2.5
D65-2296	27.9	+7	34	20.3-	39.6	2.1	1.5	1.0	0.5
D65-2304	28.2	-4	32	18.1-	41.0+	1.8	1.0	1.0	18.5
D65-2306	25.8	+7	26	18.5-	41.9+	1.9	2.5	1.0	0.0
D65-2312	27.0	+7	34	17.5-	41.2+	1.7	2.5	1.0	9.5
D65-2313	25.5	-5	28	18.2-	40.0	1.7	4.5	1.0	3.5
D65-2317	25.3	+3	35	16.6-	41.7+	1.7	2.0	1.0	11.0
D65-2325	27.0	-5	30	17.3-	41.3+	1.9	3.0	1.0	10.0
D65-2330	24.8	+6	25	16.4-	42.1+	2.0	1.0	1.0	3.5
D65-2335	31.5	-5	29	19.9-	39.4	1.7	4.0	1.0	7.0
D65-2342	27.5	-9	26	18.9-	38.8	1.9	3.5	1.0	13.5
D65-2352	27.7	+4	28	17.5-	40.2	1.7	1.0	1.0	5.5
D65-2356	25.9	+5	41	17.9-	42.0+	1.9	1.0	1.0	20.0
D65-2367	28.8	+5	28	17.8-	40.2	2.0	1.5	1.0	3.5
D65-2371	24.0	+10	36	18.0-	38.9	1.9	1.5	1.0	28.0
D65-2375	26.2	+3	33	17.2-	42.7+	1.6	1.5	1.0	8.5
D65-2380	25.5	+4	34	17.4-	40.6+	1.8	2.5	1.0	13.0
D65-2385	27.5	+3	31	18.3-	39.9	2.2	1.0	1.0	6.0
D65-2387	27.0	+4	33	18.4-	40.1	2.1	2.0	1.0	5.0
D65-2391	25.7	+6	35	16.9-	40.6+	1.7	1.0	1.0	4.5
D65-2393	26.8	-6	27	18.8-	41.2+	1.9	1.0	1.0	14.5
D65-2402	25.3	-5	24	19.5-	38.9	2.0	1.5	1.0	22.0
D65-2413	26.3	+6	32	17.1-	41.4+	1.8	2.5	1.0	10.5
D65-2434	27.4	+6	32	16.3-	42.1+	2.1	1.0	1.0	13.0
L.S.D.(.05)	4.2			0.9	1.2				
L.S.D.(.01)	5.5			1.2	1.7				

1/ Stoneville data.
2/ Warsaw data.

Table 10. - Seed yield, in bushels per acre, for the strains in Preliminary Group IV, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.	Eldorado,* Ill.
Kent	29.0	18.7	31.9	30.7	51.2
Delmar	24.4	24.3	--	28.8	--
Scott	32.8	21.4	40.7	33.7	58.6
D64-3129	30.3	23.9+	36.5	34.5	57.8
D64-3146	32.7	23.1+	29.5	41.4+	56.0
D64-3077	28.3	20.2	39.4	28.1	31.5
D65-2262	28.2	17.5	38.5	41.7+	64.2
D65-2267	21.7-	27.2+	28.0	27.9	47.5
D65-2272	23.7	15.8	32.6	38.0+	42.9
D65-2276	24.2	17.2	33.7	39.6+	44.4
D65-2284	28.9	17.0	36.0	37.7+	52.2
D65-2285	22.8	19.2	32.4	34.6	39.9
D65-2291	26.2	16.0	32.3	38.3+	47.3
D65-2296	23.4	18.1	36.8	33.4	55.1
D65-2304	27.0	19.0	28.6	38.3+	40.4
D65-2306	26.4	17.3	31.2	28.3	45.6
D65-2312	26.0	18.5	29.1	34.3	47.7
D65-2313	18.2-	21.4	29.8	32.8	34.7
D65-2317	21.2-	15.4	32.0	32.6	44.6
D65-2325	23.7	21.5	27.8	34.9	43.1
D65-2330	21.4-	16.1	29.8	31.6	41.0
D65-2335	29.8	23.1+	35.3	37.8+	49.5
D65-2342	26.2	18.0	31.7	34.0	41.8
D65-2352	21.0-	16.7	31.1	42.0+	44.7
D65-2356	24.0	16.2	30.6	32.6	43.5
D65-2367	27.4	17.7	32.9	37.3+	44.2
D65-2371	23.8	14.6-	27.6	30.0	38.0
D65-2375	24.9	15.7	32.7	31.5	49.7
D65-2380	23.0	15.9	28.7	34.3	37.1
D65-2385	25.2	16.2	31.8	37.0+	43.4
D65-2387	22.4	16.3	32.0	37.2+	47.6
D65-2391	23.8	15.2-	30.7	33.2	47.2
D65-2393	25.2	15.7	34.9	31.3	46.3
D65-2402	26.6	16.4	28.7	29.7	47.8
D65-2413	22.2	17.2	31.6	34.2	37.8
D65-2434	25.2	16.4	30.1	38.0+	45.3
L.S.D.(.05)	7.0	3.5	N.S.	4.9	--
C.V.	14%	9%	12%	7%	--

*Not included in mean, single row, one replication grown.

Table 11. - Oil percentages for the strains in Preliminary Group IV, 1966

Strain	Linkwood, Md.	Portageville, Mo.	Stoneville, Miss.
Kent	23.0	21.6	22.4
Delmar	23.8	--	23.9
Scott	22.8	20.5	23.6
D64-3129	23.2	20.7	23.3
D64-3146	22.1	20.8	22.3
D64-3077	22.2	20.8	22.6
D65-2262	20.8	19.5	21.5
D65-2267	21.1	20.1	21.9
D65-2272	21.5	19.8	21.3
D65-2276	20.6	18.5	21.0
D65-2284	20.7	19.5	22.0
D65-2285	20.0	19.1	21.7
D65-2291	21.7	19.6	22.2
D65-2296	20.8	18.5	21.5
D65-2304	19.6	15.1	19.5
D65-2306	18.5	17.0	19.9
D65-2312	17.6	16.7	18.3
D65-2313	19.3	16.8	18.4
D65-2317	17.5	16.4	15.8
D65-2325	16.8	16.9	18.3
D65-2330	17.8	15.0	16.4
D65-2335	20.0	19.3	20.5
D65-2342	19.2	18.0	19.6
D65-2352	18.3	16.5	17.6
D65-2356	18.3	16.6	18.8
D65-2367	18.8	16.7	18.0
D65-2371	18.7	16.9	18.3
D65-2375	17.9	16.2	17.4
D65-2380	18.2	16.1	17.8
D65-2385	19.0	17.1	18.8
D65-2387	18.6	17.3	19.4
D65-2391	17.9	15.6	17.1
D65-2393	19.9	17.5	19.1
D65-2402	19.6	18.7	20.1
D65-2413	17.6	16.1	17.5
D65-2434	17.3	15.2	16.5

Table 12. - Protein percentages for the strains in Preliminary Group IV, 1966

Strain	Linkwood, Md.	Portageville, Mo.	Stoneville, Miss.
Kent	38.7	40.1	39.5
Delmar	37.5	--	37.1
Scott	36.2	38.1	35.3
D64-3129	39.6	42.1	39.7
D64-3146	40.0	41.9	39.7
D64-3077	40.5	41.5	39.3
D65-2262	37.7	39.3	38.5
D65-2267	40.1	39.3	38.8
D65-2272	36.8	39.9	39.3
D65-2276	37.2	39.4	39.3
D65-2284	38.4	39.3	38.5
D65-2285	37.7	39.9	38.6
D65-2291	37.7	39.4	37.6
D65-2296	38.7	40.2	39.9
D65-2304	41.2	41.7	40.0
D65-2306	41.7	42.6	41.4
D65-2312	40.9	41.2	41.5
D65-2313	38.9	40.4	40.7
D65-2317	41.5	41.3	42.3
D65-2325	41.6	41.9	40.5
D65-2330	41.7	42.0	42.7
D65-2335	40.1	39.6	38.6
D65-2342	39.6	38.7	38.1
D65-2352	40.0	40.0	40.6
D65-2356	41.8	43.8	40.4
D65-2367	39.8	40.8	40.0
D65-2371	37.4	39.4	39.9
D65-2375	42.3	43.0	42.7
D65-2380	40.6	40.4	40.9
D65-2385	39.6	39.9	40.3
D65-2387	39.6	40.5	40.2
D65-2391	41.1	40.3	40.5
D65-2393	40.4	42.4	40.7
D65-2402	39.2	39.5	38.1
D65-2413	41.0	41.7	41.5
D65-2434	42.1	42.7	41.6

Table 13. - Plant height for the strains in Preliminary Group IV, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.	Eldorado, Ill.
Kent	36	30	34	26	42
Delmar	38	35	--	33	--
Scott	46	34	38	32	50
D64-3129	50	41	47	41	63
D64-3146	40	32	35	33	44
D64-3077	38	33	39	29	44
D65-2262	32	28	31	27	37
D65-2267	20	20	18	16	26
D65-2272	34	32	33	27	38
D65-2276	38	33	37	32	44
D65-2284	34	29	32	27	44
D65-2285	39	30	34	29	40
D65-2291	30	34	31	29	40
D65-2296	33	34	32	28	44
D65-2304	28	32	34	25	39
D65-2306	27	24	26	21	32
D65-2312	38	26	32	26	47
D65-2313	23	28	30	19	41
D65-2317	32	37	39	31	38
D65-2325	29	33	29	24	36
D65-2330	24	26	25	20	30
D65-2335	30	28	29	24	33
D65-2342	26	24	30	19	32
D65-2352	30	29	27	26	30
D65-2356	45	38	40	36	45
D65-2367	30	27	27	23	35
D65-2371	39	32	32	30	45
D65-2375	36	31	32	27	38
D65-2380	34	33	34	30	39
D65-2385	32	28	31	29	34
D65-2387	34	28	35	29	38
D65-2391	36	32	36	29	44
D65-2393	26	23	30	18	39
D65-2402	28	22	25	18	29
D65-2413	29	32	35	28	38
D65-2434	31	29	31	28	40

Table 14. - Seed quality scores for the strains in Preliminary Group IV, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Portageville, Mo.	Stoneville, Miss.	Eldorado, Ill.
Kent	3.0	3.5	3.0	3.0	2.5
Delmar	3.0	3.0	---	2.5	---
Scott	3.0	3.0	3.5	3.0	2.5
D64-3129	2.0	3.5	3.0	2.0	2.0
D64-3146	2.0	2.6	2.5	2.0	1.5
D64-3077	3.0	3.0	2.5	2.5	1.5
D65-2262	2.0	2.6	1.0	2.0	1.0
D65-2267	3.0	2.6	2.0	2.0	1.0
D65-2272	2.0	3.5	1.0	2.0	1.5
D65-2276	2.0	3.0	2.0	2.0	2.0
D65-2284	2.0	2.6	1.5	2.0	1.0
D65-2285	2.0	2.3	1.5	2.0	1.5
D65-2291	2.0	3.5	1.5	2.0	1.5
D65-2296	2.0	3.5	2.0	2.0	1.0
D65-2304	2.0	2.3	1.5	2.0	1.0
D65-2306	2.0	2.6	2.0	2.0	1.0
D65-2312	2.0	2.3	1.0	2.0	1.0
D65-2313	2.0	1.8	1.5	2.0	1.0
D65-2317	2.0	2.3	1.0	2.0	1.0
D65-2325	2.0	3.4	1.0	2.0	1.0
D65-2330	2.0	2.3	2.0	2.0	1.5
D65-2335	2.0	1.8	1.5	2.0	1.0
D65-2342	3.0	1.8	1.5	2.0	1.0
D65-2352	2.0	2.0	1.5	2.0	1.0
D65-2356	2.0	2.6	2.0	2.0	1.0
D65-2367	2.0	2.3	2.0	2.0	1.5
D65-2371	2.0	2.0	2.0	2.0	1.5
D65-2375	2.0	2.0	1.0	2.0	1.0
D65-2380	2.0	2.6	1.5	2.0	1.0
D65-2385	2.0	2.6	2.5	2.0	2.0
D65-2387	2.0	3.0	2.5	2.0	1.0
D65-2391	2.0	2.0	1.5	2.0	1.0
D65-2393	2.0	2.6	2.0	2.0	1.0
D65-2402	3.0	2.0	2.0	2.0	1.0
D65-2413	2.0	2.0	2.0	2.0	1.0
D65-2434	2.0	3.5	2.0	2.0	1.0

UNIFORM GROUP V

1966

	Variety or strain	Parentage	Generation composited
1.	Hill	D632-15 x D49-2525	F_5
2.	Dare	Hill x D52-810	F_5
3.	D61-901	Hill(2) x D51-4877	F_5
4.	N59-6913	Hill x D52-810	F_5
5.	V61-20	Dorman x Hood	
6.	D63-7320	Hill x [Lee(2) x Peking]	F_6
7.	R62-550	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_4
8.	R64-500	Hill(6) x Arksoy	F_3
9.	D63-6087	Hill(4) x PI 171,442	F_4
10.	R62-659	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_4
11.	R63-190	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5
12.	UD61-1806	FC 33243 x D49-2491	

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 and D49-2491 are sister strains 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 through 1956.

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

PI 171,442 is an introduction from China highly resistant to phytophthora rot and downy mildew.

Dortchsoy 110 is a short, lodging-resistant strain selected from Ogden x Wabash.

FC 33243 is a strain of IV maturity which has proved highly resistant to root-knot nematodes in Delaware.

Thirty-five Uniform Group V nurseries were planted. Results of 31 nurseries are summarized in Table 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. The strain N59-6972, which became Dare, had been tested in Group VI. In 1966, Dare was shifted to Group V. In comparing performance of D59-693 in Group V with N59-6972 in Group VI, the seed yield of the two strains appeared very similar. Since performance of the two strains had been similar, data for D59-693 was averaged with 1966 data for Dare to obtain 2- and 3-year means.

Seed yield differences among strains were significant at the 5 percent level of significance at 20 of the 31 locations summarized. The combined analysis of variance for mean seed yields by production regions showed differences among strains to be significant at the 5 percent level of confidence in each of the production regions.

Three strains, D61-901, N59-6913, and V61-20, have been evaluated three seasons. D61-901 is a taller type, but the additional height does not appear to help its productivity. N59-6913 is slightly earlier than Dare. It has yielded very well. V61-20 is among the later maturing strains in the group. It has yielded very well in the East Coast tests. V61-20 will be increased for release in Virginia, North Carolina, and Maryland.

D63-7320 has been included 2 years. D63-7320 is highly resistant to cyst nematodes and root-knot nematodes. This strain will be released in Missouri and Tennessee for production on cyst-nematode-infested soils. Many of these soils are also infested with root-knot nematodes. D63-7320 is less resistant to phytophthora rot and to shattering than Hill.

R62-550 has also been grown 2 years. It has yielded well, but has not been superior to Dare.

Five strains were evaluated only 1 year. R64-500 and D63-6087 are very similar to Hill. D64-500 has resistance to phytophthora rot transferred by backcrossing with Arksoy as the donor parent. Seed yield was significantly below Hill in the Upper and Central region but equal in other regions. D63-6087 has PI 171,442 as the donor parent to contribute higher resistance to phytophthora rot and downy mildew. Only three backcrosses had been made. Mean seed yields averaged below Hill in each production area. R62-659 and R63-190 were of Dare maturity. R62-659 yielded especially well in the Western region. UD61-1806 has an indeterminate growth type and makes rank growth with very heavy stems. It averaged 2 days later in maturity than Dare and averaged lower in seed yield.

Table 15. - General summary of performance for the strains in Uniform Group V, 1966

	Hill	Dare	D61-901	N59-6913	V61-20	D63-7320
Seed Yield - 1966						
East Coast	30.9	34.1+	31.4	35.1+	34.7+	30.9
Upper & Central South	34.3	36.8	34.2	32.6	38.4+	33.1
Delta	38.5	41.0	39.1	40.0	40.1	36.1
West	36.8	39.3	39.0	40.9	39.4	33.9
- 1965-66						
East Coast	33.2	35.9*	34.5	36.9	37.6	32.4
Upper & Central South	36.3	39.9*	36.1	37.2	39.9	34.5
Delta	35.9	40.9*	35.7	38.3	37.6	33.5
West	37.1	38.7*	39.2	39.6	39.5	33.3
- 1964-66						
East Coast	33.9	36.4*	35.2	37.6	38.8	
Upper & Central South	35.0	37.0*	34.5	35.6	38.3	
Delta	36.3	38.5*	35.9	37.7	37.5	
West	37.0	37.5*	37.8	38.9	38.6	
Oil Content - 1966	21.0	21.8+	20.4-	20.2-	20.6	20.3-
- 1965-66	21.4	21.7*	20.9	20.8	21.2	20.9
- 1964-66	21.3	21.9*	20.9	20.8	21.2	
Protein Content - 1966	38.6	38.3	38.5	39.1	38.7	39.5+
- 1965-66	39.2	39.5*	39.1	39.5	39.1	40.2
- 1964-66	39.4	39.5*	39.0	39.7	38.9	
Seed Size	12.6	13.1	12.3	12.7	17.3+	15.2+
Seed Quality	1.9	1.5	2.0	1.7	1.7	1.9
Maturity Index	10-5	+8	+8	+4	+9	+6
Height	34	35	38	29	34	32
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	2.5	1.0
Phytophthora Rot[1/]	1.0	1.0	1.0	1.0	1.0	2.0
Seed Coat Mottling(%)[2/]	6.5	2.3	18.2	4.2	0.0	19.0
Shattering	1.0	1.0	1.0	1.0	1.0	2.0
Flower Color	W	W	W	W	P	P
Pubescence Color	T	G	T	G	G	T
Pod Wall Color	T	B	T	T	T	T

1/ Stoneville data. 2/ Warsaw and Petersburg data.

*D59-693 used for calculating 2- and 3-yr. means for seed yield, oil and protein percentages.

Table 15. - (continued)

	R62-550	R64-500	D63-6087	R62-659	R63-190	UD61-1806
Seed Yield - 1966						
East Coast	32.8	30.0	29.3	33.4	33.0	29.1
Upper & Central South	36.9	31.1-	30.8-	36.2	34.1	32.8
Delta	39.6	38.4	37.7	39.8	40.9	33.0
West	40.7	37.1	34.1	42.3+	38.2	37.4
- 1965-66						
East Coast	34.3					
Upper & Central South	38.3					
Delta	37.2					
West	39.5					
- 1964-66						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1966	21.0	20.6	21.1	20.5-	20.5-	20.9
- 1965-66	21.5					
- 1964-66						
Protein Content - 1966	40.1+	39.1	38.6	40.5+	40.2+	38.8
- 1965-66	40.6					
- 1964-66						
Seed Size	14.9+	12.0	12.8	15.5+	12.8	14.2+
Seed Quality	1.8	1.7	1.9	1.9	1.8	2.0
Maturity Index	+9	0	0	+8	+9	+10
Height	34	32	30	37	39	45
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	2.5
Phytophthora Rot[1/]	1.0	1.0	1.0	1.0	1.5	1.5
Seed Coat Mottling(%)[2/]	4.8	12.0	8.9	7.2	7.7	9.9
Shattering	1.0	1.0	1.0	1.0	1.0	1.0
Flower Color	W	W	W	P	W	W
Pubescence Color	T	T	T	T	G	T
Pod Wall Color	T	T	T	seg	T	B

Table 16. - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1966

Location	Hill	Dare	D61-901	N59-6913	V61-20	D63-7320	R62-550
			East Coast				
Georgetown, Del.	23.8	30.6	27.6	27.7	28.9	32.0	25.2
Linkwood, Md.	29.7	36.4+	30.7	35.7+	32.6	31.3	34.0+
Painter, Va.	36.3	37.7	36.9	40.7	41.7	34.4	35.9
Warsaw, Va.	18.3	18.9	19.6	19.6	20.5+	18.9	18.4
Petersburg, Va.	30.8	31.2	26.5	37.9+	33.9	30.5	35.0
Norfolk, Va.	25.7	32.3	30.8	36.9+	32.8+	26.0	30.8
Holland, Va.	40.5	38.3	32.3	37.4	38.1	38.0	36.6
Plymouth, N. C.	41.8	47.1	47.2	45.0	49.0	36.2	46.6
Mean	30.9	34.1+	31.4	35.1+	34.7+	30.9	32.8
			Upper and Central South				
Orange, Va.*	24.2	30.4	28.0	24.9	27.8	26.2	26.0
Princeton, Ky.	39.3	35.5	37.6	29.5	41.4	34.6	44.1
Milan, Tenn.	32.0	38.4+	34.2	38.3+	35.9	33.9	38.8+
Jackson, Tenn.	31.7	31.2	29.4	31.7	36.4	36.4	32.0
Belle Mina, Ala.	33.9	37.1	34.0	34.4	34.9	32.9	32.8
Blairsville, Ga.	36.9	35.9	36.5	31.2	45.5	34.4	33.6
Experiment, Ga.	30.2	36.7	30.2	26.4	32.7	23.5	32.4
State College, Miss.	36.0	43.0+	37.5	36.9	41.8	35.8	44.6+
Mean	34.3	36.8	34.2	32.6	38.4+	33.1	36.9
			Delta				
Miller City, Ill.	28.0	33.2	35.2	28.7	31.3	38.9	31.2
Henderson, Ky.	42.4	44.9	38.8	44.7	43.5	42.3	30.6-
Hickman, Ky.	44.4	41.0	38.5	40.0	42.1	38.9	43.7
Portageville, Mo.(A)	33.6	39.1+	34.9	40.2+	42.4+	39.5+	38.6+
Portageville, Mo.(B)	38.0	38.2	31.2-	35.9	44.7+	33.4	40.3
Keiser, Ark.	18.8	18.1	18.0	21.1	15.0	16.2	17.1
Marianna, Ark.	45.0	42.8	48.1	43.8	44.4	39.4	46.9
Stoneville, Miss.(A)	47.0	50.2	42.7	45.1	39.5-	35.8-	45.0
Stoneville, Miss.(B)	36.0	40.6	40.5	40.3	41.2+	37.4	43.7+
St. Joseph, La.	52.1	61.4	63.2	60.8	62.1	39.4	59.2
Mean	38.5	41.0	39.1	40.0	40.1	36.1	39.6
			West				
Stuttgart, Ark.	46.9	51.7	46.7	52.1	48.4	41.2-	54.4+
Curtis, La.	36.0	36.7	41.0	41.7	35.8	33.6	32.6
Bixby, Okla.	27.6	29.5	29.4	29.0	34.3+	27.0	34.9+
Lubbock, Texas*	21.3	23.8	29.4	16.7	22.5	22.4	19.2
Dumas, Texas*	30.3	33.2	17.1-	27.2	23.7-	25.4-	21.6-
Mean	36.8	39.3	39.0	40.9	39.4	33.9	40.7

* Not included in mean.

Table 16. - (continued)

Location	R64-500	D63-6087	R62-659	R63-190	UD61-1806	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	27.9	23.1	26.4	28.7	30.2	N.S.	13%
Linkwood, Md.	28.9	29.6	29.6	30.6	30.6	4.1	8%
Painter, Va.	37.7	37.9	40.2	37.6	34.3	N.S.	7%
Warsaw, Va.	16.4	15.6-	17.7	18.8	18.5	2.2	7%
Petersburg, Va.	26.5	23.4-	33.6	32.1	27.4	5.2	10%
Norfolk, Va.	28.3	27.5	36.1+	35.3+	24.5	6.7	13%
Holland, Va.	36.0	36.2	38.1	35.3	30.2	N.S.	10%
Plymouth, N. C.	38.2	41.2	45.7	45.6	37.4	7.7	10%
Mean	30.0	29.3	33.4	33.0	29.1	2.6	
			Upper and Central South				
Orange, Va.*	22.2	23.3	23.7	29.0	30.7	N.S.	23%
Princeton, Ky.	31.2	29.2	38.6	30.4	35.9	N.S.	18%
Milan, Tenn.	28.9	29.9	37.7+	36.8+	35.8	4.5	8%
Jackson, Tenn.	32.6	29.3	32.7	29.0	24.7	N.S.	18%
Belle Mina, Ala.	28.5-	30.5	33.7	36.8	31.3	3.6	6%
Blairsville, Ga.	35.1	33.5	37.2	33.5	37.3	N.S.	14%
Experiment, Ga.	25.4	26.9	34.6	32.6	32.8	N.S.	16%
State College, Miss.	35.7	36.6	39.2	39.3	31.9	6.1	9%
Mean	31.1-	30.8-	36.2	34.1	32.8	2.8	
			Delta				
Miller City, Ill.	29.8	25.6	26.6	27.7	27.5	N.S.	20%
Henderson, Ky.	44.4	41.9	33.0-	38.5	39.6	4.0	6%
Hickman, Ky.	35.7-	34.8-	41.9	37.4-	30.9-	6.5	10%
Portageville, Mo.(A)	39.4+	38.7+	38.2+	38.3+	33.2	3.9	6%
Portageville, Mo.(B)	36.8	34.8	37.8	42.8	33.7	5.6	9%
Keiser, Ark.	17.3	16.3	20.5	18.1	17.0	N.S.	19%
Marianna, Ark.	45.4	48.2	46.8	54.3+	30.5-	6.7	9%
Stoneville, Miss.(A)	41.4	44.8	48.5	49.9	30.1-	6.2	8%
Stoneville, Miss.(B)	39.6	36.9	42.4+	39.3	31.6	4.8	7%
St. Joseph, La.	54.4	55.5	62.3	62.6	55.8	9.4	10%
Mean	38.4	37.7	39.8	40.9	33.0	3.6	
			West				
Stuttgart, Ark.	47.3	43.2	50.6	48.0	42.5	5.3	7%
Curtis, La.	35.6	36.7	43.5	39.9	42.2	N.S.	20%
Bixby, Okla.	28.5	22.5-	32.8+	26.8	27.5	5.1	10%
Lubbock, Texas*	24.1	20.6	29.3	32.9+	22.7	8.8	22%
Dumas, Texas*	27.8	25.0-	22.6-	25.4-	21.9-	3.3	22%
Mean	37.1	34.1	42.3+	38.2	37.4	4.7	

(+) - 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, 1966

	Hill	Dare	D61-901	N59-6913	V61-20	D63-7320
			Oil Percentage			
Linkwood, Md.	21.7	21.1	19.4	20.5	20.7	20.1
Warsaw, Va.	18.7	21.2	18.7	19.1	19.4	19.4
Plymouth, N. C.	20.5	22.2	20.6	20.5	19.4	19.8
Milan, Tenn.	20.9	23.0	21.3	20.7	21.2	21.5
Henderson, Ky.	18.4	19.6	18.4	18.8	18.2	17.8
Portageville, Mo.(A)	20.7	21.2	20.1	19.1	20.7	20.2
Keiser, Ark.	21.8	22.6	21.3	20.4	21.0	21.4
Stoneville, Miss.(B)	22.4	22.6	21.6	19.3	22.2	21.5
Stuttgart, Ark.	22.9	22.7	22.0	21.5	22.1	20.3
Bixby, Okla.	21.8	22.1	20.3	21.7	21.5	20.7
Mean	21.0	21.8+	20.4-	20.2-	20.6	20.3-
			Protein Percentage			
Linkwood, Md.	35.8	36.6	37.4	37.6	36.7	37.2
Warsaw, Va.	41.5	38.8	40.2	39.0	40.3	40.8
Plymouth, N. C.	39.8	40.6	40.7	41.3	41.5	42.6
Milan, Tenn.	39.5	39.5	39.0	40.4	39.0	39.9
Henderson, Ky.	38.4	39.1	38.8	39.5	39.2	38.5
Portageville, Mo.(A)	36.8	37.1	36.5	38.4	37.7	37.0
Keiser, Ark.	37.7	36.7	36.8	38.2	39.2	38.2
Stoneville, Miss.(B)	38.2	37.0	36.6	38.5	37.5	39.8
Stuttgart, Ark.	39.1	38.9	38.7	39.3	38.3	41.0
Bixby, Okla.	38.8	39.1	40.1	38.8	37.7	40.4
Mean	38.6	38.3	38.5	39.1	38.7	39.5+
			Grams per 100 Seeds			
Linkwood, Md.	14.7	15.1	15.5	14.3	19.2	17.7
Warsaw, Va.	8.8	10.3	11.3	9.4	13.9	10.9
Plymouth, N. C.	12.9	15.0	12.4	13.8	18.7	16.6
Henderson, Ky.	13.5	14.1	13.2	13.9	17.2	16.4
Keiser, Ark.	10.0	9.0	8.7	9.5	16.0	11.3
Stoneville, Miss.(B)	10.6	10.5	10.8	11.5	15.3	14.4
Stuttgart, Ark.	15.0	15.3	13.7	14.7	19.0	19.0
Bixby, Okla.	15.2	15.1	12.7	14.7	19.2	15.5
Mean	12.6	13.1	12.3	12.7	17.3+	15.2+

Table 17. - (continued)

Location	R62-550	R64-500	D63-6087	R62-659	R63-190	UD61-1806	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	20.1	21.0	21.2	20.8	20.4	20.6	
Warsaw, Va.	19.8	18.3	18.8	18.7	19.4	19.8	
Plymouth, N. C.	20.5	20.5	21.1	20.5	20.5	20.3	
Milan, Tenn.	22.9	20.8	21.7	21.6	21.3	21.8	
Henderson, Ky.	19.3	18.3	19.3	18.3	17.8	19.3	
Portageville, Mo.(A)	20.4	21.1	22.2	19.9	21.0	21.3	
Keiser, Ark.	21.3	21.7	21.3	21.2	20.9	22.2	
Stoneville, Miss.(B)	22.8	20.4	22.2	21.5	21.4	21.7	
Stuttgart, Ark.	21.6	21.6	22.0	21.4	21.2	22.0	
Bixby, Okla.	20.8	22.4	21.2	20.8	20.6	20.0	
Mean	21.0	20.6	21.1	20.5-	20.5-	20.9	0.5
			Protein Percentage				
Linkwood, Md.	38.3	37.0	35.8	37.0	38.5	37.2	
Warsaw, Va.	41.4	42.0	41.1	43.1	40.9	40.5	
Plymouth, N. C.	43.6	40.9	41.0	42.0	42.4	41.0	
Milan, Tenn.	39.8	40.8	39.5	41.1	40.4	39.3	
Henderson, Ky.	39.5	38.5	38.5	41.2	40.2	39.6	
Portageville, Mo.(A)	39.5	37.0	36.5	38.1	39.2	36.7	
Keiser, Ark.	39.2	38.4	37.4	39.2	38.2	36.5	
Stoneville, Miss.(B)	38.5	38.9	38.4	40.2	38.9	37.9	
Stuttgart, Ark.	41.3	39.2	38.3	41.0	41.3	39.7	
Bixby, Okla.	40.2	38.3	39.8	42.2	41.6	40.0	
Mean	40.1+	39.1	38.6	40.5+	40.2+	38.8	0.7
			Grams per 100 Seeds				
Linkwood, Md.	16.3	14.0	15.1	16.8	15.9	16.8	
Warsaw, Va.	13.5	8.3	8.4	13.8	10.9	14.1	
Plymouth, N. C.	16.2	12.4	14.0	15.5	13.1	14.4	
Henderson, Ky.	13.5	12.9	13.6	15.1	13.8	14.9	
Keiser, Ark.	11.3	9.3	9.0	12.3	10.0	10.0	
Stoneville, Miss.(B)	13.2	11.0	11.0	13.6	10.4	12.9	
Stuttgart, Ark.	17.7	14.0	15.0	19.3	15.0	17.0	
Bixby, Okla.	17.1	14.4	16.0	17.5	13.5	13.8	
Mean	14.9+	12.0	12.8	15.5+	12.8	14.2+	0.9

Table 18. - Relative maturity, days earlier (-) or later (+) than Hill, for the strains in Uniform Group V, 1966

Location	Date planted	Hill matured	Dare	D61-901	N59-6913	V61-20
		East Coast				
Georgetown, Del.	6-7	10-24	+7	+7	+2	+7
Linkwood, Md.	6-2	10-15	+9	+12	+5	+8
Painter, Va.	6-7	10-23	+7	+3	-4	+12
Warsaw, Va.	5-17	10-6	+16	+17	+8	+16
Petersburg, Va.	5-18	10-8	+13	+19	+7	+14
Plymouth, N. C.	5-18	10-1	+12	+9	+9	+19
Mean		10-13	+11	+11	+5	+13
		Upper and Central South				
Orange, Va.	5-10	10-15	0	+4	0	0
Princeton, Ky.	5-11	10-30	+2	+2	+2	-2
Milan, Tenn.	5-20	10-7	+2	+2	-2	+4
Jackson, Tenn.	6-3	9-30	+12	+14	+10	+12
Belle Mina, Ala.		9-29	+10	+10	+3	+2
Blairsville, Ga.	5-30	10-17	+2	+1	-1	0
Experiment, Ga.	5-10	9-28	+2	+2	+1	+8
Mean		10-9	+4	+5	+2	+3
		Delta				
Miller City, Ill.	6-4	10-13	+8	+7	+2	+7
Portageville, Mo.(A)	5-21	10-7	+5	+5	+4	+5
Portageville, Mo.(B)		10-9	+13	+12	+2	+13
Keiser, Ark.	5-11	9-30	+10	+10	+10	+12
Marianna, Ark.	5-27	10-3	+10	+8	+7	+17
Stoneville, Miss.(A)	5-9	9-19	+6	+8	+4	+9
Stoneville, Miss.(B)	5-11	9-19	+7	+7	+4	+7
St. Joseph, La.	5-16	9-15	+10	+10	+13	+12
Mean		9-29	+9	+8	+6	+10
		West				
Stuttgart, Ark.	5-28	9-29	+9	+9	+9	+10
Curtis, La.	6-2	10-7	+4	+2	0	+12
Bixby, Okla.	5-19	9-28	+13	+11	+11	+12
Lubbock, Texas	6-1	10-14	0	+2	0	+1
Mean		10-5	+7	+6	+5	+9

Table 18. - (continued)

	D63-7320	R62-550	R64-500	D63-6087	R62-659	R63-190	UD61-1806
			East Coast				
Georgetown, Del.	+4	+7	-1	-2	+7	+7	+7
Linkwood, Md.	+5	+10	-1	-1	+10	+12	+9
Painter, Va.	+7	+4	-3	-3	+7	+9	+8
Warsaw, Va.	+9	+16	-2	-3	+16	+16	+19
Petersburg, Va.	+5	+11	-4	+4	+18	+17	+19
Plymouth, N. C.	+12	+12	0	-1	+9	+14	+9
Mean	+7	+10	-2	-1	+11	+13	+12
			Upper and Central South				
Orange, Va.	-1	+14	-1	-1	+13	+12	+12
Princeton, Ky.	-2	+2	+2	+2	+2	+2	-2
Milan, Tenn.	+2	+4	0	-2	+2	+2	+4
Jackson, Tenn.	+14	+12	0	0	+14	+16	+16
Belle Mina, Ala.	+3	+8	+1	+1	+11	+10	+7
Blairsville, Ga.	+3	+4	+1	+2	+2	0	+5
Experiment, Ga.	+2	+1	-1	-1	+2	+4	+4
Mean	+3	+6	0	0	+7	+7	+7
			Delta				
Miller City, Ill.	+4	+7	-2	0	+5	+8	+9
Portageville, Mo.(A)	+3	+5	-1	-2	+4	+3	+5
Portageville, Mo.(B)	+1	+14	-1	-1	+10	+13	+12
Keiser, Ark.	+2	+11	-2	-2	+11	+10	+12
Marianna, Ark.	+12	+10	0	0	+11	+14	+17
Stoneville, Miss.(A)	+10	+11	+1	0	+4	+10	+11
Stoneville, Miss.(B)	+5	+7	0	0	+7	+7	+10
St. Joseph, La.	+12	+13	0	0	+10	+11	+14
Mean	+6	+10	0	0	+8	+10	+11
			West				
Stuttgart, Ark.	+12	+9	0	0	+9	+10	+11
Curtis, La.	+2	+13	+4	+1	+3	0	+10
Bixby, Okla.	+13	+12	0	0	+11	+13	+13
Lubbock, Texas	+3	+3	0	+1	+3	+2	+3
Mean	+8	+9	+1	0	+7	+6	+9

Table 19. - Plant height data for the strains in Uniform Group V, 1966

Location	Hill	Dare	D61-901	N59-6913	V61-20	D63-7320
			East Coast			
Georgetown, Del.	36	34	38	30	34	32
Linkwood, Md.	39	37	44	30	40	34
Painter, Va.	36	40	41	33	39	32
Warsaw, Va.	34	34	38	27	37	32
Petersburg, Va.	32	33	35	30	32	32
Norfolk, Va.	31	30	34	28	30	30
Holland, Va.	36	39	46	37	39	34
Plymouth, N. C.	37	37	43	33	39	36
Mean	35	36	40	31	36	33
			Upper and Central South			
Orange, Va.	34	33	39	26	39	35
Princeton, Ky.	35	36	42	26	36	35
Milan, Tenn.	34	36	36	27	39	28
Jackson, Tenn.	39	41	43	29	33	42
Belle Mina, Ala.	35	35	40	28	31	34
Blairsville, Ga.	42	41	44	37	42	40
Experiment, Ga.	35	34	37	26	32	31
Mean	36	37	40	28	36	35
			Delta			
Miller City, Ill.	34	36	39	28	32	32
Henderson, Ky.	37	38	41	35	38	38
Hickman, Ky.	38	37	40	31	36	33
Portageville, Mo.(A)	34	39	41	32	36	32
Portageville, Mo.(B)	34	36	38	27	30	32
Keiser, Ark.	24	24	24	22	22	18
Marianna, Ark.	39	40	43	37	39	41
Stoneville, Miss.(A)	33	35	37	32	31	31
Stoneville, Miss.(B)	33	36	40	32	33	31
St. Joseph, La.	31	33	36	32	33	31
Mean	34	35	38	31	33	32
			West			
Stuttgart, Ark.	31	32	35	29	30	28
Curtis, La.	26	25	33	19	23	22
Bixby, Okla.	33	32	34	24	32	29
Lubbock, Texas	24	21	22	20	18	21
Mean	29	28	31	23	26	25

Table 19. - (continued)

Location	R62-550	R64-500	D63-6087	R62-659	R63-190	UD61-1806
			East Coast			
Georgetown, Del.	38	32	30	33	39	45
Linkwood, Md.	39	38	36	45	49	40
Painter, Va.	38	35	30	42	50	49
Warsaw, Va.	37	36	32	38	38	39
Petersburg, Va.	36	29	24	35	39	45
Norfolk, Va.	31	29	25	32	35	40
Holland, Va.	38	37	35	43	41	48
Plymouth, N. C.	39	36	33	42	41	48
Mean	37	34	31	39	42	44
			Upper and Central South			
Orange, Va.	36	32	30	34	42	38
Princeton, Ky.	36	34	32	39	41	47
Milan, Tenn.	40	33	26	40	38	49
Jackson, Tenn.	36	35	27	40	39	51
Belle Mina, Ala.	32	31	31	37	37	45
Blairsville, Ga.	41	40	37	44	44	44
Experiment, Ga.	33	36	28	32	36	43
Mean	36	34	30	38	40	45
			Delta			
Miller City, Ill.	36	32	28	42	46	53
Henderson, Ky.	38	37	36	41	40	34
Hickman, Ky.	34	35	32	37	39	46
Portageville, Mo.(A)	37	34	31	39	44	53
Portageville, Mo.(B)	33	32	30	38	37	42
Keiser, Ark.	22	22	21	24	22	26
Marianna, Ark.	41	39	36	43	42	59
Stoneville, Miss.(A)	28	29	30	36	38	55
Stoneville, Miss.(B)	33	33	31	39	42	46
St. Joseph, La.	32	34	31	39	38	52
Mean	33	33	31	38	39	47
			West			
Stuttgart, Ark.	30	30	27	33	35	55
Curtis, La.	17	15	20	31	31	38
Bixby, Okla.	35	32	30	34	35	43
Lubbock, Texas	19	21	19	23	26	23
Mean	25	25	24	30	32	40

Table 20. - Lodging scores for the strains in Uniform Group V, 1966

Location	Hill	Dare	D61-901	N59-6913	V61-20	D63-7320
			East Coast			
Georgetown, Del.	4.0	3.0	3.3	2.0	2.3	4.0
Linkwood, Md.	1.9	2.0	1.5	1.5	1.8	1.9
Painter, Va.	2.7	2.7	2.3	2.2	2.8	3.0
Warsaw, Va.	1.4	1.4	1.5	1.0	1.0	1.9
Petersburg, Va.	1.0	1.0	1.3	1.0	1.0	1.0
Norfolk, Va.	1.3	1.3	1.7	1.0	1.3	1.7
Holland, Va.	2.0	2.3	3.0	2.0	2.0	2.0
Plymouth, N. C.	3.0	3.0	3.0	2.0	2.0	3.0
			Upper and Central South			
Orange, Va.	1.7	3.0	3.0	1.3	2.0	3.7
Princeton, Ky.	1.0	1.0	1.0	1.0	1.0	1.0
Milan, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
Belle Mina, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	1.0	2.7	1.0	1.7	1.7	2.0
Experiment, Ga.	1.7	1.7	1.3	1.0	1.0	1.3
			Delta			
Miller City, Ill.	2.8	2.3	2.1	1.2	1.3	3.5
Henderson, Ky.	2.7	3.7	3.0	1.7	1.7	3.3
Hickman, Ky.	2.0	2.0	2.0	1.0	1.3	2.0
Portageville, Mo.(A)	2.0	2.7	3.0	1.7	2.0	2.3
Portageville, Mo.(B)	2.0	1.7	1.7	1.7	1.7	2.0
Keiser, Ark.	1.0	1.0	1.2	1.0	1.0	1.0
Marianna, Ark.	3.0	3.0	3.0	2.3	2.3	2.7
Stoneville, Miss.(A)	2.0	2.0	2.3	1.7	2.0	2.0
Stoneville, Miss.(B)	1.3	2.3	2.0	1.3	2.3	2.0
St. Joseph, La.	3.4	2.4	3.0	2.7	2.7	2.0
			West			
Stuttgart, Ark.	1.0	1.0	1.3	1.0	1.0	1.0
Curtis, La.	3.0	2.0	2.0	1.0	2.0	2.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 20. - (continued)

Location	R62-550	R64-500	D63-6087	R62-659	R63-190	UD61-1806
			East Coast			
Georgetown, Del.	3.8	3.7	3.3	3.8	3.8	3.8
Linkwood, Md.	1.9	1.9	1.9	2.3	2.0	2.0
Painter, Va.	2.2	2.0	2.2	3.2	3.2	4.2
Warsaw, Va.	1.4	1.4	1.1	1.3	1.3	2.1
Petersburg, Va.	2.0	1.0	1.0	1.7	1.7	2.3
Norfolk, Va.	1.3	1.7	1.3	1.7	2.0	1.7
Holland, Va.	2.0	1.7	1.7	3.0	2.7	3.3
Plymouth, N. C.	2.0	3.0	2.0	3.0	3.0	3.0
			Upper and Central South			
Orange, Va.	3.0	2.3	1.3	1.7	2.0	2.0
Princeton, Ky.	1.0	1.0	1.0	1.0	1.0	1.0
Milan, Tenn.	1.0	1.0	1.0	1.0	1.0	3.0
Belle Mina, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Blairsville, Ga.	1.3	2.3	2.0	2.3	2.3	1.3
Experiment, Ga.	1.7	1.3	1.7	2.3	1.3	2.0
			Delta			
Miller City, Ill.	1.8	3.0	1.8	1.7	1.5	2.9
Henderson, Ky.	3.3	1.7	1.7	3.7	3.7	3.0
Hickman, Ky.	2.0	2.0	1.0	2.3	2.0	1.7
Portageville, Mo.(A)	3.0	2.3	1.7	2.7	2.7	3.3
Portageville, Mo.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Keiser, Ark.	1.3	1.0	1.0	1.2	1.2	1.0
Marianna, Ark.	2.3	3.0	2.7	3.0	3.0	4.0
Stoneville, Miss.(A)	2.0	2.0	1.7	3.0	2.7	3.7
Stoneville, Miss.(B)	2.0	2.0	1.0	3.0	3.0	2.7
St. Joseph, La.	3.0	4.0	3.0	3.0	3.4	3.4
			West			
Stuttgart, Ark.	1.0	1.0	1.0	1.7	2.0	2.7
Curtis, La.	2.0	2.0	2.0	2.0	2.0	2.0
Bixby, Okla.	1.0	1.0	1.0	2.0	2.0	2.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 21. - Seed quality scores for the strains in Uniform Group V, 1966

Location	Hill	Dare	D61-901	N59-6913	V61-20	D63-7320
			East Coast			
Georgetown, Del.	2.7	1.7	2.7	1.7	1.3	1.7
Linkwood, Md.	2.0	2.0	2.0	2.0	3.0	2.0
Painter, Va.	1.8	1.2	2.0	1.7	1.2	1.5
Warsaw, Va.	3.0	2.0	2.3	1.8	2.3	2.2
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Norfolk, Va.	3.0	2.0	3.0	3.0	2.0	3.0
Holland, Va.	1.5	1.0	1.5	1.0	1.0	2.0
Plymouth, N. C.	2.0	2.0	2.0	2.0	2.0	2.0
			Upper and Central South			
Orange, Va.	2.0	1.0	4.0	3.0	1.7	1.0
Princeton, Ky.	2.0	1.0	1.0	1.0	2.0	2.0
Milan, Tenn.	2.0	1.0	2.0	2.0	1.0	1.0
Jackson, Tenn.	3.0	3.0	3.0	3.0	2.0	3.0
Blairsville, Ga.	1.0	1.0	1.7	1.0	1.0	1.7
Experiment, Ga.	1.7	1.0	1.3	1.0	1.3	2.0
			Delta			
Miller City, Ill.	1.3	1.0	1.5	1.5	2.0	1.5
Henderson, Ky.	1.0	1.0	1.2	1.0	1.0	1.0
Hickman, Ky.	1.5	1.2	2.3	1.2	1.0	1.5
Portageville, Mo.(A)	1.7	1.0	2.0	1.0	2.0	2.3
Portageville, Mo.(B)	1.3	1.0	2.0	1.0	2.0	2.0
Keiser, Ark.	2.0	2.0	2.0	2.0	3.7	2.7
Marianna, Ark.	2.7	2.3	2.0	2.3	2.0	3.0
Stoneville, Miss.(A)	2.0	1.3	2.0	2.0	2.0	2.3
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Stuttgart, Ark.	2.3	1.3	1.7	1.7	2.3	3.0
Curtis, La.	2.0	2.0	2.0	2.0	2.0	2.0
Bixby, Okla.	1.0	2.0	2.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.3	1.3	1.3	1.6

Table 21. - (continued)

Location	R62-550	R64-500	D63-6087	R62-659	R63-190	UD61-1806
			East Coast			
Georgetown, Del.	2.0	2.3	2.0	2.0	2.3	2.0
Linkwood, Md.	2.0	2.0	2.0	2.0	3.0	2.0
Painter, Va.	1.7	1.8	2.3	1.8	2.0	2.2
Warsaw, Va.	2.0	3.0	3.1	2.9	2.6	2.5
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Norfolk, Va.	2.0	3.0	3.0	3.0	3.0	3.0
Holland, Va.	1.5	1.0	1.5	2.0	1.5	1.0
Plymouth, N. C.	2.0	2.0	2.0	2.0	2.0	2.0
			Upper and Central South			
Orange, Va.	1.0	2.7	2.7	2.0	2.0	2.3
Princeton, Ky.	1.0	2.0	1.0	2.0	1.0	2.0
Milan, Tenn.	2.0	1.0	1.3	1.3	1.3	2.7
Jackson, Tenn.	2.0	3.0	3.0	3.0	3.0	3.0
Blairsville, Ga.	1.7	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	2.0	1.0	1.7	1.7	1.0	1.7
			Delta			
Miller City, Ill.	1.3	1.5	1.7	1.5	1.7	1.7
Henderson, Ky.	1.3	1.0	1.0	1.0	1.0	1.0
Hickman, Ky.	1.2	1.7	1.3	1.7	1.3	2.0
Portageville, Mo.(A)	3.0	2.0	1.7	2.0	1.0	2.3
Portageville, Mo.(B)	2.0	1.7	1.3	1.7	1.3	2.0
Keiser, Ark.	2.3	2.0	2.0	2.7	2.0	2.0
Marianna, Ark.	2.7	2.7	2.7	2.3	2.0	3.3
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	1.7	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.3
			West			
Stuttgart, Ark.	2.3	2.3	2.7	2.0	1.7	2.7
Curtis, La.	2.0	2.0	3.0	2.0	2.0	2.0
Bixby, Okla.	1.0	2.0	2.0	1.0	2.0	2.0
Lubbock, Texas	1.6	1.3	1.3	1.0	1.0	1.0

PRELIMINARY GROUP V

1966

Preliminary Group V nurseries made up of 34 experimental strains and the two check strains Hill and D59-693 were grown at six locations. 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 the 5 percent level of confidence in each of the six nurseries. The combined analysis of variance for seed yield showed differences to be significant at the 5 percent level. Nine strains yielded significantly less than Hill, while there were none which yielded significantly higher than Hill.

The six strains ranking highest in seed yield are suggested to be advanced to Uniform Group V. These are: R64-14, D61-858, N63-2769, V63-57, N63-4253, and D64-4731.

Table 22. - Parentage of the strains in Preliminary Group V, 1966

	Variety or strain	Parentage	Generation composited
1.	Hill		
2.	D59-693		
3.	D61-858	Hill(2) x D51-4877	F_5
4.	D64-2935	Hill x Kingwa	F_5
5.	D64-2936	Hill x Kingwa	F_5
6.	D64-3454	Hill(2) x FC 34195	F_5
7.	D64-3514	Hill(2) x FC 34195	F_5
8.	D64-3548	Hill(2) x FC 34195	F_5
9.	D64-3606	Hill x PI 187,155	F_7
10.	D64-3740	PI 96,983 x D53-354	F_5
11.	D64-3747	PI 96,983 x D53-354	F_5
12.	D64-3806	Hill x D59-1619	F_5
13.	D64-3908	Hill x D59-1619	F_5
14.	D64-4731	Lee(2) x [Clark(2) x T109]	F_5
15.	N63-2768	N59-6958 sel.	
16.	N63-2769	N59-6958 sel.	
17.	N63-4056	Hill(2) x PI 96,983	F_5
18.	N63-4102	Hill(2) x PI 96,983	F_5
19.	N63-4166	Hill(2) x PI 96,983	F_5
20.	N63-4180	Hill(2) x PI 96,983	F_5
21.	N63-4253	Hill(2) x PI 96,983	F_5
22.	N63-4354	Hill(2) x PI 96,983	F_5
23.	N63-4396	Hill(2) x PI 96,983	F_5
24.	R64-14	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_6
25.	R64-446	Hill x R59-200	F_4
26.	V63-14	Hood x D53-354	F_6
27.	V63-30	Dorman x Hill	F_6
28.	V63-37	Perry x Hill	F_6
29.	V63-56	Dorman x (Wabash x Ogden)	F_6
30.	V63-57	Hood x D53-354	F_6
31.	V63-64	Dorman x Hill	F_6
32.	V63-65	Hill x D53-354	F_6
33.	V63-68	Hood x D53-354	F_6
34.	V63-80	Dorman x (Wabash x Ogden)	F_6
35.	V64-38	C1069 x Lee	F_6
36.	V64-42	C1069 x Lee	F_6

Table 23. - General summary of performance for the strains grown in Preliminary Group V, 1966

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Seed holding	B.P.	P.R.	% mottled seed
Hill	32.3	10-5	33	20.4	39.2	1.0	1.0	1.0	20.5
D59-693	33.1	+8	30	20.5	38.9	1.0	1.0	1.0	1.5
D61-858	33.5	+7	39	20.9	38.4	1.0	1.0	1.0	17.0
D64-2935	29.4	+13	37	17.8-	40.5+	1.0	1.0	1.0	11.5
D64-2936	28.7	0	33	17.6-	41.1+	1.0	1.0	1.0	17.0
D64-3454	27.7-	+2	32	19.8	37.9-	1.0	1.0	1-0	14.0
D64-3514	29.3	+1	32	19.5-	39.1	1.0	1.0	1.0	9.5
D64-3548	30.3	+11	32	18.7-	40.1	1.0	1.0	1.0	8.5
D64-3606	30.1	+7	36	19.3-	41.1+	1.0	1.0	1.0	3.0
D64-3740	26.7-	+15	34	17.6-	42.8+	1.0	1.0	1.0	5.5
D64-3747	26.5-	+3	34	17.2-	42.2+	1.0	1.0	1.0	1.0
D64-3806	29.2	+5	34	20.7	39.1	1.0	1.0	1.0	1.5
D64-3908	27.3-	+10	31	20.4	38.9	1.0	1.0	1.0	9.0
D64-4731	31.4	+7	26	20.0	39.0	1.0	1.0	2.0	20.5
N63-2768	28.3-	+12	34	20.7	38.9	1.0	1.0	1.0	0.5
N63-2769	32.9	+11	32	20.9	39.1	1.0	1.0	1.0	0.0
N63-4056	29.7	+6	37	20.0	39.9	1.0	1.0	1.0	9.0
N63-4102	30.4	+10	39	19.4-	40.5+	1.0	1.0	2.0	9.5
N63-4166	31.4	+10	41	19.4-	39.7	1.0	1.0	1.0	9.0
N63-4180	29.2	+7	38	20.0	39.6	1.0	1.0	1.0	10.0
N63-4253	31.9	+8	39	20.4	39.8	1.0	1.0	1.0	10.5
N63-4354	28.9	+9	41	19.8	39.4	1.0	1.0	1.0	6.5
N63-4396	31.3	+10	38	18.9-	40.8+	1.0	1.0	1.0	19.0
R64-14	33.8	+10	37	21.0	40.2	1.0	1.0	1.0	8.0
R64-446	30.8	+9	29	20.3	39.5	1.0	1.0	1.0	23.0
V63-14	26.6-	+8	37	20.7	38.4	2.0	1.0	3.0	0.0
V63-30	29.5	+7	32	21.4+	38.5	1.0	1.0	1.0	12.5
V63-37	29.1	+4	29	20.6	39.0	1.0	1.0	2.0	17.5
V63-56	30.9	+3	31	20.6	40.0	1.0	3.0	1.0	0.0
V63-57	32.3	+5	33	19.4-	38.5	1.0	1.0	2.0	0.0
V63-64	27.3-	-2	28	20.8	39.8	1.0	1.0	2.0	4.5
V63-65	28.9	0	26	20.7	38.9	1.0	1.0	1.0	3.0
V63-68	26.1-	+6	32	20.3	38.6	1.0	1.0	3.0	0.0
V63-80	29.7	+8	31	19.1-	40.9+	1.0	3.0	1.0	4.0
V64-38	25.7-	+9	30	20.8	40.1	2.0	1.0	2.0	6.0
V64-42	30.3	+7	34	21.3+	40.2	1.0	1.0	1.0	4.5
L.S.D.(.05)	4.0			0.8	1.1				
L.S.D.(.01)	5.3			1.1	1.4				

Table 24. - Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	32.6	15.4	35.4	45.8	20.5	43.9
D59-693	33.8	18.0	38.2	46.7	22.9	38.9
D61-858	33.4	17.8	40.4	42.7	25.7	40.9
D64-2935	29.3	10.4-	36.2	41.9	22.4	35.9
D64-2936	34.0	13.8	31.6	35.3-	19.9	37.5
D64-3454	32.1	15.1	25.4-	38.5	15.8	39.4
D64-3514	30.4	16.3	30.5	39.2	19.5	39.8
D64-3548	31.6	14.8	39.0	34.2-	20.1	41.9
D64-3606	28.9	14.0	34.6	38.0	24.3	41.0
D64-3740	28.6	14.4	33.9	35.4-	20.5	27.7-
D64-3747	25.4-	14.2	34.5	31.6-	17.2	36.0
D64-3806	29.3	15.9	28.7	38.6	22.5	40.3
D64-3908	33.8	17.1	28.3	39.2	16.1	29.4-
D64-4731	35.8	16.6	37.8	47.0	--	31.9-
N63-2768	24.2-	16.3	34.4	35.6-	15.9	43.2
N63-2769	35.0	20.0+	44.3+	41.2	16.5	40.2
N63-4056	30.2	16.4	39.5	36.3-	18.2	37.9
N63-4102	30.2	14.9	40.0	32.3-	24.8	40.1
N63-4166	36.4	16.3	41.0	36.3-	20.6	37.5
N63-4180	34.8	15.7	32.4	35.0-	20.9	36.2
N63-4253	36.3	17.2	39.9	39.3	17.7	40.8
N63-4354	28.8	17.0	33.3	37.0	21.6	35.4
N63-4396	36.3	15.9	40.7	32.6-	19.5	43.1
R64-14	31.6	15.6	42.5	41.8	28.8+	42.5
R64-446	33.6	17.9	39.6	35.6-	24.4	33.8-
V63-14	29.4	17.7	31.9	34.3-	16.4	29.8-
V63-30	36.2	16.7	40.2	33.7-	17.4	32.6-
V63-37	32.2	14.4	40.2	37.3	18.8	32.0-
V63-56	35.1	16.4	31.6	41.0	17.5	43.7
V63-57	38.7+	17.9	36.8	38.0	15.6	47.1
V63-64	27.2	16.2	33.6	37.6	14.1	35.2
V63-65	35.6	15.0	38.2	34.1-	13.9	36.5
V63-68	33.3	15.9	31.0	28.5-	13.6	34.2-
V63-80	33.0	16.1	35.2	38.9	25.1	29.7-
V64-38	28.6	15.3	31.0	31.6-	16.9	30.9-
V64-42	35.8	17.7	38.2	39.0	13.1-	37.7
L.S.D.(.05)	6.0	3.1	8.3	9.0	7.4	9.4
C.V.	9%	10%	11%	12%	19%	12%

Table 25. - Oil percentages for the strains in Preliminary Group V, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	21.2	18.7	19.6	20.3	21.5	21.1
D59-693	20.9	19.3	20.1	20.3	21.5	21.1
D61-858	21.2	20.2	20.6	20.5	21.0	22.0
D64-2935	17.8	15.3	17.0	19.1	18.7	18.7
D64-2936	18.7	15.3	17.1	16.8	18.3	19.4
D64-3454	19.9	19.1	18.1	19.8	20.8	21.3
D64-3514	20.2	17.4	18.6	19.8	20.0	21.2
D64-3548	20.4	17.0	16.7	18.6	19.3	20.0
D64-3606	19.6	18.7	18.6	18.6	19.5	20.6
D64-3740	18.1	16.2	16.2	17.1	18.0	19.7
D64-3747	18.6	15.7	16.0	16.8	17.3	18.9
D64-3806	20.7	20.1	19.3	20.2	21.7	21.9
D64-3908	20.0	18.8	19.6	20.4	21.3	22.3
D64-4731	20.6	19.2	18.5	20.3	--	21.3
N63-2768	21.3	20.0	19.5	20.1	21.7	21.7
N63-2769	19.9	20.0	20.2	20.4	22.1	22.8
N63-4056	19.8	19.3	20.2	18.2	21.0	21.5
N63-4102	19.8	17.4	19.5	19.1	19.4	21.4
N63-4166	19.4	18.5	19.0	18.7	20.1	20.8
N63-4180	19.8	19.0	19.1	20.1	20.2	21.7
N63-4253	19.9	19.3	19.9	20.3	21.0	21.9
N63-4354	19.2	18.8	18.3	20.4	20.3	21.8
N63-4396	18.9	17.8	17.8	19.4	19.5	20.2
R64-14	19.6	20.1	20.6	20.9	22.0	23.0
R64-446	20.1	19.8	20.8	19.7	20.6	20.6
V63-14	18.7	18.6	20.8	20.7	22.2	23.0
V63-30	21.1	19.4	21.2	21.3	22.1	23.5
V63-37	20.2	19.8	21.5	20.5	21.7	19.6
V63-56	19.8	18.9	20.9	20.5	22.0	21.7
V63-57	19.1	17.3	20.3	18.4	20.9	20.4
V63-64	21.4	17.7	20.2	22.1	21.6	21.9
V63-65	20.5	17.7	20.6	20.9	21.7	22.6
V63-68	20.0	18.5	19.4	20.4	21.6	21.9
V63-80	18.6	18.2	18.4	18.7	19.6	21.0
V64-38	20.4	19.3	19.8	21.0	22.0	22.4
V64-42	20.5	20.1	19.9	20.4	23.3	23.6

Table 26. - Protein percentages for the strains in Preliminary Group V, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	36.0	43.3	41.6	37.1	38.5	38.7
D59-693	36.1	40.5	41.1	38.5	38.8	38.5
D61-858	36.4	39.6	41.0	37.4	37.3	38.4
D64-2935	39.8	42.4	42.7	40.4	38.9	38.7
D64-2936	38.8	44.7	43.6	39.9	40.4	39.1
D64-3454	36.9	39.3	41.1	36.5	37.0	36.6
D64-3514	37.9	42.2	41.9	37.4	38.0	37.2
D64-3548	38.1	42.5	42.2	39.4	39.5	38.9
D64-3606	40.7	42.6	44.1	39.4	40.7	39.1
D64-3740	41.0	44.7	46.0	43.0	41.2	40.9
D64-3747	36.7	44.8	45.8	42.4	42.0	41.4
D64-3806	37.7	39.3	43.9	39.0	38.0	36.8
D64-3908	37.2	40.7	42.4	38.7	37.7	36.6
D64-4731	37.0	40.3	41.7	37.9	--	38.1
N63-2768	37.1	40.1	43.3	38.0	38.0	37.0
N63-2769	37.7	41.0	42.3	38.8	38.0	36.5
N63-4056	38.1	40.8	43.6	40.0	38.6	38.2
N63-4102	38.0	43.3	44.0	39.7	39.6	38.6
N63-4166	38.4	41.0	44.1	37.5	39.3	37.7
N63-4180	37.1	41.0	43.4	38.0	39.2	38.7
N63-4253	37.3	41.7	43.3	38.5	39.1	38.8
N63-4354	37.2	41.1	43.7	37.0	39.0	38.2
N63-4396	37.9	43.3	44.6	39.0	39.1	40.6
R64-14	38.8	41.9	43.6	39.0	39.1	38.9
R64-446	37.8	39.4	42.4	38.5	39.9	39.1
V63-14	38.7	41.3	40.3	37.4	36.5	36.1
V63-30	36.0	41.3	41.3	36.3	38.0	38.2
V63-37	38.0	41.5	40.9	36.8	38.2	38.8
V63-356	38.6	43.7	41.5	38.5	38.7	39.0
V63-57	36.9	42.3	40.1	37.8	37.0	37.1
V63-64	37.3	44.9	42.2	37.5	37.9	39.1
V63-65	37.5	43.5	41.0	37.0	37.1	37.5
V63-68	38.4	41.7	40.5	37.4	36.9	36.8
V63-80	39.2	42.2	43.4	40.1	40.7	39.6
V64-38	39.2	41.5	43.0	38.7	39.0	38.9
V64-42	38.8	41.5	44.2	39.3	38.4	39.2

Table 27. - Plant height for the strains in Preliminary Group V, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	36	32	36	36	23	32
D59-693	32	27	34	32	26	29
D61-858	44	35	46	43	32	36
D64-2935	42	34	39	40	30	34
D64-2936	35	28	41	35	26	30
D64-3454	37	31	37	32	26	28
D64-3514	40	30	35	33	23	29
D64-3548	38	31	35	33	24	28
D64-3606	45	36	35	38	27	34
D64-3740	44	40	40	35	27	20
D64-3747	42	35	38	32	24	31
D64-3806	39	36	35	37	26	31
D64-3908	39	32	36	35	21	21
D64-4731	30	23	29	28	--	19
N63-2768	34	34	39	42	24	32
N63-2769	31	33	36	38	22	32
N63-4056	44	39	40	40	25	31
N63-4102	41	40	41	45	30	38
N63-4166	45	42	45	45	32	39
N63-4180	46	38	40	42	29	35
N63-4253	46	38	43	43	28	36
N63-4354	47	40	47	47	29	37
N63-b396	44	36	43	42	27	36
R64-14	45	36	38	41	26	38
R64-446	34	26	32	33	23	23
V63-14	45	35	40	41	27	33
V63-30	38	34	37	36	24	25
V63-37	34	26	35	31	20	26
V63-56	31	30	41	34	20	28
V63-57	32	34	36	42	24	31
V63-64	32	32	36	28	19	21
V63-65	31	25	32	28	18	22
V63-68	38	30	33	35	25	29
V63-80	32	32	36	32	25	26
V64-38	32	27	35	34	23	28
V64-42	40	36	37	40	23	26

Table 28. - Seed quality scores for the strains in Preliminary Group V, 1966

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss.(B)
Hill	2.0	3.0	2.0	1.5	3.0	2.0
D59-693	2.0	1.7	2.0	1.0	1.7	2.0
D61-858	3.0	2.4	2.0	2.0	2.4	2.0
D64-2935	2.0	2.8	2.0	2.0	2.8	2.0
D64-2936	3.0	3.3	2.0	3.0	3.3	2.0
D64-3454	2.0	2.7	2.0	2.0	2.7	2.0
D64-3514	2.0	3.0	2.0	2.0	3.0	2.0
D64-3548	3.0	3.1	2.0	2.0	3.1	2.0
D64-3606	2.0	1.8	2.0	2.0	1.8	2.0
D64-3740	3.0	1.6	2.0	2.0	1.6	2.5
D64-3747	3.0	2.4	2.0	2.5	2.4	2.0
D64-3806	2.0	1.6	2.0	1.0	1.6	2.0
D64-3908	2.0	1.9	2.0	2.0	1.9	2.0
D64-4731	2.0	2.0	2.0	1.5	2.0	2.0
N63-2768	2.0	1.8	2.0	1.5	1.8	1.5
N63-2769	2.0	1.9	2.0	1.0	1.9	2.0
N63-4056	2.0	2.6	2.0	2.0	2.6	2.0
N63-4102	3.0	2.0	2.0	2.0	2.0	2.0
N63-4166	2.0	2.0	2.0	1.5	2.0	2.0
N63-4180	2.0	2.2	2.0	2.0	2.2	2.0
N63-4253	2.0	2.0	2.0	2.5	2.0	2.0
N63-4354	2.0	2.3	2.0	2.0	2.3	2.0
N63-4396	2.0	2.7	2.0	2.5	2.7	2.0
R64-14	2.5	1.8	2.0	1.0	1.8	2.0
R64-446	2.0	1.9	2.0	2.0	1.9	2.0
V63-14	2.0	1.7	2.0	1.0	1.7	2.0
V63-30	2.0	2.0	2.0	2.0	2.0	2.0
V63-37	2.0	1.8	2.0	1.5	1.8	2.0
V63-56	3.0	2.0	2.0	1.5	2.0	2.0
V63-57	2.5	1.9	2.0	2.0	1.9	2.0
V63-64	2.0	3.1	2.0	1.5	3.1	2.0
V63-65	2.0	2.6	2.0	1.0	2.6	1.5
V63-68	1.5	1.5	2.0	2.0	1.5	2.0
V63-80	2.0	2.8	3.0	1.5	2.8	2.0
V64-38	2.0	1.9	2.0	3.0	1.9	2.0
V64-42	2.5	2.9	2.0	3.0	2.9	2.0

UNIFORM GROUP VI

1966

	Variety or strain	Parentage	Generation composited
1.	Hood	Roanoke x N45-745	F_6
2.	Lee	S-100 x CNS	F_6
3.	Pickett	[D49-2491(6) x Dorman] x [Lee(4) x Peking]	F_5
4.	Davis	D49-2573 x N45-1497	
5.	R64-501	Lee(6) x Arksoy	
6.	R62-395	R54-168 x Hill	F_5
7.	D61-929	Hill(2) x D51-4877	F_5
8.	D62-7816	D49-2491(5) x PI 181,537	F_5
9.	D63-3933	D49-2491(5) x T122	F_4
10.	D63-6292	Lee(2) x [Clark(2) x T109]	F_5
11.	N62-136	D58-1899 x D59-2205	F_4
12.	R63-544	(R54-168 x Hill) x (Lee x Dortchsoy 110)	F_5

Background of strains used as parents:

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

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.

R64-168 is a sister strain to Davis.

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

PI 181,537 is a narrow leaf type of Group 0 maturity.

T122 is a genetic type with low number of seeds per pod.

T109 is a genetic type with a high percentage of 4-seeded pods.

D58-1899 is a white-flowered, gray-pubescent type from D49-2491(6) x Dorman.

D59-2205 is a high protein strain selected from D55-4168 x Hill. Dortchsoy 110 is a short, lodging rresistant strain selected from Wabash x Ogden.

Thirty-two Uniform Group VI nurseries were planted. Results of 29 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 the 5 percent level of confidence at 16 locations. The combined analysis of variance for mean yields by production regions show differences among strains to be significant at the 5 percent level in East, Southeast, and Delta. However, there was no strain with a yield significantly higher than Hood or Lee in any production region.

R62-395 has been grown 2 years and has produced seed yields very similar to those for Lee. Seven strains have been grown one year. Four of these strains are Lee or D49-2491 types with specific qualities added. R64-501 has the high degree of resistance to phytophthora rot added from Arksoy. Seed yield was superior to Lee in the Delta region, and was very similar to Lee in other regions. D62-7816 is a narrow-leaf type. Seed yield was 2 bushels below Lee in the Southeast but was equal or slightly higher in each of the other regions. D63-3933 has a low number of seeds per pod. Seed yields are slightly higher than Lee in the Delta and West but lower in other regions. D63-6292 has narrow leaves and a higher number of seeds per pod. Seed yield was lightly above Lee in the Upper and Central South, Delta, and West. Seed yields were lower in the East and Southeast.

D61-929 was the earliest maturing strain in the group. Seed yield equalled Hood in the Delta but was lower in other regions. N62-136 equalled Lee in yield in the Upper and Central South, but seed yield was lower in the other regions. N62-136 is highly susceptible to target spot. R63-544 yielded less than Lee in the Southeast, slightly higher in the West, and was equal in the other regions.

Table 29. - General summary of the performance for the strains in Uniform Group VI, 1966

	Hood	Lee	Pickett	Davis	R64-501	R62-395
Seed Yield - 1966						
East Coast	37.6	35.9	31.2-	38.3	35.6	35.9
Southeast	41.4	40.2	37.1	44.2	38.3	34.2-
Upper & Central South	37.3	35.5	37.2	40.6	35.3	36.3
Delta	41.7	38.6	32.7-	40.2	41.8	40.5
West	42.1	40.4	39.7	41.7	38.8	43.4
- 1965-66						
East Coast	37.9	36.3	30.5	35.2	--	36.1
Southeast	38.7	35.3	35.0	40.1	--	33.8
Upper & Central South	37.8	35.7	35.9	36.5	--	37.3
Delta	37.8	37.3	33.7	38.7	--	38.4
West	41.5	41.9	39.4	39.7	--	42.4
- 1964-66						
East Coast	37.9	35.4	--	35.0		
Southeast	35.0	34.1	--	36.2		
Upper & Central South	36.3	34.5	--	34.5		
Delta	37.6	36.2	--	38.1		
West	40.6	38.9	--	38.6		
Oil Content - 1966	21.1	20.5-	20.6-	21.3	20.4-	21.5
- 1965-66	21.5	20.8	20.9	21.3	--	21.2
- 1964-66	21.4	20.9	--	21.2		
Protein Content - 1966	39.7	41.1+	40.7+	39.0-	41.1+	39.8
- 1965-66	40.0	41.3	40.9	39.6	--	40.2
- 1964-66	39.9	40.9	--	39.4		
Seed Size	15.6	13.1-	12.5-	14.1-	13.5-	15.3
Maturity Index	10-6	+7	+9	+7	+7	+5
Height	34	33	31	40	34	30
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot[1/]	1.5	1.0	2.5	1.0	1.0	1.0
Seed Coat Mottling(%)[2/]	0.0	11.2	13.0	42.0	16.7	2.3
Shattering	2.0	1.0	1.0	2.0	1.0	1.0
Flower Color	W	P	P	W	P	W
Pubescence Color	G	T	G	G	T	G
Pod Wall Color	T	T	T	T	T	B

1/ Stoneville, Keiser, Portageville data. 2/ Warsaw data.

Table 29. - (continued)

	D61-929	D62-7816	D63-3933	D63-6292	N62-136	R63-544
Seed Yield - 1966						
East Coast	34.7-	35.3	34.0-	34.6-	33.7-	35.7
Southeast	34.3-	38.0	35.4-	36.2-	35.8-	34.6-
Upper & Central South	35.6	36.9	32.9	37.4	36.9	36.6
Delta	41.5	38.6	40.4	41.1	33.6-	38.5
West	39.8	42.4	41.9	43.6	39.8	42.8
- 1965-66						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
- 1964-66						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1966	20.6-	20.4-	21.7+	20.2-	20.4-	21.6+
- 1965-66						
- 1964-66						
Protein Content - 1966	39.7	40.5+	40.4+	41.1+	42.0+	39.2
- 1965-66						
- 1964-66						
Seed Size	12.8-	12.5-	12.2-	11.8-	12.4-	13.1-
Maturity Index	-2	+5	+1	+5	+5	+5
Height	33	31	34	32	31	32
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot[1/]	1.0	1.0	1.5	1.0	2.0	1.0
Seed Coat Mottling(%)[2/]	11.3	21.7	8.3	15.0	3.3	3.7
Shattering	1.0	1.0	1.0	1.0	1.0	1.0
Flower Color	W	P	P	P	W	W
Pubescence Color	T	T	T	G	T	G
Pod Wall Color	T	T	T	T	G	T

Table 30. - Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1966

Location	Hood	Lee	Pickett	Davis	R64-501	R62-395	D61-929
			East Coast				
Linkwood, Md.	32.7	33.6	27.7	30.9	34.7	33.2	29.5
Painter, Va.	43.1	44.3	37.8-	41.4	41.3	40.8	41.7
Warsaw, Va.	19.0	20.3	11.9-	18.4	20.1	18.4	19.1
Petersburg, Va.	41.9	38.7	39.6	44.7	39.7	45.5	36.7
Norfolk, Va.	44.4	38.1-	30.8-	42.4	35.6-	35.1-	37.6-
Holland, Va.	36.5	26.9-	22.4-	31.7-	29.6-	29.1-	35.9
Plymouth, N. C.	37.9	38.8	33.2	45.5	37.0	36.3	39.1
Willard, N. C.	47.8	47.3	42.1	47.4	45.6	45.0	41.0
Clayton, N. C.	35.2	35.3	35.0	42.7	37.0	39.9	32.0
Mean	37.6	35.9	31.2-	38.3	35.6	35.9	34.7-
			Southeast				
Quincy, Fla.	32.4	31.1	29.0-	36.3+	28.9-	19.5-	24.2-
Jay, Fla.	43.5	39.4	38.0-	46.3	37.7-	36.8-	32.5-
Fairhope, Ala.	48.3	50.1	44.4	50.0	48.3	46.3	46.3
Mean	41.4	40.2	37.1	44.2	38.3	34.2-	34.3-
			Upper and Central South				
Milan, Tenn.	38.4	35.6	33.6	35.0	30.1	34.2	36.1
Jackson, Tenn.	24.8	23.1	32.6	24.3	30.0	28.3	31.3
Belle Mina, Ala.	41.3	32.5-	36.0	43.5	30.9-	39.4	34.7-
Experiment, Ga.	38.9	44.1	47.4	55.3+	43.7	37.6	36.5
State College, Miss.	43.3	42.3	36.6	44.9	41.6	42.1	39.3
Mean	37.3	35.5	37.2	40.6	35.3	36.3	35.6
			Delta				
Portageville, Mo.(A)	32.4	32.8	30.1	31.1	37.6+	35.7	33.6
Portageville, Mo.(B)	39.3	34.9	27.9-	38.4	43.0	41.2	42.7
Keiser, Ark.	26.6	31.0	26.5	31.1	33.6	29.2	32.9
Marianna, Ark.	42.5	38.3	29.8-	41.1	40.8	40.1	37.0
Stoneville, Miss.(A)	41.4	38.8	30.0-	39.7	40.8	42.8	41.6
Stoneville, Miss.(B)	41.4	38.3	34.6	34.5	37.9	35.0	40.2
St. Joseph, La.	68.7	56.0-	49.6-	65.7	58.7-	59.6	62.6
Mean	41.7	38.6	32.7-	40.2	41.8	40.5	41.5
			West				
Stuttgart, Ark.	51.3	45.4	45.5	48.7	45.2	50.7	47.9
Crowley, La.	45.0	50.2	46.5	50.7	46.2	46.5	47.3
Curtis, La.	47.6	44.0	42.6-	44.0	37.6-	45.1	39.2-
Bixby, Okla.	24.4	21.8	24.4	23.4	26.0	31.3	24.7
Lubbock, Texas*	28.5	28.9	27.2	23.7	25.1	26.8	29.4
Mean	42.1	40.4	39.7	41.7	38.8	43.4	39.8

* Not included in mean.

Table 30 - (continued)

Location	D62-7816	D63-3933	D63-6292	N62-136	R63-544	L.S.D. (.05)	C.V.
			East Coast				
Linkwood, Md.	32.9	30.9	34.4	30.2	35.0	N.S.	11%
Painter, Va.	42.6	37.2-	44.2	41.7	40.7	4.0	6%
Warsaw, Va.	18.8	19.2	21.5	19.4	19.1	2.5	8%
Petersburg, Va.	44.4	33.6-	39.4	38.9	46.1	6.5	9%
Norfolk, Va.	39.4-	37.1-	40.9	37.1-	36.6-	4.9	8%
Holland, Va.	26.2-	35.7	27.7-	26.5-	24.8-	4.6	9%
Plymouth, N. C.	36.8	35.8	33.6	34.1	39.2	N.S.	11%
Willard, N. C.	42.1	40.1	37.0	41.4	39.6	N.S.	13%
Clayton, N. C.	34.6	36.7	34.3	34.5	40.1	N.S.	13%
Mean	35.3	34.0-	34.6-	33.7-	35.7	2.7	
			Southeast				
Quincy, Fla.	30.1	25.8-	26.8-	27.1-	25.4-	3.1	7%
Jay, Fla.	36.6-	30.6-	32.5-	34.2-	33.7-	4.3	7%
Fairhope, Ala.	47.4	49.9	49.4	46.1	44.8	N.S.	5%
Mean	38.0	35.4-	36.2-	35.8-	34.6-	4.7	
			Upper and Central South				
Milan, Tenn.	32.0	35.9	37.4	32.6	37.1	N.S.	11%
Jackson, Tenn.	28.7	33.4	30.2	28.1	27.8	N.S.	14%
Belle Mina, Ala.	39.6	31.2-	35.8	37.8	41.2	5.9	9%
Experiment, Ga.	41.0	25.0-	40.4+	45.2	37.4	9.4	13%
State College, Miss.	43.0	39.2	43.3	40.7	39.6	N.S.	9%
Mean	36.9	32.9	37.4	36.9	36.6	N.S.	
			Delta				
Portageville, Mo.(A)	32.8	41.0	34.4	30.7	35.0	4.3	8%
Portageville, Mo.(B)	37.5	37.4	37.2	34.7	41.4	4.8	8%
Keiser, Ark.	25.7	16.5-	35.1	25.5	25.2	9.2	19%
Marianna, Ark.	38.0	43.2	42.5	40.8	41.4	6.1	9%
Stoneville, Miss.(A)	37.5	41.9	40.2	27.7-	35.0-	5.9	9%
Stoneville, Miss.(B)	40.1	42.4	38.7	30.0	33.3	N.S.	13%
St. Joseph, La.	58.3-	60.8	59.4	46.0-	58.5-	9.8	10%
Mean	38.6	40.4	41.1	33.6-	38.5	3.8	
			West				
Stuttgart, Ark.	48.8	52.6	52.6	44.6	53.6	N.S.	8%
Crowley, La.	47.3	45.4	47.2	46.5	44.7	N.S.	6%
Curtis, La.	44.2	37.9-	44.7	40.8-	41.9-	4.5	6%
Bixby, Okla.	24.1	31.7	29.8	27.3	31.2	N.S.	15%
Lubbock, Texas*	29.1	9.5	29.5	25.6	28.3	N.S.	25%
Mean	42.4	41.9	43.6	39.8	42.8	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, 1966

Location	Hood	Lee	Pickett	Davis	R64-501	R62-395
			Oil Percentage			
Warsaw, Va.	19.1	18.2	18.0	18.2	18.2	18.7
Plymouth, N. C.	20.3	20.7	20.3	20.9	20.0	20.7
Clayton, N. C.	21.0	21.3	21.0	22.2	20.9	22.0
Jay, Fla.	22.1	21.7	22.7	22.6	22.2	22.5
Portageville, Mo.(A)	19.5	19.7	19.5	20.5	19.6	20.6
Keiser, Ark.	21.0	20.5	20.7	21.2	21.0	21.6
Stoneville, Miss.(A)	21.8	20.8	20.6	22.0	21.1	22.2
Stoneville, Miss.(B)	23.2	21.7	22.2	23.1	21.6	23.4
Stuttgart, Ark.	21.6	20.1	20.6	20.7	19.4	21.7
Mean	21.1	20.5-	20.6-	21.3	20.4-	21.5
			Protein Percentage			
Warsaw, Va.	41.7	41.3	41.9	41.6	41.1	41.1
Plymouth, N. C.	41.2	42.4	42.1	40.4	42.6	41.1
Clayton, N. C.	40.7	42.7	41.6	39.4	42.0	40.4
Jay, Fla.	39.6	41.3	40.3	39.4	41.2	40.5
Portageville, Mo.(A)	38.8	38.8	39.4	37.4	39.2	38.5
Keiser, Ark.	38.8	39.4	38.9	38.3	40.0	38.7
Stoneville, Miss.(A)	38.6	41.5	41.7	38.8	41.2	40.5
Stoneville, Miss.(B)	37.4	38.5	38.6	36.1	38.4	35.8
Stuttgart, Ark.	40.2	43.6	41.8	39.9	44.5	41.2
Mean	39.7	41.1+	40.7+	39.0-	41.1+	39.8
			Grams per 100 Seeds			
Warsaw, Va.	15.6	11.5	10.6	15.2	11.6	14.7
Plymouth, N. C.	15.6	12.0	12.6	15.0	12.5	15.7
Clayton, N. C.	14.5	15.2	15.5	14.8	16.2	16.9
Jay, Fla.	17.3	15.1	13.7	14.6	15.1	16.6
Keiser, Ark.	14.0	10.7	9.3	12.3	11.3	11.7
Stoneville, Miss.(A)	15.4	12.9	12.5	13.6	13.4	14.9
Stoneville, Miss.(B)	14.6	13.5	11.7	13.1	13.0	14.4
Stuttgart, Ark.	17.0	14.3	14.3	15.3	15.0	17.7
Bixby, Okla.	16.0	12.7	12.0	13.3	12.9	15.3
Mean	15.6	13.1-	12.5-	14.1-	13.4-	15.3

Table 31. - (continued)

Location	D61-929	D62-7816	D63-3933	D63-6292	N62-136	R63-544	L.S.D. (.05)
			Oil Percentage				
Warsaw, Va.	17.6	18.6	20.6	18.4	19.0	19.4	
Plymouth, N. C.	20.3	19.3	21.0	20.0	19.9	20.6	
Clayton, N. C.	20.8	21.0	21.6	20.4	21.5	21.7	
Jay, Fla.	22.3	21.6	22.7	21.2	21.8	23.6	
Portageville, Mo.(A)	20.2	19.3	22.1	19.3	19.1	20.1	
Keiser, Ark.	20.8	21.7	22.1	20.2	20.2	21.6	
Stoneville, Miss.(A)	20.9	20.8	21.3	20.2	19.7	22.8	
Stoneville, Miss.(B)	21.8	21.5	23.3	22.2	22.8	23.3	
Stuttgart, Ark.	20.7	19.5	20.9	19.5	19.4	20.9	
Mean	20.6-	20.4-	21.7+	20.2-	20.4-	21.6+	0.5
			Protein Percentage				
Warsaw, Va.	40.7	41.1	41.3	41.0	42.8	40.0	
Plymouth, N. C.	41.5	41.8	42.0	42.9	43.0	41.2	
Clayton, N. C.	40.5	41.6	41.4	42.6	42.7	39.3	
Jay, Fla.	39.8	39.9	41.4	41.3	42.8	39.9	
Portageville, Mo.(A)	37.6	38.0	37.8	39.8	39.3	38.0	
Keiser, Ark.	39.0	38.6	38.6	39.4	40.0	38.5	
Stoneville, Miss.(A)	40.0	41.5	41.1	41.4	43.6	39.3	
Stoneville, Miss.(B)	37.4	38.4	37.4	37.2	38.2	35.8	
Stuttgart, Ark.	40.5	43.4	42.7	43.9	45.2	40.5	
Mean	39.7	40.5+	40.4+	41.1+	42.0+	39.2	0.7
			Grams per 100 Seeds				
Warsaw, Va.	11.5	11.2	11.3	9.9	12.9	12.5	
Plymouth, N. C.	13.4	11.9	13.1	11.1	12.6	13.8	
Clayton, N. C.	12.4	14.9	14.4	13.2	14.6	14.4	
Jay, Fla.	14.1	13.7	13.5	12.6	14.7	15.1	
Keiser, Ark.	11.7	11.0	9.0	9.0	9.7	10.7	
Stoneville, Miss.(A)	13.8	12.5	11.9	11.7	10.9	12.4	
Stoneville, Miss.(B)	12.1	12.2	11.5	12.2	11.5	12.2	
Stuttgart, Ark.	13.7	13.3	13.7	13.0	14.0	15.0	
Bixby, Okla.	12.7	12.1	11.3	13.5	11.1	12.1	
Mean	12.8-	12.5-	12.2-	11.8-	12.4-	13.1-	0.8

Table 32. - Relative maturity data, days earlier (-) or later (+) than Hood, for the strains in Uniform Group VI, 1966

Location	Date planted	Hood matured	Lee	Pickett	Davis	R64-501	R62-395
			East Coast				
Linkwood, Md.	6-2	10-30	+2	+2	+3	+2	+2
Painter, Va.	6-7	11-4	+4	+6	+7	+2	+4
Warsaw, Va.	5-18	10-28	+10	+14	+13	+7	+12
Petersburg, Va.	5-18	10-30	+5	+6	+6	+4	+6
Plymouth, N. C.	5-18	10-17	+7	+11	+13	+5	+11
Willard, N. C.	5-17	10-8	+10	+12	+12	+14	+6
Clayton, N. C.	5-10	10-13	+13	+14	+13	+17	+5
Mean		10-23	+7	+9	+10	+7	+7
			Southeast				
Quincy, Fla.	6-14	10-15	+2	+3	-5	-3	-2
Jay, Fla.	5-28	10-3	+6	+7	+3	+4	+3
Fairhope, Ala.	6-1	10-2	+8	+8	+2	+8	+4
Mean		10-7	+5	+6	0	+3	+2
			Upper and Central South				
Milan, Tenn.	5-20	10-28	+7	+11	+4	0	+7
Belle Mina, Ala.		10-10	+7	+11	+8	+9	+8
Experiment, Ga.	5-10	10-3	+11	+17	+10	+11	+4
Mean		10-14	+8	+13	+7	+7	+6
			Delta				
Portageville, Mo.(A)	5-21	10-15	+11	+11	+11	+10	+12
Portageville, Mo.(B)		10-25	+5	+7	+7	+5	+6
Keiser, Ark.	5-11	10-17	+12	+15	+10	+13	+10
Marianna, Ark.	5-27	10-22	+6	+6	+6	+6	+6
Stoneville, Miss.(A)	5-9	10-7	+6	+5	+4	+6	+2
Stoneville, Miss.(B)	5-11	10-3	+11	+12	+5	+10	0
St. Joseph, La.	5-16	10-5	+15	+8	+6	+14	+3
Mean		10-16	+9	+9	+7	+9	+6
			West				
Stuttgart, Ark.	5-28	10-12	+10	+10	+10	+10	+10
Curtis, La.	6-2	10-19	+1	+1	+4	+5	+2
Bixby, Okla.	5-19	10-23	+2	+3	+2	+3	+2
Mean		10-18	+4	+5	+5	+6	+5

Table 32. - (continued)

Location	D61-929	D62-7816	D63-3933	D63-6292	N62-136	R63-544
			East Coast			
Linkwood, Md.	-1	+2	-1	+1	+1	+2
Painter, Va.	-10	+1	-4	+3	+1	+1
Warsaw, Va.	+1	+10	+7	+10	+10	+9
Petersburg, Va.	-5	+4	-2	0	+1	+1
Plymouth, N. C.	-2	+5	+7	+5	+3	+11
Willard, N. C.	0	+10	+2	+6	+6	+12
Clayton, N. C.	0	+15	+5	+7	+7	+5
Mean	-2	+7	+2	+5	+4	+6
			Southeast			
Quincy, Fla.	-4	-5	-1	+1	+2	+1
Jay, Fla.	-5	+4	+3	+4	+2	+2
Fairhope, Ala.	0	+8	+4	+4	+8	+4
Mean	-3	+2	+2	+3	+4	+2
			Upper and Central South			
Milan, Ten..	-10	-6	-10	-3	-2	0
Belle Mina, Ala.	0	+8	0	+8	+9	+9
Experiment, Ga.	+2	+12	+6	+8	+9	+2
Mean	-3	+5	-1	+4	+5	+4
			Delta			
Portageville, Mo.(A)	0	+11	+3	+10	+9	+13
Portageville, Mo.(B)	-1	+4	-2	+3	+3	+5
Keiser, Ark.	0	+11	-5	+11	+14	+10
Marianna, Ark.	-2	+6	+6	+6	+6	+6
Stoneville, Miss.(A)	-1	+5	+5	+5	+2	+3
Stoneville, Miss.(B)	+2	+9	+4	+9	+6	+6
St. Joseph, La.	-5	+6	+6	+6	+1	+5
Mean	-1	+7	+2	+7	+6	+7
			West			
Stuttgart, Ark.	-2	+10	+2	+10	+7	+11
Curtis, La.	+4	+2	-1	+2	+4	+4
Bixby, Okla.	-12	+2	+3	+2	0	0
Mean	-3	+5	+1	+5	+4	+5

Table 33. - Plant height for the strains in Uniform Group VI, 1966

Location	Hood	Lee	Pickett	Davis	R64-501	R62-395
			East Coast			
Linkwood, Md.	39	42	36	46	39	34
Painter, Va.	41	39	37	49	38	33
Warsaw, Va.	35	36	33	39	35	33
Petersburg, Va.	37	35	33	42	34	31
Norfolk, Va.	36	35	38	42	38	32
Holland, Va.	43	41	37	47	41	37
Plymouth, N. C.	36	34	33	42	35	33
Willard, N. C.	37	34	31	41	33	31
Clayton, N. C.	38	33	33	41	35	33
Mean	37	35	33	43	36	33
			Southeast			
Quincy, Fla.	23	24	20	34	25	20
Jay, Fla.	26	25	24	32	25	23
Fairhope, Ala.	23	31	26	34	30	23
Mean	24	27	23	33	27	22
			Upper and Central South			
Milan, Tenn.	40	38	28	46	40	34
Jackson, Tenn.	39	34	41	43	40	41
Belle Mina, Ala.	36	33	35	41	35	35
Experiment, Ga.	32	32	29	38	33	29
Mean	37	34	33	42	37	35
			Delta			
Portageville, Mo.(A)	41	41	36	48	42	35
Portageville, Mo.(B)	36	34	31	41	36	27
Keiser, Ark.	27	27	25	31	27	24
Marianna, Ark.	41	43	38	47	42	35
Stoneville, Miss.(A)	37	35	35	41	34	34
Stoneville, Miss.(B)	33	31	31	41	29	28
St. Joseph, La.	37	33	34	43	36	31
Mean	36	35	33	42	35	31
			West			
Stuttgart, Ark.	34	34	31	38	32	29
Crowley, La.	27	31	30	35	30	27
Curtis, La.	28	25	26	30	29	24
Bixby, Okla.	34	34	33	36	35	34
Lubbock, Texas	17	17	21	20	26	13
Mean	28	28	28	32	30	25

Table 33. - (continued)

Location	D61-929	D62-7816	D63-3933	D63-6292	N62-136	R63-544
			East Coast			
Linkwood, Md.	41	41	42	39	34	33
Painter, Va.	40	36	42	37	37	38
Warsaw, Va.	33	34	38	34	32	32
Petersburg, Va.	32	32	37	35	33	32
Norfolk, Va.	33	32	37	37	36	34
Holland, Va.	43	37	46	39	37	38
Plymouth, N. C.	35	35	35	35	33	35
Willard, N. C.	31	29	31	24	31	30
Clayton, N. C.	33	29	39	30	34	37
Mean	36	34	39	34	34	34
			Southeast			
Quincy, Fla.	25	22	25	20	21	22
Jay, Fla.	25	26	25	24	23	25
Fairhope, Ala.	27	25	29	26	25	26
Mean	26	24	26	23	23	24
			Upper and Central South			
Milan, Tenn.	36	30	36	34	34	36
Jackson, Tenn.	43	39	38	41	40	38
Belle Mina, Ala.	34	33	35	33	33	33
Experiment, Ga.	32	29	34	30	30	29
Mean	36	33	36	35	34	34
			Delta			
Portageville, Mo.(A)	35	36	40	39	38	37
Portageville, Mo.(B)	36	32	29	35	32	30
Keiser, Ark.	27	23	25	25	25	21
Marianna, Ark.	46	39	51	42	40	41
Stoneville, Miss.(A)	33	33	37	32	33	37
Stoneville, Miss.(B)	33	29	31	29	25	27
St. Joseph, La.	32	32	40	32	34	36
Mean	35	32	36	33	32	33
			West			
Stuttgart, Ark.	34	31	34	32	31	31
Crowley, La.	30	27	30	28	26	29
Curtis, La.	28	27	27	28	28	27
Bixby, Okla.	36	36	46	37	34	34
Lubbock, Texas	17	21	15	19	20	16
Mean	29	28	28	29	28	27

Table 34. - Lodging scores for the strains in Uniform Group VI, 1966

Location	Hood	Lee	Pickett	Davis	R64-501	D62-395
			East Coast			
Linkwood, Md.	1.9	2.4	1.8	1.7	2.4	1.4
Painter, Va.	2.5	3.3	3.3	3.7	3.2	2.3
Warsaw, Va.	1.2	1.5	2.1	1.4	1.5	1.2
Petersburg, Va.	1.3	2.3	1.0	1.7	2.0	1.0
Norfolk, Va.	2.0	3.0	3.3	2.0	4.0	2.3
Holland, Va.	2.3	3.3	3.7	2.7	3.0	3.0
Plymouth, N. C.	2.0	3.0	3.0	3.0	3.0	3.0
Willard, N. C.	3.0	3.0	2.0	3.0	3.0	2.0
Clayton, N. C.	3.0	2.0	3.0	2.0	3.0	3.0
			Southeast			
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Milan, Tenn.	1.0	1.0	1.0	2.0	2.0	1.0
Belle Mina, Ala.	1.0	1.3	1.3	1.0	1.3	1.0
Experiment, Ga.	1.0	1.7	1.3	1.3	1.3	1.0
			Delta			
Portageville, Mo.(A)	2.8	3.0	3.0	2.8	3.0	2.8
Portageville,Mo. (B)	1.7	2.0	2.0	2.0	2.0	1.3
Keiser, Ark.	1.5	1.8	1.1	1.2	2.3	1.2
Marianna, Ark.	3.3	3.0	3.0	3.0	3.0	2.7
Stoneville, Miss.(A)	3.0	3.0	2.7	4.0	3.0	3.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.3	2.0	1.0
St. Joseph, La.	3.0	2.3	2.0	3.0	3.0	2.7
			West			
Stuttgart, Ark.	1.0	1.7	1.0	2.0	2.0	1.0
Curtis, La.	2.0	2.0	2.0	2.0	2.0	1.0
Bixby, Okla.	1.0	1.0	1.0	1.0	3.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 34. - (continued)

Location	D61-929	D62-7816	D63-3933	D63-6292	N62-136	R63-544
			East Coast			
Linkwood, Md.	2.0	1.9	1.9	1.9	1.7	1.9
Painter, Va.	2.3	2.5	2.3	2.5	2.0	3.3
Warsaw, Va.	1.2	1.4	1.8	1.2	1.2	1.3
Petersburg, Va.	2.7	1.3	2.7	1.0	1.3	1.0
Norfolk, Va.	3.0	2.7	3.7	2.7	2.7	2.3
Holland, Va.	3.3	2.7	3.3	2.7	3.0	3.0
Plymouth, N. C.	2.0	2.0	3.0	2.0	2.0	2.0
Willard, N. C.	2.0	2.0	3.0	2.0	2.0	3.0
Clayton, N. C.	3.0	2.0	4.0	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	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Milan, Tenn.	1.0	1.0	1.0	1.0	1.0	2.0
Belle Mina, Ala.	1.0	1.3	1.0	1.3	1.3	1.3
Experiment, Ga.	2.0	1.3	1.0	1.0	1.0	1.7
			Delta			
Portageville, Mo.(A)	2.8	2.8	3.3	3.0	2.8	3.0
Portageville, Mo.(B)	2.0	2.0	2.0	1.3	1.7	1.7
Keiser, Ark.	2.0	1.5	2.3	1.5	1.2	1.0
Marianna, Ark.	4.0	3.0	3.3	2.3	2.0	2.7
Stoneville, Miss.(A)	2.0	3.0	3.0	2.3	2.7	2.3
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	2.3	1.0	2.7	2.0	2.3	2.3
			West			
Stuttgart, Ark.	2.3	1.0	2.0	1.0	1.0	1.0
Curtis, La.	2.0	2.0	2.0	2.0	1.0	1.0
Bixby, Okla.	1.0	1.0	3.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 35. - Seed quality scores for the strains in Uniform Group VI, 1966

Location	Hood	Lee	Pickett	Davis	R64-501	D62-395
			East Coast			
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Painter, Va.	1.3	1.8	2.3	2.0	2.2	1.5
Warsaw, Va.	2.0	1.9	3.2	2.4	1.9	2.0
Petersburg, Va.	1.0	3.0	1.7	1.0	1.3	1.0
Norfolk, Va.	2.0	3.0	4.0	2.0	3.0	3.0
Holland, Va.	1.0	2.0	1.0	1.0	1.5	1.5
Plymouth, N. C.	1.5	1.5	2.0	1.0	1.5	1.5
Willard, N. C.	1.5	1.0	1.0	1.0	1.5	1.0
Clayton, N. C.	1.5	1.0	1.0	1.0	1.0	1.5
			Southeast			
Quincy, Fla.	1.0	2.0	2.0	1.0	2.0	3.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	2.8	2.1	2.5	2.3	2.1	2.6
			Upper and Central South			
Milan, Tenn.	1.0	2.0	1.3	1.0	1.3	1.0
Jackson, Tenn.	2.0	3.0	2.0	2.0	2.0	2.0
Experiment, Ga.	1.3	1.3	1.3	1.0	1.3	1.0
			Delta			
Portageville, Mo.(A)	1.0	2.0	2.7	1.3	2.0	1.0
Portageville, Mo.(B)	1.0	2.0	2.3	2.3	2.0	1.0
Keiser, Ark.	2.3	2.3	2.7	2.0	2.3	2.0
Marianna, Ark.	2.3	1.7	2.0	1.7	1.7	1.7
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.3
			West			
Stuttgart, Ark.	2.3	2.0	2.0	1.7	2.0	1.7
Curtis, La.	2.0	2.0	1.0	1.0	2.0	1.0
Bixby, Okla.	2.0	2.0	3.0	2.0	2.0	2.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 35. - (continued)

Location	D61-929	D62-7816	D63-3933	D63-6292	N62-136	R63-544
			East Coast			
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Painter, Va.	1.8	1.5	2.0	2.3	1.5	1.5
Warsaw, Va.	2.2	2.3	1.6	2.3	1.6	1.7
Petersburg, Va.	1.7	1.0	1.3	2.3	1.0	1.0
Norfolk, Va.	2.0	3.0	4.0	4.0	3.0	2.0
Holland, Va.	1.0	2.0	1.5	2.0	1.0	2.0
Plymouth, N. C.	2.0	1.5	1.0	2.0	1.0	1.5
Willard, N. C.	2.0	1.5	1.5	1.5	1.0	1.0
Clayton, N. C.	2.0	1.0	1.0	1.5	1.0	1.5
			Southeast			
Quincy, Fla.	3.0	2.0	4.0	3.0	2.0	3.0
Jay, Fla.	1.0	1.0	1.0	2.0	1.0	1.0
Fairhope, Ala.	3.7	1.5	3.1	1.0	2.8	3.0
			Upper and Central South			
Milan, Tenn.	2.0	1.7	2.3	2.0	1.0	1.3
Jackson, Tenn.	2.0	2.0	2.0	3.0	2.0	2.0
Experiment, Ga.	1.7	1.7	1.3	1.7	1.0	1.7
			Delta			
Portageville, Mo.(A)	2.0	2.3	1.8	2.0	1.0	1.8
Portageville, Mo.(B)	2.0	2.0	1.0	2.0	1.0	1.0
Keiser, Ark.	2.7	2.0	2.7	3.0	1.7	2.3
Marianna, Ark.	2.3	1.3	2.0	1.7	1.3	2.0
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Stuttgart, Ark.	2.3	1.7	2.0	2.0	2.0	1.7
Curtis, La.	2.0	2.0	2.0	2.0	1.0	1.0
Bixby, Okla.	2.0	3.0	2.0	2.0	2.0	2.0
Lubbock, Texas	1.3	1.0	1.0	1.0	1.0	1.0

PRELIMINARY GROUP VI

1966

Seven Preliminary Group VI nurseries including 34 experimental strains with Hood and Lee as checks were grown. The parentage for these strains is reported in Table 36. Performance data are summarized in Tables 37 through 42. Differences in yield among strains were significant at the 5 percent level of confidence at five of the seven locations. The combined analysis of variance also showed differences among strains to be significant at the 5 percent level. Nineteen experimental strains and Lee yielded significantly less than Hood. No strain yielded significantly higher than Hood. One strain, N62-2140, was significantly higher in seed yield than Lee, but this strain was segregating for flower color and was quite susceptible to shattering.

D64-4636, which ranked third in seed yield, proved highly resistant to root-knot nematodes in field and greenhouse plantings at Jackson, Tennessee. D64-3937 and R64-502 have the Arksoy type resistance to phytophthora rot.

The six strains D64-3396, D64-3937, D64-4485, D64-4573, D64-4636, and R64-502 appear to merit further testing in Uniform Group VI.

Table 36. - Parentage of the strains in Preliminary Group VI, 1966

	Variety or strain	Parentage	Generation composited
1.	Hood		
2.	Lee		
3.	D60-6192	Hill x D49-2491	F_5
4.	D60-6306	Hill x D49-2491	F_5
5.	D63-3890	D49-2491(5) x T122	F_4
6.	D63-6324	Lee(2) x [Clark(2) x T109]	F_5
7.	D64-3396	D49-2491(5) x Hawkeye	F_4
8.	D64-3697	Hill x PI 187,155	F_7
9.	D64-3896	Hill x D59-1619	F_5
10.	D64-3937	Hill x D59-1619	F_5
11.	D64-3945	Hill x D59-1619	F_5
12.	D64-4469	Hill x D58-3311*	F_5
13.	D64-4485	Hill x D58-3311	F_5
14.	D64-4507	Hill x D58-3311	F_5
15.	D64-4573	Hill x D58-3311	F_5
16.	D64-4625	Hill x D58-3311	F_5
17.	D64-4636	Hill x D58-3311	F_5
18.	D64-4813	D49-2491(4) x PI 163,453	F_5
19.	D64-4841	D49-2491(4) x PI 163,453	F_5
20.	D64-4860	D49-2491(4) x PI 163,453	F_5
21.	D64-8713	D49-2491(5) x L7-163	F_5
22.	N62-2140	(N52-3908 x N51-1675) x (Ogden x Lee)	F_5
23.	N62-2248	(N52-3908 x N51-1675) x (Ogden x Lee)	F_5
24.	N62-2381	(N52-3908 x N51-1675) x (Ogden x Lee)	F_5
25.	N63-2765	N59-6958 sel.	
26.	N63-2766	N59-6958 sel.	
27.	N63-2767	N59-6958 sel.	
28.	N63-4240	Hill(20) x PI 96,983	F_4
29.	N63-4378	Hill(2) x PI 96,983	F_4
30.	R64-370	Hill x R59-200	F_4
31.	R64-393	Hill x R59-200	F_4
32.	R64-502	Lee(6) x Arksoy	F_3
33.	V63-24	Hood x D53-354	F_6
34.	V63-75	Dorman x Hill	F_6
35.	V63-82	Perry x Hill	F_6
36.	V64-34	C1069 x Lee	F_6

* Selection from Jackson(4) x D49-2491

Table 37. - General summary of performance for the strains in Preliminary Group VI, 1966

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter	T.S.	P.R.	Percent mottled seed
Hood	41.8	10-14	34	20.5	40.0	2.0	1.0	2.0	0.0
Lee	37.2-	+8	33	20.2	40.7	1.0	1.0	1.0	5.0
D60-6192	36.4-	+4	35	19.7	41.0+	1.0	2.0	1.0	6.0
D60-6306	36.9-	+8	31	18.5-	40.9	1.0	1.0	1.0	2.0
D63-3890	36.0-	+9	38	20.1	40.8	1.0	2.0	2.5	1.0
D63-6324	39.8	+6	31	19.4-	40.7	1.0	2.0	1.0	12.0
D64-3396	40.3	+7	33	20.3	40.0	1.0	2.0	1.0	5.0
D64-3697	33.3-	-1	32	19.3-	41.5+	1.5	2.0	1.0	8.0
D64-3896	32.5-	+4	34	20.6	40.1	2.5	2.0	1.0	1.0
D64-3937	38.9	+3	31	19.4-	40.4	1.0	2.0	1.0	0.0
D64-3945	36.7-	+5	39	20.4	38.1-	1.5	2.0	1.5	1.0
D64-4469	37.1-	+2	41	20.6	38.1-	2.0	2.0	1.0	0.0
D64-4485	38.6	+1	34	20.0	39.5	1.0	2.0	1.0	1.0
D64-4507	34.9-	+1	39	19.4-	39.0-	1.0	2.0	1.5	0.0
D64-4573	40.9	+6	34	19.4-	37.7-	1.0	2.0	1.0	0.0
D64-4625	37.2-	+2	42	19.8	38.5-	2.0	2.0	1.0	0.0
D64-4636	40.7	-2	32	20.2	39.6	1.0	1.0	1.0	0.0
D64-4813	34.8-	+8	34	19.3-	40.8	1.0	2.0	1.0	10.0
D64-4841	33.1-	+8	33	17.8-	43.5+	1.0	2.0	1.0	26.0
D64-4860	31.3-	+7	35	16.7-	44.2+	1.5	2.0	1.0	53.0
D64-8713	37.8	+7	31	19.4	41.1+	1.0	1.0	1.0	2.0
N62-2140	42.6	-4	30	21.4+	39.5	3.0	2.0	1.0	0.0
N62-2248	39.7	-3	33	20.1	40.0	4.0	2.0	3.5	0.0
N62-2381	37.8	-3	34	20.2	40.2	3.0	2.0	2.0	0.0
N63-2765	39.4	-5	30	20.6	39.0-	2.0	2.0	1.0	1.0
N63-2766	37.5	-2	32	20.9	39.2	2.0	1.0	2.0	10.0
N63-2767	37.0-	-2	32	19.9	39.8	2.0	1.0	1.0	4.0
N63-4240	32.9-	-2	36	17.0-	42.3	2.5	2.0	1.0	0.0
N63-4378	36.3-	0	34	17.9-	40.7	3.0	2.0	1.0	0.0
R64-370	38.2	+8	33	19.7	39.2	1.0	3.0	1.0	6.0
R64-393	35.2-	+8	33	19.8	38.5-	1.0	3.0	1.0	18.0
R64-502	40.3	-4	32	20.3	41.1+	1.0	2.0	1.0	7.0
V63-24	34.7-	-3	37	20.9	38.0-	3.0	1.0	2.0	0.0
V63-75	38.7	-6	32	20.2	39.2	3.0	2.0	1.0	0.0
V63-82	33.3-	-7	33	19.7	40.4	3.0	1.0	3.0	24.0
V64-34	34.3-	0	48	20.7	39.4	3.0	2.0	1.0	34.0
L.S.D.(.05)	4.5			0.9	1.0				
L.S.D.(.01)	6.0			1.1	1.3				

Table 38. - Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1966

Strain	Petersburg, Va.	Plymouth, N.C.	Portageville, Mo.	Keiser, Ark.*	Stoneville, Miss.(A)	Stoneville, Miss.(B)	Jay, Fla.
Hood	54.0	46.5	34.4	23.0	42.4	27.7	45.9
Lee	42.7-	41.1	34.9	25.5	38.8	25.5	40.5
D60-6192	43.2-	40.4	33.6	24.2	35.7-	31.9	33.7-
D60-6306	46.9	37.8	39.7	25.4	34.7-	25.1	36.9-
D63-3890	42.2-	44.9	38.9	31.5	31.2-	27.8	36.6-
D63-6324	47.4	49.0	39.0	27.9	38.8	28.0	36.9-
D64-3396	48.2	39.3	39.3	29.9	40.3	40.1+	34.7-
D64-3697	40.2-	34.6-	35.7	31.9	35.2-	25.6	28.3-
D64-3896	40.2-	40.6	30.8	26.3	22.6-	30.5	30.5-
D64-3937	46.4	45.0	37.2	32.4	36.3	32.7	35.9-
D64-3945	39.5-	40.8	36.7	35.5	33.8-	29.4	39.8
D64-4469	46.1	41.1	32.7	28.9	35.7-	26.9	39.8
D64-4485	45.6-	42.6	35.7	25.9	35.2-	33.5	38.7
D64-4507	40.2-	40.2	31.9	29.3	31.0-	27.2	38.7
D64-4573	50.8	39.4	39.2	33.2	31.9-	35.1	49.1
D64-4625	46.1-	48.0	32.6	24.9	30.0-	30.4	36.2-
D64-4636	41.0-	47.4	43.2	17.4	34.0-	37.5+	41.2
D64-4813	37.4-	35.8-	35.4	25.5	34.1-	28.8	37.6
D64-4841	38.1-	37.2-	32.8	29.0	35.4-	28.3	31.9-
D64-4860	33.8-	33.8-	29.2	30.4	31.7-	29.8	29.8-
D64-8713	41.8-	39.6	38.5	27.1	39.3	28.4	39.1
N62-2140	60.2	47.4	40.1	30.1	40.2	24.2	43.4
N62-2248	57.4	42.4	32.5	19.2	42.3	18.7-	45.1
N62-2381	52.5	40.5	31.4	21.3	37.2	22.1	43.0
N63-2765	53.2	41.0	41.9	23.0	38.1	28.8	33.3-
N63-2766	43.8-	38.4	37.4	19.3	36.4	28.4	40.5
N63-2767	37.6-	41.4	38.3	24.4	32.7-	31.9	40.2
N63-4240	33.9-	34.2-	32.3	21.0	29.9-	30.5	36.2-
N63-4378	42.2-	38.1	35.5	21.2	30.8-	30.4	40.8
R64-370	50.0	44.4	36.3	26.0	34.0-	28.0	36.2-
R64-393	44.8-	46.8	33.2	30.2	24.0-	29.8	33.0-
R64-502	49.1	39.4	41.4	21.2	37.8	35.6+	38.4
V63-24	38.4-	36.9-	27.2	26.3	37.0	27.9	40.9
V63-75	46.6	42.2	36.2	27.2	35.6-	31.4	40.5
V63-82	40.1-	34.4-	34.0	14.7	34.3-	27.1	29.8-
V64-34	41.5-	36.8-	37.4	31.5	29.0-	29.0	31.9-
L.S.D.(.05)	7.5	9.2	N.S.	N.S.	6.4	7.8	8.4
C.V.	8%	11%	12%	21%	9%	13%	11%

* Not included in mean.

Table 39. - Oil percentages for the strains in Preliminary Group VI, 1966

Strain	Petersburg, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(A)	Keiser, Ark.
Hood	19.4	21.0	19.8	20.9	21.4
Lee	19.7	20.4	19.6	20.5	20.8
D60-6192	19.2	19.9	19.4	19.2	20.8
D60-6306	18.3	18.4	18.2	17.7	19.8
D63-3890	19.9	20.2	19.8	20.0	20.6
D63-6324	20.1	19.0	18.6	19.1	20.1
D64-3396	20.3	19.5	20.0	20.4	21.1
D64-3697	19.6	18.7	19.1	19.8	19.4
D64-3896	20.1	20.9	20.0	20.7	21.2
D64-3937	20.6	19.8	19.7	16.3	20.4
D64-3945	19.5	20.1	19.9	20.8	21.8
D64-4469	20.0	20.5	20.1	20.3	21.9
D64-4485	19.5	20.4	19.5	19.9	20.7
D64-4507	19.4	19.6	19.1	18.7	20.1
D64-4573	19.2	19.2	19.3	19.4	19.8
D64-4625	20.0	20.0	19.9	18.5	20.7
D64-4636	20.7	19.9	19.9	19.1	21.5
D64-4813	19.6	19.2	19.9	19.1	18.8
D64-4841	17.7	17.3	19.9	17.3	17.0
D64-4860	16.7	16.4	17.4	16.5	16.3
D64-8713	20.4	19.7	18.2	19.2	19.3
N62-2140	21.1	21.7	21.3	21.3	21.6
N62-2248	20.1	20.3	19.7	20.1	20.4
N62-2381	19.9	20.7	20.3	19.9	20.0
N63-2765	21.2	20.3	19.5	20.8	21.1
N63-2766	21.4	20.6	20.7	20.5	21.4
N63-2767	20.8	19.7	19.0	19.5	20.6
N63-4240	16.9	17.2	17.3	15.9	17.7
N63-4378	18.0	16.9	18.0	17.7	19.0
R64-370	20.1	18.9	19.7	19.7	20.2
R64-393	20.1	19.5	19.7	19.7	20.2
R64-502	20.5	20.2	19.6	20.7	20.5
V63-24	19.1	20.4	20.5	22.2	22.3
V63-75	19.7	20.2	19.7	20.7	20.9
V63-82	20.5	20.0	16.7	20.9	20.4
V64-34	20.6	20.2	20.5	21.2	21.0

Table 40. - Protein percentages for the strains in Preliminary Group VI, 1966

Strain	Petersburg, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(A)	Keiser, Ark.
Hood	40.8	40.3	39.6	39.5	39.6
Lee	41.2	42.1	39.9	41.0	39.2
D60-6192	41.7	42.0	40.2	41.9	39.1
D60-6306	41.0	42.6	40.0	41.8	39.0
D63-3890	41.0	41.3	38.9	42.2	40.5
D63-6324	41.3	42.1	39.8	41.0	39.2
D64-3396	40.3	42.8	38.4	40.3	38.3
D64-3697	41.5	44.1	39.4	42.4	40.2
D64-3896	39.8	41.7	39.1	41.5	38.2
D64-3937	39.1	43.1	39.0	41.5	39.3
D64-3945	38.8	40.3	36.7	38.1	36.6
D64-4469	37.7	40.3	37.0	38.5	36.9
D64-4485	40.0	40.6	39.0	39.6	38.2
D64-4507	39.1	40.7	37.6	40.0	37.6
D64-4573	38.4	40.0	35.8	38.2	36.2
D64-4625	37.9	41.7	36.7	39.3	36.9
D64-4636	38.9	41.6	38.4	41.1	37.8
D64-4813	41.3	41.8	39.1	41.5	40.1
D64-4841	44.4	45.6	40.2	44.3	42.9
D64-4860	45.9	46.1	40.0	45.3	43.9
D64-8713	40.3	41.6	41.0	42.0	40.5
N62-2140	39.0	40.9	38.3	40.5	38.9
N62-2248	39.6	41.4	39.3	40.5	39.0
N62-2381	40.7	41.3	38.6	40.5	39.7
N63-2765	37.6	41.4	38.1	39.6	38.5
N63-2766	38.9	41.1	37.6	40.3	38.3
N63-2767	39.0	42.5	38.4	40.6	38.3
N63-4240	42.3	44.3	40.0	42.9	42.0
N63-4378	40.3	42.2	39.0	42.3	39.5
R64-370	38.8	40.1	38.4	40.5	38.0
R64-393	37.6	40.5	36.5	40.5	37.6
R64-502	40.2	42.5	40.4	42.0	40.5
V63-24	38.2	40.0	37.6	37.5	36.9
V63-75	39.3	40.7	37.5	39.2	39.4
V63-82	39.3	42.4	37.7	41.6	40.9
V64-34	39.5	41.4	37.1	39.7	39.1

Table 41. - Plant height for the strains in Preliminary Group VI, 1966

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Jay, Fla.
Hood	37	38	39	32	36	30	27
Lee	33	40	42	28	35	26	28
D60-6192	38	39	40	32	36	30	30
D60-6306	32	34	35	27	34	25	27
D63-3890	37	41	49	34	38	33	35
D63-6324	34	36	39	27	30	21	28
D64-3396	33	35	40	32	36	28	29
D64-3697	38	32	38	28	34	27	26
D64-3896	38	39	37	29	36	29	27
D64-3937	32	37	32	28	34	28	29
D64-3945	40	41	45	34	42	35	35
D64-4469	46	48	41	35	44	36	36
D64-4485	38	37	39	28	37	29	29
D64-4507	43	42	43	37	45	35	30
D64-4573	32	36	43	34	36	31	27
D64-4625	47	45	47	36	45	37	37
D64-4636	32	40	33	26	34	28	28
D64-4813	38	35	40	31	36	31	29
D64-4841	34	37	34	32	34	28	31
D64-4860	36	40	38	35	35	33	30
D64-8713	36	33	32	26	33	25	31
N62-2140	34	32	36	28	34	20	26
N62-2248	40	39	35	30	37	23	29
N62-2381	36	40	39	30	34	28	31
N63-2765	33	36	33	26	33	23	27
N63-2766	36	38	34	27	35	26	29
N63-2767	34	33	37	25	40	27	30
N63-4240	40	41	40	33	37	31	33
N63-4378	35	39	36	28	37	31	30
R64-370	36	35	37	27	35	30	29
R64-393	34	37	36	33	35	28	29
R64-502	30	36	37	28	34	29	27
V63-24	42	39	42	36	38	31	32
V63-75	30	40	35	29	33	27	30
V63-82	36	40	36	29	33	27	30
V64-34	50	44	53	38	64	47	42

Table 42.- Seed quality scores for the strains in Preliminary Group VI, 1966

Strain	Peters-burg, Va.	Ply-mouth, N.C.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)	Jay, Fla.
Hood	1.0	1.5	1.0	3.0	2.0	2.0	1.0
Lee	1.0	1.0	2.0	2.5	2.0	2.0	1.0
D60-6192	1.0	1.0	2.0	3.5	2.0	2.0	1.0
D60-6306	1.0	1.0	2.0	3.0	2.0	2.0	1.0
D63-3890	1.5	1.0	2.5	3.0	2.0	2.0	1.0
D63-6324	1.2	1.0	2.0	2.5	2.0	2.0	1.0
D64-3396	1.8	1.5	2.5	3.0	2.0	2.0	1.0
D64-3697	1.5	1.5	1.5	2.0	2.0	2.0	1.0
D64-3896	1.0	1.0	1.5	2.0	2.0	2.0	1.0
D64-3937	1.0	1.0	1.0	3.0	2.0	2.0	1.0
D64-3945	1.0	1.0	1.5	2.0	2.0	2.0	1.0
D64-4469	1.0	1.0	1.0	2.0	2.0	2.0	1.0
D64-4485	1.0	1.0	1.0	2.0	2.0	2.0	1.0
D64-4507	1.0	1.0	1.5	2.5	2.0	2.0	1.0
D64-4573	1.0	1.0	1.0	2.0	2.0	2.0	1.0
D64-4625	1.0	1.0	1.0	2.0	2.0	2.0	1.0
D64-4636	1.0	1.5	2.0	2.5	2.0	2.0	1.0
D64-4813	2.0	2.0	2.5	3.0	2.0	2.0	1.0
D64-4841	3.0	1.5	2.5	3.0	2.0	2.0	1.0
D64-4860	3.0	1.5	2.5	2.5	2.0	2.0	1.0
D64-8713	1.2	1.0	2.5	3.0	2.0	2.0	1.0
N62-2140	1.0	1.5	1.0	3.0	2.0	2.0	1.0
N62-2248	1.0	1.0	2.5	3.0	2.0	2.0	1.0
N62 2381	1.0	1.0	1.0	3.5	2.0	2.0	1.0
N63-2765	1.0	1.5	1.5	2.5	2.0	2.0	1.0
N63-2766	1.0	2.0	2.0	3.0	2.0	2.0	2.0
N63-2767	1.0	2.0	1.5	2.5	2.0	2.0	1.0
N63-4240	1.0	1.5	2.5	3.0	2.0	2.5	1.0
N63-4378	1.0	1.5	2.5	3.5	2.0	2.0	1.0
R64-370	2.0	1.0	2.0	2.5	2.0	2.0	1.0
R64-393	2.0	1.5	2.0	2.5	2.0	2.0	1.0
R64-502	1.5	1.0	1.5	2.5	2.0	2.0	1.0
V63-24	1.0	1.5	1.5	2.0	2.0	2.0	1.0
V63-75	1.0	1.5	1.0	3.0	2.0	2.0	1.0
V63-92	1.8	2.0	2.0	4.0	2.0	2.0	2.0
V64-34	2.0	2.0	2.5	3.5	2.0	2.0	1.0

UNIFORM GROUP VII

1966

	Variety or strain	Parentage	Generation composited
1.	Bragg	Jackson x D49-2491	F_6
2.	Semmes	D51-5427 x D49-2491	F_6
3.	F59-1505	Jackson x D49-2491	F_5
4.	D61-5264	Lee x PI 200,532	F_7
5.	F62-1770	F57-871 x F57-873	F_5
6.	D61-4269	D49-2491(6) x Barchet	F_4
7.	F62-1058	F57-871 x F57-879	F_5
8.	F62-1080	F57-871 x F57-879	F_5
9.	F62-3414	Seminole x D49-2491	F_8
10.	F62-3461	D51-5091 x N50-2542	F_8
11.	N60-5234	D55-4110 x N56-4071	F_4
12.	N63-1926	D58-3358 x D59-9289	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.

PI 200,532 is a glabrous introduction of Group VII maturity from Japan. It is resistant to phytophthora rot.

F57-871, F57-873, and F57-879 are F_3 lines selected from D49-2491(2) 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.

N50-2542 is a selection from Ogden x Biloxi.

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.

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

D59-9289 is a selection from D51-4877 x D55-4168. It is the parent line of D60-8107 which was tested in Uniform Group VII.

Thirty-two Uniform Group VII nurseries were planted. Results of 28 plantings are summarized in Tables 43 through 49. Table 43 gives a general summary of agronomic qualities, chemical composition of the seed, and field reaction to several diseases. Two- and three-year data are reported for seed yield, and oil and protein percentages.

Differences among strains were significant at the 5 percent level of confidence in 14 of the 27 comparisons. The combined analysis of variance of seed yield by production regions showed differences to be nonsignificant at the 5 percent level of confidence in the East Coast region but significant in the other regions.

The 3-year average yield of Semmes was below Bragg in all production regions. Very few of the tests were grown on poorly drained clay where Semmes is best suited for production. F59-1505 has a mean seed yield above Bragg in each production region. However, F59-1505 has shown up as sensitive to some conditions in Southeast, where plants have become chlorotic in late season. The two strains D61-5264 and F62-1770, grown two years, have mean yields below Bragg in each region. Of the strains tested one year, D61-4269 equalled Bragg in yield in the East Coast, but averaged lower in yield in other regions. All other strains had mean yields below Bragg in each region. The two strains F62-1058 and N60-5234 had moderately high protein content.

Table 43. - General summary of performance for the strains in Uniform Group VII, 1966

	Bragg	Semmes	F59-1505	D61-5264	F62-1770	D61-4269
Seed Yield - 1966						
East Coast	38.7	35.9	39.6	35.7	35.2	39.0
Southeast	39.6	35.0-	41.5	35.8-	38.2	37.5
Upper & Central South	31.6	28.5-	31.3	30.7	28.2-	29.8
Delta & West	45.3	39.9-	44.8	40.7	38.4-	40.3
- 1965-66						
East Coast	40.3	37.0	41.5	37.7	38.2	
Southeast	36.2	32.2	36.8	33.3	35.0	
Upper & Central South	35.2	30.4	34.6	33.2	32.7	
Delta & West	40.3	35.2	39.8	36.1	36.0	
- 1964-66						
East Coast	40.5	36.9	42.3			
Southeast	35.3	31.4	36.1			
Upper & Central South	39.1	34.1	39.7			
Delta & West	39.7	35.3	40.3			
Oil Content - 1966	21.2	20.8	20.9	20.0-	20.8	20.8
- 1965-66	21.4	20.9	21.0	20.0	20.8	
- 1964-66	21.4	20.9	21.0			
Protein Content - 1966	40.4	40.9	39.7-	39.3-	41.5+	40.3
- 1965-66	40.8	41.7	40.0	39.9	42.0	
- 1964-66	40.5	41.3	39.8			
Seed Size	16.5	16.1	17.5+	14.4-	15.5-	13.8-
Maturity Index	10-25	-3	-1	+2	+2	+1
Height	41	36	41	33	33	33
Shattering[1/]	1.2	1.6	1.3	1.2	1.5	1.2
Bacterial Pustule[3/]	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot[2/]	2.0	2.0	1.0	2.0	3.0	2.0
Phytophthora Rot[3/]	1.0	1.0	1.0	1.0	2.7	1.7
Flower Color	W	P	P	P	P	P
Pubescence Color	T	G	T	T	T	T
Pod Wall Color	T	T	B	T	T	T

1/ Stoneville, Blackville, Tifton, Gainesville data
2/ Stoneville and Gainesville data
3/ Stoneville data

Table 43. - (continued)

	F62-1058	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926
Seed Yield - 1966						
East Coast	36.2	34.3	37.5	33.3	34.7	36.0
Southeast	37.7	36.5-	37.3	35.8-	34.8-	36.7-
Upper & Central South	27.8-	28.2-	27.7-	21.0-	29.9	30.8
Delta & West	40.5	35.6-	38.7-	33.5-	39.9-	42.7
- 1965-66						
East Coast						
Southeast						
Upper & Central South						
Delta & West						
- 1964-66						
East Coast						
Southeast						
Upper & Central South						
Delta & West						
Oil Content - 1966	20.1-	20.5-	21.2	20.5-	20.2-	20.8
- 1965-66						
- 1964-66						
Protein Content - 1966	43.3+	42.6+	40.6	42.0+	43.7+	40.8
- 1965-66						
- 1964-66						
Seed Size	15.7-	16.4	16.7	16.4	18.0+	15.3-
Maturity Index	+1	0	0	0	-4	-2
Height	35	35	45	41	28	35
Shattering[1/]	1.0	1.4	1.4	1.2	3.0	4.0
Bacterial Pustule[3/]	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot[2/]	1.0	2.0	2.0	2.0	2.0	1.0
Phytophthora Rot[3/]	1.3	1.3	3.0	3.0	2.7	1.7
Flower Color	P	P	P	P	P	P
Pubescence Color	T	T	T	G	G + T	G
Pod Wall Color	T	T	T	T	T	B

Table 44. - Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1966

Location	Bragg	Semmes	F59-1505	D61-5264	F62-1770	D61-4269	F62-1058
East Coast							
Rocky Mount, N. C.	35.9	28.5-	36.9	31.0	28.8-	32.0	29.8-
Clayton, N. C.	34.9	33.3	39.4	38.5	33.2	39.1	34.6
Willard, N. C.	44.1	43.0	49.4	34.3-	42.9	39.0	35.7-
Florence, S. C.(A)	38.7	32.5	33.8	32.0	32.0	44.5	43.3
Florence, S. C.(B)	39.2	42.4+	37.8	38.5	40.0	41.0	36.6-
Hartsville, S. C.	39.5	35.8	40.2	39.8	34.0	38.3	37.4
Mean	38.7	35.9	39.6	35.7	35.2	39.0	36.2
Southeast							
Blackville, S. C.	29.8	25.3-	31.0	30.0	30.9	30.2	28.7
Tallassee, Ala.	29.6	28.3	29.6	27.9	32.8	33.7	30.2
Tifton, Ga.	39.1	31.0	37.9	37.3	35.0	36.6	35.2
Gainesville, Fla.	46.2	38.7	51.8	41.4	44.8	37.9	41.8
Live Oak, Fla.	41.0	28.5-	45.5	38.8	32.5-	38.1	38.4
Marianna, Fla.	50.5	46.2	49.8	41.9-	44.3	42.9-	42.4-
Quincy, Fla.	37.0	33.1-	38.9	30.7-	38.2	36.2	38.3
Jay, Fla.	35.8	37.0	40.1	31.5	38.9	35.1	38.9
Fairhope, Ala.	47.7	46.4	49.3	42.3-	46.6	47.1	45.6
Mean	39.6	35.0-	41.5	35.8-	38.2	37.5	37.7
Upper and Central South							
Clemson, S. C.	28.9	25.9	27.1	28.4	24.0	23.1	24.2
State College, Miss.	34.4	31.1	35.5	32.9	32.4	36.5	31.4
Mean	31.6	28.5-	31.3	30.7	28.2-	29.8	27.8-
Delta and West							
Stoneville, Miss.(A)	34.2	32.0	37.2	30.5	31.1	31.1	30.4
Stoneville, Miss.(B)	34.5	32.7	33.4	34.2	26.2-	24.4-	28.8
Stoneville, Miss.(C)	45.0	38.2-	46.1	46.1	39.8	39.7	41.0
St. Joseph, La.	54.9	41.3	61.0	40.8	47.6	49.4	47.8
Stuttgart, Ark.	51.9	51.4	46.2	41.5	41.2	46.5	50.1
Curtis, La.	44.0	37.6	41.0	45.3	37.2	43.8	41.5
Crowley, La.	52.8	46.2-	48.8	46.6	45.4-	47.0	43.9-
Beaumont, Texas*	50.9	45.4	38.1	38.7	43.8	46.1	49.7
Mean	45.3	39.9-	44.8	40.7	38.4-	40.3	40.5

*Not included in mean
(+) - Strains yielding significantly more (odds 19:1 or greater) than Bragg.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Bragg.

Table 44. - (continued)

Location	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926	L.S.D. (.05)	C.V.
			East Coast				
Rocky Mount, N. C.	28.5-	27.8-	26.1-	40.1	29.6-	4.9	9%
Clayton, N. C.	30.5	30.9	28.6	38.2	34.4	N.S.	16%
Willard, N. C.	34.2-	37.4	32.9-	41.8	40.2	5.4	8%
Florence, S. C.(A)	38.7	48.6+	36.9	19.4-	39.2	7.1	11%
Florence, S. C.(B)	39.4	43.1+	40.1	30.4-	40.1	2.2	6%
Hartsville, S. C.	34.3	37.0	35.0	38.3	32.5	N.S.	9%
Mean	34.3	37.5	33.3	34.7	36.0	N.S.	
			Southeast				
Blackville, S. C.	30.8	26.7-	28.7	29.8	29.5	2.9	6%
Tallassee, Ala.	34.0	28.1	30.5	32.4	29.0	N.S.	14%
Tifton, Ga.	33.7	36.5	32.3	36.2	33.1	N.S.	9%
Gainesville, Fla.	38.3	43.9	40.5	34.2	43.1	4.6	7%
Live Oak, Fla.	34.9	39.2	37.9	28.0-	34.4	6.8	11%
Marianna, Fla.	42.6-	41.9-	40.4-	41.4-	52.6	7.6	10%
Quincy, Fla.	35.1	38.3	34.9	32.9-	31.9-	2.4	4%
Jay, Fla.	35.4	36.8	35.4	34.6	31.3	N.S.	10%
Fairhope, Ala.	43.8-	44.2	41.6-	43.4-	45.8	3.6	5%
Mean	36.5-	37.3	35.8-	34.8-	36.7-	2.6	
			Upper and Central South				
Clemson, S. C.	24.2	24.9	25.8	27.2	24.1	N.S.	9%
State College, Miss.	32.2	30.6	16.2-	32.6	37.4	4.9	9%
Mean	28.2-	27.7-	21.0-	29.9	30.8	3.0	
			Delta and West				
Stoneville, Miss.(A)	29.5	30.8	26.5	33.3	34.9	N.S.	12%
Stoneville, Miss.(B)	27.3-	21.7-	15.9-	22.6-	29.3	5.8	13%
Stoneville, Miss.(C)	34.1-	34.1-	22.1-	42.4	43.7	5.7	9%
St. Joseph, La.	34.0-	51.5	42.4	58.7	66.4	15.0	18%
Stuttgart, Ark.	43.5	50.5	43.8	45.9	42.9	N.S.	14%
Curtis, La.	35.8	39.0	39.4	42.4	37.2	N.S.	10%
Crowley, La.	44.8	43.1-	44.5-	33.9-	44.5-	6.3	8%
Beaumont, Texas*	44.2	47.2	48.2	36.4	43.3	N.S.	14%
Mean	35.6-	38.7-	33.5-	39.9-	42.7	5.1	

Table 45. - Chemical composition and seed size for the strains in Uniform Group VII, 1966

Location	Bragg	Semmes	F59-1505	D61-5264	F62-1770	D61-4269	F62-1058
			Oil Percentage				
Clayton, N. C.	21.3	20.2	20.4	19.6	19.6	20.0	19.5
Hartsville, S. C.	20.5	21.9	21.9	20.2	21.7	21.7	20.7
Blackville, S. C.	20.9	20.9	20.3	20.4	20.5	20.6	20.1
Tallassee, Ala.	21.3	21.4	21.1	20.9	21.1	21.5	20.8
Gainesville, Fla.	22.5	22.1	22.6	22.7	21.6	22.2	20.0
Jay, Fla.	21.3	21.4	22.1	20.9	20.7	20.6	21.4
Clemson, S. C.	19.9	18.7	18.6	17.8	18.6	18.7	18.3
Stoneville, Miss.(A)	20.0	19.1	19.6	18.9	20.4	19.2	19.0
St. Joseph, La.	22.2	21.0	21.4	20.3	21.6	21.5	20.6
Curtis, La.	22.1	20.8	21.1	18.3	21.7	21.5	20.6
Mean	21.2	20.8	20.9	20.0-	20.8	20.8	20.1-
			Protein Percentage				
Clayton, N. C.	41.3	42.2	41.5	40.0	42.9	41.0	44.7
Hartsville, S. C.	39.9	39.3	37.7	37.5	40.0	38.7	41.9
Blackville, S. C.	42.2	41.8	41.0	40.3	43.1	41.6	45.5
Tallassee, Ala.	41.7	39.9	40.6	38.2	41.7	40.0	42.7
Gainesville, Fla.	40.6	41.4	39.4	39.2	41.7	41.0	43.0
Jay, Fla.	40.0	42.5	40.9	40.0	42.7	42.0	43.9
Clemson, S. C.	39.0	39.8	38.7	38.6	41.1	39.8	42.7
Stoneville, Miss.(A)	39.2	41.0	39.0	40.1	41.0	40.6	43.6
St. Joseph, La.	40.2	40.1	39.2	39.2	40.3	40.1	43.5
Curtis, La.	39.8	40.5	39.1	39.5	40.0	38.4	41.1
Mean	40.4	40.9	39.7-	39.3-	41.5+	40.3	43.3+
			Grams per 100 Seeds				
Clayton, N. C.	16.8	16.6	17.9	14.6	15.6	14.5	16.2
Hartsville, S. C.	16.5	16.3	16.7	14.7	15.5	13.0	15.0
Blackville, S. C.	17.5	17.1	18.2	15.2	17.6	13.7	17.0
Tallassee, Ala.	17.5	17.0	19.1	14.5	16.6	14.8	16.6
Gainesville, Fla.	17.6	17.2	19.2	16.0	17.2	15.9	16.9
Jay, Fla.	17.1	16.7	17.7	15.0	16.6	14.2	17.0
Clemson, S. C.	14.9	13.4	14.5	14.0	13.7	12.6	13.7
Stoneville, Miss.(A)	13.5	13.2	15.5	11.5	12.2	11.4	12.8
St. Joseph, La.	17.3	16.3	17.4	14.4	14.7	14.0	16.6
Curtis, La.	16.3	16.8	18.9	14.3	15.5	13.5	15.5
Mean	16.5	16.1	17.5+	14.4-	15.5-	13.8-	15.7-

Table 45. - (continued)

Location	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926	L.S.D. (.05)
			Oil Percentage			
Clayton, N. C.	19.3	19.5	19.1	19.2	19.9	
Hartsville, S. C.	21.3	21.8	22.2	20.6	21.8	
Blackville, S. C.	20.8	20.2	20.7	19.7	20.3	
Tallassee, Ala.	20.2	22.3	21.4	21.2	21.3	
Gainesville, Fla.	21.4	22.3	21.1	21.4	21.0	
Jay, Fla.	21.8	22.5	21.5	21.5	21.8	
Clemson, S. C.	17.8	19.3	19.2	18.5	18.7	
Stoneville, Miss.(A)	19.3	20.5	17.2	19.2	19.7	
St. Joseph, La.	21.4	21.5	21.4	20.4	21.8	
Curtis, La.	21.3	21.7	21.0	20.2	21.4	
Mean	20.5-	21.2	20.5-	20.2-	20.8	0.5
			Protein Percentage			
Clayton, N. C.	43.9	43.5	44.3	44.4	42.6	
Hartsville, S. C.	40.6	39.2	39.7	41.7	39.1	
Blackville, S. C.	44.1	42.6	42.8	45.9	41.7	
Tallassee, Ala.	42.8	39.1	42.3	43.5	40.8	
Gainesville, Fla.	42.9	40.8	42.0	44.5	40.9	
Jay, Fla.	42.9	41.6	42.2	44.7	41.5	
Clemson, S. C.	43.1	40.2	42.7	42.4	41.8	
Stoneville, Miss.(A)	42.5	40.1	41.5	43.7	40.6	
St. Joseph, La.	41.9	40.2	41.0	43.3	38.8	
Curtis, La.	41.1	38.3	41.3	43.1	39.9	
Mean	42.6+	40.6	42.0+	43.7+	40.8	0.6
			Grams per 100 Seeds			
Clayton, N. C.	17.6	17.9	18.3	18.1	15.5	
Hartsville, S. C.	15.5	16.7	15.0	17.3	15.5	
Blackville, S. C.	18.5	18.1	18.0	20.1	14.5	
Tallassee, Ala.	18.3	17.4	19.8	19.4	17.5	
Gainesville, Fla.	17.6	17.5	17.9	19.5	18.2	
Jay, Fla.	17.2	18.0	16.6	19.7	14.1	
Clemson, S. C.	13.9	13.6	15.3	14.5	14.1	
Stoneville, Miss.(A)	13.8	13.5	11.5	16.2	11.8	
St. Joseph, La.	16.3	17.0	15.5	17.5	15.2	
Curtis, La.	15.0	17.7	16.4	17.2	16.1	
Mean	16.4	16.7	16.4	18.0+	15.3-	0.7

Table 46. - Relative maturity data, days earlier (-) or later (+), than Bragg for the strains in Uniform Group VII, 1966

Location	Date planted	Bragg matured	Semmes	F59-1505	D61-5264	F62-1770
		East Coast				
Rocky Mount, N. C.	5-23	10-30	+3	+3	+3	+3
Clayton, N. C.	5-10	11-1	-2	+1	0	+3
Willard, N. C.	5-17	10-26	0	+2	+4	+2
Florence, S. C.(A)	5-15	10-30	+1	-2	0	0
Florence, S. C.(B)	6-15	11-4	-6	-2	-3	-5
Hartsville, S. C.	5-25	10-30	-4	-4	+1	+1
Mean		10-31	-1	0	0	0
		Southeast				
Blackville, S. C.	5-6	10-25	-7	+3	+2	+4
Tallassee, Ala.	5-17	10-25	-4	+1	+2	+3
Tifton, Ga.	5-30	10-22	-5	-2	+3	+2
Gainesville, Fla.	6-1	10-21	-4	0	+2	+2
Live Oak, Fla.	6-17	10-19	-3	+2	+7	+5
Marianna, Fla.	5-30	10-24	-6	-3	-1	-4
Quincy, Fla.	6-14	10-20	-5	-1	+2	-2
Jay, Fla.	5-28	10-14	-2	+1	-2	+4
Fairhope, Ala.	6-1	10-15	-2	0	+7	0
Mean		10-21	-4	0	+2	+2
		Upper and Central South				
Clemson, S. C.	6-24	11-4	+1	0	+3	+6
		Delta and West				
Stoneville, Miss.(A)	5-9	10-22	-2	0	0	+1
Stoneville, Miss.(B)	5-11	-10-20	-2	-1	+1	+1
Stoneville, Miss.(C)	5-11	10-24	-2	0	+1	+2
St. Joseph, La.	5-16	10-24	+2	+7	+4	+3
Stuttgart, Ark.	5-28	10-30	0	-1	+4	+5
Curtis, La.	6-2	10-25	-8	0	0	0
Mean		10-24	-2	0	+2	+2

Table 46. - (continued)

Location	D61-4269	F62-1058	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926
			East Coast				
Rocky Mount, N. C.	+3	+3	+3	+3	0	-4	0
Clayton, N. C.	-2	+1	+3	0	+7	-4	-2
Willard, N. C.	+4	+2	+2	+2	0	-6	-6
Florence, S. C.(A)	-6	-6	-10	-1	-7	-17	-6
Florence, S. C.(B)	-1	-3	-3	-3	-5	0	-2
Hartsville, S. C.	0	0	0	-2	0	-6	+2
Mean	0	0	0	0	0	-6	-2
			Southeast				
Blackville, S. C.	+3	+1	+2	-1	+3	-5	-2
Tallassee, Ala.	+2	+1	-1	-1	+3	-3	-2
Tifton, Ga.	+3	+1	0	+1	-1	-3	-3
Gainesville, Fla.	+1	-1	-1	0	-2	-4	-3
Live Oak, Fla.	+4	+2	+1	0	0	-1	-1
Marianna, Fla.	-1	0	-4	-5	-4	-9	0
Quincy, Fla.	+2	0	+1	-1	-1	-6	-2
Jay, Fla.	+6	+6	+2	-3	+3	-1	-5
Fairhope, Ala.	+3	+3	0	+3	-2	-2	-2
Mean	+3	+1	0	0	0	-4	-2
			Upper and Central South				
Clemson, S. C.	+2	+2	+1	+4	+7	+1	-2
			Delta and West				
Stoneville, Miss.(A)	+1	+1	+1	0	+1	-4	-2
Stoneville, Miss.(B)	+3	+1	+1	+1	+4	-3	-2
Stoneville, Miss.(C)	+1	+3	+4	+2	+4	-5	-2
St. Joseph, La.	0	+4	+4	+4	+1	-4	+7
Stuttgart, Ark.	+3	0	0	0	+1	-8	0
Curtis, La.	-3	+2	-3	+3	+5	+3	-2
Mean	0	+2	+1	+2	+3	-4	0

Table 47. - Plant height for the strains in Uniform Group VII, 1966

Location	Bragg	Semmes	F59-1505	D61-5264	F62-1770	D61-4269
			East Coast			
Rocky Mount, N. C.	45	39	44	35	33	34
Clayton, N. C.	46	36	43	34	36	37
Willard, N. C.	45	40	47	35	35	36
Florence, S. C.(A)	20	28	17	17	16	17
Florence, S.C.(B)	38	37	42	42	37	36
Hartsville, S. C.	43	36	42	33	33	33
Mean	40	36	40	33	32	32
			Southeast			
Blackville, S. C.	41	33	44	31	31	31
Tallassee, Ala.	43	35	45	36	36	35
Tifton, Ga.	37	27	36	31	32	31
Gainesville, Fla.	38	31	38	31	33	29
Live Oak, Fla.	29	28	33	28	25	32
Marianna, Fla.	41	37	42	34	36	36
Quincy, Fla.	31	27	33	30	29	30
Jay, Fla.	35	36	37	23	29	32
Fairhope, Ala.	34	36	35	30	33	35
Mean	37	32	38	30	32	32
			Upper and Central South			
Clemson, S. C.	48	38	45	41	40	38
			Delta and West			
Stoneville, Miss.(A)	51	44	53	38	37	37
Stoneville, Miss.(B)	47	39	41	35	32	32
Stoneville, Miss.(C)	46	39	49	34	35	36
St. Joseph, La.	44	42	48	35	35	34
Stuttgart, Ark.	47	43	49	37	35	34
Curtis, La.	46	44	47	34	40	38
Crowley, La.	39	37	34	34	39	36
Mean	46	41	46	35	36	35

Table 47. - (continued)

Location	F62-1058	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926
			East Coast			
Rocky Mount, N. C.	38	36	45	43	33	40
Clayton, N. C.	35	37	46	42	31	41
Willard, N. C.	37	40	53	45	31	42
Florence, S. C.(A)	18	24	32	27	11	12
Florences, S. C.(B)	38	37	42	40	30	37
Hartsville, S. C.	33	34	47	43	26	32
Mean	33	35	44	40	27	34
			Southeast			
Blackville, S. C.	29	32	43	42	21	34
Tallassee, Ala.	36	37	51	41	32	33
Tifton, Ga.	30	29	43	37	21	26
Gainesville, Fla.	31	33	40	37	21	31
Live Oak, Fla.	29	32	43	35	20	24
Marianna, Fla.	36	39	46	41	30	37
Quincy, Fla.	29	27	38	30	21	23
Jay, Fla.	31	31	42	38	23	32
Fairhope, Ala.	33	33	44	38	26	33
Mean	32	33	43	38	24	30
			Upper and Central South			
Clemson, S. C.	40	41	46	41	39	39
			Delta and West			
Stoneville, Miss.(A)	38	38	57	47	32	47
Stoneville, Miss.(B)	37	35	48	47	23	39
Stoneville, Miss.(C)	37	35	47	51	34	42
St. Joseph, La.	34	36	46	45	32	44
Stuttgart, Ark.	39	38	51	50	32	43
Curtis, La.	46	47	42	44	47	40
Crowley, La.	42	36	43	32	35	31
Mean	39	38	48	45	34	41

Table 48. - Lodging scores for the strains in Uniform Group VII, 1966

Location	Bragg	Semmes	F59-1505	D61-5264	F62-1770	D61-4269
			East Coast			
Rocky Mount, N. C.	4.0	3.0	3.0	4.0	4.0	4.0
Clayton, N. C.	2.0	2.0	2.0	3.0	3.0	3.0
Willard, N. C.	4.0	3.0	4.0	4.0	4.0	3.0
Florence, S. C.(A)	1.0	1.0	1.0	1.0	1.0	1.0
Florence, S. C.(B)	2.0	1.0	1.0	4.0	2.0	3.0
Hartsville, S. C.	1.4	1.9	2.0	2.3	2.1	2.3
			Southeast			
Blackville, S. C.	1.3	1.5	1.8	1.7	1.7	1.7
Tallassee, Ala.	1.6	1.0	1.0	2.0	2.3	2.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	2.0	1.0	2.0	2.0	2.0	1.3
Live Oak, Fla.	1.5	1.0	1.0	2.0	1.5	2.0
Marianna, Fla.	2.0	1.0	1.0	2.0	2.0	2.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	2.0	1.0	1.0	1.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	2.0	1.0	1.3	3.0	2.7	2.3
			Delta and West			
Stoneville, Miss.(A)	4.0	2.3	3.8	3.0	3.8	3.0
Stoneville, Miss.(B)	2.3	2.0	2.0	2.7	2.0	2.0
Stoneville, Miss.(C)	3.0	2.0	3.0	3.0	3.0	2.7
St. Joseph, La.	2.6	3.0	3.3	2.6	3.0	3.0
Stuttgart, Ark.	3.3	2.0	3.0	2.0	3.3	2.7
Curtis, La.	3.0	2.0	3.0	2.0	2.0	2.0
Crowley, La.	2.0	1.0	2.0	2.0	3.0	2.0

Table 48. - (continued)

Location	F62-1058	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926
			East Coast			
Rocky Mount, N. C.	5.0	4.0	5.0	3.0	3.0	3.0
Clayton, N. C.	3.0	4.0	3.0	3.0	2.0	2.0
Willard, N. C.	4.0	4.0	5.0	3.0	3.0	4.0
Florence, S. C.(A)	1.0	1.0	3.0	1.0	1.0	1.0
Florence, S. C.(B)	3.0	3.0	4.0	2.0	2.0	1.0
Hartsville, S. C.	2.0	2.0	3.2	2.1	1.2	1.7
			Southeast			
Blackville, S. C.	2.3	2.7	3.0	1.5	1.0	1.3
Tallassee, Ala.	2.7	2.7	2.3	1.3	1.0	1.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	2.0	2.7	2.3	1.3	1.0	1.7
Live Oak, Fla.	1.0	2.0	2.0	1.0	1.0	1.0
Marianna, Fla.	2.0	3.0	2.0	2.0	1.0	2.0
Quincy, Fla.	1.0	1.0	2.0	1.0	1.0	1.0
Jay, Fla.	2.0	1.0	2.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	3.3	2.7	3.0	1.0	2.7	1.0
			Delta and West			
Stoneville, Miss.(A)	3.8	3.8	4.0	4.0	2.3	3.0
Stoneville, Miss.(B)	2.7	2.3	2.7	2.3	1.7	2.0
Stoneville, Miss.(C)	3.0	3.0	3.3	3.0	2.0	2.3
St. Joseph, La.	3.0	3.0	4.0	3.6	2.3	2.0
Stuttgart, Ark.	3.3	3.3	3.7	3.0	1.0	2.0
Curtis, La.	2.0	2.0	3.0	2.0	2.0	2.0
Crowley, La.	2.0	3.0	2.0	2.0	1.0	1.0

Table 49. - Seed quality scores for the strains in Uniform Group VII, 1966

Location	Bragg	Semmes	F59-1505	F61-5264	F62-1770	D61-4269
East Coast						
Rocky Mount, N. C.	1.0	1.0	1.0	1.5	1.5	1.5
Clayton, N. C.	1.0	1.5	1.0	1.0	1.0	1.5
Willard, N. C.	1.0	1.5	1.0	1.0	1.0	1.5
Hartsville, S. C.	2.0	2.5	2.0	2.0	2.0	1.5
Southeast						
Blackville, S. C.	2.0	3.0	2.0	2.0	2.0	1.5
Tallassee, Ala.	1.5	2.0	1.5	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	1.0	1.3	1.0	1.0	1.0	1.0
Quincy, Fla.	2.0	2.0	2.0	4.0	2.0	3.0
Jay, Fla.	2.0	2.0	1.0	2.0	2.0	1.0
Fairhope, Ala.	1.6	2.3	1.5	1.8	1.5	1.3
Upper and Central South						
Clemson, S. C.	2.0	2.0	2.0	2.0	2.0	2.0
Delta and West						
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(C)	2.0	2.0	2.0	2.0	2.0	2.0
Stuttgart, Ark.	1.3	1.7	1.7	2.3	2.0	1.3
Curtis, La.	2.0	1.0	2.0	3.0	2.0	2.0

Table 49. - (continued)

Location	F62-1058	F62-1080	F62-3414	F62-3461	N60-5234	N63-1926
			East Coast			
Rocky Mount, N. C.	1.5	1.5	1.0	1.5	1.0	1.5
Clayton, 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	1.0
Hartsville, S. C.	2.0	2.0	1.5	2.0	2.5	3.0
			Southeast			
Blackville, S. C.	2.0	2.0	3.0	4.0	4.0	3.0
Tallassee, Ala.	1.5	1.0	1.5	1.5	2.0	2.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.7	1.7
Live Oak, Fla.	1.0	1.0	1.0	1.0	2.0	1.5
Quincy, Fla.	3.0	2.0	1.0	3.0	1.0	2.0
Jay, Fla.	1.0	1.0	1.0	2.0	1.0	2.0
Fairhope, Ala.	1.8	1.8	2.6	1.6	2.3	3.0
			Upper and Central South			
Clemson, S. C.	2.0	2.0	2.0	4.0	1.0	2.0
			Delta and West			
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.3	2.3	2.0	2.0
Stoneville, Miss.(C)	2.0	2.0	2.0	2.7	2.0	2.0
Stuttgart, Ark.	3.0	2.7	2.0	2.7	2.3	2.0
Curtis, La.	2.0	2.0	1.0	3.0	1.0	2.0

PRELIMINARY GROUP VII

1966

Preliminary Group VII nurseries, which included 33 experimental strains along with the varieties Bragg, Lee, and Bossier as checks, were planted at eight locations. Results of seven nurseries are summarized. The parentage of these strains is reported in Table 50. Performance data are summarized in Tables 51 through 56.

Differences among strains were significant at the 5 percent level of confidence in five nurseries. On the basis of the combined analysis of variance, nine strains yielded significantly less than Bragg. There were no strains which yielded significantly more than either Bragg or Lee. Six strains ranked above Bragg in mean yield. Four of these were selections from the cross D58-3358 x D59-9289.

Twelve strains were significantly higher in protein content than Bragg. The oil content of eight of these higher protein strains was within the range of experimental error of Bragg. Ten strains shattered appreciably more than Bragg. Eight strains proved to be rather susceptible to phytophthora rot when grown on clay at Stoneville.

The more promising strains would include D58-4384, F64-1683, F64-1881, N63-858, N63-908, N63-1131, and N63-1206.

Table 50. - Parentage of strains in Preliminary Group VII, 1966

	Variety or strain	Parentage	Generation composited
1.	Bragg		
2.	Lee		
3.	D58-4163	D51-5052 x D49-2491	F_5
4.	D58-4384	D51-5052 x D49-2491	F_5
5.	D64-4825	D49-2491(4) x PI 163,453	F_4
6.	D64-4857	D49-2491(4) x PI 163,453	F_4
7.	IAC-1	Aliance Prete x Palmetto	
8.	Bossier	Rogue in Lee	
9.	F64-1683	Hardee x D53-1301	F_5
10.	F64-1708	Hardee x D53-1301	F_5
11.	F64-1729	Hardee x D53-1301	F_5
12.	F64-1739	Hardee x D53-1301	F_5
13.	F64-1881	F57-1471 x D53-1301	F_5
14.	F64-3084	D49-2491(2) x Biloxi	F_6
15.	F64-3144	D49-2491(2) x Biloxi	F_6
16.	F64-3172	D49-2491(2) x Biloxi	F_6
17.	F64-3373	D49-2491(2) x Biloxi	F_6
18.	F64-3418	D49-2491(2) x Biloxi	F_6
19.	F64-3434	D49-2491(2) x Biloxi	F_6
20.	F64-3445	D49-2491(2) x Biloxi	F_6
21.	F64-3502	D49-2491(2) x Biloxi	F_6
22.	F64-3503	D49-2491(2) x Biloxi	F_6
23.	F64-3513	D49-2491(2) x Biloxi	F_6
24.	F64-3528	D49-2491(2) x Biloxi	F_6
25.	F64-3543	D49-2491(2) x Biloxi	F_6
26.	F64-3709	D49-2491(2) x Biloxi	F_6
27.	F64-3718	D49-2491(2) x Biloxi	F_6
28.	N63-700	D58-3358 x D59-9289	F_5
29.	N63-858	D58-3358 x D59-9289	F_5
30.	N63-908	D58-3358 x D59-9289	F_5
31.	N63-1131	D58-3358 x D59-9289	F_5
32.	N63-1206	D58-3358 x D59-9289	F_5
33.	N63-1210	D58-3358 x D59-9289	F_5
34.	N63-1302	D58-3358 x D59-9280	F_5
35.	N63-1552	D58-3358 x D59-9289	F_5
36.	N63-1852	D58-3358 x D59-9289	F_5

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

D59-9289 is a selection from D51-4877 x D55-4168 and is parent line of D60-8107.

Table 51. - General summary of performance for the strains in Preliminary Group VII, 1966

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter	B.P.	P.R.	T.S.
Bragg	37.7	10-21	42	20.8	41.1	1.1	1.0	1.0	1.0
Lee	37.2	-6	29	21.1	41.3	1.3	1.0	1.0	1.0
D58-4163	36.3	+3	40	21.3	39.9-	2.0	1.0	1.0	1.0
D58-4384	37.1	+3	35	21.3	41.1	2.3	1.0	1.0	1.0
D64-4825	35.5	-3	33	20.3	41.8	2.3	1.0	1.0	1.0
D64-4857	37.5	-3	32	20.2	41.0	3.0	1.0	2.0	1.0
IAC-1	28.8-	+5	50	19.4-	41.1	1.2	3.0	1.0	4.0
Bossier	38.3	+2	38	21.2	40.6	1.2	1.0	1.5	1.0
F64-1683	36.5	+4	40	20.1-	43.3+	1.4	1.0	2.0	1.0
F64-1708	34.9	+6	34	20.7	42.5+	1.0	1.0	1.0	1.0
F64-1729	36.0	+5	41	20.7	41.6	1.0	1.0	1.0	1.0
F64-1739	34.5	+4	35	20.0-	42.4+	1.3	1.0	1.5	1.0
F64-1881	37.8	+2	36	20.8	40.6	1.2	1.0	1.5	1.0
F64-3084	30.4-	+5	34	20.8	42.2+	1.2	1.0	4.0	3.0
F64-3144	32.3-	+3	34	20.3	42.5+	1.3	1.0	5.0	1.0
F64-3172	34.9	+4	36	21.5+	40.7	1.3	1.0	3.0	1.0
F64-3373	31.7-	+2	34	20.5	43.0+	1.5	1.0	3.0	1.0
F64-3418	33.2-	+2	35	20.2	42.7+	1.3	1.0	3.0	1.0
F64-3434	34.5	+5	36	21.1	40.8	1.5	1.0	1.0	1.0
F64-3445	33.7-	0	36	20.7	41.8	1.3	1.0	2.0	1.0
F64-3502	35.2	+3	34	21.2	41.1	1.0	1.0	2.0	1.0
F64-3503	32.1-	+6	36	20.3	43.3+	1.5	1.0	1.5	1.0
F64-3513	32.5-	+2	37	20.5	42.8+	1.5	1.0	2.0	1.0
F64-3528	32.8-	+5	35	20.4	42.9+	1.0	1.0	5.0	1.0
F64-3543	35.2	+1	35	20.7	40.6	1.0	1.0	2.0	1.0
F64-3709	35.7	+2	36	20.6	41.8	1.0	1.0	1.0	1.0
F64-3718	34.2	+1	36	21.2	41.0	1.5	1.0	3.0	1.0
N63-700	36.6	-2	38	19.9-	42.6+	2.6	1.0	2.0	1.0
N63-858	39.7	0	36	19.7-	42.3+	2.0	1.0	1.5	1.0
N63-908	39.5	-2	40	21.4	40.9	2.0	1.0	1.0	1.0
N63-1131	37.9	0	35	21.2	40.1-	1.8	1.0	2.0	1.0
N63-1206	40.0	0	37	20.7	41.6	2.5	1.0	2.0	1.0
N63-1210	33.9	-4	36	20.5	41.5	4.0	1.0	1.0	1.0
N63-1302	35.6	0	39	21.0	40.8	3.0	1.0	1.0	1.0
N63-1552	36.7	0	40	22.1	39.0-	3.0	1.0	4.0	1.0
N63-1852	34.4	-3	39	21.3	40.5	4.0	1.0	1.0	1.0
L.S.D.(.05)	4.0			0.7	1.0				
L.S.D.(.01)	5.3			0.9	1.3				

Table 52. - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1966

Strain	Willard, N.C.	Black-ville, S.C.	Tallassee, Ala.	Live Oak, Fla.	Jay, Fla.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)
Bragg	52.4	29.0	31.1	45.8	41.9	30.7	32.9
Lee	43.3-	27.7	39.2	30.9-	37.6	39.0+	42.7
D58-4163	38.7-	32.7	38.3	33.5-	39.8	37.9+	33.0
D58-4384	41.1-	32.0	40.8	36.6-	40.1	31.4	37.7
D64-4825	38.9-	25.8	41.2	36.8-	36.9	33.0	36.2
D64-4857	43.5-	29.9	37.3	38.1-	38.7	42.7+	32.6
IAC-1	36.0-	26.4	31.8	29.8-	30.1	18.8-	28.9
Bossier	40.5-	28.9	35.7	41.5	43.0	37.1	41.7
F64-1683	51.7	31.1	32.7	44.2	35.8	27.5	32.9
F64-1708	37.1-	29.3	33.0	41.3	39.1	28.4	33.5
F64-1729	46.0	29.8	34.0	39.5-	36.9	30.1	35.7
F64-1739	36.2-	30.8	36.3	37.7-	39.0	29.8	31.6
F64-1881	48.8	31.9	33.7	36.1-	44.1	32.9	37.2
F64-3084	35.7-	26.3	42.1	30.6-	37.3	24.7	16.1-
F64-3144	30.8-	30.2	44.4	35.3-	36.9	25.8	22.5
F64-3172	33.9-	28.9	36.6	39.2-	44.1	30.1	31.9
F64-3373	32.9-	26.4	31.8	36.6-	35.9	28.4	29.9
F64-3418	38.0-	28.1	36.0	36.5-	33.3	29.3	31.6
F64-3434	41.4-	27.4	33.1	38.3-	37.6	29.5	34.0
F64-3445	41.3-	29.0	32.8	33.9-	37.3	21.8-	30.3
F64-3502	43.6-	28.9	35.7	41.1	32.6	29.4	35.2
F64-3503	38.1-	26.2	34.1	36.9-	38.4	21.2-	29.7
F64-3513	36.0-	29.7	30.2	35.4-	34.4	27.7	34.4
F64-3528	36.6-	29.5	37.6	37.6-	38.3	27.9	22.1-
F64-3543	39.7-	29.2	35.3	38.2-	44.1	26.9	32.7
F64-3709	36.0-	28.6	40.5	38.5-	44.1	25.6	36.7
F64-3718	40.6-	28.0	38.6	36.0-	39.4	26.7	30.3
N63-700	45.8	26.9	37.3	39.9-	38.7	34.0	33.9
N63-858	52.2	32.9	39.2	43.5	40.8	34.6	35.0
N63-908	48.0	28.6	38.3	43.8	40.5	36.9	40.9
N63-1131	44.5	31.9	37.3	38.1-	43.0	33.6	37.3
N63-1206	44.3-	31.3	43.1	39.0-	45.9	37.7+	39.1
N63-1210	50.6	23.8-	28.9	30.2-	36.2	30.8	36.9
N63-1302	47.1	25.7	36.0	34.9-	37.3	32.1	36.1
N63-1552	44.4-	29.9	44.4	38.1-	42.3	33.7	23.9
N63-1852	37.2-	24.9	38.3	38.7-	36.5	34.1	30.9
L.S.D.(.05)	7.6	4.8	N.S.	5.8	N.S.	6.5	10.7
C.V.	9%	8%	13%	8%	11%	10%	16%

Table 53. - Oil percentages for the strains in Preliminary Group VII, 1966

Strain	Willard, N.C.	Blackville, S.C.	Tallassee, Ala.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	20.1	20.4	21.1	22.0	20.2
Lee	20.6	20.5	21.6	22.4	20.3
D58-4163	20.4	21.3	21.6	22.6	20.7
D58-4384	20.9	21.4	20.7	22.7	20.6
D64-4825	19.0	20.1	21.5	21.6	19.3
D64-4857	19.1	20.1	20.9	21.6	19.4
IAC-1	18.4	18.7	20.5	21.0	18.3
Bossier	20.0	20.4	22.5	22.2	21.1
F64-1683	19.4	19.8	21.8	21.1	18.6
F64-1708	20.0	20.8	22.1	22.0	18.7
F64-1729	20.1	20.9	21.2	21.8	19.6
F64-1739	18.9	20.6	20.5	21.0	18.8
F64-1881	19.9	21.1	21.9	21.4	19.6
F64-3084	19.5	21.3	22.0	22.0	19.1
F64-3144	18.9	21.3	21.6	20.5	19.1
F64-3172	19.9	22.5	22.2	22.6	20.1
F64-3373	18.8	21.1	21.9	21.3	19.3
F64-3418	18.5	20.9	21.5	21.4	18.5
F64-3434	20.2	21.2	22.3	22.4	19.6
F64-3445	19.9	21.3	21.5	21.2	19.7
F64-3502	20.1	21.1	23.1	22.1	19.7
F64-3503	19.6	19.8	21.5	21.0	19.8
F64-3513	19.7	20.3	21.2	21.8	19.7
F64-3528	19.7	19.7	21.7	21.6	19.2
F64-3543	19.9	20.6	22.3	21.4	19.3
F64-3709	19.6	20.9	21.7	21.4	19.5
F64-3718	20.5	21.3	22.6	22.0	19.7
N63-700	19.7	18.8	21.2	20.8	18.9
N63-858	19.2	18.9	20.2	21.0	19.0
N63-908	20.9	20.5	21.9	22.7	21.1
N63-1131	20.3	20.9	21.7	22.7	20.3
N63-1206	19.9	20.4	21.5	22.4	19.4
N63-1210	20.3	18.3	21.5	22.5	20.0
N63-1302	20.5	20.6	21.7	22.2	20.0
N63-1552	21.5	21.1	23.1	23.5	21.1
N63-1852	20.7	20.2	22.1	22.2	21.1

Table 54. - Protein percentages for the strains in Preliminary Group VII, 1966

Strain	Willard, N.C.	Blackville, S.C.	Tallassee, Ala.	Jay, Fla.	Stoneville, Miss.(A)
Bragg	42.4	41.7	40.5	41.2	39.8
Lee	43.5	40.5	40.1	41.9	40.5
D58-4163	41.9	40.6	39.3	39.2	38.7
D58-4384	43.4	42.5	40.1	39.9	39.7
D64-4825	44.4	41.1	39.8	42.1	41.4
D64-4857	42.9	40.8	39.7	41.4	40.4
IAC-1	43.5	42.1	38.9	41.0	40.2
Bossier	42.7	42.0	38.9	41.1	38.5
F64-1683	45.9	44.2	41.3	43.6	41.6
F64-1708	44.9	42.8	40.6	41.7	42.6
F64-1729	43.4	42.4	40.3	41.8	40.1
F64-1739	46.5	42.7	39.0	42.3	41.6
F64-1881	44.1	40.7	37.3	40.4	40.4
F64-3084	45.2	42.9	39.9	40.8	42.0
F64-3144	46.4	42.9	39.7	41.8	41.5
F64-3172	44.1	40.5	39.1	40.0	39.6
F64-3373	47.4	43.5	39.8	41.8	42.3
F64-3418	46.0	43.4	40.0	42.0	42.2
F64-3434	43.5	41.6	38.5	40.0	40.2
F64-3445	44.3	42.7	40.0	41.3	40.9
F64-3502	43.4	41.7	38.5	41.0	40.8
F64-3503	46.9	43.8	41.5	41.9	42.2
F64-3513	46.0	43.8	40.5	42.2	41.6
F64-3528	46.5	43.9	40.6	41.5	41.9
F64-3543	43.0	42.4	38.2	39.7	39.8
F64-3709	44.2	42.4	40.1	41.5	40.8
F64-3718	43.5	41.2	39.9	40.7	39.5
N63-700	44.5	43.1	41.6	42.2	41.4
N63-858	43.9	43.2	41.1	42.2	41.0
N63-908	41.9	42.4	40.0	41.0	39.4
N63-1131	41.4	40.8	38.9	39.8	39.6
N63-1206	43.0	42.4	40.1	41.3	41.2
N63-1210	42.4	43.1	41.0	40.8	40.0
N63-1302	41.9	42.4	39.6	40.9	39.1
N63-1552	39.6	40.8	37.8	38.1	38.6
N63-1852	41.7	42.9	38.4	39.7	39.8

Table 55 - Plant height for the strains in Preliminary Group VII, 1966

Strain	Willard, N.C.	Blackville, S.C.	Tallassee, Ala.	Live Oak, Fla.	Jay, Fla.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)
Bragg	49	39	45	32	35	49	46
Lee	33	19	34	23	26	35	34
D58-4163	43	38	43	34	35	44	41
D58-4384	33	36	36	30	33	39	37
D64-4825	35	26	42	28	30	37	36
D64-4857	34	30	36	29	29	37	28
IAC-1	49	49	51	48	48	54	53
Bossier	38	35	40	38	34	40	38
F64-1683	46	36	39	37	34	44	44
F64-1708	32	31	33	29	30	50	34
F64-1729	45	39	43	36	34	43	44
F64-1739	38	33	40	29	30	37	38
F64-1881	36	34	41	32	33	38	37
F64-3084	37	32	37	29	30	39	31
F64-3144	34	34	38	28	31	38	36
F64-3172	38	33	43	34	32	38	35
F64-3373	35	29	35	30	32	39	35
F64-3418	40	31	37	32	34	38	36
F64-3434	40	34	37	31	34	39	36
F64-3445	39	30	39	32	35	38	37
F64-3502	36	29	38	32	31	37	38
F64-3503	42	35	37	30	32	41	33
F64-3513	42	34	36	31	35	42	36
F64-3528	39	28	45	27	32	38	33
F64-3543	40	29	40	30	30	39	36
F64-3709	38	35	40	29	32	40	35
F64-3718	44	33	39	32	33	39	34
N63-700	44	33	40	26	33	45	43
N63-858	42	36	40	24	33	43	36
N63-908	43	37	43	31	36	45	44
N63-1131	38	34	32	27	32	44	36
N63-1206	38	36	34	27	35	44	43
N63-1210	41	35	31	24	33	41	46
N63-1302	43	38	39	29	37	48	42
N63-1552	50	38	46	29	35	44	38
N63-1852	38	40	44	31	36	45	42

Table 56. - Seed quality scores for the strains in Preliminary Group VII, 1966

Strain	Willard, N.C.	Blackville, S.C.	Tallassee, Ala.	Live Oak, Fla.	Jay, Fla.	Stone-ville, Miss.(A)	Stone-ville, Miss.(B)
Bragg	1.0	1.0	1.5	1.0	2.0	2.0	2.0
Lee	1.0	1.5	1.0	1.0	2.0	2.0	2.0
D58-4163	1.0	1.5	1.5	1.0	2.0	2.0	2.0
D58-4384	1.0	2.0	2.0	1.0	1.0	2.0	2.0
D64-4825	1.0	1.5	1.5	1.0	2.0	2.0	2.0
D64-4857	1.0	1.0	1.5	1.0	2.0	2.0	2.0
IAC-1	1.0	2.0	1.5	1.0	2.0	2.0	2.0
Bossier	1.0	1.0	1.5	1.0	1.0	2.0	2.0
F64-1683	1.0	3.0	1.5	1.0	2.0	2.0	2.0
F64-1708	1.0	3.0	1.0	1.0	3.0	2.0	2.0
F64-1729	1.0	1.0	1.0	1.0	1.0	2.0	2.0
F64-1739	1.0	2.0	1.5	1.0	1.0	2.0	2.0
F64-1881	1.5	2.0	1.0	1.0	2.0	2.0	2.0
F64-3084	1.0	3.0	1.5	1.0	1.0	2.0	2.0
F64-3144	1.0	1.0	1.0	1.5	2.0	2.0	2.0
F64-3172	1.0	2.0	1.0	1.5	1.0	2.0	2.5
F64-3373	1.0	1.0	1.0	1.5	2.0	2.0	2.0
F64-3418	1.0	2.0	1.0	1.0	2.0	2.0	2.0
F64-3434	1.0	1.5	1.0	1.0	2.0	2.0	2.5
F64-3445	1.0	1.0	1.5	1.0	2.0	2.0	2.0
F64-3502	1.0	1.0	1.0	1.0	2.0	2.0	2.0
F64-3503	1.0	2.0	1.0	1.0	1.0	2.0	2.5
F64-3153	1.0	2.0	1.0	1.0	2.0	2.0	2.0
F64-3528	1.0	1.0	1.5	1.0	2.0	2.0	2.0
F64-3543	1.0	1.0	1.5	1.0	1.0	2.5	2.0
F64-3709	1.5	1.0	1.5	1.0	3.0	2.0	2.0
F64-3718	1.0	2.0	1.0	1.0	2.0	2.0	2.0
N63-700	1.0	3.0	1.5	1.5	2.0	2.0	2.0
N63-858	1.0	2.0	2.0	1.0	2.0	2.0	2.0
N63-908	1.0	3.0	2.0	1.5	3.0	2.0	2.0
N63-1131	1.0	3.0	2.5	1.5	3.0	2.0	2.0
N63-1206	1.0	3.0	2.0	1.0	2.0	2.0	2.0
N63-1210	1.0	3.0	2.0	1.0	3.0	2.0	2.0
N63-1302	1.0	3.0	3.0	1.5	3.0	2.0	2.0
N63-1552	1.0	3.0	2.0	1.0	3.0	2.0	2.0
N63-1852	1.0	3.0	2.0	1.0	2.0	2.0	2.0

UNIFORM GROUP VIII

1966

	Variety or strain	Parentage	Generation composited
1.	Bienville	Pelican #2 x Ogden	
2.	Hampton	Majos x Lee	
3.	Hardee	D49-772 x Improved Pelican	F_6
4.	F61-3118	D51-5091 x Jackson	F_7
5.	F61-2886	D49-2491(2) x Improved Pelican	F_7
6.	Coker 3207	Sel. from Hampton	
7.	F62-3180	La59-1-4 x D51-4877	F_6
8.	F62-3193	La59-1-4 x D51-4877	F_7
9.	F63-3938	Seminole x F55-822	F_6
10.	F63-3999	F55-822 x (Roanoke x CNS-4)	F_6
11.	F63-4000	F55-822 x (Roanoke x CNS-4)	F_6
12.	La63-15-6	Pelican 2 x Ogden	

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.

D51-5091 and D51-4877 -- 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.

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

F55-822 is parent line for Bragg.

Twenty-four Uniform Group VIII nurseries were planted. Results of 20 nurseries 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 the 5 percent level of confidence in 12 of the 20 nurseries. The combined analysis of variance for seed yields by regions also show strains to differ in yield.

One strain, F61-3118, has been tested 3 years. The mean seed yield is below that for Hampton and the seed holding qualities are not as good. Growth habit is considerably different between these two, as F61-3118 averages 12 to 14 inches taller than Hampton. One other strain, F61-2886, has been grown 2 years. This strain lodges rather severely. Seed yield is appreciably below Hampton.

Four of the seven strains grown one year gave very good performance. These are Coker 3207, F63-3938, F63-3999, and F63-4000.

Coker 3207 is a subline of Hampton which averaged 4 inches taller. The additional height did not appear to have any production advantage. F62-3180 and F62-3193 yielded well but shattered excessively. La63-15-6 was also very poor in seed holding. The strain F63-3938 has large seed and yielded moderately well. The two strains F63-3999 and F63-4000 were good in all qualities.

Table 57. - General summary of performance for the strains in Uniform Group VIII, 1966

	Bienville	Hampton	Hardee	F61-3118	F61-2886	Coker 3207
Seed Yield - 1966						
Southeast	41.1	41.8	40.0	40.2	35.4-	42.1
West	41.2	48.4+	39.8	42.1	37.7	45.0+
- 1965-66						
Southeast	40.4	41.3	38.1	38.9	35.6	
West	34.1	40.6	33.5	32.4	30.9	
- 1964-66						
Southeast	37.8	39.0	36.5	37.6		
West	35.6	39.1	32.2	32.0		
Oil Percentage - 1966	21.7	22.6+	21.5	21.9	20.3-	22.6+
- 1965-66	21.9	22.9	21.6	22.2	20.8	
- 1964-66	21.8	22.6	21.4	22.1		
Protein Percentage - 1966	40.3	38.2-	40.7	38.7-	41.3+	38.0-
- 1965-66	40.3	38.2	40.9	38.8	41.4	
- 1964-66	40.3	38.0	40.7	38.9		
Seed Size	16.7	17.9+	15.5-	16.9	13.1-	16.8
Maturity Index	11-1	0	+4	+1	+2	0
Height	40	35	44	49	45	39
Bacterial Pustule	3.0	1.0	1.0	1.0	1.0	1.0
Target Spot	1.0	1.0	1.0	1.0	1.0	1.0
Shattering	3.2	1.0	1.7	2.0	1.5	1.3
Flower Color	P	P	W	W	P	P
Pubescence Color	T	G	G	G	T	G
Pod Wall Color	T	B	T	B	T	B

Table 57. - (continued)

	F62-3180	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6
Seed Yield - 1966						
Southeast	42.4	41.8	40.3	41.5	41.3	39.9
West	45.5+	46.8+	41.3	48.1+	45.9+	44.5
- 1965-66						
Southeast						
West						
- 1964-66						
Southeast						
West						
Oil Percentage - 1966	21.7	21.4	21.5	20.4-	21.1-	22.0
- 1965-66						
- 1964-66						
Protein Percentage - 1966	39.1-	40.0	41.9+	42.1+	41.8+	40.4
- 1965-66						
- 1964-66						
Seed Size	13.9-	16.8	22.0+	15.7-	18.8+	17.1
Maturity Index	0	+2	+1	-3	0	0
Height	38	42	38	38	37	42
Bacterial Pustule	1.0	1.0	1.0	1.0	1.0	2.5
Target Spot	1.0	1.0	1.0	1.0	1.0	1.0
Shattering	3.0	2.8	1.3	1.3	1.0	3.7
Flower Color	P	P	P	P	P	P
Pubescence Color	G	G	T	T	T	T
Pod Wall Color	T	T	T	B	T	T

Table 58. - Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1966

Location	Bienville	Hampton	Hardee	F61-3118	F61-2886	Coker 3207	F62-3180
			Southeast				
Florence, S.C.(A)	40.1	43.8	44.7+	43.3	41.7	41.9	39.2
Florence, S.C.(B)	40.6	44.9+	41.0	42.7	33.7-	43.3	42.9
Hartsville, S.C.(A)	42.0	41.9	41.9	42.8	36.4	45.1	44.2
Hartsville, S.C.(B)	41.3	42.8	39.2	42.9	34.8-	43.5	42.1
Blackville, S.C.(A)	29.8	31.4	25.2-	26.7-	21.3-	30.5	31.5
Blackville, S.C.(B)	29.2	30.1	26.2-	29.9	22.6-	30.1	29.0
Tallassee, Ala.	41.5	40.4	33.7	33.0	30.9	37.4	40.8
Tifton, Ga.	38.3	37.0	38.8	31.1	30.7	40.7	41.6
Live Oak, Fla.	38.8	33.4-	42.7	42.1	35.3	32.0-	40.9
Gainesville, Fla.	41.1	45.3+	46.8+	47.9+	43.5	46.4+	43.8
Marianna, Fla.	51.6	49.4	45.2-	46.3-	38.7-	54.5	48.7
Quincy, Fla.	38.3	43.2+	36.1	36.4	35.1	39.5	44.1+
Jay, Fla.	42.5	41.8	35.6-	37.7	33.4-	43.0	41.3
Fairhope, Ala.	59.9	61.1	59.6	61.9	51.2	62.0	61.5
Poplarville, Miss.	41.5	41.0	42.8	38.7	40.9	41.2	43.6
Mean	41.1	41.8	40.0	40.2	35.4-	42.1	42.4
			West				
Stoneville, Miss.(A)	26.0	34.2+	21.7	25.9	21.0	30.4	31.6
St. Joseph, La.	53.0	64.8	51.2	54.6	48.3	59.4	53.0
Crowley, La.	46.6	45.6	43.3	42.7	41.8	47.4	46.4
Curtis, La.	39.1	49.0+	42.8	45.3	39.7	42.8	51.0+
Beaumont, Texas*	45.6	44.2	48.2	50.0	43.1	46.6	52.9
Mean	41.2	48.4+	39.8	42.1	37.7	45.0+	45.5+

*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	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6	L.S.D. (.05)	C.V.
			Southeast				
Florence, S.C.(A)	34.3-	41.7	37.8	41.2	38.9	4.5	7%
Florence, S.C.(B)	39.2	39.0	43.5	44.0	43.6	3.5	5%
Hartsville, S.C.(A)	45.0	40.0	44.3	43.2	43.5	N.S.	8%
Hartsville, S.C.(B)	43.7	42.3	41.2	45.1+	41.5	3.5	5%
Blackville, S.C.(A)	28.1	29.6	29.6	31.8	28.9	3.1	6%
Blackville, S.C.(B)	29.6	29.6	31.2	31.5+	26.1-	2.3	5%
Tallassee, Ala.	30.9	34.1	35.8	36.3	33.7	N.S.	14%
Tifton, Ga.	43.6	36.6	36.5	31.3	31.8	N.S.	15%
Live Oak, Fla.	37.9	39.3	38.2	43.3	35.0	5.0	8%
Gainesville, Fla.	45.6+	44.5	51.3+	49.2+	36.8-	4.0	5%
Marianna, Fla.	53.3	49.2	54.1	46.1-	49.0	4.6	6%
Quincy, Fla.	41.6	38.6	36.6	32.1-	38.5	4.3	7%
Jay, Fla.	42.0	39.4	43.2	44.9	42.5	5.7	8%
Fairhope, Ala.	63.6	56.7	58.9	57.8	64.8	N.S.	10%
Poplarville, Miss.	42.7	43.7	40.0	41.3	43.6	N.S.	8%
Mean	41.8	40.3	41.5	41.3	39.9	2.0	
			West				
Stoneville, Miss.(A)	31.7+	22.9	36.6+	29.2	29.8	5.7	12%
St. Joseph, La.	53.0	51.2	57.2	54.4	56.7	N.S.	12%
Crowley, La.	53.9	47.1	49.9	51.0	45.4	N.S.	10%
Curtis, La.	48.5+	44.0	48.7+	48.9+	46.0+	6.3	8%
Beaumont, Texas*	53.4	50.1	50.8	48.7	49.4	N.S.	8%
Mean	46.8+	41.3	48.1+	45.9+	44.5	3.9	

Table 59. - Chemical composition and seed size for the strains in Uniform Group VIII, 1966

Location	Bienville	Hampton	Hardee	F61-3118	F61-2886	Coker 3207	F62-3180
			Oil Percentage				
Hartsville, S.C.(A)	21.2	22.5	21.8	21.3	20.4	21.9	22.0
Blackville, S.C.(B)	20.4	20.3	19.4	20.5	18.3	20.1	20.5
Tallassee, Ala.	22.3	23.3	21.3	22.2	20.8	23.6	20.9
Tifton, Ga.	21.9	22.9	22.8	22.6	19.8	23.0	21.9
Live Oak, Fla.	22.5	23.0	22.0	21.2	21.4	23.1	22.9
Gainesville, Fla.	21.5	23.5	22.8	22.9	21.0	24.5	22.5
Quincy, Fla.	22.4	22.5	21.0	22.5	20.5	22.1	22.4
Jay, Fla.	21.0	22.6	21.7	21.4	20.6	21.9	21.4
Crowley, La.	22.2	23.1	21.0	22.5	20.1	23.1	20.9
Mean	21.7	22.6+	21.5	21.9	20.3-	22.6+	21.7
			Protein Percentage				
Hartsville, S.C.(A)	39.4	37.3	39.5	38.2	40.3	36.9	38.7
Blackville, S.C.(B)	41.5	40.0	42.6	39.9	42.4	40.2	40.8
Tallassee, Ala.	39.0	37.8	40.5	38.0	40.2	38.5	38.0
Tifton, Fa.	40.9	38.7	40.6	38.9	42.3	37.6	38.6
Live Oak, Fla.	39.6	37.3	40.0	37.3	41.6	37.3	38.3
Gainesville, Fla.	41.2	38.7	40.5	38.6	41.7	38.0	39.4
Quincy, Fla.	39.8	36.9	39.5	38.7	41.2	37.5	37.9
Jay, Fla.	40.7	39.3	41.0	40.1	41.4	38.6	40.3
Crowley, La.	40.4	37.8	41.8	38.4	40.6	37.3	39.6
Mean	40.3	38.2-	40.7	38.7-	41.3+	38.0-	39.1-
			Grams per 100 Seeds				
Hartsville, S.C(A)	17.3	17.2	15.3	17.2	12.7	17.0	12.7
Blackville, S.C.(B)	14.8	15.2	13.2	15.7	10.7	15.5	13.1
Tallassee, Ala.	18.5	20.6	17.4	18.0	14.7	14.7	15.3
Tifton, Ga.	17.0	20.0	17.0	19.0	15.0	19.0	15.0
Live Oak, Fla.	17.2	17.8	16.2	16.9	13.9	17.3	13.9
Gainesville, Fla.	15.5	17.6	15.2	18.5	14.8	17.3	14.6
Quincy, Fla.	16.0	16.0	15.0	13.0	12.0	16.0	12.0
Jay, Fla.	18.5	20.2	16.5	18.3	12.9	17.5	15.1
Crowley, La.	15.5	16.9	13.5	15.5	11.2	17.1	13.3
Mean	16.7	17.9+	15.5-	16.9	13.1-	16.8	13.9-

Table 59. - (continued)

Location	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6	L.S.D. (.05)
			Oil Percentage			
Hartsville, S.C.(A)	21.1	21.0	20.4	20.9	22.1	
Blackville, S.C.(B)	19.7	18.8	20.3	20.6	20.6	
Tallassee, Ala.	21.9	22.2	20.5	20.6	22.2	
Tifton, Ga.	22.1	21.8	21.2	21.4	21.4	
Live Oak, Fla.	22.4	22.7	21.0	22.1	22.5	
Gainesville, Fla.	21.8	23.0	20.4	21.9	22.5	
Quincy, Fla.	21.3	21.5	20.1	20.7	22.8	
Jay, Fla.	21.3	21.6	19.9	21.1	21.7	
Crowley, La.	21.4	20.7	20.2	20.2	21.9	
Mean	21.4	21.5	20.4-	21.1-	22.0	0.5
			Protein Percentage			
Hartsville, S.C.(A)	38.7	41.2	40.9	40.6	39.2	
Blackville, S.C.(B)	42.1	43.9	43.2	42.9	42.2	
Tallassee, Ala.	39.1	40.2	43.1	43.0	39.9	
Tifton, Ga.	39.5	42.8	43.1	42.9	41.8	
Live Oak, Fla.	39.9	42.2	41.5	40.7	40.0	
Gainesville, Fla.	40.4	41.4	42.4	41.1	40.7	
Quincy, Fla.	39.0	41.5	41.4	40.7	39.2	
Jay, Fla.	41.1	42.2	42.2	42.3	40.7	
Crowley, La.	39.8	41.5	41.2	41.9	39.5	
Mean	40.0	41.9+	42.1+	41.8+	40.4	0.6
			Grams per 100 Seeds			
Hartsville, S.C.(A)	16.8	23.3	16.2	18.2	18.0	
Blackville, S.C.(B)	14.7	19.2	14.3	16.3	15.2	
Tallassee, Ala.	18.1	23.1	17.1	18.8	19.1	
Tifton, Ga.	18.0	24.0	15.0	19.0	18.0	
Live Oak, Fla.	17.7	21.8	16.2	19.8	17.0	
Gainesville, Fla.	17.4	23.2	16.2	20.6	16.0	
Quincy, Fla.	15.0	21.0	14.0	17.0	16.0	
Jay, Fla.	17.3	23.2	16.7	20.2	18.4	
Crowley, La.	16.1	19.4	15.5	19.7	16.0	
Mean	16.8	22.0+	15.7-	18.8+	17.1	0.9

Table 60. - Relative maturity, days earlier (-) or later (+) than Bienville, for the strains in Uniform Group VIII, 1966

Location	Date planted	Bienville matured	Hampton	Hardee	F61-3118	F61-2886
		Southeast				
Florence, S.C.(A)	5-15	10-31	0	+12	+6	+3
Florence, S.C.(B)	6-15	11-4	+2	+6	-1	0
Hartsville, S.C.(A)	5-25	11-7	-2	+5	+3	+3
Hartsville, S.C.(B)	6-22	11-8	-2	+4	0	+2
Blackville, S.C.(A)	5-6	11-3	-2	+3	+1	0
Blackville, S.C.(B)	6-24	11-4	-1	+2	0	+1
Tallassee, Ala.	5-17	11-2	-1	0	0	+1
Tifton, Ga.	5-30	11-5	+2	+5	+2	+3
Live Oak, Fla.	6-17	10-27	0	+5	0	+5
Gainesville, Fla.	6-1	10-27	0	+5	+1	+5
Marianna, Fla.	5-30	10-27	+5	+7	-1	+6
Quincy, Fla.	6-14	10-30	-4	0	-7	+2
Jay, Fla.	5-28	10-26	0	+4	+3	+1
Fairhope, Ala.	6-1	10-25	0	+8	+8	-3
Mean		11-1	0	+5	+1	+2
		West				
Stoneville, Miss.(A)	5-9	11-1	0	+3	0	-2
St. Joseph, La.	5-16	11-2	0	+2	+1	0
Curtis, La.	6-2	10-30	+3	+4	+8	+13
Mean		11-1	+1	+3	+3	+4

Table 60. - (continued)

Location	Coker 3207	F62-3180	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6
			Southeast				
Florence, S.C.(A)	+2	0	+4	+1	-3	+3	+2
Florence, S.C.(B)	-1	+2	+8	+6	-3	+2	-3
Hartsville, S.C.(A)	-1	0	0	+2	-5	-3	0
Hartsville, S.C.(B)	-1	0	+1	0	-5	-4	-1
Blackville, S.C.(A)	-1	-2	+6	+1	-5	-2	0
Blackville, S.C.(B)	0	-1	+3	+2	-3	-1	0
Tallassee, Ala.	-1	-1	0	0	-5	-5	-1
Tifton, Ga.	+2	+2	+6	+3	+2	+5	+2
Live Oak, Fla.	-1	+4	+3	-1	-6	-2	-1
Gainesville, Fla.	-1	+3	+4	+1	-4	+1	+1
Marianna, Fla.	+2	+3	+2	+5	-3	+3	+4
Quincy, Fla.	-5	-1	+1	0	-12	-6	-3
Jay, Fla.	+1	-1	+4	-3	-8	-4	-2
Fairhope, Ala.	-3	-5	-5	0	-5	0	0
Mean	0	0	+3	+1	-5	0	0
			West				
Stoneville, Miss.(A)	0	-4	-4	-2	-4	0	-2
St. Joseph, La.	0	0	+1	+1	0	+1	0
Curtis, La.	-2	+9	+6	+10	+11	+6	-2
Mean	0	+2	+1	+3	+2	+2	-1

Table 61. - Plant height for the strains in Uniform Group VIII, 1966

Location	Bienville	Hampton	Hardee	F61-3118	F61-2886	Coker 3207
			Southeast			
Florence, S.C.(A)	38	28	32	37	42	28
Florence, S.C.(B)	46	40	46	50	47	43
Hartsville, S.C.(A)	42	33	48	49	45	41
Hartsville, S.C.(B)	47	39	45	56	51	46
Blackville, S.C.(A)	39	36	45	48	42	38
Blackville, S.C.(B)	32	31	32	43	36	33
Tallassee, Ala.	42	38	46	58	47	44
Tifton, Ga.	37	31	40	53	37	35
Live Oak, Fla.	34	33	44	47	48	35
Gainesville, Fla.	38	34	41	42	41	37
Marianna, Fla.	44	38	46	48	46	43
Quincy, Fla.	29	29	36	43	43	33
Jay, Fla.	41	38	44	56	46	43
Fairhope, Ala.	45	35	47	52	44	35
Mean	40	35	42	49	44	38
			West			
Stoneville, Miss.(A)	38	38	54	60	54	48
St. Joseph, La.	50	40	59	57	44	43
Crowley, La.	40	37	46	54	43	38
Curtis, La.	34	34	42	28	50	30
Mean	41	37	50	50	48	40

Table 61. - (continued)

Location	F62-3180	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6
			Southeast			
Florence, S.C.(A)	18	28	35	16	24	30
Florence, S.C.(B)	41	46	38	40	41	40
Hartsville, S.C.(A)	38	43	40	43	41	44
Hartsville, S.C.(B)	43	48	43	45	44	48
Blackville, S.C.(A)	37	38	39	40	39	39
Blackville, S.C.(B)	31	36	31	33	31	34
Tallassee, Ala.	45	47	42	41	40	46
Tifton, Ga.	31	41	34	37	31	39
Live Oak, Fla.	35	38	39	39	37	38
Gainesville, Fla.	37	39	37	37	38	39
Marianna, Fla.	42	46	40	40	42	48
Quincy, Fla.	31	35	33	32	27	37
Jay, Fla.	43	46	38	40	37	45
Fairhope, Ala.	36	40	35	30	33	41
Mean	36	41	37	37	36	41
			West			
Stoneville, Miss.(A)	48	46	46	48	48	46
St. Joseph, La.	47	53	45	45	48	53
Crowley, La.	38	44	39	39	38	39
Curtis, La.	41	38	34	35	26	52
Mean	44	45	39	42	40	48

Table 62. - Lodging scores for the strains in Uniform Group VIII, 1966

Location	Bienville	Hampton	Hardee	F61-3118	F61-2886	Coker 3207
		Southeast				
Florence, S.C.(A)	2.0	2.0	3.0	2.0	5.0	2.0
Florence, S.C.(B)	3.0	2.0	3.0	2.0	5.0	3.0
Hartsville, S.C.(A)	2.8	1.9	3.0	2.9	3.8	2.3
Hartsville, S.C.(B)	2.3	2.3	2.8	2.8	3.8	2.5
Blackville, S.C.(A)	3.0	1.3	1.3	2.7	4.7	1.7
Blackville, S.C.(B)	2.2	2.0	1.6	3.0	3.2	2.2
Tallassee, Ala.	2.0	1.0	2.0	2.0	4.0	2.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	2.0	1.7	2.3	2.0	3.7	2.0
Gainesville, Fla.	2.0	1.7	1.7	2.0	3.0	2.0
Marianna, Fla.	3.0	2.0	2.0	2.0	4.0	2.0
Quincy, Fla.	1.0	1.0	2.0	2.0	5.0	1.0
Jay, Fla.	2.0	2.0	3.0	4.0	5.0	3.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
		West				
Stoneville, Miss.(A)	4.0	3.0	4.0	4.0	4.0	3.0
St. Joseph, La.	4.0	3.0	4.0	4.0	4.0	4.0
Crowley, La.	3.0	3.0	3.0	2.0	4.0	3.0
Curtis, La.	2.0	2.0	3.0	3.0	5.0	2.0

Table 62. - (continued)

Location	F62-3180	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6
			Southeast			
Florence, S.C.(A)	1.0	2.0	1.0	1.0	1.0	2.0
Florence, S.C.(B)	2.0	3.0	2.0	1.0	2.0	3.0
Hartsville, S.C.(A)	2.4	2.9	2.8	2.2	2.1	2.8
Hartsville, S.C.(B)	3.8	3.0	3.5	2.3	2.3	3.0
Blackville, S.C.(A)	2.3	3.0	1.3	1.0	1.2	3.0
Blackville, S.C.(B)	1.3	2.3	1.7	1.3	1.0	2.3
Tallassee, Ala.	3.0	2.0	2.0	1.0	2.0	2.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	2.0	2.0	2.0	1.0	1.3	2.0
Gainesville, Fla.	2.3	3.0	2.0	1.3	1.0	2.7
Marianna, Fla.	3.0	2.0	3.0	2.0	2.0	3.0
Quincy, Fla.	1.0	1.0	3.0	1.0	1.0	2.0
Jay, Fla.	2.0	4.0	2.0	1.0	1.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
Stoneville, Miss.(A)	3.0	3.0	4.0	4.0	3.0	4.0
St. Joseph, La.	3.3	4.0	4.0	3.3	4.0	4.0
Crowley, La.	3.0	3.0	3.0	2.0	2.0	3.0
Curtis, La.	3.0	3.0	3.0	4.0	2.0	4.0

Table 63. - Seed quality scores for the strains in Uniform Group VIII, 1966

Location	Bienville	Hampton	Hardee	F61-3118	F61-2886	Coker 3207
			Southeast			
Hartsville, S.C.(A)	1.5	1.5	1.5	2.5	2.0	1.5
Blackville, S.C.(A)	2.0	2.0	2.0	1.5	3.0	2.0
Blackville, S.C.(B)	1.0	1.0	1.0	2.0	2.0	2.0
Tallassee, Ala.	1.5	2.0	1.0	1.5	1.0	2.5
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	3.0	2.0	4.0	2.0
Jay, Fla.	1.0	1.0	1.0	2.0	2.0	2.0
Fairhope, Ala.	1.1	1.5	1.8	1.5	1.8	1.3
			West			
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Curtis, La.	2.0	2.0	3.0	2.0	4.0	2.0

Table 63. - (continued)

Location	F62-3180	F62-3193	F63-3938	F63-3999	F63-4000	La63-15-6
			Southeast			
Hartsville, S.C.(A)	1.5	1.5	2.0	2.5	2.0	1.5
Blackville, S.C.(A)	1.0	2.0	2.5	2.0	1.5	1.0
Blackville, S.C.(B)	1.0	1.0	2.0	1.0	1.0	1.0
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.5	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	2.0	1.0	2.0	2.0	1.0
Jay, Fla.	1.0	1.0	1.0	2.0	2.0	1.0
Fairhope, Ala.	1.1	1.0	1.5	1.6	1.6	1.1
			West			
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Curtis, La.	1.0	2.0	2.0	3.0	2.0	2.0

PRELIMINARY GROUP VIII

1966

Preliminary Group VIII nurseries, which included 33 experimental strains along with the three varieties Hampton, Bienville, and Hardee, were planted at eight locations. Results of six of these plantings are summarized. The parentage of the strains is reported in Table 64. Performance data are summarized in Tables 65 through 70. Seed yield differences among strains were significant at the 5 percent level of confidence in each of the nurseries. The combined analysis of variance also showed differences to be significant at the 5 percent level. Eleven strains had mean seed yields significantly below that for Hampton. There were no strains yielding significantly better than Hampton on the basis of the six location means. Twelve strains yielded significantly better than Hampton at Live Oak.

Lines which would appear to merit testing in Uniform Group VIII are: Coker 4504, F64-1928, F64-2505, F64-2570, F64-2571, and F64-2778. Two of these strains, F64-1928 and F64-2505, are 5 to 6 days later in maturity than Hardee.

Table 64. - Parentage of strains in Preliminary Group VIII, 1966

	Variety or strain	Parentage	Generation composited
1.	Hampton 266		
2.	Bienville		
3.	Hardee		
4.	Campinas 652	Early Parana x Abura	
5.	Coker 3208	Sel. from Hampton	
6.	Coker 4503	Jackson x Co56-251	
7.	Coker 4504	Jackson x Co56-251	
8.	Coker 4506	Jackson x Co56-251	
9.	Coker 5314	Co220 x Lee	
10.	F63-4315	Hardee x (Biloxi x F55-224)	F_5
11.	F63-4349	Hardee x (Biloxi x F55-224)	F_5
12.	F64-1692	Hardee x D53-1301	F_5
13.	F64-1751	Hardee x D53-1301	F_5
14.	F64-1782	Hardee x D53-1301	F_5
15.	F64-1825	Hardee x D53-1301	F_5
16.	F64-1873	F57-1471 x D53-1301	F_5
17.	F64-1919	F57-1471 x D53-1301	F_5
18.	F64-1928	F57-1471 x D53-1301	F_5
19.	F64-1984	D55-4073 x D55-4087	F_6
20.	F64-1988	D55-4073 x D55-4087	F_6
21.	F64-2310	D55-4110 x (D49-2491 x PI 163,453)	F_5
22.	F64-2505	F57-1471 x F58-3726	F_5
23.	F64-2523	F57-1471 x D58-3726	F_5
24.	F64-2570	F57-1471 x F58-3726	F_5
25.	F64-2571	F57-1471 x F58-3726	F_5
26.	F64-2597	F57-1471 x F58-3726	F_5
27.	F64-2602	F57-1471 x F58-3726	F_5
28.	F64-2778	PI 171,445 x D51-5091	F_9
29.	F64-2812	PI 171,445 x D51-5091	F_9
30.	F64-3664	D49-2491(2) x Biloxi	F_6
31.	La60-69-5		
32.	La61-24-2		
33.	La62-69-3		
34.	La63-31-A		
35.	La63-27-4		
36.	La63-212-2		

Table 65. - General summary of performance for the strains in Preliminary Group VIII, 1966

Strain	Seed yield	Maturity index	Ht.	Percent Oil	Percent Protein	Shatter	B.P.	T.S.
Hampton 266	38.8	10-31	33	22.4	38.5	1.0	1.0	1.0
Bienville	37.0	0	35	21.9	40.7+	4.0	3.0	1.0
Hardee	35.4	+4	39	21.7	40.6+	1.7	1.0	1.0
Campinas 652	31.1-	+1	40	20.1-	42.4+	4.0	3.0	1.0
Coker 3208	35.9	-3	24	22.7	38.6	1.0	1.0	1.0
Coker 4503	36.0	0	35	22.1	39.4+	1.3	1.0	1.0
Coker 4504	37.8	+2	39	22.2	39.9+	2.0	1.0	3.0
Coker 4506	37.7	+3	42	21.4-	39.7+	2.5	1.0	3.5
Coker 5314	34.6-	-1	33	22.6	39.7+	1.0	1.0	1.5
F63-4315	33.7-	+6	43	20.2-	43.7+	1.7	1.0	1.5
F63-4349	33.9-	-4	42	21.4-	42.8+	3.0	1.0	1.0
F64-1692	35.6	-1	42	19.9-	42.9+	1.2	1.0	1.0
F64-1751	34.9	-1	35	22.0	40.7+	1.0	1.0	2.5
F64-1782	36.5	-2	39	21.4-	40.5+	1.0	1.0	2.5
F64-1825	33.8	+1	30	21.4-	41.0+	1.2	1.0	2.5
F64-1873	37.1	0	37	21.4-	39.9+	1.2	1.0	1.0
F64-1919	35.9	+3	35	21.3-	40.7+	1.0	1.0	1.0
F64-1928	38.2	+9	46	21.8	39.2	1.0	1.0	1.0
F64-1984	32.3-	-1	37	19.4-	45.4+	1.0	1.0	1.5
F64-1988	33.9	+2	39	20.3-	43.2+	1.2	1.0	1.0
F64-2310	34.8	+5	44	21.2-	41.0+	2.0	1.0	1.0
F64-2505	38.4	+10	52	20.6-	41.2+	1.2	1.0	1.0
F64-2523	37.1	+5	42	21.4-	40.0+	3.0	1.0	1.0
F64-2570	37.7	+3	45	20.2-	40.9+	1.2	1.0	1.0
F64-2571	39.9	+6	40	21.4-	39.8+	1.8	1.0	1.0
F64-2597	37.1	+11	44	20.7-	38.9	1.0	1.0	1.0
F64-2602	35.0	+6	50	20.5-	41.0+	1.6	1.0	1.0
F64-2778	37.6	-4	46	21.4-	39.6+	1.6	1.0	1.0
F64-2812	31.9-	0	32	21.1-	39.6+	2.3	1.0	1.0
F64-3664	32.5-	-5	33	22.1	40.3+	1.5	1.0	1.0
La60-69-5	31.1-	-8	35	22.2	40.2+	5.0	3.0	1.0
La61-24-2	33.9-	-2	39	20.6-	40.5+	4.0	3.0	1.0
La62-69-3	32.9-	0	38	20.6-	40.6+	4.0	3.0	1.0
La63-31-A	34.8	-3	37	21.0-	40.3+	3.0	3.0	1.0
La63-27-4	37.4	0	35	22.0	40.6+	4.5	3.0	1.0
La63-212-2	30.0-	-1	36	20.8-	40.3+	4.0	3.0	1.0
L.S.D.(.05)	4.1			0.7	0.9			
L.S.D.(.01)	5.4			1.0	1.2			

Table 66. - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1966

Strain	Florence, S.C.	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.
Hampton 266	37.0	29.1	33.4	46.5	43.7	43.0
Bienville	29.4-	27.6	39.7+	42.2	41.8	41.2
Hardee	30.1-	25.3	40.7+	45.1	40.0	31.5-
Campinas 652	26.0-	24.6	29.4	30.9-	33.7-	41.9
Coker 3208	38.4	30.5	34.1	29.1-	42.8	40.5
Coker 4503	30.8	27.8	39.7+	38.0-	37.5-	42.3
Coker 4504	28.4-	28.6	39.1	42.8	45.2	42.6
Coker 4506	24.2-	25.4	42.8+	49.1	45.5	39.1
Coker 5314	29.4-	28.0	32.5	41.9	37.3-	38.4
F63-4315	22.4-	26.1	39.3+	44.3	39.5	30.8-
F63-4349	31.2	26.4	34.9	42.3	35.6-	33.0-
F64-1692	31.8	27.6	35.9	38.4-	39.2	40.5
F64-1751	27.6-	26.1	39.5+	45.7	35.8-	34.4-
F64-1782	32.8	30.2	34.0	45.2	38.4	38.4
F64-1825	30.0-	24.0-	34.3	38.1-	38.4	38.4
F64-1873	31.4	28.3	41.0+	35.6-	40.8	45.5
F64-1919	29.8-	28.0	35.3	37.8-	40.1	44.4
F64-1928	29.0-	30.0	41.4+	44.3	38.4	46.2
F64-1984	30.4	24.4	33.2	36.0-	33.9-	35.9
F64-1988	31.1	26.3	36.8	36.8-	38.9	33.7-
F64-2310	33.6	24.6	38.8	42.0	37.7-	32.3-
F64-2505	33.5	23.1-	41.5+	48.0	43.8	40.9
F64-2523	32.2	29.4	35.3	48.1	41.3	36.2
F64-2570	28.4-	25.9	41.7+	44.8	44.3	41.2
F64-2571	31.8	32.6	46.7+	44.1	47.1	37.3
F64-2597	29.0-	22.7-	41.2+	43.9	45.0	40.8
F64-2602	26.6-	22.7-	37.1	43.5	40.5	39.8
F64-2778	26.6-	28.2	42.3+	40.8	44.3	43.4
F64-2812	25.6-	29.8	30.2	33.7-	35.3-	36.9
F64-3664	27.6-	25.4	31.7	41.1	30.2-	38.7
La60-69-5	26.6-	26.3	32.2	33.9-	31.3-	36.2
La61-24-2	28.4-	24.9	37.5	42.6	32.1-	38.0
La62-69-3	28.3-	26.5	36.9	38.9-	32.7-	34.1-
La63-31-A	33.2	27.4	38.3	45.1	30.5-	34.1-
La63-27-4	37.0	26.8	39.9+	40.9	37.8-	42.3
La63-212-2	31.4	22.5-	34.1	31.3-	27.2-	33.7-
L.S.D.(.05)	6.8	4.7	5.8	6.9	5.5	7.8
C.V.	11%	9%	8%	8%	7%	10%

Table 67. - Oil percentages for the strains in Preliminary Group VIII, 1966

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.
Hampton 266	20.4	23.3	23.5	22.4
Bienville	20.3	22.6	22.9	21.9
Hardee	20.4	22.6	22.5	21.4
Campinas 652	17.7	22.0	19.9	20.7
Coker 3208	21.1	23.5	23.6	22.7
Coker 4503	20.8	22.7	22.9	21.9
Coker 4504	20.1	22.7	23.5	22.4
Coker 4506	18.7	22.5	23.1	21.3
Coker 5314	21.0	23.0	24.2	22.3
F63-4315	18.4	20.4	21.1	20.7
F63-4349	21.0	22.4	20.7	21.6
F64-1692	19.0	20.1	20.7	19.7
F64-1751	19.8	22.6	23.4	22.1
F64-1782	20.4	21.6	22.2	21.5
F64-1825	19.7	21.6	22.7	21.6
F64-1873	20.1	21.2	22.5	21.6
F64-1919	20.1	21.8	21.9	21.2
F64-1928	20.8	22.7	22.2	21.4
F64-1984	18.4	19.6	19.8	19.8
F64-1988	18.6	21.4	20.7	20.4
F64-2310	19.1	22.1	22.5	21.2
F64-2505	19.4	21.5	21.4	20.1
F64-2523	20.5	22.3	22.1	20.8
F64-2570	18.1	21.6	21.1	20.1
F64-2571	19.6	22.3	22.4	21.1
F64-2597	19.1	21.9	20.7	21.0
F64-2602	18.2	22.0	21.9	20.0
F64-2778	19.9	22.1	22.2	21.2
F64-2812	19.9	22.1	21.7	20.8
F64-3664	21.3	22.4	23.1	21.5
La60-69-5	20.8	22.9	23.1	22.1
La61-24-2	18.5	20.6	22.2	20.9
La62-69-3	19.4	20.9	21.1	20.9
La63-31-A	19.8	20.9	22.1	21.3
La63-27-4	20.9	22.7	22.6	21.7
La63-212-2	19.5	20.9	21.6	21.3

Table 68. - Protein percentages for the strains in Preliminary Group VIII, 1966

Strain	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Jay, Fla.
Hampton 266	39.6	37.9	37.2	39.3
Bienville	42.0	40.0	40.7	40.2
Hardee	41.0	39.9	40.4	41.2
Campinas 652	43.7	42.2	41.7	41.8
Coker 3208	39.0	37.9	38.2	39.3
Coker 4503	40.3	38.8	39.0	39.5
Coker 4504	40.3	39.1	40.2	40.1
Coker 4506	41.0	38.6	38.7	40.4
Coker 5314	39.9	39.4	39.3	40.2
F63-4315	43.7	43.6	43.9	43.5
F63-4349	41.9	41.9	43.6	43.8
F64-1692	43.0	42.4	42.6	43.6
F64-1751	41.7	40.4	39.7	40.9
F64-1782	39.8	40.2	40.2	41.6
F64-1825	41.9	40.3	40.0	41.6
F64-1873	40.7	39.2	39.5	40.2
F64-1919	41.4	40.3	41.0	40.0
F64-1928	38.6	38.5	40.2	39.6
F64-1984	45.7	45.5	45.9	44.5
F64-1988	43.1	43.6	43.4	42.8
F64-2310	41.0	41.1	40.8	41.0
F64-2505	40.5	40.1	42.1	42.0
F64-2523	39.1	39.2	40.6	40.9
F64-2570	40.9	40.3	40.0	42.3
F64-2571	39.2	39.0	40.5	40.4
F64-2597	39.3	38.1	38.9	39.3
F64-2602	41.6	40.1	40.6	41.5
F64-2778	41.2	38.1	39.6	39.4
F64-2812	40.1	38.5	39.5	40.3
F64-3664	39.8	39.9	40.1	41.2
La60-69-5	40.8	39.2	40.0	40.9
La61-24-2	41.7	40.0	39.6	40.6
La62-69-3	41.6	40.4	39.7	40.6
La63-31-A	40.7	40.6	39.7	40.0
La63-27-4	40.9	39.8	41.3	40.5
La63-212-2	40.4	40.5	40.3	40.0

Table 69. - Plant height for the strains in Preliminary Group VIII, 1966

Strain	Florence, S.C.	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.
Hampton 266	38	28	34	30	30	39
Bienville	40	31	34	34	34	38
Hardee	41	31	46	36	39	43
Campinas 652	40	31	44	35	41	49
Coker 3208	35	19	26	19	22	23
Coker 4503	40	30	41	29	29	39
Coker 4504	40	35	42	34	40	42
Coker 4506	44	37	45	41	40	46
Coker 5314	36	28	34	31	32	37
F63-4315	42	37	47	42	44	47
F63-4349	45	33	46	39	42	45
F64-1692	43	36	47	36	43	46
F64-1751	39	25	37	36	36	35
F64-1782	42	31	43	39	35	41
F64-1825	34	24	35	24	28	34
F64-1873	40	38	39	32	33	42
F64-1919	38	33	38	34	31	37
F64-1928	45	37	47	47	43	54
F64-1984	39	28	41	35	36	41
F64-1988	41	34	41	37	39	40
F64-2310	45	36	47	39	45	49
F64-2505	48	47	65	48	50	56
F64-2523	40	39	47	40	41	43
F64-2570	42	38	49	42	44	52
F64-2571	41	31	45	37	40	43
F64-2597	46	32	45	42	46	54
F64-2602	48	43	60	44	46	56
F64-2778	44	42	47	44	42	54
F64-2812	38	27	32	32	30	33
F64-3664	37	32	34	30	30	35
La60-69-5	40	29	34	35	34	37
La61-24-2	42	33	45	33	35	45
La62-69-3	42	34	41	33	35	41
La63-31-A	41	33	41	31	32	42
La63-27-4	41	32	32	33	33	38
La63-212-2	42	29	39	30	34	40

Table 70. - Seed quality scores for the strains in Preliminary Group VIII, 1966

Strain	Florence, S.C.	Blackville, S.C.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.
Hampton 266	2.0	1.0	1.0	1.0	2.0	1.0
Bienville	1.0	2.0	1.0	1.0	2.0	1.0
Hardee	2.0	1.5	1.0	1.0	4.0	1.0
Campinas 652	2.0	---	1.0	2.0	3.0	2.0
Coker 3208	1.0	1.0	1.0	1.0	1.0	2.0
Coker 4503	1.0	3.0	1.0	1.5	2.0	2.0
Coker 4504	1.0	3.0	1.0	1.0	3.0	2.0
Coker 4506	1.0	1.5	1.0	1.0	2.0	2.0
Coker 5314	3.0	2.0	1.0	1.5	2.0	2.0
F63-4315	2.0	2.0	1.0	1.0	2.0	1.0
F63-4349	2.0	1.5	1.0	1.0	3.0	1.0
F64-1692	1.0	3.0	1.0	1.0	4.0	1.0
F64-1751	3.0	2.0	1.0	1.0	2.0	1.0
F64-1782	1.0	3.0	1.0	1.0	3.0	1.0
F64-1825	1.0	3.0	1.0	1.0	3.0	2.0
F64-1873	3.0	2.0	1.0	1.0	2.0	1.0
F64-1919	2.0	1.0	1.0	1.0	1.0	1.0
F64-1928	2.0	1.0	1.0	1.0	1.0	1.0
F64-1984	1.0	1.0	1.0	1.0	3.0	2.0
F64-1988	2.0	2.0	1.0	1.5	3.0	1.0
F64-2310	2.0	1.5	1.0	1.0	2.0	1.0
F64-2505	3.0	1.0	1.0	1.0	2.0	1.0
F64-2523	4.0	1.0	1.0	1.0	2.0	1.0
F64-2570	3.0	1.0	1.0	1.0	2.0	1.0
F64-2571	2.0	2.0	1.0	1.0	2.0	1.0
F64-2597	3.0	2.0	1.0	1.0	2.0	1.0
F64-2602	4.0	1.0	1.0	1.0	1.0	1.0
F64-2778	3.0	1.0	1.0	1.0	2.0	2.0
F64-2812	1.0	1.0	1.0	1.0	2.0	1.0
F64-3664	2.0	3.0	1.0	1.0	3.0	2.0
La60-69-5	1.0	3.0	1.5	2.0	4.0	2.0
La61-24-2	2.0	5.0	1.0	1.0	3.0	1.0
La62-69-3	3.0	5.0	1.0	1.0	3.0	2.0
La63-31-A	3.0	5.0	1.0	1.0	5.0	2.0
La63-27-4	2.0	1.0	1.0	1.0	1.0	1.0
La63-212-2	2.0	5.0	1.0	1.0	3.0	2.0