U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1962 PART II. SOUTHERN STATES

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

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RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS

PART II. SOUTHERN STATES

1962

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INTRODUCTION

The program of the U.S. Regional Soybean Laboratory has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs are conducted at three locations, Stoneville, Mississippi; Raleigh, North Carolina; and Gainesville, Florida. After promising new strains are developed at these breeding centers, or by any other cooperating angency, 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.

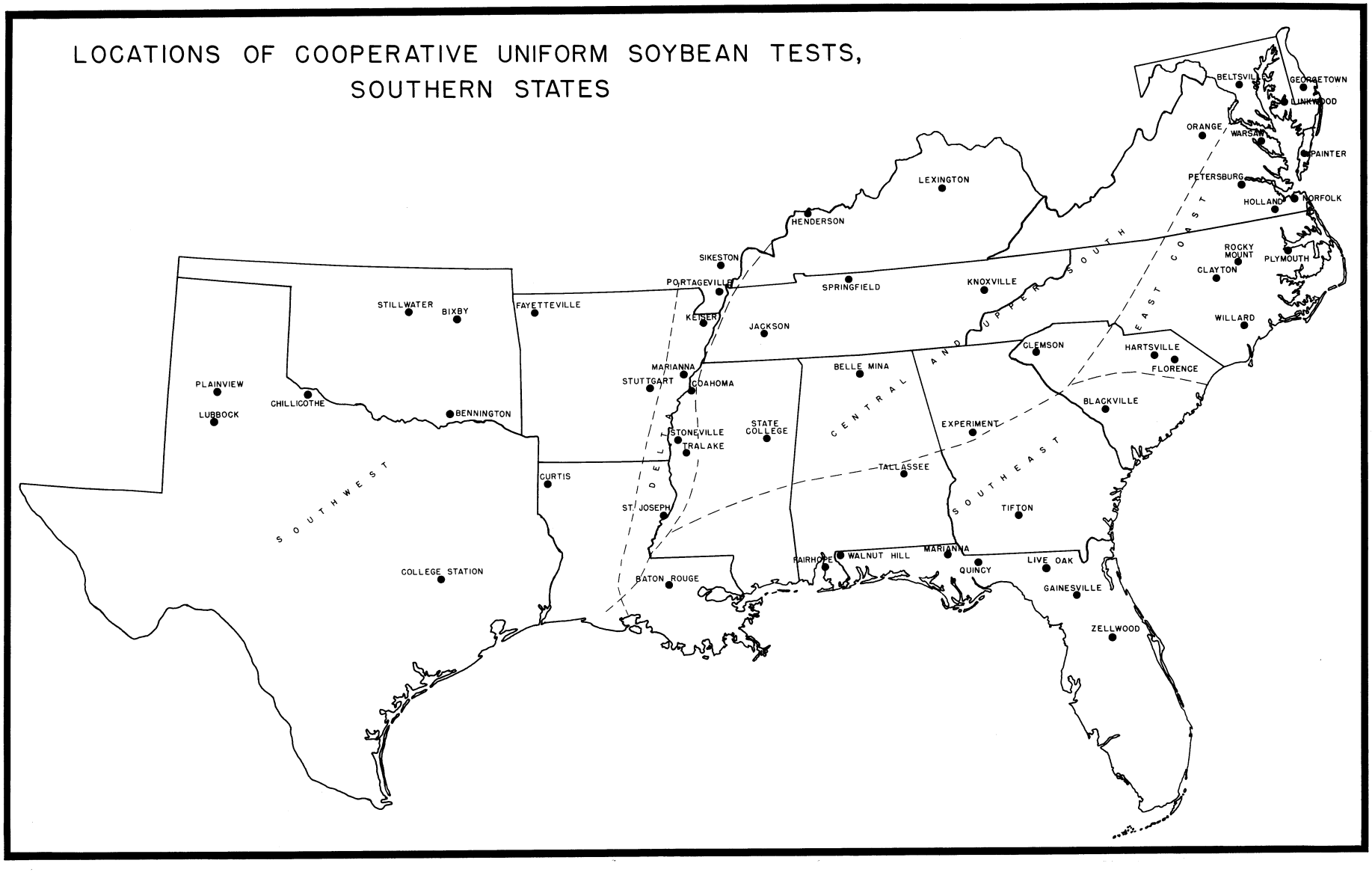
Ten uniform test groups have been established to evaluate the better strains developed in the breeding programs. The Groups 00 through IV are adapted in the northern part of the United States, and the Groups IV through VIII are grown in the southern part. Within their area of adaptation, there is a maturity range of 12 to 18 days within each maturity class. The best standard variety available of each maturity class is used as a check variety with which to compare new strains as to seed yield, chemical composition, maturity, height, lodging, seed quality, and reaction to diseases. For the groups grown in the southern area, the check varieties are Kent, Hill, Hood, Jackson, and Bienville. At Stoneville, Mississippi, where all maturity classes will mature, the approximate maturity dates of these varieties when planted during the first half of May are: Kent, September 8; Hill, September 20; Hood, October 8: Jackson, October 25; and Bienville, November 1.

A wide range of soil and climatic conditions exist in the region. 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 soils from South Carolina southward; (3) the Upper and Central South, including the Piedmont and loessal hill soils east of the Mississippi River; (4) the Delta area, composed of the alluvial soils along the Mississippi River from southern Missouri, southward; and (5) the Southwest, comprising Arkansas and Louisiana (outside the Delta), and Oklahoma and Texas. In the Southwest area, the potential soybean-growing areas would include the alluvial river valley soils and the high plains of Texas. In this area many of the tests receive supplemental irrigation. A map is included to illustrate the five production areas.

On nearly all of the Coastal Plain, Piedmont, and loessal soils, fertilization is essential for satisfactory soybean production. In the Western area, irrigation is necessary for successful production. A table showing soil types, soil test information, and rate of fertilization is included.

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

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES



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

STRAIN IDENTIFICATION

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

Co	-	Coker's Pedigreed Seed Co., Hartsville, South Carolina
D	-	Delta Branch Exp. Sta. and U.S. Regional Soybean Laboratory
F	-	Florida Agr. Exp. Sta. and U.S. Regional Soybean Laboratory
FWH	-	Florida Agr. Exp. Sta. - Walnut Hill, Florida
Ga	-	Georgia Agricultural Experiment Station
L	-	Illinois Agr. Exp. Sta. and U.S. Regional Soybean Laboratory
La	-	Louisiana Agricultural Experiment Station
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
SL	-	U.S. Regional Soybean Laboratory - Illinois and Missouri
UD	-	Delaware Agricultural Experiment Station
V	-	Virginia Agricultural Experiment Station

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

Location	Groups Grown IV	V	VI	VII	VIII	Soil Type	Soil Analyses P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted Variety[2]
East Coast											
Georgetown, Del.	1	1*	1*			Norfolk sandy loam	H	M	6.2	0-30-60	19.5 - A
Linkwood, Md.	1	1	1			Sassafras sandy loam	-	-	---	0-30-60	29.0 - A
Warsaw, Va.	1	1*	1*			Sassafras sandy loam	H	M	6.6	0-0-0	27.4 - B
Painter, Va.	1	1	1			Sassafras sandy loam	VH	H	5.4	0-0-0	47.9 - B
Petersburg, Va.		1	1			Norfolk fine sandy loam	VH	M	6.7	0-0-0	31.0 - B
Norfolk, Va.		1	1			Woodstown sandy loam	H	M	6.2	0-70-70	12.5 - B
Holland, Va.		1	1			Dragston loamy fine sand					
Plymouth, N. C.		1*	1*			Portsmouth fine sandy loam	H	H	6.0	0-40-80	44.5 - C
Rocky Mt., N.C.				1		Norfolk sandy loam	H	H	6.2	0-40-80	27.8 - C
Willard, N. C.			1	1*		Norfolk sandy loam	VH	M	5.6	0-40-80	47.0 - C
Clayton, N. C.			1	1		Norfolk sandy loam	VH	M	6.0	0-40-80	20.4 - C
Florence, S. C.				1	1*	Faceville fine sandy loam				10-27-27	44.9 - D
Hartsville, S.C.			1	1	1	Norfolk sandy loam				0-40-80	44.8 - D
Southeast											
Blackville, S.C.(A)				1*		Norfolk sandy loam	VH	M	6.0	0-56-56	25.1 - D
Blackville, S.C.(B)					1*	Norfolk sandy loam	VH	M	5.5	0-56-56	33.8 - F
Tallassee, Ala.			1	1	1	Independence loamy fine sand				0-42-42	27.2 - D
Tifton, Ga.				1	1	Tifton pebbly loam	M	L	5.6	23-45-68	34.5 - F
Live Oak, Fla.				1	1*	Klej fine sand	20	143	6.4	0-50-100	24.7 - H
Gainesville, Fla.				1*	1*	Arredonda fine sand	36	276	6.2	0-50-100	43.2 - H
Zellwood, Fla.			1	1*		Muck				0-0-0	34.7 - C
Quincy, Fla.			1	1	1*	Norfolk loamy fine sand	9	157	6.2	20-60-60	38.5 - D
Marianna, Fla.				1	1	Ruston sandy loam				24-72-72	44.0 - D
Jay, Fla.			1	1*	1*	Tifton fine sandy loam				24-72-72	39.2 - D
Fairhope, Ala.			1	1	1	Marlboro fine sandy loam				16-48-48	43.8 - F
Baton Rouge, La.			1	1	1*	Olivier silt loam				15-60-60	41.4 - E
Upper and Central South											
Orange, Va.	1	1				Davidson clay loam	M	H	5.6	0-112-56	21.1 - A
Charlotte Courthouse,Va.	1	1				Cecil sandy loam	H	M	6.0	0-56-56	20.6 - A
Springfield, Tenn.	1	1				Mountview silt loam				0-60-60	17.9 - A
Jackson, Tenn.		1	1			Richland silt loam	H	H	5.7	0-80-80	25.6 - A
Belle Mina, Ala.		1	1			Decatur sandy loam				0-56-56	9.2 - A
Blairsville, Ga.		1				Hawassee loam				20-60-60	26.1 - A
Clemson, S. C.				1		Cecil sandy loam	L	M	5.6	20-60-60	22.3 - C
Experiment, Ga.		1	1	1*	1*	Lloyd sandy clay loam	H	L	6.2	20-60-60	22.3 - C
State College, Miss.		1	1	1		Verona fine sandy loam				36-20-60	36.8 - C

Location	Groups Grown IV	V	VI	VII	VIII	Soil Type	Soil Analyses P_2O_5	K_2O	pH	Fertilizer[1]	Yield-adapted variety[2]
Delta											
Henderson, Ky.	1	1				Falaya silt loam	H	L	6.0	0-40-40	47.6 - G
Portageville,Mo.(A)	1	1*	1*			Salix silt loam	H	M	5.0		41.5 - B
Portageville,Mo.(B)	1	1	1			Sharkey clay					
Keiser, Ark. (A)	1	1	1			Sharkey clay(overwash)	M	H	6.6		34.5 - C
Keiser, Ark. (B)	1	1*	1*			Sharkey clay	M	H	6.4		23.7 - A
Marianna, Ark.	1	1	1			Richland silt loam	M	M	6.2	0-40-40	29.9 - A
Stoneville, Miss.(A)		1	1	1*	1	Bosket fine sandy loam	H	M+	6.0		46.1 - C
Stoneville, Miss.(B)	1	1*	1*	1		Sharkey clay	H	M+	6.2		41.4 - C
St. Joseph, La.		1	1	1	1	Commerce sandy loam				0-45-45	51.7 - C
West											
Stuttgart, Ark.[3]		1	1	1		Crowley silt loam	VL	M	6.5	0-55-55	46.2 - C
Curtis, La.		1	1	1	1	Yahola fine sandy loam					36.1 - C
Bixby, Okla.	1	1	1			Lonoke very fine sandy loam	65	316	7.4		41.9 - B
Bennington, Okla.			1	1		Miller sandy loam					
Lubbock, Texas[3]		1	1			Amarillo fine sandy loam					28.5 - A
College Station, Texas			1	1	1	Miller clay loam					52.1 - C

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 = Hood; C = Lee; D = Jackson; E = Bienville; F = Hampton; G = Kent; H = Hardee
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 all groups. Row widthes at the different locations vary from 36 to 40 inches. An attempt was made to follow the best cultural and management practices in conducting these strain comparisons.

The preliminary nurseries were planted in 4-row plots with 2 replications at each of 6 to 8 locations.

Planting Rate: All strains were packeted at the rate of 190 seed for planting a 19-foot row. This gives a planting rate of 10 seed per foot.

Yields are taken by harvesting a 16-foot length from the mid-section of each plot. Actual seed weights are recorded after the seed of strains have a uniform moisture content.

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

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

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

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

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

1 - almost all plants erect.
2 - either all plants leaning slightly, or a few plants down.
3 - either all plants leaning moderately, or 25 to 50% of the plants down.
4 - either all plants leaning considerabley, 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, Jackson; and Group VIII, Bienville.

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

(1) very good, (2) good, (3) fair, (4) poor, and (5) very poor

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

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

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

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

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

B. Root and Stem
1 - no plantes 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

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

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

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

UNIFORM GROUP IV

	Variety or Strain	Parentage	Generation Composited
1.	Kent	Lincoln x Ogden	F_7
2.	Scott	D49-2525 x L6-5679	F_4
3.	Bethel	FC33243 x Perry	F_6
4.	Clark	Lincoln(2) x Richland	F_8
5.	SL1	(Clark(5) x L49-4091) x (Clark(6) x Blackhawk)	*
6.	D53-184	D49-2525 x L6-5679	F_5
7.	UD672	C5799 x FC33243	F_6
8.	L57-9809	Hawkeye x Lee	F_6
9.	DA60-13-1	D49-2491(4) x Hawkeye	F_3
10.	D60-5702	Hill x D53-354	F_5
11.	D60-5818	Hill x D53-354	F_5
12.	D60-5847	Hill x D53-354	F_5

* F_3 lines screened for disease reaction and lines resistant to bacterial pustule and phytophthora rot were composited.

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.

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

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.

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

Sixteen Group IV nurseries were planted. Results of 12 of these nurseries are summarized in tables 1 through 7. A general summary of agronomic qualities, chemical composition of the seed,and reaction to diseases is reported in table 1. Two- and three-year data are reported for seed yield and oil and protein percentage.

Differences among strains were significant in five of the 12 comparisons. The combined analysis for yield in the East Coast area showed no differences among strains. Differences among strains were significant in the Delta area.

Kent ranked highest in yield in the East Coast area but has poor seed quality, shows a high percentage of purple seed stain, and has poor seed holding qualities. Thin stands may have contributed to poor performance of Bethel in several of the tests. The strain tested as SL1 will be released as Clark 63. This strain is basically Clark to which resistance to the disease bacterial pustule and phytophthora rot has been added. Yields for Clark and SL1 were very similar at all locations, except Stoneville where SL1 had a yield advantage of 33%.

The strain DA60-13-1 was grown to observe the performance of a determinate type in this maturity class. The strain yielded fairly well but was too short at most locations. It appears that a Group IV strain with a determinate growth habit should have a later flowering date than indeterminate types now being grown.

The three strains D60-5702, D60-5818, and D60-5847 were selected to combine the characters seed quality and seed holding. All three strains rated well for these qualities but were not outstanding in yield, particularly in the East Coast region where there is a greater need for a variety of this maturity with these qualities.

Table 1. - General summary of performance for the strains in Uniform Group IV, 1962

	Kent	Scott	Bethel	Clark	SL1	D53-184
Seed Yield - 1962						
East Coast	34.9	29.6	28.7	30.0	30.1	29.3
Upper & Central South	24.2	20.1-	20.0-	23.9	21.6	17.8-
Delta	37.2	37.0	28.7-	34.2	36.2	36.1
1961-62						
East Coast	35.2	31.6	31.7	32.4	32.9	31.6
Delta	36.8	35.6	30.5	33.0	35.2	35.5
1960-62						
East Coast	36.8	34.1	33.1	32.8	--	33.2
Delta	36.2	34.4	30.9	31.8	--	35.0
Oil Content - 1962	21.8	21.8	21.6	22.0	21.9	21.0
- 1961-62	22.1	22.0	22.2	22.3	22.2	21.5
- 1960-62	22.1	22.0	21.8	22.4	--	21.6
Protein Content - 1962	41.3	40.0-	40.5	40.9	41.1	42.4+
- 1961-62	41.0	39.5	40.1	40.7	40.6	41.5
- 1960-62	40.7	39.2	40.6	40.7	--	41.4
Seed Size	16.0	13.1-	12.8-	14.7-	14.3-	12.8-
Maturity Index	10-9	+4	+5	-6	-5	+4
Height	36	39	35	35	37	41
Seed Quality 1/	58	42	33	36	67	25
Bacterial Pustule 2/	3.0	1.0	3.0	4.0	1.0	1.0
Phytophthora Rot 2/	2.5	2.0	2.0	2.0	1.0	1.0
Purple Stain 3/	4.0	3.0	2.0	3.0	3.0	3.0
Pod and Stem Blight 4/	2.0	2.0	2.0	3.5	3.2	2.0
Shattering 5/	4.0	2.0	1.3	1.5	1.8	1.0

1/ Percentage of comparisons receiving a score of 3 or poorer.
2/ Stoneville data.
3/ Average of Georgetown, Linkwood, Orange, Warsaw, and Charlotte Court House.
4/ Seed infection score at Georgetown.
5/ Average of Warsaw, Charlotte Court House, Springfield, and Stoneville.

Table 1. - (continued)

	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847
Seed Yield - 1962						
East Coast	30.2	32.1	29.4	27.1	30.4	27.7
Upper & Central South	22.8	24.6	23.3	20.7-	20.5-	21.3
Delta	27.1-	40.9+	33.7-	40.2	39.5	36.6
- 1961-62						
East Coast	32.6	34.2				
Delta	31.0	39.2				
- 1960-62						
East Coast	33.9					
Delta	31.4					
Oil Content - 1962	21.5	22.2	21.4	21.6	21.1	21.3
- 1961-62	21.6	22.5				
- 1960-62	22.0					
Protein Content - 1962	42.0	40.9	43.3+	40.9	41.2	40.9
- 1961-62	41.5	40.5				
- 1960-62	40.9					
Seed Size	13.4-	13.7-	14.7-	11.6-	12.3-	12.2-
Maturity Index	+4	+3	+2	0	+5	+2
Height	40	41	22	37	40	38
Seed Quality[1/]	50	50	9	25	33	33
Bacterial Pustule[2/]	3.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot[2/]	1.5	1.5	1.0	1.0	1.0	1.0
Purple Stain[3/]	2.0	3.0	1.0	1.0	1.0	2.0
Pod and Stem Blight[4/]	2.0	2.5	3.0	1.5	2.0	1.5
Shattering[5/]	1.0	2.3	1.0	1.0	1.0	1.0

Table 2. - Seed yield, in bushels per acre, for the strains in Uniform Group IV, 1962

Location	Kent	Scott	Bethel	Clark	SL1	D53-184
			East Coast			
Georgetown, Del.	26.0	21.0-	22.5-	23.0	21.6-	21.0-
Linkwood, Md.	31.5	26.3	31.2	27.5	26.8	29.5
Orange, Va.	29.7	23.5-	--	23.7-	24.1-	20.8-
Warsaw, Va.	40.8	40.9	22.9-	35.4-	34.3-	36.5-
Painter, Va.	46.5	36.1-	42.1-	40.3-	43.4-	38.8-
Mean	34.9	29.6	28.7	30.0	30.1	29.3
			Upper and Central South			
Charlotte Court House, Va.	26.7	22.7	21.7	27.0	22.7	18.9
Springfield, Tenn.	21.9	17.5	18.4	20.8	20.6	16.7
Mean	24.2	20.1-	20.0-	23.9	21.6	17.8-
			Delta			
Henderson, Ky.	47.6	39.7	36.0	40.3	37.0	40.1
Portageville, Mo. (A) 1/	37.7	40.3	--	--	35.2	39.9
Keiser, Ark. (A) 1/	14.6	17.2	--	14.6	12.8	20.9
Stoneville, Miss. (B)	32.9	40.7+	35.1	29.8	39.7+	40.7+
Bixby, Okla.	31.0	30.6	15.1-	32.4	31.8	27.4
Mean	37.2	37.0	28.7-	34.2	36.2	36.1

1/ Not included in combined analysis.

(+) - 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	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847	L.S.D. (.05)	C.V.
East Coast								
Georgetown, Del.	20.6-	25.7	19.4-	25.7	24.0	19.5-	3.2	8%
Linkwood, Md.	29.1	32.5	30.2	30.1	35.1	27.1	N.S.	15%
Orange, Va.	22.0-	19.7-	16.3-	18.6-	22.2-	23.1-	3.7	10%
Warsaw, Va.	38.0	38.9	36.7	24.5-	31.1-	30.6-	4.2	7%
Painter, Va.	41.2-	43.7	44.3	36.9-	39.7-	38.2-	4.9	7%
Mean	30.2	32.1	29.4	27.1	30.4	27.7	N.S.	
Upper and Central South								
Charlotte Court House,Va.	27.0	25.0	26.4	23.3	24.1	25.5	N.S.	12%
Springfield, Tenn.	18.6	24.2	20.1	18.2	16.9	17.1	N.S.	15%
Mean	22.8	24.6	23.3	20.7-	20.5-	21.3	3.4	
Delta								
Henderson, Ky.	35.2	47.9	44.3	42.0	39.3	42.0	N.S.	13%
Portageville, Mo. (A) [1/]	32.7	40.3	--	35.6	40.4	36.1	N.S.	9%
Keiser, Ark. (A) [1/]	16.2	21.6	6.9	17.0	22.7	20.5	--	--
Stoneville, Miss. (B)	30.5	42.9+	22.7-	46.4+	48.5+	39.2+	5.0	8%
Bixby, Okla.	15.5-	31.8	34.1	32.0	30.8	28.6	8.0	17%
Mean	27.1-	40.9+	33.7-	40.2	39.5	36.6	3.3	

Table 3. - Chemical composition and seed size for the strains in Uniform Group IV, 1962

Location	Kent	Scott	Bethel	Clark	SL1	D53-184
			Oil Percentage			
Georgetown, Del.	19.5	20.0	20.8	19.8	18.7	18.8
Warsaw, Va.	21.7	21.7	22.3	22.5	22.2	21.0
Henderson, Ky.	23.6	22.0	21.6	22.9	23.2	22.0
Stoneville, Miss.(B)	22.8	23.2	23.3	23.4	24.0	23.0
Bixby, Okla.	21.3	21.9	20.2	21.5	21.6	20.2
Mean	21.8	21.8	21.6	22.0	21.9	21.0
			Protein Percentage			
Georgetown, Del.	43.6	42.9	41.7	43.8	44.2	45.4
Warsaw, Va.	41.6	39.4	38.5	40.5	40.6	42.0
Henderson, Ky.	38.7	37.9	41.5	39.0	37.3	40.6
Stoneville, Miss.(B)	40.2	37.6	39.0	40.0	39.9	41.0
Bixby, Okla.	42.2	41.1	41.6	41.2	43.6	43.2
Mean	41.3	40.0-	40.5	40.9	41.1	42.4+
			Grams Per 100 Seeds			
Georgetown, Del.	15.7	12.2	14.1	14.0	13.5	12.4
Warsaw, Va.	19.0	16.0	13.0	16.0	16.0	14.0
Henderson, Ky.	19.0	15.0	16.0	17.0	15.0	15.0
Stoneville, Miss.(B)	13.6	11.4	11.1	13.7	13.7	11.6
Bixby, Okla.	12.8	10.7	9.9	12.7	13.5	10.9
Mean	16.0	13.1-	12.8-	14.7-	14.3-	12.8-

Table 3. - (continued)

Location	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847	L.S.D. (.05)
			Oil Percentage				
Georgetown, Del.	19.8	20.3	18.5	18.9	19.1	18.6	
Warsaw, Va.	22.5	22.8	22.4	21.7	20.8	23.2	
Henderson, Ky.	22.7	23.6	22.7	22.3	21.7	20.8	
Stoneville, Miss.(B)	23.1	23.7	22.5	23.6	23.1	22.9	
Bixby, Okla.	19.4	20.5	20.7	21.4	20.6	20.9	
Mean	21.5	22.2	21.4	21.6	21.1	21.3	N.S.
			Protein Percentage				
Georgetown, Del.	44.7	44.1	46.1	44.0	43.8	43.3	
Warsaw, Va.	40.8	40.0	41.2	39.3	40.7	39.4	
Henderson, Ky.	41.5	39.4	41.4	39.0	40.2	40.0	
Stoneville, Miss.(B)	40.2	39.5	43.3	39.7	38.3	39.7	
Bixby, Okla.	42.8	41.6	44.5	42.3	42.8	42.0	
Mean	42.0	40.9	43.3+	40.9	41.2	40.9	1.1
			Grams Per 100 Seeds				
Georgetown, Del.	13.7	13.7	13.4	10.9	12.0	10.7	
Warsaw, Va.	15.0	15.0	15.0	12.0	12.0	12.0	
Henderson, Ky.	17.0	16.0	17.0	14.0	15.0	16.0	
Stoneville, Miss.(B)	11.1	11.1	14.8	11.3	12.0	11.5	
Bixby, Okla.	10.1	12.5	13.5	9.9	10.6	10.7	
Mean	13.4-	13.7-	14.7-	11.6-	12.3-	12.2-	1.3

Table 4. - Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV, 1962

Location	Date Planted	Kent Matured	Scott	Bethel	Clark	SL1	D53-184
			East Coast				
Georgetown, Del.	5-29	10-1	+1	+2	-11	-11	+2
Linkwood, Md.	5-31	10-4	0	+3	-10	-10	+2
Orange Va.	5-22	10-2	+3	+9	-12	-10	+5
Warsaw, Va.	5-23	10-2	+3	+3	-4	-4	0
Mean		10-2	+2	+4	-9	-9	+2
			Upper and Central South				
Charlotte Court House,Va.	5-23	10-10	+7	0	0	+5	+5
Springfield, Tenn.	5-7	9-10	-2	+7	0	0	-2
Mean		10-5	+3	+4	0	+3	+2
			Delta				
Henderson, Ky.	5-15	9-28	+10	+3	-11	-11	+6
Portageville, Mo.(A)	5-14	9-24	+1	--	--	-7	+2
Keiser, Ark. (A)	5-9	9-18	+10	+8	-6	-6	+8
Stoneville, Miss.(B)	5-7	8-27	+8	+14	-6	-4	+10
Bixby, Okla.	5-10	9-6	+7	+4	0	0	+8
Mean		9-14	+7	+7	-6	-6	+7

Table 4. - (continued)

Location	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847
			East Coast			
Georgetown, Del.	0	0	+1	0	+1	0
Linkwood, Md.	+2	-3	+3	-3	+4	-1
Orange, Va.	+5	-9	+3	0	+5	+1
Warsaw, Va.	+1	0	+1	0	0	0
Mean	+2	-3	+2	0	+3	0
			Upper and Central South			
Charlotte Courthouse,Va.	0	+5	+5	+5	0	0
Springfield, Tenn.	+7	+4	0	0	+4	-2
Mean	+4	+5	+3	+3	+2	-1
			Delta			
Henderson, Ky.	+6	-5	-4	+1	+9	+8
Portageville, Mo.(A)	+4	+3	--	-1	+3	+1
Keiser, Ark. (A)	+4	+12	+2	-1	+11	+4
Stoneville, Miss.(B)	+7	+15	+2	+1	+16	+9
Bixby, Okla.	+3	+9	+4	+3	+7	+5
Mean	+5	+8	0	0	+9	+5

Table 5. - Plant height for the strains in Uniform Group IV, 1962

Location	Kent	Scott	Bethel	Clark	SL1	D53-184
			East Coast			
Georgetown, Del.	39	39	39	37	39	43
Linkwood, Md.	33	33	33	29	33	38
Orange, Va.	39	40	30	37	40	41
Warsaw, Va.	35	37	28	34	34	40
Painter, Va.	35	39	31	33	37	41
Mean	36	38	32	34	37	41
			Upper and Central South			
Charlotte Court House,Va.	45	45	39	42	46	45
Springfield, Tenn.	34	38	36	36	35	40
Mean	40	42	38	39	41	43
			Delta			
Henderson, Ky.	43	50	44	44	42	52
Portageville, Mo.(A)	34	35	--	--	31	43
Keiser, Ark.(A)	28	33	29	27	29	30
Stoneville, Miss.(B)	31	37	41	32	32	37
Bixby, Okla.	34	45	38	36	40	45
Mean	34	40	38	35	35	41

Table 5. - (continued)

Location	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847
			East Coast			
Georgetown, Del.	40	42	24	39	42	40
Linkwood, Md.	33	34	23	34	38	37
Orange, Va.	40	39	34	35	41	44
Warsaw, Va.	35	36	26	33	37	38
Painter, Va.	35	40	26	32	36	36
Mean	37	38	27	35	39	39
			Upper and Central South			
Charlotte Court House,Va.	47	52	28	45	47	46
Springfield, Tenn.	35	42	19	37	38	38
Mean	41	47	24	41	43	42
			Delta			
Henderson, Ky.	46	48	23	44	47	52
Portageville, Mo.(A)	43	44	--	36	41	45
Keiser, Ark.(A)	35	32	10	28	30	35
Stoneville, Miss.(B)	41	35	13	34	41	43
Bixby, Okla.	47	43	18	42	41	43
Mean	42	40	16	37	40	44

Table 6. - Lodging scores for the strains in Uniform Group IV, 1962

Location	Kent	Scott	Bethel	Clark	SL1	D53-184
			East Coast			
Georgetown, Del.	1.7	2.3	2.0	2.0	2.0	2.3
Linkwood, Md.	2.0	2.3	2.0	2.3	2.0	2.7
Orange, Va.	1.0	1.3	1.0	1.0	1.7	1.7
Warsaw, Va.	1.5	2.5	2.2	1.5	2.0	2.3
Painter, Va.	2.3	3.2	2.5	2.0	2.3	3.5
			Upper and Central South			
Charlotte Court House, Va.	2.0	4.0	3.0	3.0	4.0	5.0
Springfield, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Henderson, Ky.	3.0	3.0	3.0	3.0	3.0	3.0
Keiser, Ark. (A)	1.0	1.3	1.0	1.0	1.0	1.0
Stoneville, Miss.(B)	2.0	2.0	2.7	1.7	2.3	3.0
Bixby, Okla.	2.7	2.3	3.0	2.7	2.7	3.7

Table 6. - (continued)

Location	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847
			East Coast			
Georgetown, Del.	2.0	2.0	1.0	2.0	1.7	3.0
Linkwood, Md.	2.0	2.7	2.0	2.0	2.7	2.3
Orange, Va.	1.0	1.7	1.0	1.0	1.3	2.0
Warsaw, Va.	1.0	2.7	1.3	2.7	3.0	2.8
Painter, Va.	2.3	3.6	2.2	2.5	2.8	2.8
			Upper and Central South			
Charlotte Court House, Va.	3.0	4.0	2.0	2.0	4.0	4.0
Springfield, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Henderson, Ky.	3.0	4.0	1.0	3.0	3.0	4.0
Keiser, Ark. (A)	1.0	1.7	1.0	1.0	1.0	1.3
Stoneville, Miss.(B)	2.3	2.7	1.0	2.0	2.0	3.3
Bixby, Okla.	3.0	2.3	1.7	2.3	2.3	3.3

Table 7. - Seed quality scores for the strains in Uniform Group IV, 1962

Location	Kent	Scott	Bethel	Clark	SL1	D53-184
			East Coast			
Georgetown, Del.	2.3	2.0	2.0	2.0	2.0	1.7
Linkwood, Md.	3.0	3.0	2.0	3.0	3.0	2.0
Orange, Va.	2.0	1.0	1.7	2.3	2.7	2.0
Warsaw, Va.	3.0	2.0	2.5	2.5	2.0	2.0
Painter, Va.	4.0	2.0	1.0	2.5	3.0	2.5
			Upper and Central South			
Charlotte Court House, Va.	3.0	3.0	2.0	3.0	3.0	3.0
			Delta			
Henderson, Ky.	3.0	3.0	3.0	4.0	3.0	2.0
Portageville, Mo.(A)	2.8	2.5	--	--	3.0	2.0
Keiser, Ark.(A)	5.0	4.7	--	5.0	5.0	3.7
Stoneville, Miss.(B)	3.0	2.7	3.3	2.7	3.0	2.0
Bixby, Okla.	2.7	3.0	5.0	2.7	3.7	3.7

Table 7. - (continued)

Location	UD672	L57-9809	DA60-13-1	D60-5702	D60-5818	D60-5847
			East Coast			
Georgetown, Del.	1.7	2.0	2.0	2.0	2.0	2.0
Linkwood, Md.	3.0	3.0	2.0	2.0	2.0	3.0
Orange, Va.	3.3	1.7	1.0	1.3	2.0	1.0
Warsaw, Va.	2.0	2.0	1.0	1.5	1.0	1.5
Painter, Va.	1.0	3.0	1.5	1.5	1.5	2.0
			Upper and Central South			
Charlotte Court House, Va.	2.0	3.0	2.0	2.0	3.0	2.0
			Delta			
Henderson, Ky.	4.0	3.0	2.0	3.0	4.0	3.0
Portageville, Mo.(A)	2.5	2.0	--	2.3	1.8	2.0
Keiser, Ark.(A)	4.7	4.3	4.0	4.3	3.5	3.7
Stoneville, Miss.(b)	3.3	2.0	2.3	2.3	2.3	2.3
Bixby, Okla.	4.3	4.0	2.3	3.0	3.0	3.0

UNIFORM GROUP V

1962

	Variety or Strain	Parentage	Generation Composited
1.	Hill	D632-15 x D49-2525	F_5
2.	Dorman	Dunfield x Arksoy	F_6
3.	D59-415	Hill x D52-810	F_5
4.	D59-693	Hill x D52-810	F_5
5.	D59-377	Hill x D52-810	F_5
6.	D59-630	Hill x D52-810	F_5
7.	N59-6821	Hill x D52-810	F_5
8.	N59-6913	Hill x D52-810	F_5
9.	N59-6921	Hill x D52-810	F_5
10.	N59-6926	Hill x D52-810	F_5
11.	N59-6955	Hill x D52-810	F_5
12.	R59-2	D49-507 x D49-2510	

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 D49-2510 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.

D49-507 is a selection from Roanoke x Rose Non-pop.

Thirty-one Group V nurseries were planted. Results from 26 nurseries are summarized in tables 8 through 14. A general summary of seed yields by production areas, agronomic qualities, chemical qualities, and reaction to some diseases is given in table 8.

Differences among strains were significant in 14 of the 26 comparisons. The combined analysis of yield data by production areas showed differences to be significant within each of the areas. All experimental lines are later maturing than are Hill and Dorman. It appeared that rainfall distribution favored later-maturing strains at several of the locations.

Hill and Dorman have been compared for eight years. Table 8 shows the seed yield, oil and protein comparisons for these years. The seed yield advantage for Hill is greater in the Delta and West than in the other production areas. Oil percentages are similar, but Hill has a slightly higher protein percentage.

The two strains D59-415 and D59-693 have been tested two years. Both strains have a higher 2-year men yield for each production area than Hill and appear equal to Hill in all other qualities measured. Both strains are later maturing than Hill.

Seven of the eight strains tested one year are from the cross Hill x D52-810, which is also the cross from which D59-415 and D59-693 were selected. All of the lines tested one year are later maturing than Hill. On the basis of the one-year testing, not any of the lines appeared to be superior to D59-693. R59-2 ranked near the top in yield in the Preliminary Group V nursery in 1961 but shattered badly at Warsaw. In 1962, it again demonstrated susceptibility to shattering.

All lines tested are resistant to bacterial pustule and appeared to have satisfactory field tolerance to phytophthora rot. All were relatively free from development of purple seed stain. Differences were observed at Georgetown, Delaware for development of pod and stem blight on the seed. This development of pod and stem blight was not related to maturity.

The line N59-6913 was variable for pubescence color.

Table 8. - General summary of performance for the strains in Unifrom Group V, 1962

	Hill	Dorman	D59-415	D59-693	D59-377	D59-630
Seed Yield - 1962						
East Coast	31.8	32.0	33.7	37.2+	35.5+	35.4+
Upper & Central South	24.4	22.2	30.6+	31.9+	29.5+	26.7
Delta	34.6	31.1	39.7	41.1+	38.5	36.7
West	27.5	24.0	35.3+	37.9+	36.3+	34.4+
- 1961-62						
East Coast	31.4	31.0	33.0	34.5		
Upper & Central South	28.6	25.8	32.4	32.9		
Delta	36.6	33.3	39.0	39.6		
West	32.3	29.4	37.5	36.4		
- 1955-62						
East Coast	34.5	34.2				
Upper & Central South	24.7	24.0				
Delta	34.6	32.1				
West	30.0	28.0				
Oil Content - 1962	20.8	20.6	20.8	20.9	21.5+	20.6
- 1961-62	21.0	21.0	20.9	20.8		
- 1955-62	21.2	21.3				
Protein Content - 1962	39.4	39.4	38.7	39.6	39.8	40.2
- 1961-62	39.8	39.5	39.1	40.2		
- 1955-62	39.6	39.2				
Seed Size	12.4	13.1	13.7+	13.4+	16.0+	14.8+
Maturity Index	10-4	0	+8	+6	+9	+10
Height	34	37	34	31	34	34
Bacterial Pustule 1/	1.0	3.0	1.0	1.0	1.0	1.0
Phytophthora Rot 1/	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain 2/	1.0	3.0	2.0	2.0	2.0	1.0
Pod and Stem Blight 3/	2.0	2.0	1.0	1.5	3.0	1.0
Shattering 4/	1.0	1.7	1.7	1.0	1.3	1.3

1/ Stoneville data.
2/ Average of Georgetown, Warsaw, Petersburg, Charlotte Court House, Plymouth, and Jackson.
3/ Seed scores at Georgetown.
4/ Stoneville and State College data.

Table 8. - (continued)

	N59-6821	N59-6913	N59-6921	N59-6926	N59-6955	R59-2
Seed Yield - 1962						
East Coast	34.0	35.1+	35.7+	36.5+	36.2+	35.3+
Upper & Central South	28.4+	27.8+	29.0+	29.3+	28.9+	29.3+
Delta	39.7	36.7	40.7+	38.6	37.6	36.9
West	37.5+	35.5+	36.9+	38.4+	35.2+	34.4+
- 1961-62						
East Coast						
Upper & Central South						
Delta						
West						
- 1955-62						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1962	21.2	20.6	21.2	20.9	21.4+	20.2-
- 1961-62						
- 1955-62						
Protein Content - 1962	40.8+	39.6	40.0	39.9	39.1	41.0+
- 1961-62						
- 1955-62						
Seed Size	15.7+	13.0	14.4+	15.0+	14.2+	12.9
Maturity Index	+8	+6	+10	+9	+8	+4
Height	36	31	37	34	35	33
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain[2/]	2.0	2.0	2.0	1.0	2.0	2.0
Pod and Stem Blight[3/]	4.0	1.5	1.5	1.0	1.0	1.0
Shattering[4/]	1.0	1.0	2.1	2.3	1.0	4.0

Table 9. - Seed yield, in bushels per acre, for the strains in Uniform Group V, 1962.

Location	Hill	Dorman	D59-415	D59-693	D59-377	D59-630	N59-6821
East Coast							
Georgetown, Del.	19.5	16.9	18.4	23.8	27.1	22.8	20.7
Linkwood, Md.	29.0	33.2	34.6+	36.6+	37.1+	35.9+	32.1
Warsaw, Va.	32.5	33.0	30.7	36.4	32.3	33.6	34.7
Painter, Va.	38.9	39.9	43.8+	45.6+	40.7	45.0+	46.6+
Petersburg, Va.	30.0	26.5	27.7	34.5+	28.5	30.0	26.0-
Norfolk, Va.[1/]	16.2	13.9	11.9	6.9	21.4	13.4	8.8
Plymouth, N. C.	41.1	42.6	46.8	46.5	47.4	45.1	44.0
Mean	31.8	32.0	33.7	37.2+	35.5+	35.4+	34.0
Upper and Central South							
Orange, Va.	21.1	23.9	30.2	32.9+	30.0+	25.1	27.7
Charlotte Court House, Va.	20.6	17.0	25.0+	27.5+	29.9+	24.3	24.9+
Springfield, Tenn.	17.9	16.4	18.4	21.0	17.9	17.3	20.8
Jackson, Tenn.	25.6	19.1-	28.0	31.0+	24.1	25.9	23.7
Belle Mina, Ala.[1/]	9.2	--	12.7+	15.5+	14.3+	11.5	11.7+
Blairsville, Ga.	26.1	22.3	29.4	33.4+	30.8+	27.4	27.8
Experiment, Ga.	22.3	17.5	29.6+	32.8+	27.1	27.2	29.7+
State College, Miss.	37.0	39.0	53.9	44.3	46.3	39.6	44.0
Mean	24.4	22.2	30.6+	31.9+	29.5+	26.7	28.4+
Delta							
Henderson, Ky.	41.9	38.3	41.6	38.8	38.4	39.3	41.0
Keiser, Ark.(A)	22.9	19.9	27.6	28.0	27.8	25.2	26.1
Keiser, Ark.(B)	23.7	20.4	28.1	25.8	24.0	24.0	22.2
Marianna, Ark.[1/]	29.9	27.8	35.0	33.4	33.8	29.8	27.8
Stoneville, Miss.(A)	51.0	45.8	55.0	60.7	53.8	47.1	57.7
Stoneville, Miss.(B)	32.4	23.9-	41.7+	45.4+	42.9+	38.8+	39.1+
St. Joseph, La.	35.6	38.5	44.0+	48.1+	44.0+	45.8+	52.0+
Mean	34.6	31.1	39.7	41.1+	38.5	36.7	39.7
West							
Stuttgart, Ark.	35.5	33.2	46.4+	45.1+	51.3+	44.8+	47.7+
Curtis, La.	18.8	16.6	25.9+	31.2+	28.9+	23.8	28.4+
Bixby, Okla.	27.0	19.0-	41.2+	41.0+	36.5+	38.8+	43.2+
Lubbock, Texas	28.5	27.0	27.7	34.1	28.6	30.0	30.8
Mean	27.5	24.0	35.3+	37.9+	36.3+	34.4+	37.5+

1/ Not included in combined analysis.

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

Table 9. - (continued)

Location	N59-6913	N59-6921	N59-6926	N59-6955	R59-2	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	18.4	22.4	24.9	23.2	21.1	N.S.	16%
Linkwood, Md.	37.5+	37.5+	39.0+	38.1+	31.6	5.0	8%
Warsaw, Va.	33.1	34.4	36.2	35.1	35.8	N.S.	6%
Painter, Va.	43.2	43.5+	46.1+	45.8+	47.3+	4.6	6%
Petersburg, Va.	29.7	27.5	27.7	29.3	27.7	3.8	17%
Norfolk, Va.[1/]	13.6	12.3	10.2	10.6	5.8	N.S.	41%
Plymouth, N. C.	48.7	49.1	45.0	45.9	48.5	N.S.	7%
Mean	35.1+	35.7+	36.5+	36.2+	35.3+	2.5	
			Upper and Central South				
Orange, Va.	26.1	25.6+	27.5+	30.0+	29.1+	4.1	9%
Charlotte Court House, Va.	23.3	25.6+	31.2+	26.3+	26.3+	3.8	8%
Springfield, Tenn.	19.7	17.7	17.1	16.9	19.5	N.S.	15%
Jackson, Tenn.	25.5	25.3	24.6	25.5	24.9	4.6	11%
Belle Mina, Ala.[1/]	11.6+	13.7+	11.4	12.4+	10.3	2.4	12%
Blairsville, Ga.	26.8	29.6	27.5	30.5+	31.0+	4.2	9%
Experiment, Ga.	27.2	31.9+	30.2+	32.3+	32.4+	7.0	15%
State College, Miss.	46.3	46.6	47.0	41.3	42.0	N.S.	14%
Mean	27.8+	29.0+	29.3+	28.9+	29.3+	2.6	
			Delta				
Henderson, Ky.	37.6	32.4	42.9	43.5	39.5	N.S.	13%
Keiser, Ark.(A)	24.7	31.0	26.8	23.1	24.8	N.S.	14%
Keiser, Ark.(B)	27.4	25.1	22.7	27.1	24.7	N.S.	12%
Marianna, Ark.[1/]	31.9	33.7	34.2	37.1	31.9	--	--
Stoneville, Miss.(A)	51.9	58.6	47.5	33.0	49.2	N.S.	19%
Stoneville, Miss.(B)	40.6+	47.7+	43.0+	48.9+	37.2+	4.0	6%
St. Joseph, La.	38.0	49.6+	48.7+	49.8+	46.1+	7.1	9%
Mean	36.7	40.7+	38.6	37.6	36.9	5.3	
			West				
Stuttgart, Ark.	47.9+	48.7+	51.1+	45.8+	41.1	5.7	8%
Curtis, La.	25.6+	25.7+	27.9+	26.0+	19.6	5.7	13%
Bixby, Okla.	38.7+	42.2+	44.9+	35.7+	43.7+	7.1	11%
Lubbock, Texas	30.0	31.1	29.6	33.2	33.2	N.S.	12%
Mean	35.5+	36.9+	38.4+	35.2+	34.4+	5.2	

Table 10. - Chemical composition and seed size for the strains in Uniform Group V, 1962

Location	Hill	Dorman	D59-415	D59-693	D59-377	D59-630
			Oil Percentage			
Georgetown, Del.	19.0	19.2	19.0	18.6	20.2	19.0
Warsaw, Va.	20.2	19.6	19.1	17.4	20.6	19.2
Plymouth, N. C.	22.3	21.9	21.3	22.0	22.1	21.5
Henderson, Ky.	20.6	19.6	19.9	20.6	20.8	20.5
Keiser, Ark.(A)	23.0	22.2	22.2	21.8	22.2	21.3
Stoneville, Miss.(B)	20.6	21.1	22.0	21.6	22.4	21.7
Stuttgart, Ark.	21.1	22.3	21.2	21.6	22.0	20.6
Bixby, Okla.	19.9	18.8	21.9	23.0	21.8	21.7
Lubbock, Texas	20.8	20.5	21.0	21.2	21.2	20.1
Mean	20.8	20.6	20.8	20.9	21.5+	20.6
			Protein Percentage			
Georgetown, Del.	42.1	41.4	42.1	42.4	40.9	42.2
Warsaw, Va.	39.8	40.3	38.6	39.6	40.3	40.3
Plymouth, N. C.	38.8	39.1	39.3	38.9	39.0	41.5
Henderson, Ky.	38.0	39.4	38.3	39.2	39.7	39.2
Keiser, Ark.(A)	36.9	36.6	38.3	38.1	38.9	39.2
Stoneville, Miss.(B)	42.1	40.7	38.0	40.4	41.1	42.0
Stuttgart, Ark.	40.3	38.5	39.0	41.5	40.3	41.9
Bixby, Okla.	42.5	42.1	38.6	40.0	41.3	39.5
Lubbock, Texas	34.3	36.5	36.0	35.9	37.1	36.0
Mean	39.4	39.4	38.7	39.6	39.8	40.2
			Grams per 100 Seeds			
Georgetown, Del.	11.0	14.9	12.7	12.3	14.9	13.2
Warsaw, Va.	13.0	14.0	13.0	15.0	15.0	15.0
Plymouth, N. C.	12.4	12.9	13.0	13.0	16.1	14.5
Henderson, Ky.	15.0	15.0	14.0	14.0	17.0	15.0
Keiser, Ark.(A)	12.0	11.3	14.3	12.7	16.0	15.0
Stoneville, Miss.(B)	9.8	9.9	12.2	12.4	15.0	12.4
Stutgart, Ark.	12.7	13.7	14.3	14.0	18.3	16.3
Bixby, Okla.	9.8	9.2	13.7	13.0	14.7	14.9
Lubbock, Texas	16.0	17.0	16.0	14.0	17.0	17.0
Mean	12.4	13.1	13.7+	13.4+	16.0+	14.8+

Table 10. - (continued)

Location	N59-6821	N59-6913	N59-6921	N59-6926	N59-6955	R59-2	L.S.D. (.05)
			Oil Percentage				
Georgetown, Del.	19.6	18.4	18.9	19.7	19.6	17.2	
Warsaw, Va.	20.2	19.4	19.9	18.0	20.2	19.5	
Plymouth, N. C.	22.0	21.0	21.7	21.7	22.5	21.3	
Henderson, Ky.	20.6	20.6	19.6	20.1	20.7	19.6	
Keiser, Ark.(A)	21.8	21.6	22.7	21.8	21.7	20.8	
Stoneville, Miss.(B)	22.0	21.0	22.4	21.7	23.0	21.2	
Stuttgart, Ark.	21.4	21.0	21.6	21.0	21.8	20.3	
Bixby, Okla.	22.1	22.1	22.7	21.6	21.6	21.1	
Lubbock, Texas	21.2	20.7	21.4	22.3	21.2	21.2	
Mean	21.2	20.6	21.2	20.9	21.4+	20.2-	0.6
			Protein Percentage				
Georgetown, Del.	44.1	42.8	43.4	42.5	41.2	45.6	
Warsaw, Va.	40.2	39.8	40.2	39.1	38.8	41.6	
Plymouth, N. C.	41.4	38.0	40.1	38.8	37.7	40.2	
Henderson, Ky.	40.1	39.2	40.1	40.0	38.9	41.3	
Keiser, Ark.(A)	39.4	38.4	38.1	38.8	39.5	39.4	
Stoneville, Miss.(B)	40.7	40.9	40.6	41.4	39.3	41.5	
Stuttgart, Ark.	42.3	41.7	41.8	41.8	40.5	41.7	
Bixby, Okla.	40.3	39.0	38.9	39.7	40.1	40.8	
Lubbock, Texas	38.3	36.8	37.2	37.4	35.5	36.9	
Mean	40.8+	39.6	40.0	39.9	39.1	41.0+	0.9
			Grams per 100 Seeds				
Georgetown, Del.	15.5	11.3	12.8	14.6	11.7	10.8	
Warsaw, Va.	16.0	13.0	15.0	15.0	14.0	13.0	
Plymouth, N. C.	15.0	11.6	13.7	12.8	11.7	12.4	
Henderson, Ky.	17.0	14.0	15.0	16.0	16.0	15.0	
Keiser, Ark.(A)	14.7	13.3	14.3	15.3	15.3	11.3	
Stoneville, Miss.(B)	12.5	11.8	12.7	13.0	14.2	11.4	
Stuttgart, Ark.	17.0	13.7	15.0	16.3	15.3	13.0	
Bixby, Okla.	14.2	12.8	15.4	15.1	13.6	13.0	
Lubbock, Texas	19.0	15.5	16.0	17.0	16.0	16.0	
Mean	15.7+	13.0	14.4+	15.0+	14.2+	12.9	0.9

Table 11. - Relative maturity, days earlier (-) or later (+) than Hill, for the strains in Uniform Group V, 1962

Location	Date Planted	Hill Matured	Dorman	D59-415	D59-693	D59-377
			East Coast			
Georgetown, Del.	5-25	10-15	+2	+1	+1	+6
Linkwood, Md.	5-31	10-17	-1	+2	+4	+6
Warsaw, Va.	5-23	10-17	-2	0	+2	+1
Petersburg, Va.	5-19	10-15	-3	+5	0	+5
Plymouth, N. C.	5-14	9-28	+4	+10	+8	+12
Mean		10-12	0	+4	+3	+6
			Upper and Central South			
Orange, Va.	5-22	10-17	+1	0	+1	+4
Charlotte Court House,Va.	5-23	10-20	0	0	0	-4
Springfield, Tenn.	5-7	10-1	-5	+5	+2	+7
Jackson, Tenn.	--	10-7	-4	+19	+10	+8
Belle Mina, Ala.	6-1	10-20	--	+3	+2	+2
Blairsville, Ga.	6-18	10-15	+1	+3	+2	+2
Experiment, Ga.	6-1	9-25	-7	+9	+7	+13
State College, Miss.	5-7	9-12	0	+12	+12	+14
Mean		10-7	-2	+6	+5	+6
			Delta			
Henderson, Ky.	5-15	10-10	+4	+10	+12	+8
Keiser, Ark.(A)	5-9	9-28	-1	+13	+7	+12
Keiser, Ark.(B)	6-19	10-16	+2	+3	0	+5
Stoneville, Miss.(A)	5-14	9-17	0	+11	+12	+12
Stoneville, Miss.(B)	5-7	9-11	0	+8	+7	+10
St. Joseph, La.	5-17	9-20	-7	+15	+3	+17
Mean		9-27	0	+10	+7	+11
			West			
Stuttgart, Ark.	5-18	9-24	0	+10	+10	+10
Curtis, La.	5-10	9-15	0	+7	+8	+13
Bixby, Okla.	5-10	9-18	+2	+32	+31	+28
Lubbock, Texas	6-6	10-18	0	+5	-2	+6
Mean		10-26	0	+14	+12	+14

Table 11. - (continued)

Location	D59-630	N59-6821	N59-6913	N59-6921	N59-6926	N59-6955	R59-2
			East Coast				
Georgetown, Del.	+7	+6	+2	+7	+4	+2	0
Linkwood, Md.	+9	+6	+3	+7	+6	+4	+1
Warsaw, Va.	+4	+3	+3	+2	+3	-2	+2
Petersburg, Va.	+10	+8	+2	+9	+5	+5	+3
Plymouth, N. C.	+12	+12	+7	+10	+10	+8	+5
Mean	+8	+7	+3	+7	+6	+3	+2
			Upper and Central South				
Orange, Va.	+7	+1	+1	+5	+4	+6	-1
Charlotte Court House, Va.	+9	+9	0	+5	+5	+3	-4
Springfield, Tenn.	+10	+3	-3	+10	+10	+8	0
Jackson, Tenn.	+15	+12	+12	+18	+12	+12	+7
Belle Mina, Ala.	-1	+1	0	+2	+1	-1	+3
Blairsville, Ga.	+5	+3	0	+3	+2	+3	+3
Experiment, Ga.	+14	+7	+8	+14	+10	+9	0
State College, Miss.	+12	+13	+12	+14	+13	+13	+6
Mean	+9	+6	+4	+9	+7	+7	+2
			Delta				
Henderson, Ky.	+6	+6	+6	+14	+12	+15	+8
Keiser, Ark.(A)	+17	+12	+7	+12	+14	+17	+6
Keiser, Ark.(B)	+6	+6	+1	+3	+4	+2	0
Stoneville, Miss.(A)	+13	+13	+12	+13	+14	+14	+10
Stoneville, Miss.(B)	+9	+12	+9	+12	+12	+12	+6
St. Joseph, La.	+18	+5	+5	+14	+8	+20	+4
Mean	+12	+9	+7	+11	+11	+13	+6
			West				
Stuttgart, Ark.	+10	+10	+10	+10	+10	+10	+10
Curtis, La.	-7	+13	+10	+13	+12	-5	+3
Bixby, Okla.	+34	+27	+22	+32	+27	+28	+22
Lubbock, Texas	+12	+4	+2	+6	+3	+6	-1
Mean	+12	+14	+11	+15	+13	+10	+9

Table 12. - Plant height data for the strains in Uniform Group V, 1962

Location	Hill	Dorman	D59-415	D59-693	D59-377	D59-630
			East Coast			
Georgetown, Del.	36	41	35	31	35	35
Linkwood, Md.	37	45	37	32	35	39
Warsaw, Va.	37	41	34	29	35	36
Painter, Va.	39	44	36	31	37	38
Petersburg, Va.	38	40	36	31	38	40
Norfolk, Va.	35	44	33	29	33	35
Plymouth, N. C.	32	38	38	33	36	35
Mean	36	42	36	31	36	37
			Upper and Central South			
Orange, Va.	47	53	41	39	43	42
Charlotte Court House, Va.	44	40	38	37	39	44
Springfield, Tenn.	36	42	35	33	35	37
Jackson, Tenn.	33	36	32	31	34	36
Belle Mina, Ala.	34	---	31	29	35	36
Blairsville, Ga.	36	41	38	36	38	37
Experiment, Ga.	29	31	29	29	28	26
State College, Miss	29	30	32	33	35	30
Mean	36	39	35	33	36	36
			Delta			
Henderson, Ky.	38	42	38	35	39	36
Keiser, Ark.(A)	28	25	27	26	28	27
Keiser, Ark.(B)	28	30	26	27	25	27
Stoneville, Miss.(A)	30	28	31	33	29	29
Stoneville, Miss.(B)	27	26	28	27	27	28
St. Joseph, La.	32	33	31	28	30	30
Mean	31	31	30	29	30	30
			West			
Stuttgart, Ark.	26	31	29	27	28	27
Curtis, La.	34	32	30	24	32	27
Bixby, Okla.	36	35	50	42	46	45
Lubbock, Texas	33	31	29	27	26	34
Mean	32	32	35	30	33	33

Table 12. - (continued)

Location	N59-6821	N59-6913	N59-6921	N59-6926	N59-6955	R59-2
			East Coast			
Georgetown, Del.	33	27	36	34	36	34
Linkwood, Md.	37	34	39	40	38	37
Warsaw, Va.	37	30	38	35	36	34
Painter, Va.	42	32	39	37	43	37
Petersburg, Va.	40	33	38	39	39	38
Norfolk, Va.	33	34	38	32	34	32
Plymouth, N. C.	37	33	40	36	36	33
Mean	37	32	38	36	37	35
			Upper and Central South			
Orange, Va.	46	33	42	44	46	42
Charlotte Court House, Va.	47	39	46	41	44	44
Springfield, Tenn.	42	33	40	37	39	37
Jackson, Tenn.	36	33	35	32	39	33
Belle Mina, Ala.	36	32	36	33	38	33
Blairsville, Ga.	36	35	40	38	38	34
Experiment, Ga.	28	27	31	27	30	27
State College, Miss.	30	27	35	33	32	28
Mean	38	32	38	36	38	35
			Delta			
Henderson, Ky.	44	37	43	41	38	39
Keiser, Ark.(A)	29	25	34	24	26	23
Keiser, Ark.(B)	27	23	29	26	28	25
Stoneville, Miss.(A)	30	30	35	25	22	29
Stoneville, Miss.(B)	29	26	32	26	27	25
St. Joseph, La.	34	32	35	34	32	33
Mean	32	29	35	29	29	29
			West			
Stuttgart, Ark.	30	25	28	31	31	25
Curtis, La.	32	20	28	30	31	30
Bixby, Okla.	48	44	46	49	46	41
Lubbock, Texas	31	27	32	31	30	27
Mean	35	29	34	35	35	31

Table 13. - Lodging scores for the strains in Uniform Group V, 1962

Location	Hill	Dorman	D59-415	D59-693	D59-377	D59-630
East Coast						
Georgetown, Del.	4.0	3.7	3.0	2.0	2.3	2.7
Linkwood, Md.	3.3	4.0	2.7	2.3	2.3	2.7
Warsaw, Va.	3.3	4.2	3.3	2.8	2.3	2.8
Painter, Va.	3.3	4.0	3.1	3.0	3.0	3.0
Petersburg, Va.	1.3	1.7	1.0	1.0	1.0	1.0
Norfolk, Va.	3.0	4.0	1.0	1.0	1.0	2.0
Plymouth, N. C.	3.2	3.8	3.3	3.0	2.7	3.3
Upper and Central South						
Orange, Va.	2.7	3.3	2.3	2.0	2.3	1.0
Charlotte Court House, Va.	5.0	4.0	4.0	3.0	2.7	4.7
Springfield, Tenn.	1.0	2.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	2.0	1.0	1.0	1.0	1.0
Belle Mina, Ala.	2.7	--	1.0	1.0	1.0	1.3
Blairsville, Ga.	1.7	2.0	1.0	1.0	1.0	2.0
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	1.0	3.0	2.0	1.0	1.0	1.0
Delta						
Henderson, Ky.	3.0	4.0	4.0	4.0	2.0	2.0
Keiser, Ark.(A)	1.0	1.3	1.0	1.0	1.0	1.0
Keiser, Ark.(B)	1.5	2.0	1.0	1.0	1.0	1.0
Stoneville, Miss.(A)	2.7	3.3	3.0	2.0	1.7	2.0
Stoneville, Miss.(B)	1.7	2.0	1.0	1.0	1.3	1.3
St. Joseph, La.	2.0	2.0	1.0	1.0	1.0	2.0
West						
Stuttgart, Ark.	1.7	3.0	2.3	2.3	1.3	3.0
Curtis, La.	1.0	2.0	1.0	1.0	1.0	1.0
Bixby, Okla.	2.7	2.7	2.0	2.3	1.3	1.3
Lubbock, Texas	2.0	2.0	2.0	1.0	2.0	1.0

Table 13. - (continued)

Location	N59-6821	N59-6913	N59-6921	N59-6926	N59-6955	R59-2
			East Coast			
Georgetown, Del.	2.3	2.3	1.7	2.7	2.7	3.7
Linkwood, Md.	2.3	2.7	2.0	3.0	3.0	3.7
Warsaw, Va.	1.5	2.0	3.0	2.5	3.0	3.2
Painter, Va.	3.0	2.6	3.0	3.0	3.5	2.8
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Norfolk, Va.	2.0	1.0	1.0	1.0	2.0	2.0
Plymouth, N. C.	2.7	2.7	2.7	2.0	2.7	3.0
			Upper and Central South			
Orange, Va.	3.0	1.0	1.7	2.0	3.3	1.7
Charlotte Court House, Va.	2.3	2.3	4.3	2.7	4.0	3.7
Springfield, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
Belle Mina, Ala.	1.0	1.0	1.0	1.0	1.7	1.3
Blairsville, Ga.	2.0	1.0	1.0	1.0	2.0	1.0
Experiment, Ga.	1.0	1.0	1.3	1.0	1.0	1.0
State College, Miss.	1.0	2.0	1.0	1.0	1.0	1.0
			Delta			
Henderson, Ky.	2.0	4.0	4.0	3.0	3.0	2.0
Keiser, Ark.(A)	1.0	1.0	1.7	1.0	1.0	1.0
Keiser, Ark.(B)	1.0	1.0	1.0	1.0	1.5	1.0
Stoneville, Miss.(A)	2.3	1.3	3.0	1.7	2.0	2.0
Stoneville, Miss.(B)	1.3	1.0	2.0	1.0	1.7	1.0
St. Joseph, La.	2.0	1.0	2.0	2.0	2.0	1.0
			West			
Stuttgart, Ark.	1.7	1.3	2.7	2.3	3.3	2.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	1.0	2.0	1.7	1.7	1.7	1.7
Lubbock, Texas	1.0	1.0	1.0	2.0	1.0	2.0

Table 14. - Seed quality scores for the strains in Uniform Group V, 1962

Location	Hill	Dorman	D59-415	D59-693	D59-377	D59-630
East Coast						
Georgetown, Del.	2.3	3.0	3.0	2.3	2.3	3.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Warsaw, Va.	2.0	2.0	2.0	1.5	2.0	1.0
Painter, Va.	1.0	1.0	1.0	1.0	1.5	1.0
Petersburg, Va.	1.3	1.3	2.0	1.0	2.0	1.7
Norfolk, Va.	2.0	2.0	2.0	2.0	2.0	2.0
Plymouth, N. C.	1.0	1.5	1.5	1.0	1.0	1.0
Upper and Central South						
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Charlotte Court House, Va.	3.0	3.0	3.0	3.0	3.0	1.0
Jackson, Tenn.	4.0	4.0	4.0	3.0	3.0	3.0
Blairsville, Ga.	1.0	1.0	1.0	1.0	1.7	2.3
Experiment, Ga.	1.7	2.7	1.3	1.7	1.7	1.0
State College, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
Delta						
Henderson, Ky.	2.0	2.0	4.0	2.0	2.0	2.0
Keiser, Ark.(A)	3.7	3.7	3.0	2.7	2.7	3.0
Keiser, Ark.(B)	2.3	3.0	2.3	1.7	2.5	3.0
Stoneville, Miss.(A)	1.7	1.7	2.0	1.7	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	1.7	2.0	2.0
St. Joseph, La.	3.0	2.0	2.0	2.0	3.0	2.0
West						
Stuttgart, Ark.	2.7	2.0	2.0	2.3	3.0	2.3
Bixby, Okla.	2.0	2.0	2.0	2.0	2.0	2.0
Lubbock, Texas	3.0	2.0	2.0	1.0	3.0	1.0

Table 14. - (continued)

Location	N59-6821	N59-6913	N59-6921	N59-6926	N59-6955	R59-2
			East Coast			
Georgetown, Del.	3.0	1.7	2.7	2.7	1.7	2.3
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	3.0
Warsaw, Va.	1.0	1.5	2.5	1.5	1.5	2.0
Painter, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Petersburg, Va.	2.0	1.3	2.0	1.8	1.3	1.7
Norfolk, Va.	2.0	2.0	2.0	2.0	2.0	2.0
Plymouth, N. C.	1.0	1.0	1.5	1.5	1.0	1.0
			Upper and Central South			
Orange, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Charlotte Court House,Va.	2.0	3.0	3.0	2.0	3.0	3.0
Jackson, Tenn.	3.0	3.0	3.0	3.0	3.0	2.0
Blairsville, Ga.	1.0	1.0	2.0	1.0	1.0	1.0
Experiment, Ga.	1.7	1.7	1.7	1.3	1.3	1.0
State College, Miss.	3.0	2.0	2.0	2.0	2.0	2.0
			Delta			
Henderson, Ky.	4.0	2.0	4.0	3.0	4.0	3.0
Keiser, Ark.(A)	2.3	3.0	2.0	2.3	3.7	3.0
Keiser, Ark.(B)	3.7	2.0	3.0	2.0	2.0	3.0
Stoneville, Miss.(A)	2.0	1.7	1.7	2.0	2.3	2.0
Stoneville, Miss.(B)	2.3	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	3.0	2.0	3.0	3.0	3.0	3.0
			West			
Stuttgart, Ark.	3.3	2.0	3.0	2.7	2.0	2.7
Bixby, Okla.	1.0	1.0	1.7	1.3	1.7	1.0
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	1.0

PRELIMINARY GROUP V

1962

Preliminary Group V nurseries were grown at six locations. The parentage of the lines tested is reported in table 15. Data summarizing the performance of these lines are reported in tables 16 through 21. Differences in seed yield were significant at each of the locations Georgetown, Warsaw, Plymouth, and Stoneville. Stands were incomplete at Portageville and Keiser. The Delaware lines were excluded from the combined analysis for seed yield, because of extremely variable performance. The line UD1058-5-3 was only 8 inches tall at Stoneville and, consequently, could not be harvested. At Warsaw, this line was 28 inches tall. The lines UD1120-1-2 and UD1120-1-3 showed injury from phytophthora rot at Stoneville.

The two lines D61-5141 and D61-5201 were of interest, since they are basically Dorman with simple characters modified. D61-5141 has a narrow leaf and D61-5201 is glabrous. On the basis of these tests, replacing the large floppy leaf of Dorman with the narrow leaf type did not influence performance. The glabrous type equalled the yield of Dorman at Stoneville but yielded less at other locations. The yield reduction was greatest at Georgetown. No observations were made with regard to leaf hopper populations, but it is assumed that yield reduction is directly related to the population of leaf hoppers.

There were no lines having seed yields significantly higher than Hill, on the basis of the combined analysis. Of the 12 lines ranking highest in yield, N60-6008 was segregating for flower color. The lines D59-458, D60-5884, D60-5894, N59-6782, and S58-6173 showed green stems at maturity at Plymouth. The four lines D59-428, R60-66, N60-6053, and N59-6948 should merit being advanced to the Uniform Group V nursery.

Table 15. - Parentage of the strains in Preliminary Group V, 1962

	Strain	Parentage	Generation Composited
1.	Hill		
2.	Dorman		
3.	D59-428	Hill x D52-810	F_5
4.	D59-458	Hill x D52-810	F_5
5.	D59-563	Hill x D52-810	F_5
6.	D59-2260	D55-4168 x Hill	F_5
7.	D60-5873	D52-18 x D53-492	F_5
8.	D60-5884	D52-18 x D53-492	F_5
9.	D60-5894	D52-18 x D53-492	F_5
10.	D61-5141	Dorman(5) x PI 181,537	F_3
11.	D61-5201	Dorman(6) x PI 181,537	F_3
12.	N59-6782	Hill x D52-810	F_5
13.	N59-6858	Hill x D52-810	F_5
14.	N59-6948	Hill x D52-810	F_5
15.	N59-7065	D55-4168 x Hill	F_5
16.	N60-6003	Hill x D49-2491	F_5
17.	N60-6006	Hill x D49-2491	F_5
18.	N60-6008	Hill x D49-2491	F_5
19.	N60-6010	Hill x D49-2491	F_5
20.	N60-6020	Hill x D49-2491	F_5
21.	N60-6053	Hill x D49-2491	F_5
22.	N60-6059	Hill x D49-2491	F_5
23.	N60-6107	Hill x D49-2491	F_5
24.	R59-114	Dortchsoy 67 x Lee	
25.	R60-66	Dortchsoy 67 x Lee	
26.	S58-6079	D49-2491(2) x L3-2010	F_6
27.	S58-6102	D49-2491(2) x L3-2010	F_6
28.	S58-6104	D49-2491(2) x L3-2010	F_6
29.	S58-6131	D49-2491(2) x L3-2010	F_6
30.	S58-6145	D49-2491(2) x L3-2010	F_6
31.	S58-6173	D49-2491(2) x D56-8	F_6
32.	UD1058-5-3	FC33243 x D49-2491	F_5
33.	UD1120-1-2	FC33243 x D49-2491	F_5
34.	UD1120-1-3	FC33243 x D49-2491	F_5
35.	UD1120-6-1	FC33243 x D49-2491	F_5
36.	UD1120-6-3	FC33243 x D49-2491	F_5

Table 16. - General summary of performance for the strains grown in Preliminary Group V, 1962

Strain	Seed Yield	Maturity Index	Ht.	Percent Oil	Percent Protein	Shattering[1]	Purple Stain[2]	Pod & Stem Blight[3]
Hill	32.8	9-30	32	20.1	39.2	1.0	1.0	2.0
Dorman	30.0	+2	35	20.7	39.2	1.0	3.0	2.0
D59-428	37.2	+2	33	21.8+	39.7	1.0	2.0	3.0
D59-458	36.1	+11	33	22.0+	38.6	1.0	3.0	2.0
D59-563	33.4	+10	29	21.2+	39.8	1.0	2.0	2.5
D59-2260	31.4	+9	36	18.9-	43.3+	1.0	2.0	2.0
D60-5873	36.4	+10	34	20.5	40.1	1.0	2.0	3.0
D60-5884	35.5	+11	32	20.8+	40.6+	1.5	2.0	3.0
D60-5894	37.2	+9	35	20.9+	40.4+	1.0	2.0	3.0
D61-5141	29.3	+2	34	20.8+	39.1	1.0	4.0	2.0
D61-5201	18.8-	0	24	20.4	40.1	1.0	2.0	---
N59-6782	35.6	+6	38	21.7+	39.0	1.0	2.0	2.5
N59-6858	35.2	+7	34	21.6+	38.7	1.0	2.0	2.0
N59-6948	35.6	+7	30	20.7	39.5	2.0	2.0	2.5
N59-7065	34.5	+7	35	20.5	41.8+	1.0	2.0	2.5
N60-6003	34.5	+6	31	21.3+	40.6+	2.0	2.5	2.0
N60-6006	36.9	+8	31	20.4	40.7+	1.0	2.0	2.0
N60-6008	34.5	+6	28	19.6	41.8+	2.0	2.0	2.0
N60-6010	31.8	+2	29	19.2-	41.8+	1.0	2.0	3.5
N60-6020	33.6	+4	33	19.8	41.7+	1.0	2.0	3.0
N60-6053	35.8	+3	31	19.6	41.5+	1.0	2.0	3.0
N60-6059	34.6	+6	33	20.5	41.6+	2.0	2.0	2.5
N60-6107	34.5	0	33	20.3	41.2+	1.0	2.0	3.0
R59-114	35.7	+5	37	20.5	39.7	1.0	3.0	1.5
R60-66	36.9	+2	31	21.2+	39.7	1.0	2.5	2.0
S58-6079	34.7	+8	28	21.1+	39.9	1.0	2.0	2.0
S58-6102	35.0	+6	32	21.1+	40.2	1.0	3.0	2.0
S58-6104	33.0	+9	31	20.6	40.9+	1.0	2.0	3.5
S58-6131	33.1	+1	32	21.4+	39.7	1.5	1.0	---
S58-6145	34.1	+10	32	20.2	40.4+	1.0	3.0	1.5
S58-6173	35.4	+9	31	20.6	41.4+	1.0	3.0	2.0
UD1058-5-3	--	+7	16	--	--	1.0	3.0	1.0
UD1120-1-2	--	-1	43	--	--	2.0	4.0	1.5
UD1120-1-3	--	+2	38	--	--	1.5	4.0	1.0
UD1120-6-1	--	+6	29	--	--	1.0	3.0	1.0
UD1120-6-3	--	+4	33	--	--	2.0	4.0	---
L.S.D.(.05)	4.8			0.7	1.1			
L.S.D.(.01)	6.3			0.9	1.5			

1/ Stoneville data
2/ Plymouth and Georgetown data
3/ Seed scores at Georgetown

Table 17. - Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1962

Strain	Georgetown, Del.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo. 1/	Keiser, Ark. 1/	Stoneville Miss.(B)
Hill	24.8	37.3	36.1	--	21.9	33.1
Dorman	24.8	35.1	34.1	33.7	14.8	26.0-
D59-428	25.8	34.6	48.2+	--	24.4	40.1+
D59-458	23.4	37.0	43.1	31.3	16.8	40.9+
D59-563	22.4	35.5	35.0	34.7	24.7	40.8+
D59-2260	19.4	33.5	33.8	25.8	14.2	39.1+
D60-5873	28.6	38.4	38.0	37.4	18.5	40.5+
D60-5884	28.0	37.1	43.1	37.7	21.6	33.6
D60-5894	25.1	42.4+	37.2	37.3	24.1	43.9+
D61-5141	21.3	34.6	33.2	46.1	13.6	28.2
D61-5201	8.2-	17.3	21.0	27.5	18.2	28.7
N59-6782	24.3	37.2	44.0	33.3	24.3	37.0
N59-6858	26.2	37.1	37.9	38.1	17.6	39.7+
N59-6948	24.5	37.0	44.4	34.9	13.6	36.4
N59-7065	24.2	32.6	41.3	30.4	16.6	39.8+
N60-6003	21.6	39.9	37.5	34.8	25.3	39.1+
N60-6006	23.4	38.5	43.2	36.1	20.4	42.4+
N60-6008	22.4	40.3	42.2	39.5	16.8	33.0
N60-6010	23.6	37.2	34.0	32.9	21.8	32.4
N60-6020	20.8	36.2	36.9	39.3	22.9	40.5+
N60-6053	25.9	37.4	38.5	--	--	41.2+
N60-6059	22.0	34.0	43.8	35.8	11.5	38.5+
N60-6107	26.8	40.3	36.8	--	21.8	34.2
R59-114	26.7	37.4	38.4	32.4	23.0	40.4+
R60-66	21.4	42.8+	46.9+	34.9	17.1	36.4
S58-6079	25.7	37.6	36.8	34.0	23.2	38.8+
S58-6102	24.4	38.3	36.7	37.6	--	40.5+
S58-6104	20.4	37.2	35.0	37.0	20.4	39.4+
S58-6131	24.2	38.9	31.8	39.1	18.4	37.3
S58-6145	22.9	35.7	33.4	37.9	25.5	44.6+
S58-6173	23.2	42.8	36.4	--	20.2	39.3+
UD1058-5-3 2/	17.4-	36.4	15.1	26.2	9.7	--
UD1120-1-2 2/	21.5	36.9	24.1	38.5	--	31.3
UD1120-1-3 2/	26.5	42.4+	26.8	31.5	19.8	26.0-
UD1120-6-1 2/	22.4	39.0	26.0	39.1	--	34.0
UD1120-6-3 2/	22.6	37.8	33.7	35.4	--	28.7
L.S.D.(.05)	6.0	5.1	9.3	--	--	5.0
C.V.	13%	7%	12%	--	--	7%

1/ Not included in combined analysis.
2/ Combined analysis run on 31 strains excluding UD selections.

Table 18. - Oil percentages for the strains in Preliminary Group V, 1962

Strain	Georgetown, Del.	Warsaw, Va.	Plymouth, N. C.	Keiser, Ark.	Stoneville, Miss. (B)
Hill	19.2	18.3	21.5	20.5	21.0
Dorman	20.2	18.1	22.1	20.7	22.5
D59-428	20.5	20.0	24.0	21.9	22.6
D59-458	20.3	20.1	23.0	22.0	24.4
D59-563	19.9	19.6	22.1	21.1	23.3
D59-2260	17.9	18.5	19.4	17.9	20.7
D60-5873	19.4	19.5	21.6	19.8	22.4
D60-5884	19.8	20.2	21.6	20.3	22.0
D60-5894	20.0	19.1	22.0	20.1	23.3
D61-5141	19.9	19.3	22.0	20.8	21.8
D61-5201	19.9	18.6	21.0	19.9	22.4
N59-6782	21.1	20.3	22.9	21.8	22.5
N59-6858	20.4	19.8	22.4	21.5	23.9
N59-6948	19.6	19.6	21.6	20.6	22.3
N59-7065	19.9	19.6	20.9	20.0	22.2
N60-6003	20.1	19.6	22.6	20.9	23.3
N60-6006	19.5	18.9	21.1	20.7	21.8
N60-6008	18.1	18.0	21.6	19.1	21.0
N60-6010	18.3	18.1	20.8	18.9	19.8
N60-6020	19.1	17.8	20.5	20.4	21.4
N60-6053	18.6	18.3	20.9	19.6	20.6
N60-6059	19.2	19.0	21.9	20.4	22.0
N60-6107	18.9	19.7	21.3	20.5	21.0
R59-114	19.6	19.7	21.5	19.6	21.9
R60-66	19.9	20.2	22.2	21.3	22.6
S58-6079	20.6	19.7	22.4	20.3	22.7
S58-6102	20.0	20.0	22.9	--	22.3
S58-6104	19.7	18.5	21.5	20.6	22.9
S58-6131	20.3	18.3	23.8	21.0	23.5
S58-6145	19.0	18.0	20.9	21.0	22.3
S58-6173	19.3	19.1	21.7	20.7	22.2
UD1058-5-3	19.2	18.7	21.3	21.0	--
UD1120-1-2	18.9	19.8	22.1	--	23.4
UD1120-1-3	19.9	19.6	22.3	20.8	22.9
UD1120-6-1	19.0	18.9	21.7	--	22.1
UD1120-6-3	19.1	18.8	22.1	20.1	21.7

Table 19. - Protein percentages for the strains in Preliminary Group V, 1962

Strain	Georgetown, Del.	Warsaw, Va.	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss. (B)
Hill	40.0	39.5	37.7	37.7	41.1
Dorman	38.5	39.5	39.1	39.8	39.2
D59-428	41.4	39.9	37.9	39.3	40.1
D59-458	38.6	38.7	39.0	37.6	38.9
D59-563	40.0	40.5	40.0	39.9	38.6
D59-2260	43.7	42.2	44.5	43.4	42.7
D60-5873	41.1	40.9	39.3	40.1	38.9
D60-5884	40.5	40.8	40.5	40.2	40.8
D60-5894	41.2	40.1	40.3	41.2	39.4
D61-5141	38.5	40.1	38.5	38.8	39.5
D61-5201	39.1	40.9	39.6	41.8	38.9
N59-6782	40.2	39.1	38.4	38.5	38.7
N59-6858	39.4	39.1	38.6	38.1	38.5
N59-6948	41.1	39.0	39.1	39.0	39.3
N59-7065	42.2	42.2	42.9	41.1	40.8
N60-6003	41.4	41.5	39.6	40.5	40.0
N60-6006	41.3	40.5	41.0	40.6	40.2
N60-6008	43.7	42.6	39.6	41.2	41.8
N60-6010	43.7	40.8	40.7	40.9	42.8
N60-6020	42.6	41.5	41.9	41.0	41.3
N60-6053	42.9	41.3	40.4	41.7	41.4
N60-6059	42.3	41.0	41.2	41.9	41.6
N60-6107	42.8	41.2	38.8	40.6	42.8
R59-114	41.0	40.5	39.1	38.5	39.3
R60-66	41.4	40.3	38.0	38.5	40.1
S58-6079	41.0	41.4	39.0	38.6	39.3
S58-6102	40.8	41.7	39.1	--	40.6
S58-6104	41.0	42.4	40.8	39.2	41.2
S58-6131	41.2	40.1	38.1	38.7	40.2
S58-6145	42.0	41.6	39.8	38.0	40.4
S58-6173	43.4	42.2	41.4	38.2	41.7
UD1058-5-3	42.5	41.2	39.5	39.0	--
UD1120-1-2	43.0	41.2	39.3	--	39.4
UD1120-1-3	42.7	40.8	40.4	39.3	40.5
UD1120-6-1	41.4	39.0	38.5	--	40.5
UD1120-6-3	42.2	41.3	38.9	38.3	41.4

Table 20. - Plant height for the strains in Preliminary Group V, 1962

Strain	Georgetown, Del.	Warsaw, Va.	Plymouth, N. C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss. (B)
Hill	36	38	31	--	29	27
Dorman	43	42	38	36	25	27
D59-428	35	36	35	35	28	29
D59-458	36	39	34	32	28	29
D59-563	29	32	31	29	26	28
D59-2260	39	40	35	40	29	30
D60-5873	40	40	35	31	28	29
D60-5884	36	38	36	26	28	26
D60-5894	38	36	37	41	28	28
D61-5141	40	41	36	35	27	26
D61-5201	26	20	29	28	18	23
N59-6782	41	42	38	42	34	31
N59-6858	40	40	34	37	25	27
N59-6948	34	38	33	30	24	23
N59-7065	38	38	39	38	29	30
N60-6003	35	34	33	30	27	24
N60-6006	35	34	32	30	27	25
N60-6008	35	32	31	27	21	24
N60-6010	32	35	34	22	29	24
N60-6020	40	39	32	29	31	25
N60-6053	38	36	32	28	26	26
N60-6059	41	39	35	29	27	25
N60-6107	39	38	32	31	29	26
R59-114	36	40	38	41	30	37
R60-66	33	36	34	31	22	29
S58-6079	33	32	25	30	25	20
S58-6102	35	37	30	31	--	26
S58-6104	37	36	32	28	26	24
S58-6131	38	36	33	29	26	27
S58-6145	38	39	31	29	25	28
S58-6173	37	35	31	29	30	24
UD1058-5-3	20	28	14	13	15	8
UD1120-1-2	42	42	39	46	--	46
UD1120-1-3	41	42	41	28	26	47
UD1120-6-1	35	34	31	23	--	23
UD1120-6-3	34	36	32	47	26	21

Table 21. - Seed quality scores for the strains in Preliminary Group V, 1962

Strain	Georgetown, Del.	Warsaw, Va.	Plymouth, N. C.	Portageville, Mo.	Keiser, Ark.	Stoneville, Miss. (B)
Hill	4.0	1.5	1.0	---	2.5	2.0
Dorman	4.0	2.0	1.5	1.3	3.5	2.5
D59-428	1.5	2.5	1.5	---	3.0	2.0
D59-458	4.0	1.5	1.0	1.3	3.0	2.0
D59-563	2.0	1.5	1.0	1.5	4.0	2.0
D59-2260	4.0	2.5	1.5	1.5	4.0	2.0
D60-5873	3.0	1.5	1.0	1.3	2.5	2.0
D60-5884	1.0	2.0	1.0	2.0	3.5	2.0
D60-5894	2.5	2.5	1.0	1.3	2.5	2.0
D61-5141	4.0	2.0	1.5	1.5	3.5	2.0
D61-5201	2.0	2.0	1.5	1.5	4.0	2.0
N59-6782	4.0	2.0	1.0	1.5	3.0	2.0
N59-6858	2.0	1.5	1.0	1.3	3.0	2.0
N59-6948	2.0	2.0	1.0	1.3	3.5	2.0
N59-7065	2.5	2.0	1.0	1.5	3.0	2.0
N60-6003	3.5	2.0	1.0	1.3	3.0	2.0
N60-6006	3.5	1.5	1.0	1.3	3.0	1.5
N60-6008	4.0	2.0	1.0	1.3	3.0	2.0
N60-6010	4.0	2.0	1.5	1.3	2.0	2.0
N60-6020	4.0	2.0	1.0	1.3	3.5	2.0
N60-6053	3.5	1.5	1.5	---	3.0	2.0
N60-6059	3.0	2.5	1.0	1.3	3.5	2.5
N60-6107	4.0	2.5	1.0	---	2.5	2.0
R59-114	3.5	1.5	1.5	1.5	3.0	2.0
R60-66	2.5	1.5	1.5	1.5	3.0	2.0
S58-6079	4.0	1.5	1.0	1.3	2.0	2.0
S58-6102	3.5	2.0	1.5	1.3	---	2.0
S58-6104	3.0	2.5	1.0	1.3	4.0	2.0
S58-6131	3.0	1.5	1.5	1.3	3.5	2.0
S58-6145	3.0	3.0	2.0	1.3	3.5	2.0
S58-6173	4.0	2.5	1.5	---	3.5	2.0
UD1058-5-3	2.5	3.0	2.0	1.8	4.0	---
UD1120-1-2	2.5	4.0	3.0	1.5	---	2.5
UD1120-1-3	3.0	4.0	3.5	1.5	3.5	3.0
UD1120-6-1	4.0	3.5	1.5	1.5	---	2.0
UD1120-6-3	2.0	3.5	2.0	1.8	3.0	3.0

UNIFORM GROUP VI

1962

	Variety or Strain	Parentage	Generation Composited
1.	Hood	Roanoke x N45-745	F_6
2.	Lee	S-100 x CNS	F_6
3.	R56-49	Rogue in Lee	
4.	D58-1894	D49-2491(5) x Dorman	F_3
5.	D58-5111	Ogden(2) x D49-2491	F_5
6.	D59-268	Hill x D52-810	F_5
7.	D59-706	Hill x D52-810	F_5
8.	N59-6800	Hill x D52-810	F_5
9.	N59-6825	Hill x D52-810	F_5
10.	N59-6937	Hill x D52-810	F_5
11.	N59-6972	Hill x D52-810	F_5
12.	V60-K	Selected as natural cross in Ogden	

Background of strains used as parents:

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

D49-2491 is a sister strains to Lee from the cross S-100 x CNS.

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

Thirty-seven Uniform Group VI nurseries were planted. Results from 29 of these plantings are summarized in tables 22 through 28. In addition to 1962 results, table 22 also gives two- and three-year data on seed yield and oil and protein percentages. Differences among strains for seed yield were significant in 21 of the 29 comparisons. On the basis of the combined analysis, differences among strains were significant only within the East Coast and Southeast regions.

Two strains have been grown three years along with Hood and Lee. These are R56-49 and D58-1894. Both strains have produced well. R56-49 has produced best in the East Coast area. D58-1894 is a Lee type with white flowers, gray pubescence, and buff hila. The performance of this line has been similar to Lee. At present, material is available in the program at Stoneville with two more backcrosses to D49-2491. It would appear that this material would be satisfactory for production, should there be a demand for a type with buff hila.

D58-5111 has been tested two years. This is an Ogden type with yellow seed coats and resistance to bacterial pustule. Seed yields have equalled those for Hood. Seed holding has been no better than for Hood. In the 1962 plantings at Georgetown, Delaware, D58-5111 received the highest score of the Group VI lines for development of pod and stem blight on the seed. It also ranked high for development of purple seed stain.

Six of the strains included only one year were from Hill x D52-810. All lines performed very well, except that in the Southeast the mean yield of D59-706 was significantly below that for Hood. In that area there were plants which developed very few pods in several of the plantings. Other plants within these same plots appeared normal.

V60-K yielded fairly well but was weak in seed holding.

In 1961, the growing season for Hood ranged from 110 days to 161 days. In 1962, the length of season ranged from 99 days at Fairhope to 168 days at Keiser. The yield at Fairhope was 37.3 bushels. At Keiser, Hood was not harvested because of poor stands but the yield for D58-5111 was 38.2 bushels.

Table 22. - General summary of the performance for the strains in Uniform Group VI, 1962

	Hood	Lee	R56-49	D58-1984	D58-5111	D59-268
Seed Yield - 1962						
East Coast	33.5	34.4	39.1+	33.4	34.8	33.0
Southeast	34.6	33.6	37.8	38.7	34.0	35.5
Upper & Central South	43.0	37.5	40.9	37.3	42.5	37.6
Delta	45.2	46.4	49.5	42.9	48.5	55.4
West	34.7	38.8	40.6	37.9	38.5	40.1
- 1961-62						
East Coast	35.0	33.9	38.1	32.1	35.1	
Southeast	34.4	35.1	38.2	38.7	35.4	
Upper & Central South	41.6	37.9	41.4	37.6	41.2	
Delta	41.1	40.3	43.0	37.3	41.1	
West	38.3	39.7	39.5	38.4	37.3	
- 1960-62						
East Coast	36.9	35.9	39.2	34.6		
Southeast	34.9	36.8	38.4	39.1		
Upper & Central South	37.0	33.1	36.3	33.4		
Delta	40.2	39.5	42.4	37.5		
West	40.0	40.3	40.3	38.9		
Oil Content - 1962	21.6	21.1-	22.2+	21.0-	20.9	21.6
- 1961-62	21.5	20.9	22.1	20.7	20.6	
- 1960-62	21.6	21.0	22.3	20.8		
Protein Content - 1962	39.0	40.8+	39.7+	40.3+	40.8+	39.4
- 1961-62	39.5	40.9	40.0	40.5	41.4	
- 1960-62	39.6	41.2	40.2	40.7		
Seed Size	15.9	14.2-	15.4	13.8-	14.0-	15.8
Maturity Index	10-13	+9	+2	+10	0	+4
Height	28	31	29	32	32	32
Bacterial Pustule 1/	1.0	1.0	1.0	1.0	1.0	1.0
Pod and Stem Blight 2/	1.0	1.0	2.0	1.0	3.5	2.5
Phytophthora Rot 1/	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain 3/	3.0	1.0	3.0	1.0	3.0	3.0
Shattering 3/	2.0	1.0	1.5	1.0	2.3	1.5

1/ Stoneville data.
2/ Georgetown data.
3/ Average of 6 locations.

Table 22. - (continued)

	D59-706	N59-6800	N59-6825	N59-6937	N59-6972	V60-K
Seed Yield - 1962						
East Coast	34.8	33.8	34.3	35.7	37.4	32.7
Southeast	27.1-	30.8	30.1	33.8	33.1	34.4
Upper & Central South	35.0	39.0	35.2	36.0	35.4	39.2
Delta	46.7	49.7	47.0	50.4	46.8	44.2
West	35.1	34.4	35.3	38.8	35.1	34.5
- 1961-62						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
- 1960-62						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1962	21.7	22.2+	22.0	22.1+	23.1+	21.7
- 1961-62						
- 1960-62						
Protein Content - 1962	40.9+	39.4	39.7+	38.9	38.6	39.0
- 1961-62						
- 1960-62						
Seed Size	16.9+	14.8-	15.9	15.7	13.9-	18.0+
Maturity Index	+3	-5	-3	+3	-5	-2
Height	34	35	33	34	31	31
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	3.0
Pod and Stem Blight[2/]	3.5	2.0	3.0	2.5	1.0	2.0
Phytophthora Rot[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain[3/]	2.0	3.0	2.0	3.0	3.0	2.0
Shattering[3/]	1.0	2.5	1.5	1.3	1.5	3.0

Table 23. - Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1962

Location	Hood	Lee	R56-49	D58-1894	D58-5111	D59-268	D59-706
			East Coast				
Georgetown, Del.	21.4	18.9	24.4	15.0	21.4	15.9	23.8
Linkwood, Md.	32.2	32.8	36.2	30.2	33.6	31.7	36.5
Warsaw, Va.	27.4	31.9+	36.9+	35.9+	34.5+	35.8+	33.9+
Painter, Va.	47.9	43.0-	45.3	41.2-	44.0	39.2-	45.5
Petersburg, Va.1/	--	25.7	32.3	26.2	31.3	28.2	22.4
Norfolk, Va.1/	12.5	18.0	18.4	17.3	20.1	22.0	12.1
Plymouth, N. C.	35.6	44.5+	45.1+	39.7	42.6+	46.9+	42.8+
Willard, N. C.	45.8	47.0	56.6+	55.2+	44.5	49.0	47.4
Clayton, N. C.	23.3	18.7	27.9	13.7-	20.3	14.2-	17.0
Hartsville, S. C.	34.8	38.3	40.5	36.0	37.8	31.6	31.3
Mean	33.5	34.4	39.1+	33.4	34.8	33.0	34.8
			Southeast				
Tallassee, Ala.1/	12.2	21.1	17.9	32.9+	20.7	27.9+	17.0
Quincy, Fla.	37.4	38.4	48.9+	42.3	36.4	43.4+	27.3-
Jay, Fla.	38.0	35.1	41.4	41.6	39.4	39.0	23.4-
Fairhope, Ala.	37.3	36.1	38.1	38.7	35.1	37.8	36.1
Baton Rouge, La.	25.8	24.9	22.8	32.3+	24.9	21.9	21.5
Mean	34.6	33.6	37.8	38.7	34.0	35.5	27.1-
			Upper & Central South				
Jackson, Tenn.	36.8	38.2	37.4	37.2	42.9	37.6	29.0-
Belle Mina, Ala.1/	12.7	11.5	11.9	13.3	9.0-	12.0	9.3-
Experiment, Ga.1/	--	19.8	27.0	31.2	20.2	30.5	16.5
State College, Miss.	49.2	36.8-	44.3	37.3-	42.1	37.5-	41.0-
Mean	43.0	37.5	40.9	37.3	42.5	37.6	35.0
			Delta				
Portageville, Mo. (A)1/	41.5	39.9	46.7	--	48.2	39.0	37.3
Keiser, Ark. (A)1/	--	34.5	40.9	34.3	38.2	38.2	30.9
Stoneville, Miss. (A)	45.5	46.1	51.7+	42.6	51.9+	58.8+	49.7
Stoneville, Miss. (B)	41.8	41.4	45.1	39.9	44.7	49.5	44.7
St. Joseph, La.	48.4	51.7	51.6	46.3	48.9	58.0	45.8
Mean	45.2	46.4	49.5	42.9	48.5	55.4	46.7
			West				
Stuttgart, Ark.	37.7	43.4	44.6+	43.6	44.4+	44.4+	48.6+
Curtis, La.	40.9	32.1-	39.1	44.6	38.9	39.3	28.2-
Bixby, Okla.	41.9	50.2+	44.9	39.8	41.9	43.9	36.1-
Lubbock, Texas	24.2	25.6	30.7	24.8	29.0	27.2	26.8
College Station, Texas	28.7	42.6+	43.5+	36.9+	37.3+	45.9+	35.8+
Mean	34.7	38.8	40.6	37.9	38.5	40.1	35.1

1/ Not included in combined analysis.
(+) - Strains yielding significantly more (odds 19:1 or greater) than Hood.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Hood.

Table 23. - (continued)

Location	N59-6800	N59-6825	N59-6937	N59-6972	V60-K	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	23.3	21.4	30.2+	29.3+	18.0	5.6	15%
Linkwood, Md.	36.8	37.9	34.0	40.0	34.8	N.S.	10%
Warsaw, Va.	31.1	33.1+	34.7+	33.5+	31.4	3.0	5%
Painter, Va.	42.9-	43.0-	42.2-	46.6	45.1	4.6	6%
Petersburg, Va.[1/]	27.2	25.0	28.7	30.2	26.5	3.5	7%
Norfolk, Va.[1/]	12.8	17.5	26.6	17.5	14.5	N.S.	54%
Plymouth, N. C.	42.8+	46.3+	51.5+	44.9+	38.9	6.4	9%
Willard, N. C.	41.6	45.0	41.8	45.7	46.9	7.9	10%
Clayton, N. C.	20.7	21.7	20.0	25.1	13.2-	5.2	16%
Hartsville, S. C.	30.7	26.0-	31.5	34.0	33.4	6.4	11%
Mean	33.8	34.3	35.7	37.4	32.7	3.7	
			Southeast				
Tallassee, Ala.[1/]	23.1+	18.1	24.1+	17.2	7.7	9.6	28%
Quincy, Fla.	38.6	35.5	35.2	39.7	39.8	5.3	8%
Jay, Fla.	26.1-	32.3-	37.3	34.2-	35.1	3.8	6%
Fairhope, Ala.	36.2	32.8	36.0	33.5	32.6	N.S.	11%
Baton Rouge, La.	22.3	19.8	26.7	24.9	30.1	6.2	15%
Mean	30.8	30.1	33.8	33.1	34.4	5.0	
			Upper & Central South				
Jackson, Tenn.	31.1	29.3-	33.3	30.3	33.9	7.2	12%
Belle Mina, Ala.[1/]	11.4	11.1	11.6	9.5-	7.7-	2.0	11%
Experiment, Ga.[1/]	25.2	22.7	26.8	27.7	22.2	7.3	18%
State College, Miss.	50.2	41.1-	38.8-	40.5-	44.6	7.2	10%
Mean	39.0	35.2	36.0	35.4	39.2	N.S.	
			Delta				
Portageville, Mo.(A)[1/]	39.6	43.8	36.0	39.4	42.1	N.S.	12%
Keiser, Ark.(A)[1/]	32.4	25.3	32.7	29.9	29.4	-	-
Stoneville, Miss.(A)	54.0+	48.3	50.0	47.8	48.6	6.0	7%
Stoneville, Miss.(B)	42.9	42.8	46.0	38.4	40.5	N.S.	11%
St. Joseph, La.	52.3	49.8	55.2	54.3	43.6	N.S.	10%
Mean	49.7	47.0	50.4	46.8	44.2	N.S.	
			West				
Stuttgart, Ark.	51.5+	46.9+	44.8+	48.8+	46.2+	6.5	8%
Curtis, La.	25.4-	26.7-	37.6	26.1-	29.8-	5.7	10%
Bixby, Okla.	40.2	33.9-	43.7	39.6	40.5	5.7	8%
Lubbock, Texas	23.3	29.9	27.9	24.5	27.9	N.S.	11%
College Station, Texas	31.5	38.9+	40.2+	36.6+	28.2	7.1	11%
Mean	34.4	35.3	38.8	35.1	34.5	N.S.	

Table 24. - Chemical composition and seed size for the strains in Uniform Group VI, 1962

Location	Hood	Lee	R56-49	D58-1894	D58-5111	D59-268
			Oil Percentage			
Warsaw, Va.	19.8	20.7	21.2	19.8	19.2	20.5
Plymouth, N. C.	21.8	20.6	21.6	20.3	19.7	20.1
Willard, N. C.	21.0	20.9	22.0	21.1	19.5	21.2
Jay, Fla.	24.0	22.7	21.7	22.9	23.6	23.4
Portageville, Mo.	20.4	21.3	22.4	--	20.2	22.1
Stoneville, Miss.(A)	22.3	21.8	23.2	22.2	21.6	21.9
Stoneville, Miss.(B)	22.8	21.6	23.6	21.6	22.3	22.6
Stuttgart, Ark.	21.0	21.0	22.8	20.9	20.2	22.3
Bixby, Okla.	21.7	20.9	22.8	20.7	21.7	21.6
Lubbock, Texas	21.1	19.8	20.8	19.5	21.1	20.2
Mean	21.6	21.1-	22.2+	21.0-	20.9-	21.6
			Protein Percentage			
Warsaw, Va.	40.0	41.0	40.1	40.5	40.8	39.4
Plymouth, N. C.	40.0	41.3	40.0	41.3	41.8	40.7
Willard, N. C.	39.7	42.0	40.9	42.4	43.2	40.6
Jay, Fla.	37.3	39.0	37.8	38.2	38.3	39.3
Portageville, Mo.	39.4	40.5	39.4	--	39.8	37.6
Stoneville, Miss.(A)	39.8	41.6	40.6	39.8	42.3	39.1
Stoneville, Miss.(B)	37.8	40.9	38.9	40.3	40.9	39.2
Stuttgart, Ark.	39.9	42.7	41.7	42.0	43.0	41.9
Bixby, Okla.	41.3	41.2	40.2	41.1	40.9	40.0
Lubbock, Texas	34.3	37.8	36.9	37.0	36.5	35.8
Mean	39.0	40.8+	39.7+	40.3+	40.8+	39.4
			Grams Per 100 Seeds			
Warsaw, Va.	14.0	13.0	15.0	14.0	14.0	17.0
Plymouth, N. C.	14.2	12.0	13.7	11.9	11.6	14.1
Willard, N. C.	15.2	13.1	14.8	13.1	12.0	15.4
Jay, Fla.	19.0	17.1	17.2	14.9	15.9	19.4
Stoneville, Miss.(A)	15.6	14.3	15.9	12.9	13.5	14.8
Stoneville, Miss.(B)	15.3	13.9	14.8	12.9	13.6	14.4
Stuttgart, Ark.	16.0	14.0	15.7	13.7	13.0	13.7
Bixby, Okla.	17.7	14.8	14.9	14.2	15.1	16.4
Lubbock, Texas	16.0	16.0	17.0	16.5	17.0	17.0
Mean	15.9	14.2-	15.4	13.8-	14.0-	15.8

Table 24. - (continued)

Location	D59-706	N59-6800	N59-6825	N59-6937	N59-6972	V60-K	L.S.D. (.05)
			Oil Percentage				
Warsaw, Va.	20.0	19.9	21.3	21.6	21.4	19.3	
Plymouth, N. C.	20.4	22.4	21.2	21.0	21.5	21.3	
Willard, N. C.	21.3	21.5	21.7	21.3	22.5	22.1	
Jay, Fla.	22.6	24.5	23.8	23.7	26.0	24.5	
Portageville, Mo.	22.1	21.3	21.0	21.3	22.6	20.8	
Stoneville, Miss.(A)	22.8	22.8	22.2	22.9	24.0	22.4	
Stoneville, Miss.(B)	23.4	23.7	22.8	23.8	24.8	22.9	
Stuttgart, Ark.	22.0	22.4	21.9	21.8	22.4	21.1	
Bixby, Okla.	21.8	22.2	21.9	21.6	23.6	21.2	
Lubbock, Texas	20.3	21.4	21.9	21.8	22.3	21.4	
Mean	21.7	22.2+	22.0	22.1+	23.1+	21.7	0.5
			Protein Percentage				
Warsaw, Va.	39.9	39.0	39.3	38.6	40.2	40.2	
Plymouth, N. C.	41.9	39.2	40.2	40.2	39.3	38.5	
Willard, N. C.	42.9	41.6	42.1	41.0	40.8	41.1	
Jay, Fla.	42.1	38.6	39.5	38.4	37.5	37.3	
Portageville, Mo.	39.1	37.9	38.3	38.0	37.6	38.7	
Stoneville, Miss.(A)	41.5	39.6	40.3	40.2	38.4	40.2	
Stoneville, Miss.(B)	40.6	39.5	39.0	37.5	37.0	38.1	
Stuttgart, Ark.	42.4	40.7	41.0	41.2	42.1	42.2	
Bixby, Okla.	41.7	39.5	41.0	38.7	38.3	40.6	
Lubbock, Texas	36.8	38.1	36.5	35.6	35.0	32.7	
Mean	40.9+	39.4	39.7+	38.9	38.6	39.0	0.7
			Grams Per 100 Seeds				
Warsaw, Va.	17.0	15.0	15.0	15.0	14.0	18.0	
Plymouth, N. C.	15.8	12.3	14.2	13.8	12.0	15.5	
Willard, N. C.	16.0	12.1	13.9	13.8	12.4	17.8	
Jay, Fla.	18.3	15.4	18.8	18.2	16.3	19.0	
Stoneville, Miss.(A)	16.1	15.0	16.0	15.3	13.0	18.5	
Stoneville, Miss.(B)	16.5	15.0	15.4	15.4	12.7	17.5	
Stuttgart, Ark.	17.7	16.3	16.7	16.7	14.3	18.7	
Bixby, Okla.	18.0	14.3	14.9	16.3	13.8	17.7	
Lubbock, Texas	17.0	18.0	18.0	17.0	17.0	19.0	
Mean	16.9+	14.8-	15.9	15.7	13.9-	18.0+	0.8

Table 25. - Relative maturity data, days earlier (-) or later (+) than Hood, for the strains in Uniform Group VI, 1962

Location	Date Planted	Hood Matured	Lee	R56-49	D58-1894	D58-5111
			East Coast			
Georgetown, Del.	5-25	10-29	+8	+4	+10	-1
Linkwood, Md.	5-31	10-26	+4	+3	+9	+2
Warsaw, Va.	5-23	10-28	0	-2	+1	0
Petersburg	5-18	10-17	+6	+3	+11	+4
Plymouth, N. C.	5-14	10-11	+11	+ 3	+13	+2
Willard, N. C.	5-17	10-8	+7	+2	+10	-3
Clayton, N. C.	5-7	10-5	+11	0	+11	0
Hartsville, S. C.	5-29	10-15	+9	-1	+9	+9
Mean		10-17	+7	+2	+9	+2
			Southeast			
Tallassee, Ala.	6-13	10-4	+8	+10	+21	+6
Jay, Fla.	6-6	10-2	+5	+3	+8	-2
Fairhope, Ala.	6-18	9-25	+20	0	+20	0
Baton Rouge, La.	6-5	10-3	+11	-1	+18	-5
Mean		10-1	+11	+3	+17	0
			Upper and Central South			
Jackson, Tenn.	--	10-26	-2	0	-	-2
Belle Mina, Ala.	6-1	10-28	0	-1	0	-2
Experiment, Ga.	6-1	10-10	+7	+8	+6	+2
State College, Miss.	5-7	9-30	+14	+1	+17	0
Mean		10-16	+5	+2	+8	0
			Delta			
Portageville,Mo.(A)	5-14	10-17	+8	+3	+9	+3
Keiser, Ark.(A)	5-9	10-24	+8	+1	+10	-1
Stoneville, Miss.(A)	5-14	10-7	+12	-1	+14	-1
Stoneville, Miss.(B)	5-9	10-3	+15	+1	+15	0
St. Joseph, La.	5-17	10-12	+13	+4	+8	-6
Mean		10-13	+11	+2	+11	-1
			West			
Stuttgart, Ark.	5-18	10-14	+12	+1	+14	-5
Curtis, La.	5-10	10-1	+20	+12	+17	-4
Bixby, Okla.	5-10	10-23	+13	0	+13	0
Lubbock, Texas	6-6	10-30	0	0	+3	-1
College Station,Texas	6-8	10-8	+15	+7	+5	0
Mean		10-15	+12	+4	+10	-2

Table 25. - (continued)

Location	D59-268	D59-706	N59-6800	N59-6825	N59-6937	N59-6972	V60-K
			East Coast				
Georgetown, Del.	+14	+5	-5	-2	+1	-10	-3
Linkwood, Md.	+9	+5	+3	+1	+2	+2	+2
Warsaw, Va.	+2	0	-3	-4	-4	-5	-7
Petersburg, Va.	+11	+4	+1	+2	+6	-3	-3
Plymouth, N. C.	+11	+11	-2	+2	+5	-3	-1
Willard, N. C.	+4	-8	-8	-7	+2	-6	-6
Clayton, N. C.	+9	0	-3	-3	+9	-3	-2
Hartsville, S. C.	+4	+1	-9	-7	0	-8	-8
Mean	+8	+2	-2	-2	+3	-5	-4
			Southeast				
Tallassee, Ala.	+14	+14	0	0	+11	-4	-3
Jay, Fla.	+3	+7	-15	-5	+1	-4	-6
Fairhope, Ala.	+6	+6	0	+6	+6	0	+6
Baton Rouge, La.	-7	-5	-3	-2	+17	-8	+7
Mean	+4	+6	-5	0	+9	-4	+1
			Upper and Central South				
Jackson, Tenn.	-3	--	-13	-3	-3	-5	--
Belle Mina, Ala.	-2	0	-2	-1	0	-1	0
Experiment, Ga.	+6	+9	-3	-5	+6	-4	-5
State College, Miss.	+2	+2	-8	-5	+7	-5	-2
Mean	0	+4	-7	-4	+3	-4	-2
			Delta				
Portageville, Mo.(A)	+7	0	-4	-4	+1	-4	-3
Keiser, Ark.(A)	+1	-1	-4	-4	-2	-6	-2
Stoneville, Miss.(A)	+3	+1	-7	-7	+4	-4	-5
Stoneville, Miss.(B)	+3	+1	-2	-2	+2	-2	-2
St. Joseph, La.	+4	+13	-2	-3	+3	-2	-5
Mean	+4	+3	-4	-4	+2	+4	-3
			West				
Stuttgart, Ark.	-2	-3	-9	-9	-3	-9	-9
Curtis, La.	-3	-5	-15	-13	+12	-18	+7
Bixby, Okla.	0	+12	+1	+4	-1	-1	0
Lubbock, Texas	0	0	-1	-4	0	-1	0
College Station, Texas	+5	+10	-7	+5	+5	-4	0
Mean	0	+3	-6	-3	+3	-7	0

Table 26. - Plant height for the strains in Uniform Group VI, 1962

Location	Hood	Lee	R56-49	D58-1894	D58-5111	D59-268
			East Coast			
Georgetown, Del.	30	34	33	33	33	32
Linkwood, Md.	36	41	39	42	40	37
Warsaw, Va.	31	37	35	36	35	36
Painter, Va.	31	43	37	40	39	37
Petersburg, Va.	30	38	33	35	38	37
Norfolk, Va.	29	37	36	35	32	40
Plymouth, N. C.	33	34	35	36	39	41
Willard, N. C.	34	33	33	37	34	35
Clayton, N. C.	36	36	37	37	39	39
Hartsville, S. C.	29	27	25	28	29	30
Mean	32	36	34	36	36	36
			Southeast			
Tallassee, Ala.	26	31	26	32	30	28
Quincy, Fla.	18	23	24	26	23	25
Jay, Fla.	25	23	26	30	30	28
Fairhope, Ala.	21	25	21	27	23	25
Baton Rouge, La.	17	19	19	22	13	18
Mean	21	24	23	34	24	25
			Upper and Central South			
Jackson, Tenn.	33	36	31	35	33	35
Belle Mina, Ala.	29	32	31	32	32	29
Experiment, Ga.	--	26	30	30	26	31
State College, Miss.	26	29	26	29	30	33
Mean	29	31	30	32	30	32
			Delta			
Portageville, Mo.(A)	37	36	31	38	33	38
Keiser, Ark.(A)	24	28	24	29	28	31
Stoneville, Miss.(A)	31	32	32	33	36	35
Stoneville, Miss.(B)	32	29	27	31	33	33
St. Joseph, La.	28	32	30	27	35	28
Mean	30	31	29	32	33	33
			West			
Stuttgart, Ark.	27	25	25	31	32	31
Curtis, La.	20	22	22	28	32	27
Bixby, Okla.	31	33	29	36	37	32
Lubbock, Texas	32	32	31	33	31	33
College Station, Texas	25	26	19	29	24	25
Mean	27	28	25	31	31	30

Table 26. - (continued)

Location	D59-706	N59-6800	N59-6825	N59-6937	N59-6972	V60-K
			East Coast			
Georgetown, Del.	37	38	35	37	32	32
Linkwood, Md.	41	46	42	40	37	39
Warsaw, Va.	37	41	38	38	36	38
Painter, Va.	41	44	44	43	39	38
Petersburg, Va.	40	39	40	40	35	37
Norfolk, Va.	36	35	37	37	35	36
Plymouth, N. C.	41	42	41	39	37	31
Willard, N. C.	38	38	36	37	35	33
Clayton, N. C.	42	42	39	40	39	35
Hartsville, S. C.	27	30	22	28	27	29
Mean	38	40	37	38	35	35
			Southeast			
Tallassee, Ala.	31	33	32	31	33	26
Quincy, Fla.	27	31	25	29	25	25
Jay, Fla.	29	32	28	27	31	32
Fairhope, Ala.	20	25	29	27	20	25
Baton Rouge, La.	18	20	20	22	17	13
Mean	25	28	27	27	25	24
			Upper and Central South			
Jackson, Tenn.	34	39	35	36	37	35
Belle Mina, Ala.	31	35	33	34	32	34
Experiment, Ga.	32	32	29	28	23	28
State College, Miss.	33	32	35	40	30	30
Mean	33	35	33	35	31	32
			Delta			
Portageville, Mo.(A)	33	34	36	39	33	34
Keiser, Ark.(A)	30	32	29	29	29	26
Stoneville, Miss.(A)	35	41	37	33	31	31
Stoneville, Miss.(B)	37	38	35	33	33	29
St. Joseph, La.	38	36	32	35	30	31
Mean	35	36	34	34	31	30
			West			
Stuttgart, Ark.	36	39	36	34	31	33
Curtis, La.	26	34	26	30	30	21
Bixby, Okla.	46	42	43	40	35	33
Lubbock, Texas	33	33	29	34	31	31
College Station, Texas	25	23	25	26	26	22
Mean	33	34	32	33	31	28

Table 27. - Lodging scores for the strains in Uniform Group VI, 1962

Location	Hood	Lee	R56-49	D58-1894	D58-5111	D59-268
			East Coast			
Georgetown, Del.	1.7	4.0	2.7	3.0	2.0	2.3
Linkwood, Md.	3.0	3.7	2.7	3.7	3.3	2.7
Warsaw, Va.	3.0	3.7	2.3	3.3	2.8	3.2
Painter, Va.	3.0	4.1	3.5	4.0	3.3	3.6
Petersburg, Va.	1.0	1.7	1.0	2.0	1.0	2.0
Norfolk, Va.	1.0	1.0	2.0	2.0	1.0	2.0
Plymouth, N. C.	2.7	3.2	3.0	3.7	3.0	2.5
Willard, N. C.	1.3	2.0	1.7	2.0	1.7	2.0
Clayton, N. C.	3.7	4.0	3.7	3.3	3.7	3.0
Hartsville, S. C.	1.3	1.3	1.0	1.0	1.0	1.3
			Southeast			
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Jackson, Tenn.	1.0	3.0	1.0	3.0	2.0	2.0
Belle Mina, Ala.	1.7	2.0	1.7	2.0	1.0	1.0
Experiment, Ga.	-	1.0	1.0	1.0	1.0	1.0
State College, Miss.	1.0	2.0	1.0	2.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	2.5	2.2	1.3	1.8	1.7	1.3
Keiser, Ark.(A)	1.0	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss.(A)	3.0	3.7	3.3	3.0	3.3	2.7
Stoneville, Miss.(B)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	2.0	2.0	2.0	2.0	2.0	2.0
			West			
Stuttgart, Ark.	3.3	2.3	2.0	3.0	2.7	2.3
Curtis, La.	1.0	1.0	1.0	2.0	2.0	2.0
Bixby, Okla.	2.7	2.7	1.7	2.3	2.0	2.3
Lubbock, Texas	2.0	2.0	2.0	3.0	2.0	2.0
College Statin, Texas	1.0	1.0	1.0	3.0	2.0	2.0

Table 27. - (continued)

Location	D59-706	N59-6800	N59-6825	N59-6937	N59-6972	V60-K
			East Coast			
Georgetown, Del.	1.7	1.7	2.7	3.0	2.7	2.7
Linkwood, Md.	2.3	2.3	2.7	3.0	3.3	2.0
Warsaw, Va.	1.7	2.0	2.3	2.3	3.2	3.2
Painter, Va.	3.1	3.0	4.1	3.3	3.8	3.0
Petersburg, Va.	1.0	1.0	1.3	1.3	1.0	1.0
Norfolk, Va.	1.0	2.0	3.0	2.0	4.0	1.0
Plymouth, N. C.	2.0	2.7	3.0	3.0	3.5	2.3
Willard, N. C.	1.0	1.3	1.0	1.7	1.0	1.3
Clayton, N. C.	2.7	3.7	3.0	3.0	3.7	2.3
Hartsville, S. C.	1.0	1.6	1.0	1.0	1.0	1.3
			Southeast			
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Jackson, Tenn.	1.0	2.0	2.0	2.0	1.0	2.0
Belle Mina, Ala.	1.0	1.0	1.3	1.7	1.0	1.7
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	2.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Portageville, Mo.(A)	1.5	1.5	1.7	1.8	2.0	1.3
Keiser, Ark.(A)	1.0	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss.(A)	2.3	3.3	2.7	3.0	3.3	3.7
Stoneville, Miss.(B)	1.7	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	2.0	2.0	2.0	2.0	2.0
			West			
Stuttgart, Ark.	3.0	2.0	2.0	2.3	3.7	3.7
Curtis, La.	2.0	2.0	1.0	2.0	2.0	2.0
Bixby, Okla.	2.0	2.3	1.0	2.0	2.0	2.0
Lubbock, Texas	1.0	2.0	2.0	2.0	2.0	2.0
College Station, Texas	1.0	1.0	1.0	2.0	2.0	1.0

Table 28. - Seed quality scores for the strains in Uniform Group VI, 1962

Location	Hood	Lee	R56-49	D58-1894	D58-5111	D59-268
			East Coast			
Georgetown, Del.	2.3	4.0	3.3	4.0	4.0	5.0
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	3.0
Warsaw, Va.	1.0	2.0	1.0	1.5	1.5	1.5
Painter, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Petersburg, Va.	1.4	1.0	1.0	1.0	1.0	1.5
Norfolk, Va.	2.0	1.0	2.0	2.0	2.0	1.0
Plymouth, N. C.	1.0	1.0	1.0	1.5	2.0	1.5
Willard, N. C.	1.0	1.0	1.0	1.0	1.5	1.5
Clayton, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
Hartsville, S. C.	2.5	1.3	2.0	1.5	2.7	3.0
			Southeast			
Tallassee, Ala.	4.0	2.0	3.0	2.0	4.0	3.0
Quincy, Fla.	2.0	2.0	2.0	2.0	3.0	2.0
Jay, Fla.	1.0	1.0	2.0	1.0	3.0	2.0
Fairhope, Ala.	2.0	2.0	2.0	2.0	3.0	2.7
Baton Rouge, La.	3.0	2.0	1.0	1.0	1.0	2.0
			Upper and Central South			
Jackson, Tenn.	3.0	1.0	3.0	2.0	3.0	2.0
Experiment, Ga.	-	1.3	1.7	1.0	2.0	1.7
State College, Miss.	2.0	2.0	2.0	2.0	3.0	2.0
			Delta			
Portageville, Mo.(A)	1.3	1.5	1.8	-	1.5	1.5
Keiser, Ark.(A)	-	2.5	2.3	2.7	4.0	3.0
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss.(B)	2.0	2.0	2.0	1.7	2.0	2.0
St. Joseph, La.	1.0	2.0	1.0	1.0	3.0	2.0
			West			
Stuttgart, Ark.	2.0	2.0	1.7	2.3	2.3	2.0
Bixby, Okla.	2.0	2.0	2.0	2.0	2.3	2.0
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0
College Station, Texas	1.0	1.5	1.5	1.0	1.5	1.0

Table 28. - (continued)

Location	D59-706	N59-6800	N59-6825	N59-6937	N59-6972	V60-K
			East Coast			
Georgetown, Del.	5.0	3.7	4.7	4.3	2.3	4.3
Linkwood, Md.	3.0	2.0	2.0	2.0	2.0	3.0
Warsaw, Va.	2.5	1.5	2.0	1.5	1.0	2.5
Painter, Va.	1.5	1.0	1.0	1.5	1.0	1.5
Petersburg, Va.	1.7	1.0	1.7	1.2	1.0	1.0
Norfolk, Va.	2.0	2.0	1.0	2.0	1.0	2.0
Plymouth, N. C.	1.5	1.5	1.5	1.0	1.0	1.5
Willard, N. C.	1.0	1.0	1.5	1.5	1.0	1.0
Clayton, N. C.	1.0	1.5	1.5	1.5	1.5	1.5
Hartsville, S. C.	2.5	1.5	2.3	2.3	2.7	3.3
			Southeast			
Tallassee, Ala.	4.0	4.0	4.0	3.0	4.0	5.0
Quincy, Fla.	4.0	2.0	3.0	2.0	2.0	3.0
Jay, Fla.	4.0	3.0	2.0	2.0	2.0	3.0
Fairhope, Ala.	3.3	2.7	3.0	3.0	2.3	3.7
Baton Rouge, La.	5.0	5.0	2.0	2.0	3.0	4.0
			Upper and Central South			
Jackson, Tenn.	3.0	3.0	3.0	3.0	3.0	3.0
Experiment, Ga.	3.7	1.7	2.3	2.0	2.0	2.0
State College, Miss.	2.0	2.0	2.0	2.0	2.0	4.0
			Delta			
Portageville, Mo.(A)	1.5	1.5	1.5	1.3	1.3	1.5
Keiser, Ark.(A)	2.7	2.7	2.5	3.3	2.0	4.0
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.7
Stoneville, Miss.(B)	2.0	2.0	2.3	2.0	2.0	2.0
St. Joseph, La.	4.0	1.0	3.0	3.0	2.0	2.0
			West			
Stuttgart, Ark.	2.7	2.0	2.7	2.7	1.7	2.7
Bixby, Okla.	2.0	2.0	3.0	2.7	1.0	2.0
Lubbock, Texas	3.0	2.0	2.0	3.0	2.0	2.0
College Station, Texas	2.5	1.0	1.0	1.5	1.0	1.5

PRELIMINARY GROUP VI

1962

Seven Preliminary Group VI nurseries were planted. The parentage for the strains included is given in table 29. The results from six nurseries are summarized in tables 30 through 35.

The combined analysis for seed yield showed 14 strains to have mean seed yields significantly higher than Hood, but none significantly higher than Lee. Two strains yielded significantly lower than Hood.

Two small seeded lines, D59-2463 and D59-2537, were similar to Lee in performance. The mean seed size for Hood, Lee, D59-2463, and D59-2537 are 14.8, 13.5, 9.1, and 10.0 grams per 100 seed, respectively. This further substantiates that satisfactory yields can be produced with small seeded types.

D59-8335 averaged 0.9 bushel per acre above Lee and was similar in most other measurements. This strain has been converted to a narrow leaf type. The results suggest that if it were desirable to use the narrow leaf type as a marker, yield would not be reduced. Similar results were obtained in Preliminary Group V, using a narrow leaf Dorman.

The high protein line D59-9048 developed by backcrossing equalled Lee in yield at Stoneville but produced slightly less at other locations. However, the high protein line D60-9647 ranked third in yield as a mean for all locations. This further confirms that high yielding, high protein lines can be developed.

The five lines D60-9647, D60-10,998, D60-11,082, D60-11,215, and D60-11,321 carry the gene for immunity to phytophthora rot. All produced well.

Several of the North Carolina selections were early for Group VI. The two Delaware selections flowered extremely early and as a result were extremely short at some locations. In the May planting at Stoneville, they grew only 10 inches tall.

The mean overall seed yield for this group was 35.6 bushels per acre. This indicates that avery good group of lines was tested. All but one line, D54-171-1, were superior to Hood in seed holding and all but three lines showed less purple stain development on the seed than Hood.

Table 29. - Parentage of the strains in Preliminary Group VI, 1962

	Strain	Parentage	Generation Composited
1.	Hood		
2.	Lee		
3.	D59-2463	D49-2491(3) x PI 165,926	F_4
4.	D59-2537	D49-2491(3) x PI 165,926	F_4
5.	D59-8335	D49-2491(5) x PI 181,537	F_5
6.	D59-9048	D49-2491(4) x PI 174,862	F_5
7.	D60-6416	Hill x D51-4877	F_5
8.	D60-6458	Hill x D51-4877	F_5
9.	D60-6499	Hill x D51-4877	F_5
10.	D60-9647	FC31745 x D49-2510	F_6
11.	D60-10,998	D49-2573 x Nansemond	F_6
12.	D60-11,082	D49-2573 x Nansemond	F_6
13.	D60-11,215	D49-2573 x Nansemond	F_6
14.	D60-11,321	D49-2573 x Nansemond	F_6
15.	N60-6022	Hill x D49-2491	F_5
16.	N60-6045	Hill x D49-2491	F_5
17.	N60-6056	Hill x D49-2491	F_5
18.	N60-6081	Hill x D49-2491	F_5
19.	N60-6102	Hill x D49-2491	F_5
20.	N60-6140	Hill x D49-2491	F_5
21.	N60-6170	Hill x D49-2491	F_5
22.	N60-6261	Hill x D49-2491	F_5
23.	N60-6407	Hill x D49-2491	F_5
24.	N60-6501	Hill x D49-2491	F_5
25.	UD1077-3-1	FC33243 x D49-2491	F_5
26.	UD1077-3-3	FC33243 x D49-2491	F_5
27.	R54-171-1	D49-2573 x N45-1497	
28.	R60-79	Dortchsoy 67 x Lee	
29.	R60-349	Hood x Jackson	
30.	R60-964	Lee(3) x Dortchsoy 67	F_3
31.	S58-6006	Ogden x N46-2566-1	F_6
32.	S58-6009	Ogden x N46-2566-1	F_6
33.	S58-6078	D49-2491(2) x L3-2010	F_6
34.	S58-6112	D49-2491(2) x L3-2010	F_6
35.	S58-6122	D49-2491(2) x L3-2010	F_6
36.	S58-6133	D49-2491(2) x L3-2010	F_6

Table 30. - General summary of performance for the strains in Preliminary Group VI, 1962

Strain	Seed Yield	Maturity Index	Ht.	Percent Oil	Percent Protein	Shattering[1]	Purple Stain[2]
Hood	32.0	10-17	31	21.0	39.2	3.0	3.0
Lee	37.6+	+8	33	20.3	40.8+	1.0	1.5
D59-2463	35.7	+7	33	19.6-	41.0+	1.3	2.0
D59-2537	37.0+	+6	32	19.7-	41.0+	1.3	2.0
D59-8335	38.7+	+7	33	20.6	40.0	1.0	1.0
D59-9048	33.9	+6	32	16.9-	44.2+	1.0	1.0
D60-6416	34.7	+7	37	19.6-	40.3	1.7	2.0
D60-6458	40.6+	-2	38	21.5	39.2	1.7	2.0
D60-6499	36.7+	+7	33	20.6	38.8	1.0	1.5
D60-9647	38.7+	+9	33	18.1-	45.9+	1.3	2.0
D60-10,998	37.6+	+5	37	19.6-	43.5+	1.3	2.0
D60-11,082	41.3+	+6	37	19.7-	41.5+	1.0	2.0
D60-11,215	37.2+	0	34	20.1-	38.7	1.3	2.0
D60-11,321	36.2	+5	37	19.6-	42.8+	1.3	2.0
N60-6022	35.4	-1	30	20.3	40.7+	1.3	2.5
N60-6045	34.2	0	28	19.9-	41.3+	1.3	2.0
N60-6056	34.8	-6	28	20.6	40.7+	1.3	2.0
N60-6081	34.3	-5	31	20.4	41.1+	1.3	1.5
N60-6102	37.3+	-3	28	20.5	41.0+	1.0	1.5
N60-6140	35.6	-5	27	21.0	40.3	1.3	1.5
N60-6170	36.3+	-7	26	20.7	41.3+	1.3	3.0
N60-6261	35.5	-1	30	19.8-	42.3+	1.3	2.0
N60-6407	38.6+	-4	28	19.7-	41.5+	1.3	1.0
N60-6501	35.8	-6	32	21.0	41.0+	1.7	2.5
UD1077-3-1	26.2-	-1	20	21.6	40.3	1.0	2.5
UD1077-3-3	26.2-	+2	20	21.2	40.3	1.0	2.5
R54-171-1	38.3+	+10	40	21.2	39.8	3.0	1.0
R60-79	37.2+	+9	38	20.7	38.6	1.7	2.0
R60-349	34.3	+10	30	21.2	39.7	2.3	2.5
R60-964	32.8	+8	29	20.6	41.2+	1.3	1.0
S58-6006	36.6+	+8	34	19.5-	41.4+	1.3	1.0
S58-6009	32.9	+8	37	20.0-	41.6+	1.0	1.0
S58-6078	35.0	+2	31	20.5	40.6+	1.0	1.5
S58-6112	33.6	+9	33	21.4	40.1	1.0	1.0
S58-6122	38.3+	+7	33	20.8	39.8	1.3	3.0
S58-6133	35.2	+2	30	21.3	39.2	1.0	3.0
L.S.D.(.05)	4.3			0.9	1.2		
L.S.D.(.01)	5.7			1.2	1.5		

1/ Stoneville and Plymouth data.
2/ Georgetown and Plymouth data.

Table 31. - Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1962

Strain	George-town, Del.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.1/	Stone-ville, Miss.(B)	Stoneville, Miss.(B-late)
Hood	20.6	32.5	34.8	40.6	36.8	35.4
Lee	26.3	34.7	41.0	38.3	45.7+	40.3
D59-2463	24.8	29.7	46.0+	37.4	42.2	35.9
D59-2537	27.8	30.3	42.6+	34.8	44.4+	39.7
D59-8335	31.4	35.5	42.4+	43.0	46.3+	38.0
D59-9048	20.4	30.1	38.6	30.3	42.0	38.6
D60-6416	20.7	33.3	40.2	31.3	43.0	36.6
D60-6458	31.6	37.7+	51.9+	36.9	46.3+	35.5
D60-6499	31.9	31.3	34.2	38.2	46.0+	39.9
D60-9647	27.9	35.8	40.6	32.7	49.6+	39.8
D60-10,998	27.8	32.8	39.8	34.0	48.2+	39.5
D60-11,082	33.7	37.0+	42.9+	35.9	49.9+	43.2+
D60-11,215	26.6	35.0	46.7+	36.3	44.7+	37.4
D60-11,321	26.6	32.3	42.0+	41.5	41.2	38.9
N60-6022	27.6	35.7	41.8+	37.7	42.2	29.9
N60-6045	27.0	33.0	32.2	39.9	45.6+	33.2
N60-6056	28.4	33.0	39.0	35.2	39.7	33.8
N60-6081	22.6	32.3	41.8+	30.9	37.6	37.2
N60-6102	25.7	35.6	44.0+	38.8	39.2	42.0+
N60-6140	29.1	36.3	37.4	35.6	39.9	35.6
N60-6170	29.8	34.0	38.6	34.4	42.5	36.5
N60-6261	26.8	29.8	41.0	34.0	43.6+	36.6
N60-6407	27.2	36.4+	42.2+	35.7	48.8+	38.2
N60-6501	23.4	35.1	39.2	46.6	44.7+	36.4
UD1077-3-1	22.8	34.6	35.0	20.1	11.6-	27.1-
UD1077-3-3	23.0	32.7	35.4	36.2	16.8-	23.2-
R54-171-1	22.8	32.0	44.7+	23.9	51.0+	40.8
R60-79	26.1	32.1	46.0+	26.1	45.7+	36.4
R60-349	22.3	31.2	39.2	30.8	39.4	39.5
R60-964	24.8	30.8	35.4	30.9	38.3	34.9
S58-6006	29.6	35.4	34.0	39.4	42.6	41.4+
S58-6009	27.8	32.4	36.4	27.3	37.8	30.5
S58-6078	23.5	35.4	41.6+	43.4	43.9+	30.6
S58-6112	27.2	32.5	40.1	33.6	37.3	31.1
S58-6122	27.6	33.4	42.4+	39.0	48.4+	39.9
S58-6133	26.6	32.8	43.8+	35.3	37.6	35.4
L.S.D.(.05)	N.S.	3.9	6.7	--	6.4	6.0
C.V.	14%	6%	8%	--	8%	8%

1/ Not included in combined analysis, only one plot harvested.

Table 32.- Oil percentages for the strains in Preliminary Group VI, 1962

Strain	Warsaw, Va.	Plymouth, N.C.	Keiser, Ark.	Stoneville, Miss.(B)
Hood	19.3	20.3	--	23.4
Lee	19.2	19.9	19.6	22.3
D59-2463	19.4	18.7	19.6	20.7
D59-2537	19.0	18.9	--	21.1
D59-8335	19.7	20.0	20.6	21.9
D59-9048	16.7	16.5	17.1	17.4
D60-6416	19.4	18.6	18.6	21.6
D60-6458	20.4	21.4	21.0	23.1
D60-6499	19.6	20.3	20.9	21.7
D60-9647	17.9	17.7	17.2	19.7
D60-10,998	19.6	19.7	18.1	21.1
D60-11,082	19.2	19.0	19.4	21.2
D60-11,215	19.7	20.3	19.2	21.1
D60-11,321	19.5	19.8	18.7	20.5
N60-6022	19.0	20.2	19.9	22.1
N60-6045	18.1	20.5	19.4	21.6
N60-6056	19.3	20.5	20.1	22.4
N60-6081	18.8	20.6	19.3	22.7
N60-6102	19.1	20.6	20.1	22.3
N60-6140	19.7	21.4	20.6	22.4
N60-6170	19.3	21.8	19.8	21.9
N60-6261	18.2	21.3	19.2	20.5
N60-6407	17.9	20.0	19.3	21.7
N60-6501	19.1	21.6	19.8	23.3
UD1077-3-1	19.8	22.1	21.3	23.1
UD1077-3-3	19.4	21.7	20.8	22.8
R54-171-1	20.2	20.6	21.5	22.4
R60-79	19.6	20.8	20.1	22.4
R60-349	19.4	21.0	21.2	23.3
R60-964	19.3	20.3	19.7	22.9
S58-6006	18.1	19.0	19.2	21.5
S58-6009	19.5	20.6	19.1	20.6
S58-6078	19.6	20.5	19.8	22.2
S58-6112	20.2	21.2	--	23.5
S58-6122	18.2	21.0	20.6	23.5
S58-6133	19.7	21.1	21.0	23.2

Table 33. - Protein percentages for the strains in Preliminary Group VI, 1962

Strain	Warsaw, Va.	Plymouth N.C.	Keiser, Ark.	Stoneville, Miss.(B)
Hood	39.2	40.4	--	37.3
Lee	40.5	41.3	40.9	40.6
D59-2463	41.4	41.6	40.8	40.0
D59-2537	41.4	41.9	--	39.8
D59-8335	40.2	41.0	39.5	39.4
D59-9048	43.6	45.4	43.2	44.4
D60-6416	40.0	40.8	39.6	40.7
D60-6458	39.0	39.8	39.4	38.6
D60-6499	38.2	40.2	37.8	39.1
D60-9647	44.5	47.3	47.0	44.7
D60-10,998	42.0	43.9	46.0	42.0
D60-11,082	41.0	42.4	42.8	39.8
D60-11,215	37.6	38.7	40.2	38.1
D60-11,321	41.0	42.6	45.6	42.1
N60-6022	40.1	41.3	40.8	40.4
N60-6045	42.3	41.1	41.5	40.1
N60-6056	41.5	41.1	40.5	39.5
N60-6081	42.1	41.4	40.8	40.0
N60-6102	41.6	41.3	40.2	40.7
N60-6140	41.9	40.3	41.0	38.0
N60-6170	41.9	41.3	41.8	40.3
N60-6261	42.9	43.7	42.0	40.6
N60-6407	42.4	41.7	40.8	40.9
N60-6501	42.2	41.1	41.2	39.4
UD1077-3-1	41.5	41.0	39.8	38.7
UD1077-3-3	41.7	40.7	39.8	39.0
R54-171-1	39.5	40.2	40.4	39.0
R60-79	39.6	39.2	38.0	37.4
R60-349	40.3	40.3	40.0	38.1
R60-964	41.6	41.5	42.0	39.7
S58-6006	41.5	41.7	41.7	40.8
S58-6009	41.6	41.1	42.9	40.9
S58-6078	41.2	41.2	40.8	39.1
S58-6112	40.6	41.1	--	38.6
S58-6122	39.8	40.1	40.1	39.4
S58-6133	40.1	39.6	38.8	38.4

Table 34. - Plant height for the strains in Preliminary Group VI, 1962

Strain	Georgetown, Del.	Warsaw, Va.	Plymouth, N.C.	Portageville, Mo.	Stoneville, Miss.(B)	Stoneville, Miss.(B-late)
Hood	32	33	34	35	27	23
Lee	36	35	37	32	27	28
D59-2463	36	36	36	32	28	29
D59-2537	32	33	40	30	28	28
D59-8335	34	36	35	35	27	28
D59-9048	36	36	31	36	27	28
D60-6416	36	39	41	43	34	28
D60-6458	41	44	44	37	28	33
D60-6499	32	34	34	32	35	29
D60-9647	34	36	34	34	32	28
D60-10,998	40	42	38	36	36	28
D60-11,082	42	38	42	41	32	28
D60-11,215	38	36	39	34	31	24
D60-11,321	43	40	37	41	34	29
N60-6022	35	35	32	27	25	23
N06-6045	32	34	33	25	22	22
N60-6056	32	34	32	22	25	22
N60-6081	36	37	35	28	25	25
N60-6102	33	34	31	21	22	26
N60-6140	32	34	30	23	21	20
N60-6170	31	30	31	17	25	22
N60-6261	36	36	32	25	24	26
N60-6407	31	33	33	26	25	22
N60-6501	40	36	32	31	27	26
UD1077-3-1	26	32	22	13	10	16
UD1077-3-3	25	30	22	18	10	14
R54-171-1	38	44	46	44	39	28
R60-79	38	37	40	42	40	30
R60-349	32	32	34	32	25	26
R60-964	34	34	32	27	23	26
S58-6006	38	38	38	36	25	29
S58-6009	40	39	40	41	33	31
S58-6078	35	34	34	32	22	26
S58-6112	36	38	36	38	24	27
S58-6122	34	36	39	38	26	26
S58-6133	34	35	33	34	20	25

Table 35. - Seed quality scores for the strains in Preliminary Group VI, 1962

Strain	George-town, Del.	Warsaw,	Plymouth,	Portage-ville, Mo.	Stone-ville, Miss.(B)	Stoneville, Miss.(B late)
Hood	2.5	1.0	1.0	1.3	2.0	2.0
Lee	4.5	1.5	1.0	1.5	2.0	2.0
D59-2463	5.0	3.0	1.0	1.8	2.0	2.0
D59-2537	4.0	2.5	1.0	1.5	2.0	2.5
D59-8335	2.5	2.0	1.0	1.3	1.5	2.0
D59-9048	4.5	1.5	1.0	1.5	2.0	2.0
D60-6416	4.0	1.0	1.0	1.8	2.0	2.0
D60-6458	2.5	1.5	1.0	1.5	2.0	2.0
D60-6499	3.5	1.0	1.0	1.3	2.0	2.0
D60-9647	3.5	3.5	1.5	2.5	2.0	2.0
D60-10,998	4.0	2.5	1.5	1.8	2.0	2.0
D60-11,082	4.0	1.5	1.5	1.3	2.0	2.0
D60-11,215	3.5	2.0	2.0	2.0	2.0	2.0
D60-11,321	3.5	2.0	2.0	1.5	2.5	2.5
N60-6022	4.0	2.0	1.5	1.3	2.0	2.0
N60-6045	3.0	2.0	1.5	1.3	2.5	2.0
N60-6056	3.5	2.0	1.5	1.3	3.0	2.0
N60-6081	3.5	2.5	1.5	1.3	3.0	2.0
N60-6102	3.5	1.5	1.0	1.3	2.5	2.0
N60-6140	4.0	1.5	1.5	1.0	2.5	2.0
N60-6170	4.0	2.5	2.0	2.0	3.0	2.0
N60-6261	4.5	2.0	1.5	1.3	1.5	2.0
N60-6407	4.0	1.5	1.0	1.3	2.5	2.0
N60-6501	4.5	2.0	1.5	1.5	3.0	2.0
UD1077-3-1	3.0	1.5	1.5	1.5	2.5	2.0
UD1077-3-3	3.0	1.5	1.0	1.5	2.5	2.0
R54-171-1	2.0	1.0	1.0	1.5	2.0	2.0
R60-79	3.5	2.5	1.5	1.3	2.0	2.0
R60-349	2.0	2.0	1.0	1.3	2.0	2.0
R60-964	4.5	1.0	1.5	1.3	2.0	2.0
S58-6006	2.0	2.0	1.5	1.3	2.0	2.0
S58-6009	3.0	2.0	1.0	1.8	2.0	2.0
S58-6078	3.0	2.5	1.0	1.5	2.0	2.0
S58-6112	3.0	1.5	1.0	1.5	2.0	2.0
S58-6122	3.5	2.0	1.5	1.5	1.5	2.0
S58-6133	3.0	2.0	1.5	1.5	2.0	2.0

UNIFORM GROUP VII

1962

	Variety or Strain	Parentage	Generation Composited
1.	Jackson	Volstate(2) x Palmetto	F_4
2.	Lee	S-100 x CNS	F_6
3.	F55-822	Jackson x D49-2491	F_4
4.	F55-822A	Composite of selected lines F55-822	
5.	F58-3786	Selection F55-822	F_6
6.	D57-1299	Roanoke x D49-2491	F_6
7.	N57-6801	Jackson x D49-2491	F_5
8.	D58-4300	D51-5052 x D49-2491	F_5
9.	Ga58-33	D49-588 x N51-1956	
10.	D57-1501	Jackson x D49-2491	F_6
11.	FWH57-1	Jackson x Lee	
12.	N58-5850	N51-1971 x D49-2491	F_5

Background of strains used as parents:

D49-2491 is a sister strain to Lee selected from S-100 x CNS.

D51-5052 is a selection from Roanoke x N45-745 which was included in Uniform Group VII for the years 1953-1956.

D49-588 is a selection from Roanoke x N45-745 which was included in the Uniform Group VII for the years 1952-1953.

N51-1956 is a selection from N47-3545, a high oil selection from Volstate (2) x Palmetto.

N51-1971 is a selection from Roanoke x Ogden which was included in Uniform Group VI for the years 1954-1956.

Thirty Uniform Group VII nurseries were planted. Results from 26 nurseries are summarized in table 36 through 42. In addition to 1962 data, two- and three-year data for seed yield and oil and protein percentages are summarized in table 26. Differences among strains for seed yield were significant in only 9 of the 26 comparisons.

The strain F55-822 continued to produce well. For the 4-year period 1959-1962, F55-822 had a 4-year average in the Southeast 11 percent above that for Jackson. It has also produced well in other production areas. F55-822 is slightly taller than Jackson and equals Lee in seed holding. Because of slight variability within F55-822, the subline F58-3786 and the composite of selected lines, F55-822A, were also grown in 1962. F58-3786 appeared to be equal in all respects to its parent line. It was the only line to have a seed yield significantly above Jackson in the Southeast. Two other composites of F55-822 were included in Preliminary Group VII and ranked fourth and fifth for seed yield.

The two strains D57-1299 and N57-6801 have been grown three years. Both strains have yielded well in all areas but have not produced as well as F55-822 in the Southeast where a strain of this maturity is most needed. N57-6801 has shown considerable killing from phytophthora rot on the Sharkey clay at Stoneville. It also showed considerable purple seed stain at Jay.

D58-4300 and Ga58-33 have been grown two years. D58-4300 has given good seed yields in all areas while Ga58-33 has produced best in the East and Southeast. Of the strains tested one year, FWH57-1 showed severe killing from phytophthora rot on the clay at Stoneville.

In 1961, the length of growing season for Jackson ranged from 118 days to 176 days. In 1962, Clayton again had the longest season with 174 days and Tifton had the shortest season with 123 days. The yield of Jackson at Clayton was 10.5 bushels. At Fairhope, with a season of 127 days, Jackson yielded 41.4 bushels.

Table 36. - General summary of performance for the strains in Uniform Group VII, 1962

	Jackson	Lee	F55-822	F55-822A	F58-3786	D57-1299
Seed Yield - 1962						
East Coast	38.5	42.6	40.1	40.9	41.6	44.9
Southeast	32.5	29.1	34.6	35.3	36.3+	34.5
Upper & Central South	26.3	25.7	29.7	27.1	30.8	28.8
Delta	44.9	47.0	49.5	45.5	47.9	49.9
West	42.2	44.8	47.6	44.7	44.6	44.0
- 1961-62						
East Coast	31.5	36.0	35.3	--	--	37.2
Southeast	33.2	32.2	37.0	--	--	35.6
Upper & Central South	33.3	34.9	36.9	--	--	36.7
Delta	43.0	45.5	46.4	--	--	48.0
West	41.3	43.5	44.1	--	--	42.8
- 1960-62						
East Coast	35.1	38.1	38.7	--	--	39.9
Southeast	33.6	33.2	38.2	--	--	35.8
Upper & Central South	34.3	34.2	36.1	--	--	35.3
Delta	42.8	45.6	46.0	--	--	47.7
West	40.4	42.4	42.2	--	--	41.3
Oil Percentage - 1962	22.3	21.7-	22.2	22.6	22.0	21.8-
- 1961-62	21.9	21.6	21.8	--	--	21.5
- 1960-62	22.0	21.6	21.9	--	--	21.6
Protein Percentage - 1962	39.1	41.1+	40.1+	39.0	40.2+	39.0
- 1961-62	39.3	41.3	40.3	--	--	39.7
- 1960-62	39.4	41.5	40.5	--	--	40.0
Seed Size	16.9	14.7-	16.7	16.7	16.5	15.1-
Maturity Index	10-28	-8	-2	-2	-4	-5
Height	37	27	38	40	38	28
Shattering 1/	2.2	1.0	1.0	1.0	1.0	1.6
Bacterial Pustule	2.5	1.0	1.0	1.0	1.0	1.0
Target Spot 2/	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain 3/	2.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot 2/	2.0	1.0	1.5	1.5	1.5	1.0

1/ Average of scores for 9 locations.
2/ Stoneville data.
3/ Jay data.

Table 36. - (continued)

	N57-6801	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850
Seed Yield - 1962						
East Coast	40.3	43.7	41.2	42.0	43.5	41.3
Southeast	33.7	33.8	34.7	34.8	33.6	31.7
Upper & Central South	28.8	30.6	26.2	26.3	27.6	31.2
Delta	48.8	47.5	46.7	50.2	40.8	45.4
West	45.1	42.9	44.5	44.6	45.5	49.3
- 1961-62						
East Coast	36.7	36.0	36.5			
Southeast	35.6	37.0	37.0			
Upper & Central South	35.8	35.9	33.5			
Delta	48.0	47.2	43.7			
West	43.5	42.7	42.7			
- 1960-62						
East Coast	39.7					
Southeast	35.5					
Upper & Central South	35.3					
Delta	46.9					
West	42.1					
Oil Percentage - 1962	22.8+	22.2	22.2	22.1	21.4-	22.6
- 1961-62	22.7	21.8	21.9			
- 1960-62	22.8					
Protein Percentage - 1962	39.0	38.4-	39.1	39.4	40.1+	40.3+
- 1961-62	39.1	38.7	39.4			
- 1960-62	39.2					
Seed Size	15.0-	14.5-	18.7+	14.5-	14.5-	16.0
Maturity Index	-5	-3	+3	-5	0	0
Height	36	36	42	32	39	33
Shattering	1.3	1.8	1.5	1.0	1.0	1.3
Bacterial Pustule	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain	3.0	1.0	1.0	2.0	1.0	1.0
Phytophthora Rot	4.0	1.0	2.0	1.5	5.0	1.0

Table 37. - Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1962

Location	Jackson	Lee	F55-822	F55-822A	F58-3786	D57-1299	N57-6801
			East Coast				
Rocky Mount, N. C.	27.5	27.8	28.8	22.4	26.3	30.9	31.5
Clayton, N. C.1/	10.5	20.4+	10.3	10.8	10.2	21.6+	12.0
Willard, N. C.	42.2	44.5	43.6	50.1	43.7	51.2	45.0
Florence, S. C.(A)	40.6	54.0+	46.4	50.1+	49.8+	52.0+	42.0
Florence, S. C.(B)	43.6	47.9	43.9	42.5	42.7	47.5	45.5
Hartsville, S. C.	38.6	38.9	37.9	39.4	45.4	43.0	37.6
Mean	38.5	42.6	40.1	40.9	41.6	44.9	40.3
			Southeast				
Blackville, S. C.	25.1	21.8	22.9	25.2	26.7	25.9	21.1
Tallassee, Ala.1/	27.2	23.8	41.1	32.9	43.6	31.1	31.1
Tifton, Ga.	25.4	30.8	29.8	28.9	27.3	31.2	28.0
Gainesville, Fla.	40.8	22.1-	44.1	43.6	44.0	33.1-	44.5
Zellwood, Fla.1/	12.8	34.7	19.2	31.8	28.7	20.0	25.8
Live Oak, Fla.	12.1	14.1	27.2+	32.5+	28.7+	22.2+	27.1+
Marianna, Fla.	44.0	43.4	43.8	45.6	46.9	51.0	51.1
Quincy, Fla.	38.5	35.9	35.5	36.6	39.9	40.2	33.8-
Jay, Fla.	39.2	34.9	36.3	39.2	36.3	39.4	33.4
Fairhope, Ala.	41.4	34.8	42.5	44.2	46.0	40.2	39.1
Baton Rouge, La.	26.2	24.5	29.2	21.5	30.5	27.1	25.4
Mean	32.5	29.1	34.6	35.3	36.3+	34.5	33.7
			Upper and Central South				
Clemson, S. C.	21.4	22.3	23.3	22.7	24.8	24.5	23.9
Experiment, Ga.	21.5	22.3	29.4	31.1	37.8	29.8	29.2
State College, Miss.	36.0	32.6	36.5	27.5	29.8	32.1	33.2
Mean	26.3	25.7	29.7	27.1	30.8	28.8	28.8
			Delta				
Stoneville, Miss.(A)	47.6	48.3	52.1	48.6	49.4	49.1	55.2
Stoneville, Miss.(B)	36.7	38.6	47.1+	40.5	42.9+	48.6+	39.9
St. Joseph, La.	50.5	54.1	49.4	47.4	51.4	51.9	51.3
Mean	44.9	47.0	49.5	45.5	47.9	49.9	48.8
			West				
Stuttgart, Ark.	42.7	46.2	47.4	46.4	45.3	45.1	44.8
Curtis, La.	42.7	36.1-	48.4	45.4	48.7+	37.8	44.9
College Station, Texas	41.2	52.1	47.1	42.3	39.9	49.0	45.5
Mean	42.2	44.8	47.6	44.7	44.6	44.0	45.1

1/ Not included in combined analysis.
(+) - Strains yielding significantly more (odds 19:1 or greater) than Jackson.
(-) - Strains yielding significantly less (odds 19:1 or greater) than Jackson.

Table 37. - (continued)

Location	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850	L.S.D. (.05)	C.V.
			East Coast				
Rocky Mount, N. C.	24.3	19.5-	28.6	29.3	25.5	6.3	14%
Clayton, N. C.1/	18.8+	13.9	18.2+	16.0+	14.2	5.2	21%
Willard, N. C.	47.8	47.8	50.9	51.9	46.0	N.S.	10%
Florence, S. C.(A)	54.3+	47.6	43.8	51.4+	47.7	8.1	10%
Florence, S. C.(B)	50.6	45.8	44.4	46.0	47.4	N.S.	6%
Hartsville, S. C.	41.5	45.3	42.2	38.9	40.1	N.S.	13%
Mean	43.7	41.2	42.0	43.5	41.3	N.S.	
			Southeast				
Blackville, S. C.	26.1	24.2	22.0	26.9	20.0	N.S.	11%
Tallassee, Ala.1/	25.9	29.5	39.5	26.8	38.3	N.S.	29%
Tifton, Ga.	32.3	30.3	30.5	27.4	29.7	N.S.	9%
Gainesville, Fla.	41.1	40.9	43.3	39.8	43.7	6.8	10%
Zellwood, Fla.1/	22.2	28.7	32.0	29.2	27.3	N.S.	36%
Live Oak, Fla.	21.8+	30.2+	27.2+	24.7+	17.4+	5.1	13%
Marianna, Fla.	43.8	41.8	47.7	42.2	43.7	N.S.	9%
Quincy, Fla.	35.8	34.9	40.5	33.6-	39.4	4.0	6%
Jay, Fla.	39.6	35.1	40.1	38.0	31.8	N.S.	11%
Fairhope, Ala.	43.3	42.6	38.9	41.6	39.9	N.S.	9%
Baton Rouge, La.	20.2	31.8	22.8	28.0	20.2	7.6	17%
Mean	33.8	34.7	34.8	33.6	31.7	3.5	
			Upper and Central South				
Clemson, S. C.	23.2	24.4	25.7	24.8	24.9	N.S.	8%
Experiment, Ga.	34.3	20.9	19.2	24.9	34.4	N.S.	26%
State College, Miss.	34.4	33.3	34.2	33.1	34.3	N.S.	15%
Mean	30.6	26.2	26.3	27.6	31.2	N.S.	
			Delta				
Stoneville, Miss.(A)	47.8	50.5	54.6	50.8	47.7	N.S.	9%
Stoneville, Miss.(B)	44.9+	34.8	45.7+	17.5-	36.6	6.8	8%
St. Joseph, La.	49.8	54.9	50.2	54.0	51.8	N.S.	6%
Mean	47.5	46.7	50.2	40.8	45.4	N.S.	
			West				
Stuttgart, Ark.	45.8	46.5	42.8	46.6	51.3	N.S.	7%
Curtis, La.	41.7	40.4	43.1	44.1	49.3+	5.9	8%
College Station, Texas	41.3	46.5	48.0	45.9	47.2	N.S.	12%
Mean	42.9	44.5	44.6	45.5	49.3	N.S.	

Table 38. - Chemical composition and seed size for the strains in Uniform Group VII, 1962

Location	Jackson	Lee	F55-822	F55-822A	F58-3786	D57-1299
			Oil Percentage			
Willard, N. C.	22.1	20.7	21.3	22.0	21.3	21.3
Hartsville, S. C.	21.5	21.6	21.3	22.0	21.6	21.8
Blackville, S. C.	21.5	21.0	21.0	21.4	21.0	21.7
Gainesville, Fla.	23.3	22.2	23.2	24.1	22.8	21.0
Jay, Fla.	23.6	22.7	23.6	24.2	23.6	22.8
Experiment, Ga.	21.8	21.5	22.5	22.7	22.0	22.2
Stoneville, Miss.(A)	22.5	21.7	22.3	22.5	22.5	21.5
St. Joseph, La.	22.1	21.8	22.1	22.2	21.5	22.1
Mean	22.3	21.7-	22.2	22.6	22.0	21.8-
			Protein Percentage			
Willard, N. C.	40.9	41.7	41.8	40.4	42.1	40.2
Hartsville, S. C.	38.7	40.0	39.5	38.5	38.9	37.5
Blackville, S. C.	40.6	42.0	41.5	40.2	42.2	39.4
Gainesville, Fla.	38.8	43.0	41.1	39.4	41.1	39.6
Jay, Fla.	36.5	39.6	37.4	36.2	37.9	37.5
Experiment, Ga.	38.7	38.8	38.4	37.3	38.4	37.6
Stoneville, Miss.(A)	39.1	41.5	40.0	40.2	40.7	40.0
St. Joseph, La.	39.3	41.8	40.9	39.4	40.2	40.1
Mean	39.1	41.1+	40.1+	39.0	40.2+	39.0
			Grams per 100 Seeds			
Willard, N. C.	17.0	12.8	16.0	16.2	15.8	13.8
Hartsville, S. C.	18.0	16.0	18.3	17.0	17.3	15.7
Blackville, S. C.	18.9	13.3	18.0	19.6	18.1	16.3
Gainesville, Fla.	15.3	12.9	16.2	15.9	16.2	13.1
Jay, Fla.	16.9	16.5	16.4	17.7	15.7	15.7
Experiment, Ga.	19.2	16.4	18.6	18.2	17.2	16.9
Stoneville, Miss.(A)	15.6	14.8	14.8	14.3	16.8	15.0
St. Joseph, La.	14.3	14.5	15.3	14.3	14.5	14.0
Mean	16.9	14.7-	16.7	16.7	16.5	15.1-

Table 38. - (continued)

Location	N57-6801	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850	L.S.D. (.05)
			Oil Percentage				
Willard, N. C.	22.5	20.6	22.2	21.8	20.6	21.7	
Hartsville, S. C.	22.8	23.3	22.3	21.6	21.7	22.4	
Blackville, S. C.	21.3	21.0	20.8	20.7	20.4	21.1	
Gainesville, Fla.	22.8	24.0	23.5	23.1	22.3	23.9	
Jay, Fla.	23.9	22.8	23.5	23.4	22.5	24.2	
Experiment, Ga.	22.8	21.7	21.0	21.8	21.8	21.8	
Stoneville, Miss.(A)	23.5	21.8	22.1	22.1	20.9	22.3	
St. Joseph, La.	23.0	22.7	22.5	22.1	21.1	23.4	
Mean	22.8+	22.2	22.2	22.1	21.4-	22.6	0.5
			Protein Percentage				
Willard, N. C.	40.2	39.9	39.8	40.6	42.3	41.8	
Hartsville, S. C.	37.7	37.4	37.8	38.3	39.0	39.1	
Blackville, S. C.	41.0	39.4	39.8	41.3	41.9	41.4	
Gainesville, Fla.	40.4	38.4	40.2	40.2	40.6	41.1	
Jay, Fla.	37.2	36.7	38.5	36.7	38.2	38.5	
Experiment, Ga.	36.9	38.6	39.3	38.9	37.5	40.3	
Stoneville, Miss.(A)	38.9	38.6	38.2	40.2	40.5	40.4	
St. Joseph, La.	39.3	38.5	38.9	39.0	40.7	39.9	
Mean	39.0	38.4-	39.1	39.4	40.1+	40.3+	0.6
			Grams per 100 Seeds				
Willard, N. C.	15.2	14.0	19.5	13.7	15.0	15.8	
Hartsville, S. C.	17.0	14.3	18.7	15.3	15.3	15.7	
Blackville, S. C.	14.6	17.8	22.2	14.7	16.7	16.8	
Gainesville, Fla.	14.5	14.0	17.8	14.3	13.5	15.9	
Jay, Fla.	15.5	14.3	17.7	15.0	15.9	15.4	
Experiment, Ga.	15.0	16.3	18.9	14.5	14.1	16.9	
Stoneville, Miss.(A)	14.6	13.1	17.9	14.6	13.5	16.2	
St. Joseph, La.	13.3	12.5	16.5	13.5	12.3	15.3	
Mean	15.0-	14.5-	18.7+	14.5-	14.5-	16.0	1.0

Table 39. - Relative maturity data, days earlier (-) or later (+) than Jackson, for the strains in Uniform Group VII, 1962

Location	Date Planted	Jackson Matured	Lee	F55-822	F55-822A	F58-3786
		East Coast				
Rocky Mount, N. C.	5-16	10-25	-8	-1	+1	-1
Clayton, N. C.	5-7	10-25	-5	+1	+1	-6
Willard, N. C.	5-17	10-25	-10	-3	-1	-5
Florence, S. C.(A)	5-15	11-10	-15	0	0	-4
Florence, S. C.(B)	6-21	11-6	-11	0	0	-5
Hartsville, S. C.	5-29	10-30	-6	-2	-1	-2
Mean		10-31	-9	0	0	-4
		Southeast				
Blackville, S. C.	5-25	11-5	-16	-3	-3	-5
Tallassee, Ala.	6-13	10-28	-9	0	0	0
Tifton, Ga.	6-15	10-18	0	0	0	0
Gainesville, Fla.	6-1	10-20	-12	-5	-3	-5
Marianna, Fla.	6-13	10-24	-9	-6	-4	-7
Quincy, Fla.	5-4	10-22	-6	-4	-2	-4
Jay, Fla.	6-6	10-15	-8	-2	-1	-6
Fairhope, Ala.	6-18	10-23	-8	-8	-8	-8
Baton Rouge, La.	6-5	10-27	-10	-4	-9	-11
Mean		10-24	-9	-4	-3	-5
		Upper and Central South				
Clemson, S. C.	6-21	11-9	-7	-2	+1	-4
Experiment, Ga.	6-1	10-31	-11	-3	-4	-3
State College, Miss.	5-7	10-28	-14	-2	-2	-7
Mean		11-2	-11	-2	-2	-5
		Delta				
Stoneville, Miss.(A)	5-15	10-26	-7	-3	-1	-3
Stoneville, Miss.(B)	5-9	10-24	-7	-5	-5	-6
St. Joseph, La.	5-17	10-28	-3	-3	-8	-8
Mean		10-26	-6	-4	-5	-6
		West				
Stuttgart, Ark.	5-18	10-30	-4	-1	+1	-3
Curtis, La.	5-10	11-5	-2	+6	-4	-4
College Station, Texas	6-8	10-25	-2	+2	+2	+4
Mean		10-30	-3	+2	0	0

Table 39. - (continued)

Location	N57-1299	N57-6801	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850
			East Coast				
Rocky Mount, N. C.	-5	-6	-4	-4	-10	+2	-2
Clayton, N. C.	-5	-12	-2	-2	-13	+3	0
Willard, N. C.	-9	-9	-4	0	-9	0	-3
Florence, S. C.(A)	-4	-4	0	0	0	-4	0
Florence, S. C.(B)	-5	-5	-5	0	-5	0	0
Hartsville, S. C.	-4	-3	-4	+1	-4	-2	0
Mean	-5	-7	-3	0	-7	0	0
			Southeast				
Blackville, S. C.	-5	-5	-3	+2	-8	-5	-3
Tallassee, Ala.	-4	0	0	0	0	0	0
Tifton, Ga.	0	+1	0	+5	+1	+6	0
Gainesville, Fla.	-9	-8	-4	-1	-7	-1	-4
Marianna, Fla.	-10	-6	-3	+7	-6	0	-2
Quincy, Fla.	-6	-8	-2	+4	-5	-2	+4
Jay, Fla.	-4	-8	-1	0	-5	0	-1
Fairhope, Ala.	-8	-3	-8	+8	-8	0	0
Baton Rouge, La.	-7	-8	-4	+9	-7	+5	+10
Mean	-6	-5	-3	+4	-5	0	0
			Upper and Central South				
Clemson, S. C.	0	-6	+1	-1	-2	0	-1
Experiment, Ga.	-6	-2	-6	-1	-8	-4	-5
State College, Miss.	-7	-7	-3	+13	-4	-1	-4
Mean	-4	-5	-3	+4	-5	-2	-3
			Delta				
Stoneville, Miss.(A)	-3	-3	-2	+4	-3	+3	+1
Stoneville, Miss.(B)	-6	-6	-6	+2	-8	+1	+1
St. Joseph, La.	-10	-4	-3	+10	-4	+8	+10
Mean	-6	-4	-4	+5	-5	+4	+4
			West				
Stuttgart, Ark.	-4	-2	-2	+5	-5	+1	+6
Curtis, La.	-2	-4	-11	+2	-4	0	0
College Station, Texas	0	0	0	+10	+2	+5	+6
Mean	-2	-2	-4	+6	-2	+2	+4

Table 40. - Plant height for the strains in Uniform Group VII, 1962

Location	Jackson	Lee	F55-822	F55-822A	F58-3786	D57-1299
			East Coast			
Rocky Mount, N. C.	51	36	49	53	49	38
Clayton, N. C.	42	37	41	43	44	36
Willard, N. C.	44	36	46	49	48	36
Florence, S. C.(A)	36	28	40	40	34	22
Florence, S. C.(B)	40	30	40	42	40	34
Hartsville, S. C.	35	26	34	34	37	28
Mean	41	32	42	44	42	32
			Southeast			
Blackville, S. C.	40	24	36	41	41	29
Tallassee, Ala.	37	29	38	42	39	33
Tifton, Ga.	24	21	26	29	25	21
Gainesville, Fla.	39	26	39	43	40	23
Zellwood, Fla.	19	23	24	29	22	18
Live Oak, Fla.	24	19	28	29	28	19
Marianna, Fla.	41	32	42	43	43	37
Quincy, Fla.	33	23	36	40	35	26
Jay, Fla.	39	24	38	40	39	26
Fairhope, Ala.	30	22	32	35	32	22
Baton Rouge, La.	29	30	28	26	30	21
Mean	32	25	33	36	34	25
			Upper and Central South			
Clemson, S. C.	29	27	33	33	32	27
Experiment, Ga.	35	27	35	33	38	27
State College, Miss.	41	27	36	38	36	30
Mean	35	27	35	35	35	28
			Delta			
Stoneville, Miss.(A)	48	31	46	50	48	34
Stoneville, Miss.(B)	40	21	42	45	41	26
St. Joseph, La.	50	32	46	50	46	35
Mean	46	28	45	48	45	32
			West			
Stuttgart, Ark.	49	30	47	50	47	29
Curtis, La.	40	22	50	50	38	21
College Station, Texas	29	26	31	33	31	27
Mean	39	26	43	44	39	26

Table 40. - (continued)

Location	N57-6801	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850
			East Coast			
Rocky Mount, N. C.	46	44	53	42	46	44
Clayton, N. C.	43	36	43	39	40	37
Willard, N. C.	45	45	49	44	49	39
Florence, S. C.(A)	34	36	42	28	30	35
Florence, S.C.(B)	40	38	42	36	38	38
Hartsville, S. C.	29	34	42	33	38	33
Mean	40	39	45	37	40	38
			Southeast			
Blackville, S. C.	40	38	47	31	41	35
Tallassee, Ala.	37	38	37	35	41	36
Tifton, Ga.	26	27	29	21	27	19
Gainesville, Fla.	36	41	40	32	45	33
Zellwood, Fla.	26	25	25	25	33	25
Live Oak, Fla.	27	23	29	21	28	20
Marianna, Fla.	41	42	43	38	44	40
Quincy, Fla.	35	37	37	29	42	32
Jay, Fla.	36	36	41	31	41	34
Fairhope, Ala.	34	35	34	28	34	30
Bton Rouge, La.	25	25	32	21	30	21
Mean	33	33	36	28	37	30
			Upper and Central South			
Clemson, S. C.	31	31	35	24	30	28
Experiment, Ga.	38	35	39	25	33	32
State College, Miss.	36	37	55	28	42	28
Mean	35	34	43	26	35	29
			Delta			
Stoneville, Miss.(A)	45	45	49	44	50	41
Stoneville,Miss. (B)	37	41	52	37	39	37
St. Joseph, La.	40	44	58	38	52	44
Mean	41	43	53	40	47	41
			West			
Stuttgart, Ark.	46	43	54	45	49	45
Curtis, La.	34	38	52	32	45	34
College Station, Texas	31	31	34	27	30	29
Mean	37	37	47	35	41	36

Table 41. - Lodging scores for the strains in Uniform Group VII, 1962

Location	Jackson	Lee	F55-822	F55-822A	F58-3786	D57-1299
			East Coast			
Rocky Mount, N. C.	3.0	3.5	3.2	3.2	3.3	3.7
Clayton, N. C.	2.7	3.3	3.7	3.3	4.0	4.0
Willard, N. C.	3.0	2.7	3.2	3.0	3.2	2.3
Florence, S. C.(A)	1.0	1.0	1.0	1.0	1.0	1.0
Florence, S. C.(B)	1.0	1.0	2.0	1.0	1.0	1.0
Hartsville, S. C.	1.0	1.0	1.3	1.0	1.0	1.0
			Southeast			
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.7	1.0	1.7	2.0	2.0	1.0
Zellwood, Fla.	1.3	1.7	3.7	2.7	3.7	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	2.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	1.0	1.3	2.0	2.0	1.5	1.0
Experiment, Ga.	1.0	1.3	1.3	1.3	1.7	1.0
State College, Miss.	1.0	1.0	1.0	1.0	2.0	2.0
			Delta			
Stoneville, Miss.(A)	3.0	3.0	3.3	4.0	4.0	3.0
Stoneville, Miss.(B)	2.0	2.0	3.0	3.3	2.3	1.7
St. Joseph, La.	3.0	2.0	3.0	3.0	3.0	2.0
			West			
Stuttgart, Ark.	4.0	4.3	4.0	4.0	4.0	3.0
Curtis, La.	3.0	1.0	3.0	3.0	2.0	1.0
College Station, Texas	1.0	1.0	2.0	2.0	2.0	1.0

Table 41. - (continued)

Location	N57-6801	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850
			East Coast			
Rocky Mount, N. C.	3.0	3.5	3.7	2.7	4.0	3.2
Clayton, N. C.	3.7	4.0	3.7	3.0	4.0	4.0
Willard, N. C.	2.0	3.0	3.5	2.0	3.7	3.0
Florence, S. C.(A)	1.0	1.0	2.0	1.0	1.0	1.0
Florence, S. C.(B)	2.0	2.0	2.0	1.0	2.0	2.0
Hartsville, S. C.	1.0	1.3	2.0	1.0	1.0	1.6
			Southeast			
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.3	1.0	2.0	1.0	2.0	1.0
Zellwood, Fla.	1.3	1.3	3.3	1.7	2.3	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	1.0	1.8	3.0	1.0	1.5	1.0
Experiment, Ga.	1.3	1.3	1.3	1.0	1.3	1.3
State College, Miss.	1.0	1.0	3.0	1.0	2.0	2.0
			Delta			
Stoneville, Miss.(A)	3.0	2.3	4.0	2.3	4.0	4.3
Stoneville, Miss.(B)	2.0	2.0	4.3	2.0	3.7	3.3
St. Joseph, La.	2.0	2.0	3.0	2.0	3.0	3.0
			West			
Stuttgart, Ark.	3.3	3.0	4.0	2.3	4.0	3.7
Curtis, La.	2.0	2.0	3.0	1.0	4.0	2.0
College Station, Texas	2.0	1.0	4.0	1.0	2.0	1.0

Table 42. - Seed quality scores for the strains in Uniform Group VII, 1962

Location	Jackson	Lee	F55-822	F55-822A	F58-3786	F57-1299
			East Coast			
Rocky Mount, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
Clayton, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
Willard, N. C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S. C.	2.0	1.5	1.5	2.5	1.7	1.3
			Southeast			
Blackville, S. C.	1.0	1.7	2.3	2.3	2.3	1.0
Tallassee, Ala.	2.0	2.0	3.0	3.0	2.0	2.0
Tifton, Ga.	2.0	3.0	3.0	3.0	2.0	2.0
Gainesville, Fla.	1.0	1.3	1.3	1.3	1.0	1.0
Zellwood, Fla.	2.3	2.0	2.7	1.0	2.0	2.0
Live Oak, Fla.	2.0	2.3	2.0	1.3	1.3	1.3
Quincy, Fla.	2.0	2.0	3.0	2.0	2.0	2.0
Jay, Fla.	1.0	1.0	2.0	2.0	1.0	1.0
Fairhope, Ala.	2.7	2.0	2.0	2.3	2.0	1.3
Baton Rouge, La.	3.0	2.0	3.0	2.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	2.0	2.0	2.5	2.5	2.0	1.5
Experiment, Ga.	1.3	1.0	1.0	1.0	1.0	1.0
State College, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
			Delta			
Stoneville, Miss.(A)	2.0	1.7	2.0	1.3	2.0	2.0
Stoneville, Miss.(B)	2.0	1.7	2.0	2.0	2.0	2.0
St. Joseph, La.	2.0	2.0	2.0	1.0	1.0	1.0
			West			
Stuttgart, Ark.	2.0	2.3	2.7	2.3	2.3	2.3
College Station, Texas	2.5	1.5	2.0	2.0	2.0	1.5

Table 42. - (continued)

Location	N57-6801	D58-4300	Ga58-33	D57-1501	FWH57-1	N58-5850
			East Coast			
Rocky Mount, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
Clayton, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
Willard, N. C.	1.0	1.5	1.0	1.0	1.0	1.0
Hartsville, S. C.	2.7	1.5	3.0	1.3	1.3	1.0
			Southeast			
Blackville, S. C.	2.7	1.3	1.7	1.0	1.0	1.0
Tallassee, Ala.	3.0	2.0	3.0	2.0	2.0	1.0
Tifton, Ga.	3.0	2.0	4.0	3.0	2.0	2.0
Gainesville, Fla.	1.0	1.3	2.0	1.0	1.3	1.7
Zellwood, Fla.	2.7	3.0	2.3	2.0	1.0	1.3
Live Oak, Fla.	2.0	1.0	2.0	1.0	1.0	2.3
Quincy, Fla.	3.0	2.0	3.0	2.0	2.0	2.0
Jay, Fla.	2.0	2.0	1.0	1.0	2.0	2.0
Fairhope, Ala.	2.0	1.7	3.0	2.7	2.0	2.0
Baton Rouge, La.	2.0	1.0	3.0	3.0	2.0	1.0
			Upper and Central South			
Clemson, S. C.	2.0	2.0	2.5	2.0	1.5	2.5
Experiment, Ga.	1.0	1.0	1.7	1.0	1.3	1.0
State College, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
			Delta			
Stoneville, Miss.(A)	2.0	2.0	2.0	1.7	2.0	2.0
Stoneville, Miss.(B)	2.0	2.3	2.7	1.7	2.3	2.3
St. Joseph, La.	1.0	2.0	2.0	1.0	1.0	2.0
			West			
Stuttgart, Ark.	2.3	2.0	3.0	1.7	2.7	2.0
College Station, Texas	2.0	1.5	1.5	1.5	2.0	1.5

PRELIMINARY GROUP VII

1962

Eight Preliminary Group VII nurseries were planted. The parentage for the strains included is given in table 43. The results from seven nurseries are summarized in table 45 through 49.

The combined analysis for seed yield showed four strains to have mean seed yields significantly higher than Jackson. Three of these four strains were selection from the cross Jackson x D49-2491. The two composites of sub-lines from F55-822 ranked fourth and fifth for seed yield. There were six lines yielding significantly less than Jackson.

The two lines D59-6923 and D59-6930 were selected for differences in flowering date. D59-6923, the later flowering strain, was taller at all locations. It also averaged later in maturity but the difference in maturity was less than the difference in flowering date. The important point is that with a determinate growth type, there is a close association between time of beginning flowering and plant height.

Three of the lines tested were selected for high protein content. D60-8107 appears equal to Jackson in productivity and has high protein content. D60-7965, the line with the highest protein percentage, was somewhat below Jackson in yield at most of the locations.

The line D60-12,327 yielded about the same as Jackson and Lee in these plantings. This line has been selected for an immune reaction to phytophthora rot and for good performance on clay. It is of interest that it yielded as well as it did at these locations.

The three lines D60-9183, F60-1952, and F60-1971 were developed from backcrossing programs where the primary selection was for later maturity. All were later and taller than Lee but did not surpass Lee in seed yield.

Of the ten North Carolina selections, nine averaged earlier than Lee and should have been tested in Preliminary Group VI. The two strains N60-6014 and N60-6184 were segregating for flower color. Ga59-841 was segregating for pubescence color.

Ten of the 12 lines ranking highest in yield on the basis of the mean for all locations were selections from the cross Jackson x D49-2491.

Table 43. Parentage of strains in Preliminary Group VII, 1962

	Strain	Parentage	Generation Composited
1.	Jackson		
2.	Lee		
3.	D58-4741	D51-5052 x D49-2491	F_5
4.	D58-10,054	D49-2491 x (D51-5052 x PI 171,438)	F_5
5.	D59-6923	Jackson(3) x D49-2491	F_4
6.	D59-6930	Jackson(3) x D49-2491	F_4
7.	D59-9041	D49-2491(4) x PI 174,862	F_4
8.	D60-7965	D55-4090 x D55-4159	F_5
9.	D60-8107	D51-4877 x D55-4168	F_5
10.	D60-8498	D51-4877 x D55-4168	F_5
11.	D60-9183	D49-2491(4) x Barchet	F_4
12.	D60-12,327	D51-5427 x D49-2491	F_6
13.	F55-822-2	Jackson x D49-2491	
14.	F55-822-3	Jackson x D49-2491	
15.	F58-3810	Jackson x D49-2491	F_7
16.	F59-1273	Jackson x D49-2491	F_5
17.	F59-1349	Jackson x D49-2491	F_5
18.	F59-1362	Jackson x D49-2491	F_5
19.	F59-1505	Jackson x D49-2491	F_5
20.	F59-1841	D51-5091 x Jackson	F_5
21.	F59-1851	D51-5091 x Jackson	F_5
22.	F60-1952	D49-2491(3) x Biloxi	F_4
23.	F60-1971	D49-2491(3) x Biloxi	F_4
24.	Ga59-781	Jackson x D49-2491	F_7
25.	Ga59-841	Jackson x D49-2491	F_7
26.	Ga59-895	Jackson x D49-2491	F_7
27.	N60-6014	Hill x D49-2491	F_5
28.	N60-6184	Hill x D49-2491	F_5
29.	N60-6223	Hill x D49-2491	F_5
30.	N60-6237	Hill x D49-2491	F_5
31.	N60-6252	Hill x D49-2491	F_5
32.	N60-6328	Hill x D49-2491	F_5
33.	N60-6343	Hill x D49-2491	F_5
34.	N60-6358	Hill x D49-2491	F_5
35.	N60-6361	Hill x D49-2491	F_5
36.	N60-6423	Hill x D49-2491	F_5

Table 44. - General summary of performance for the strains in Preliminary Group VII, 1962

Strain	Seed Yield	Maturity Index	Ht.	Percent Oil	Percent Protein	Bact. Pustule[1]	Phytophthora[1]	Shattering[2]
Jackson	35.8	10-25	39	22.4	39.3	3.0	2.0	2.3
Lee	36.7	-9	29	21.6-	41.4+	1.0	1.0	1.3
D58-4741	36.0	-4	35	21.5-	40.4+	1.0	1.0	2.2
D58-10,054	32.4-	+2	36	20.7-	40.6+	1.0	1.0	4.0
D59-6923	37.1	0	42	21.7-	39.4	1.0	1.0	2.0
D59-6930	34.6	-6	33	21.7-	38.9	1.0	1.0	2.1
D59-9041	33.0	-6	52	18.9-	43.4+	1.0	2.0	1.3
D60-7965	31.1-	-1	41	18.1-	48.2+	1.0	1.0	2.0
D60-8107	34.7	-6	38	18.1-	46.4+	1.0	1.0	2.0
D60-8498	31.7-	-8	39	19.5-	46.6+	1.0	1.0	2.0
D60-9183	34.0	-4	35	20.3-	42.7+	1.0	1.0	1.0
D60-12,327	36.3	-6	37	21.3-	40.9+	1.0	1.0	1.5
F55-822-2	38.9	-4	41	22.1	40.6+	1.0	1.0	1.0
F55-822-3	39.6+	-4	38	21.8-	40.5+	1.0	1.0	1.2
F58-3810	38.2	-6	42	22.6	38.7	1.0	1.0	1.5
F59-1273	38.8	-2	43	20.7-	40.0	1.0	1.0	1.7
F59-1349	38.8	-3	42	21.8-	39.5	1.0	1.0	1.2
F59-1362	40.5+	-2	41	22.1	39.7	1.0	1.0	1.3
F59-1505	41.2+	-4	43	21.4-	40.0	1.0	1.0	1.7
D59-1841	38.9	-2	39	22.2	39.3	1.0	3.0	1.8
F59-1851	39.8+	-1	37	22.1	39.1	1.0	2.0	1.8
F60-1952	35.7	-3	32	21.7-	40.6+	1.0	1.0	1.3
F60-1971	33.4	-3	36	21.5-	40.7+	1.0	1.0	1.7
Ga59-781	37.3	-1	45	21.4-	41.6+	1.0	1.0	2.2
Ga59-841	37.5	0	47	22.2	40.4+	1.0	1.0	1.7
Ga59-895	37.9	-1	46	21.9	40.6+	1.0	2.0	1.5
N60-6014	36.3	-9	30	20.9-	41.7+	1.0	1.0	1.5
N60-6184	31.1-	-13	30	21.4-	42.2+	1.0	1.0	1.3
N60-6223	31.6-	-13	28	21.0-	42.3+	1.0	1.0	1.8
N60-6237	33.0	-10	29	20.6-	41.9+	1.0	1.0	1.3
N60-6252	34.0	-10	31	20.9-	42.2+	1.0	1.0	1.5
N60-6328	34.2	-9	33	21.7-	41.0+	1.0	1.0	1.2
N60-6343	35.4	-10	28	19.8-	41.4+	1.0	1.0	1.8
N60-6358	31.5-	-10	29	19.3-	42.4+	1.0	1.0	1.8
N60-6361	35.0	-8	32	20.7-	41.6+	1.0	1.0	1.7
N60-6423	33.6	-10	31	21.8-	40.7+	1.0	1.0	1.8
L.S.D.(.05)	3.4			0.6	0.9			
L.S.D.(.01)	4.5			0.8	1.2			

1/ Stoneville data.
2/ Blackville, Stoneville, and Gainesville data.

Table 45. - Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1962

Strain	Willard, N.C.	Black-ville, S.C.	Experi-ment, Ga. 1/	Gaines-ville, Fla.	Zellwood, Fla.	Jay, Fla.	Stone-ville, Miss.(A)
Jackson	47.6	25.0	45.2	39.4	18.4	36.6	48.1
Lee	53.0	21.3	17.3-	27.9-	36.4+	35.2	46.3
D58-4741	50.5	26.8	36.0	32.2	26.5	39.4	40.7
D58-10,054	47.8	23.7	32.6	35.8	12.5	37.7	37.3
D59-6923	42.3	25.1	38.7	38.3	31.3+	37.0	49.0
D59-6930	34.4-	27.3	38.5	36.5	23.3	40.2	46.2
D59-9041	44.8	19.3-	26.5-	37.2	30.5+	31.2-	34.8
D60-7965	43.0	18.5-	34.2	34.7	19.7	30.1-	40.7
D60-8107	50.0	19.9-	29.4	37.3	26.3	33.0	42.1
D60-8498	39.2	17.5-	25.4-	36.8	25.3	29.1-	43.6
D60-9183	41.6	25.6	31.9	28.1	31.9+	34.4	42.3
D60-12,327	49.3	22.7	48.9	31.5	33.5+	36.2	45.7
F55-822-2	45.8	29.3+	51.4	48.8	29.4+	38.4	41.7
F55-822-3	52.4	27.9	30.9	45.3	30.0+	38.4	43.5
F55-3810	44.6	25.3	34.1	46.3	31.7+	38.0	43.1
F59-1273	48.2	27.9	38.3	41.5	34.6+	37.3	43.1
F59-1349	48.5	30.8+	29.7	45.5	25.5	35.9	46.9
F59-1362	54.0	28.6	34.0	40.4	33.8+	36.6	50.0
F59-1505	53.4	22.0	45.5	48.7	33.3+	36.9	52.8
F59-1841	48.4	27.3	50.3	43.9	33.4+	36.2	44.1
F59-1851	48.5	25.9	54.2	43.6	39.6+	36.6	44.6
F60-1952	50.4	25.2	18.9-	37.5	31.6+	34.4	35.2
F60-1971	54.1	23.8	27.4-	19.2-	30.0+	34.1	39.4
Ga59-781	50.9	23.9	31.3	40.8	30.6+	32.6	45.1
Ga59-841	56.2	24.8	37.2	38.9	29.5+	35.2	40.5
Ga59-895	42.8	28.4	38.2	40.5	34.8+	37.3	43.8
N60-6014	52.6	20.1-	33.9	37.6	30.8+	30.5-	46.0
N60-6184	43.6	17.1-	23.8-	29.4	29.9+	30.5-	36.3
N60-6223	42.2	17.5-	32.5	29.9	25.1	29.8-	45.0
N60-6237	42.6	24.9	23.9-	31.7	27.4+	28.7-	42.7
N60-6252	43.4	22.3	37.4	32.3	32.0+	30.1-	44.3
N60-6328	44.1	20.0-	36.6	36.3	28.7+	31.2-	45.1
N60-6343	47.4	25.3	18.5-	37.3	21.9	33.7	46.8
N60-6358	43.2	22.1	34.4	28.5	22.6	34.8	37.8
N60-6361	46.1	22.1	23.9-	29.9	31.4+	31.2-	49.4
N60-6423	47.8	22.2	37.7	27.4-	25.6	34.1	44.4
L.S.D.(.05)	9.7	4.1	16.0	11.4	9.0	4.9	N.S.
C.V.	10%	11%	23%	15%	15%	7%	10%

1/ Not included in combined analysis.

Table 46. - Oil percentages for the strains in Preliminary Group VII, 1962

Strain	Willard, N.C.	Black-ville, S.C.	Experiment, Ga.	Gainesville, Fla.	Jay, Fla.	Stone-ville, Miss.(A)
Jackson	21.1	21.5	21.7	24.1	24.0	21.9
Lee	20.3	20.3	22.2	22.7	22.8	21.3
D58-4741	20.9	20.6	21.7	22.3	22.2	21.2
D58-10,054	20.5	20.1	20.9	21.7	21.7	19.4
D59-6923	21.0	20.4	22.0	22.6	23.1	21.2
D59-6930	19.8	21.0	23.0	22.4	22.7	21.5
D59-9041	17.3	17.6	20.0	19.7	20.4	18.5
D60-7965	17.0	17.3	18.0	18.8	18.9	18.4
D60-8107	17.5	17.0	18.4	18.2	19.2	18.2
D60-8498	18.2	18.6	19.4	20.8	20.4	19.7
D60-9183	19.6	18.7	20.4	21.6	21.4	20.2
D60-12,327	20.8	20.1	22.1	22.4	22.2	20.1
F55-822-2	21.6	20.8	22.1	22.8	22.6	22.5
F55-822-3	21.1	20.8	22.4	22.1	23.2	21.2
F58-3810	21.3	21.5	23.4	23.8	23.6	21.7
F59-1273	19.6	19.8	21.1	21.9	21.6	20.3
F59-1349	21.4	20.6	20.7	22.8	23.4	21.7
F59-1362	21.5	20.7	22.2	23.5	24.1	20.8
F59-1505	20.7	19.4	21.8	22.8	23.0	20.7
F59-1841	20.9	21.1	22.1	23.6	23.2	22.0
F59-1851	21.9	20.9	21.7	23.7	23.1	21.2
F60-1952	21.1	20.2	21.4	23.2	23.3	21.2
F60-1971	20.9	19.6	21.6	22.3	23.6	20.9
Ga59-781	21.4	19.4	20.8	22.5	23.4	20.8
Ga59-841	21.3	20.1	22.5	23.6	23.3	22.5
Ga59-895	21.0	19.7	21.1	23.3	24.0	22.2
N60-6014	20.8	18.7	21.3	21.4	22.4	20.9
N60-6184	20.7	19.3	21.0	22.3	23.7	21.5
N60-6223	19.9	19.0	21.9	22.0	22.7	20.6
N60-6237	20.0	19.2	21.7	21.2	21.5	19.9
N60-6252	20.2	19.7	21.5	21.3	21.8	21.0
N60-6328	20.7	19.3	22.7	23.2	23.2	21.3
N60-6343	19.1	18.4	21.0	19.9	20.9	19.2
N60-6358	18.2	18.1	20.1	19.7	20.9	18.9
N60-6361	19.3	19.1	21.8	21.1	22.9	20.2
N60-6423	20.9	19.9	21.9	22.2	24.2	21.9

Table 47. - Protein percentages for the strains in Preliminary Group VII, 1962

Strain	Willard, N.C.	Black-ville, S.C.	Experiment, Ga.	Gainesville, Fla.	Jay, Fla.	Stone-ville, Miss.(A)
Jackson	40.4	39.5	40.3	38.2	36.3	40.8
Lee	42.8	43.0	39.9	43.0	37.9	41.6
D58-4741	41.5	41.4	39.1	42.0	38.3	40.2
D58-10,054	41.9	40.4	38.3	43.2	38.6	41.3
D59-6923	40.4	40.3	38.6	40.9	36.4	39.9
D59-6930	41.2	39.1	37.0	40.1	36.4	39.5
D59-9041	45.1	43.9	40.6	45.4	40.4	44.9
D60-7965	48.4	49.4	48.3	48.8	46.6	47.5
D60-8107	46.4	48.5	47.2	46.2	44.5	45.7
D60-8498	46.4	48.6	46.9	47.3	44.8	45.6
D60-9183	42.7	43.9	43.4	43.1	40.3	43.0
D60-12,327	41.1	42.0	39.9	41.7	38.6	41.8
F55-822-2	41.1	41.7	40.6	41.3	37.6	41.2
F55-822-3	41.6	42.0	39.6	41.6	37.1	41.2
F58-3810	40.5	39.6	36.8	40.5	35.3	39.3
F59-1273	40.7	40.9	39.3	40.6	37.8	40.6
F59-1349	40.5	40.5	39.4	40.5	35.8	40.3
F59-1362	39.9	40.6	40.3	40.4	37.3	39.9
F59-1505	42.0	41.7	38.3	40.7	37.2	39.8
F59-1841	40.3	40.2	39.6	39.8	36.2	39.6
F59-1851	39.5	39.8	38.7	39.8	36.8	40.2
F60-1952	42.0	41.7	40.2	40.6	37.4	41.9
F60-1971	41.9	41.4	39.0	41.9	38.6	41.3
Ga59-781	42.6	42.8	41.6	41.4	39.4	41.9
Ga59-841	41.6	41.9	39.7	41.4	38.1	39.9
Ga59-895	42.2	40.8	40.6	41.5	37.8	40.6
N60-6014	42.0	43.5	40.9	42.9	39.7	41.3
N60-6184	42.5	44.3	41.1	43.5	40.2	41.5
N60-6223	43.2	44.4	41.2	43.3	40.8	41.0
N60-6237	42.6	42.1	40.5	43.7	39.2	43.1
N60-6252	42.9	43.3	42.0	42.8	40.0	42.1
N60-6328	41.8	43.5	38.7	43.2	37.9	41.0
N60-6343	42.5	43.0	38.7	42.9	39.6	41.6
N60-6358	43.4	43.4	40.6	43.3	40.2	43.2
N60-6361	42.5	42.9	40.0	43.5	38.8	42.0
N60-6423	41.1	42.6	38.7	42.4	38.2	41.1

Table 48. - Plant height for the strains in Preliminary Group VII, 1962

Strian	Willard, N.C.	Black-ville, S.C.	Experiment, Ga.	Gaines-ville, Fla.	Zell-wood, Fla.	Jay, Fla.	Stone-ville, Miss.(A)
Jackson	44	43	42	37	20	41	47
Lee	36	28	28	27	25	29	30
D58-4741	44	32	34	34	26	37	41
D58-10,054	40	37	35	39	26	38	38
D59-6923	46	46	41	43	28	43	46
D59-6930	42	34	28	34	19	36	40
D59-9041	62	51	42	54	50	46	60
D60-7965	46	39	44	37	32	40	47
D60-8107	43	37	39	36	29	39	43
D60-8498	42	40	39	40	30	36	45
D60-9183	39	34	32	38	28	36	37
D60-12,327	43	34	41	34	32	34	38
F55-822-2	51	37	42	40	26	43	48
F55-822-3	49	40	32	39	21	40	47
F58-3810	52	41	40	41	30	51	48
F59-1273	45	43	43	43	32	43	51
F59-1349	49	42	36	43	31	45	45
F59-1362	49	41	34	44	30	38	50
F59-1505	48	40	53	41	28	43	47
F59-1841	42	35	42	36	31	40	44
F59-1851	40	33	39	36	28	38	46
F60-1952	40	31	25	36	23	32	34
F60-1971	41	32	29	39	31	40	38
Ga59-781	54	42	40	47	34	48	53
Ga59-841	57	47	45	49	31	50	53
Ga59-895	52	46	44	46	32	47	52
N60-6014	39	26	31	32	24	31	29
N60-6184	40	26	30	31	20	28	34
N60-6223	38	23	32	23	23	27	31
N60-6237	39	25	26	31	24	28	30
N60-6252	39	28	32	31	27	29	34
N60-6328	38	26	34	34	28	35	36
N60-6343	40	24	25	27	20	31	32
N60-6358	37	27	30	28	24	27	31
N60-6361	40	28	29	33	27	32	33
N60-6423	40	27	36	27	24	29	31

Table 49. - Seed quality scores for the strains in Preliminary Group VII, 1962

Strain	Willard, N.C.	Blackville, S.C.	Experiment, Ga.	Gainesville, Fla.	Zellwood, Fla.	Jay, Fla.	Stoneville, Miss.(A)
Jackson	1.0	1.5	2.0	1.0	2.0	1.0	2.0
Lee	1.0	1.0	1.0	1.5	1.5	1.0	2.0
D58-4741	1.0	1.5	1.0	1.0	1.5	1.0	2.0
D58-10,054	1.0	3.0	1.0	1.0	2.0	3.0	2.0
D59-6923	1.0	1.5	1.0	2.0	1.5	1.0	2.0
D59-6930	1.0	1.5	1.0	1.0	2.0	1.0	2.0
D59-9041	1.0	1.0	1.0	1.5	1.5	1.0	2.0
D60-7965	1.0	3.0	1.0	1.0	1.5	2.0	2.0
D60-8107	1.0	3.0	1.0	1.0	2.0	2.0	2.0
D60-8498	1.0	3.0	1.5	1.5	2.0	2.0	2.0
D60-9183	1.0	2.0	1.0	1.5	1.0	1.0	2.0
D60-12,327	1.0	2.0	1.0	1.0	1.5	1.0	2.0
F55-822-2	1.0	2.5	1.0	1.5	2.0	1.0	2.0
F55-822-3	1.0	2.5	1.0	2.0	2.0	1.0	2.0
F58-3810	1.0	2.0	1.0	1.0	1.5	1.0	2.0
F59-1273	1.0	1.0	1.0	1.0	1.0	1.0	2.0
F59-1349	1.0	2.5	1.0	1.0	1.5	1.0	2.0
F59-1362	1.0	1.0	1.0	1.0	1.0	2.0	2.0
F59-1505	1.0	2.0	1.5	1.0	1.0	1.0	2.0
F59-1841	1.0	2.0	1.0	1.0	1.5	1.0	2.0
F59-1851	1.0	3.0	2.0	1.5	1.5	2.0	2.0
F60-1952	1.0	1.0	1.0	1.0	1.0	1.0	2.0
F60-1971	1.0	1.0	1.0	1.5	1.0	1.0	2.0
Ga59-781	1.0	1.0	1.0	1.5	1.0	2.0	2.0
Ga59-841	1.0	1.0	1.0	1.5	2.0	1.0	2.0
Ga59-895	1.0	1.5	1.0	2.0	1.0	1.0	2.0
N60-6014	1.0	3.0	2.0	3.0	2.0	3.0	2.0
N60-6184	1.0	2.0	1.0	3.0	2.5	2.0	2.0
N60-6223	1.0	2.0	1.0	3.5	2.5	1.0	2.0
N60-6237	1.0	2.5	1.0	2.0	1.5	1.0	2.0
N60-6252	1.0	1.5	1.0	1.0	2.0	1.0	2.0
N60-6328	1.0	2.5	1.0	3.5	2.0	1.0	2.0
N60-6343	1.0	2.0	1.0	1.0	2.0	1.0	2.0
N60-6358	1.0	1.5	1.0	1.5	2.0	1.0	2.0
N60-6361	1.0	1.0	1.5	3.0	2.0	2.0	2.0
N60-6423	1.0	2.0	1.5	2.5	2.0	2.0	2.0

UNIFORM GROUP VIII

1962

	Variety or Strain	Parentage	Generation Composited
1.	Bienville	Pelican #2 x Ogden	
2.	Jackson	Volstate(2) x Palmetto	F_4
3.	Hampton	Majos x Lee	
4.	Hardee (F58-3734)	D49-772 x Improved Pelican	F_7
5.	Stuart (Co57-257)	Majos x Lee	
6.	Co58-240	Majos x Lee	
7.	La58-54-6	Pelican #2 x Ogden	
8.	La58-26-2	Ogden x Creole	
9.	Co58-266	Majos x Lee	
10.	F59-1997	D49-2491(2) x Improved Pelican	F_5
11.	La59-7-21	Pelican #2 x Ogden	
12.	La59-34-7	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.

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

Twenty Group VIII nurseries were planted. Results of 19 nurseries are summarized in tables 50 through 56. In addition to 1962 data, two- and three-year data for seed yield and oil and protein percentages are summarized in Table 50. Differences among strains were significant in 14 of the 19 nurseries.

Two strains have been given names and released for production. F58-3734 is Hardee and Co57-257 is Stuart. Both of these varieties are late Group VIII types.

An early freeze (Oct. 25) in the upper Southeast probably reduced the yield of the later maturing types in this group and also in Preliminary Group VIII. The variety Stuart is very susceptible to the disease target spot. In 1962, disease development was light and the variety yielded very well.

Four strains have been tested two years -- Stuart, Co58-240, La58-54-6, and La58-26-2. Stuart, Co58-240, and La58-26-2 have shown no superiority over the named varieties.

Co58-266 is a subline of Hampton with uniform color of hila. In the Southeast there was only 0.1 bushel difference in the mean yields of the two.

Table 50. - General summary of performance for the strains in Unifrom Group VIII, 1962

	Bienville	Jackson	Hampton	Hardee	Stuart	Co58-240
Seed Yield - 1962						
Southeast	35.4	34.5	38.3	34.7	34.5	35.3
West	40.4	42.2	43.3	42.7	37.5	39.6
- 1961-62						
Southeast	34.4	32.9	37.1	35.0	33.3	33.7
West	41.7	40.6	43.0	40.1	37.3	39.9
- 1960-62						
Southeast	34.5	34.0	37.3	35.8		
West	41.4	39.7	40.9	39.7		
Oil Percentage - 1962	22.2	22.6+	23.0+	22.1	21.3-	20.5-
- 1961-62	22.0	22.4	22.6	21.5	20.7	19.9
- 1960-62	22.1	22.6	22.8	21.6		
Protein Percentage - 1962	40.0	38.9-	37.8-	40.4	40.7+	41.3+
- 1961-62	40.4	39.1	38.1	41.0	41.1	41.8
- 1960-62	40.7	39.1	38.4	41.1		
Seed Size	16.7	17.3	18.5+	15.6-	20.3+	18.0+
Maturity Index	10-30	-2	+1	+3	+6	+2
Height	38	34	32	40	39	33
Bacterial Pustule[1/]	3.0	2.5	1.0	1.0	1.0	1.0
Target Spot[1/]	1.0	1.0	1.0	1.0	3.0	1.0
Shattering[2/]	3.0	2.0	1.0	1.0	1.0	1.0

1/ Stoneville data.
2/ Gainesville and Live Oak data.

Table 50. - (continued)

	La58-54-6	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7
Seed Yield - 1962						
Southeast	37.2	34.0	38.4	35.4	37.5	35.0
West	39.5	37.5	44.9	39.4	44.7	42.2
- 1961-62						
Southeast	35.7	33.5				
West	40.1	39.8				
- 1960-62						
Southeast						
West						
Oil Percentage - 1962	21.6-	21.2-	23.2+	22.8+	22.7+	22.5
- 1961-62	21.4	20.8				
- 1960-62						
Protein Percentage - 1962	40.8+	40.3	37.8-	39.8	40.2	39.5
- 1961-62	40.9	40.5				
- 1960-62						
Seed Size	17.0	16.4	18.4+	16.8	17.3	17.0
Maturity Index	0	0	+2	-1	-2	+1
Height	37	38	33	37	33	38
Bacterial Pustule[1/]	2.5	1.5	1.0	1.0	3.0	3.0
Target Spot[1/]	1.0	1.5	1.0	1.0	1.0	1.0
Shattering[2/]	3.0	2.1	1.0	1.0	1.7	3.0

Table 51. - Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1962

Location	Bien-ville	Jackson	Hampton	Hardee	Stuart	Co58-240	La58-54-6
			Southeast				
Florence, S. C.(A)	48.5	40.8-	55.1+	40.1-	49.7	47.2	50.8
Florence, S. C.(B)	39.4	44.9	41.8	29.0-	24.4-	34.0	40.3
Hartsville, S. C.(A)	46.2	44.8	48.7	36.9-	45.5	46.8	43.0
Hartsville, S. C.(B)	38.9	39.0	43.0+	30.2-	32.2-	39.9	43.9+
Blackville, S. C.	33.4	28.5-	33.8	30.7	30.0	28.1-	35.8
Experiment, Ga.1/	21.7	21.3	28.5	25.9	16.8	25.8	24.9
Tallassee, Ala.1/	45.2	29.5	35.6	36.5	32.0	33.4	38.3
Tifton, Ga.	28.9	29.0	34.5	31.4	27.0	30.4	29.1
Live Oak, Fla.	15.7	19.8	20.0	24.7+	31.8+	25.8+	18.6
Gainesville, Fla.	36.0	37.4	41.7+	43.2+	33.2	34.1	33.8
Marianna, Fla.	36.5	39.9	39.1	41.3	43.3	40.5	34.2
Quincy, Fla.	34.5	34.0	36.1	34.2	37.3	32.9	43.4+
Jay, Fla.	32.2	35.6+	41.3+	37.7+	37.5+	36.3+	34.4
Fairhope, Ala.	42.1	41.4	43.8	47.2+	47.5+	43.9	45.7
Baton Rouge, La.	41.4	27.0-	28.2-	33.0-	26.4-	29.1-	42.6
Mean	35.4	34.5	38.3	34.7	34.5	35.3	37.2
			West				
Stoneville, Miss.(A)	35.4	43.0	43.6	38.3	39.3	38.3	36.6
St. Joseph, La.	44.7	48.3	51.0	45.0	44.7	44.0	42.5
Curtis, La.	43.1	37.9	42.7	42.9	37.3-	34.5-	44.0
College Station, Texas	38.3	39.4	35.9	44.6	28.7-	41.5	34.8
Mean	40.4	42.2	43.3	42.7	37.5	39.6	39.5

1/ Not included in combined analysis.

Table 51. - (continued)

Location	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7	L.S.D. (.05)	C.V.
			Southeast				
Florence, S. C.(A)	42.4-	53.9	48.2	48.6	46.9	6.0	7%
Florence, S. C.(B)	24.7-	37.2	39.6	51.3+	35.3	9.0	15%
Hartsville, S. C.(A)	45.5	51.6	51.2	49.9	45.2	7.5	10%
Hartsville, S. C.(B)	35.1-	44.3+	41.0	45.9+	35.7-	3.1	5%
Blackville, S. C.	25.2-	33.2	28.4-	30.7	33.1	3.8	7%
Experiment, Ga.[1/]	28.0	22.8	17.5	25.5	21.2	N.S.	23%
Tallassee, Ala.[1/]	33.6	39.0	33.8	37.6	36.1	N.S.	25%
Tifton, Ga.	26.6	32.0	26.8	30.2	28.0	N.S.	10%
Live Oak, Fla.	20.7	23.9+	21.7	20.3	18.5	6.1	17%
Gainesville, Fla.	37.9	40.9	42.6+	33.4	35.3	5.3	8%
Marianna, Fla.	37.5	42.7	39.5	37.5	38.8	N.S.	8%
Quincy, Fla.	35.2	40.3+	36.4	35.4	35.9	4.4	7%
Jay, Fla.	31.5	39.2+	32.7	36.1+	34.7	2.7	4%
Fairhope, Ala.	42.5	44.5	40.4	42.0	42.7	3.9	5%
Baton Rouge, La.	43.2	31.2-	30.0-	37.8	38.7	7.2	13%
Mean	34.0	38.4	35.4	37.5	35.0	3.1	
			West				
Stoneville, Miss.(A)	29.3	40.4	37.2	36.8	38.4	N.S.	12%
St. Joseph, La.	39.4	49.7	38.0-	54.0+	43.6	6.6	9%
Curtis, La.	42.4	44.6	39.9	45.9	46.4	5.5	8%
College Station, Texas	38.9	44.9+	42.6	42.3	40.6	6.6	10%
Mean	37.5	44.9	39.4	44.7	42.2	N.S.	

Table 52. - Chemical composition and seed size for the strains in Uniform Group VIII, 1962

Location	Bienville	Jackson	Hampton	Hardee	Stuart	Co58-240
			Oil Percentage			
Hartsville, S. C.(A)	22.4	22.4	22.2	21.6	20.9	19.7
Blackville, S. C.	20.4	21.0	20.4	20.3	18.7	17.4
Tifton, Ga.	21.7	22.9	23.5	21.7	22.3	21.4
Live Oak, Fla.	22.1	22.6	22.4	22.2	21.5	20.8
Gainesville, Fla.	22.8	22.9	23.9	22.1	21.5	21.0
Quincy, Fla.	22.9	22.1	23.4	22.6	22.4	21.4
Jay, Fla.	23.1	23.5	24.7	23.2	22.2	20.8
Baton Rouge, La.	22.4	23.2	23.9	22.8	21.6	21.8
Curtis, La.	21.9	22.5	22.8	22.0	20.5	20.4
Mean	22.2	22.6+	23.0+	22.1	21.3-	20.5-
			Protein Percentage			
Hartsville, S. C.(A)	38.7	37.5	36.4	39.5	39.1	39.6
Blackville, S. C.	40.1	39.0	37.4	40.4	40.1	42.0
Tifton, Ga.	40.9	39.0	37.9	40.4	40.4	40.2
Live Oak, Fla.	41.6	41.4	41.0	41.9	43.1	42.8
Gainesville, Fla.	40.7	39.6	39.0	41.2	42.0	42.3
Quincy, Fla.	39.8	39.4	37.0	41.3	41.4	42.6
Jay, Fla.	37.5	36.8	36.5	38.7	38.4	40.4
Baton Rouge, La.	40.4	39.3	38.1	40.4	41.0	41.4
Curtis, La.	40.6	37.8	37.0	39.7	40.5	40.7
Mean	40.0	38.9-	37.8-	40.4	40.7+	41.3+
			Grams per 100 Seeds			
Hartsville, S. C.(A)	16.7	16.7	17.7	15.0	19.7	17.0
Blackville, S. C.	21.0	21.5	20.8	18.5	22.0	21.1
Tifton, Ga.	19.3	18.2	18.8	14.6	17.9	16.9
Live Oak, Fla.	15.0	16.8	16.8	14.2	21.2	17.1
Gainesville, Fla.	14.9	15.3	17.9	16.0	19.6	17.2
Quincy, Fla.	18.0	19.0	21.0	18.0	23.0	21.0
Jay, Fla.	13.8	16.8	19.7	15.2	21.4	20.4
Baton Rouge, La.	15.3	15.5	16.3	14.5	18.5	15.5
Curtis, La.	16.5	16.0	17.5	14.5	19.5	16.0
Mean	16.7	17.3	18.5+	15.6-	20.3+	18.0+

Table 52. - (continued)

Location	La58-54-6	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7	L.S.D. (.05)
			Oil Percentage				
Hartsville, S. C.(A)	21.2	21.0	22.3	22.2	22.3	22.2	
Blackville, S. C.	20.1	19.7	20.8	21.1	20.6	20.8	
Tifton, Ga.	22.7	21.8	23.5	23.5	23.3	22.8	
Live Oak, Fla.	21.4	21.0	22.7	22.0	22.6	22.2	
Gainesville, Fla.	21.8	21.8	24.2	22.7	23.9	22.0	
Quincy, Fla.	21.9	22.0	23.7	23.2	22.8	23.6	
Jay, Fla.	22.3	21.6	24.2	24.2	24.0	23.6	
Baton Rouge, La.	22.0	21.9	24.5	24.0	22.8	23.1	
Curtis, La.	21.3	19.9	22.6	22.6	22.3	22.2	
Mean	21.6-	21.2-	23.2+	22.8+	22.7+	22.5	0.4
			Protein Percentage				
Hartsville, S. C.(A)	39.8	39.3	36.8	38.7	39.4	39.2	
Blackville, S. C.	40.2	39.4	38.1	40.6	41.4	39.6	
Tifton, Ga.	41.6	40.6	38.2	38.2	39.9	39.7	
Live Oak, Fla.	42.7	42.3	40.4	43.4	43.3	41.3	
Gainesville, Fla.	41.5	41.8	38.9	42.0	40.2	40.8	
Quincy, Fla.	40.2	39.5	36.8	40.6	39.4	38.6	
Jay, Fla.	39.3	38.9	36.5	36.2	37.9	37.0	
Baton Rouge, La.	40.5	40.0	36.8	39.7	39.8	39.3	
Curtis, La.	41.8	40.8	37.8	39.2	40.2	40.3	
Mean	40.8+	40.3	37.8-	39.8	40.2	39.5	0.6
			Grams per 100 Seeds				
Hartsville, S. C.(A)	16.0	16.7	17.7	16.0	16.7	17.3	
Blackville, S. C.	21.5	18.6	22.9	20.1	22.0	20.0	
Tifton, Ga.	18.5	16.4	18.4	17.8	18.6	17.8	
Live Oak, Fla.	15.3	16.1	17.5	15.5	16.7	15.0	
Gainesville, Fla.	14.2	15.8	16.5	16.3	15.6	14.7	
Quincy, Fla.	18.0	19.0	20.0	19.0	17.0	17.0	
Jay, Fla.	18.5	15.3	20.1	15.9	17.7	17.8	
Baton Rouge, La.	14.5	15.5	13.3	14.5	14.5	15.5	
Curtis, La.	16.3	14.3	19.3	16.5	17.0	17.5	
Mean	17.0	16.4	18.4+	16.8	17.3	17.0	1.0

Table 53. - Relative maturity, days earlier (-) or later (+) than Bienville, for the strains in Uniform Group VIII, 1962

Location	Date Planted	Bienville Matured	Jackson	Hampton	Hardee	Stuart
		Southeast				
Florence, S. C.(A)	5-15	11-6	+4	+4	+9	+4
Florence, S. C.(B)	6-21	11-10	-4	0	0	+5
Hartsville, S.C.(A)	5-29	11-3	-4	+3	+7	+7
Hartsville, S.C.(B)	7-2	11-6	-10	0	+7	+7
Blackville, S. C.	6-25	11-10	+2	+2	+4	+6
Experiment, Ga.	6-1	11-4	-2	-2	+1	+3
Tifton, Ga.	6-15	10-23	-5	-4	-1	+5
Gainesville, Fla.	6-1	10-22	-4	+1	+2	+2
Marianna, Fla.	6-13	10-26	-2	+4	+4	+7
Quincy, Fla.	5-4	10-21	+1	+3	0	+8
Jay, Fla.	6-6	10-18	-4	+2	+8	+12
Fairhope, Ala.	6-18	10-25	+4	0	+4	+4
Baton Rouge, La.	6-5	10-28	-1	+4	-4	+8
Mean		10-30	-2	+1	+3	+6
		West				
Stoneville, Miss.(A)	5-15	11-1	-5	0	+4	+6
St. Joseph, La.	5-17	10-28	0	+4	-6	+9
Curtis, La.	5-10	11-5	0	+3	+2	+7
College Station, Texas	6-8	11-3	-8	-2	+4	+7
Mean		11-2	-3	+1	+1	+7

Table 53. - (continued)

Location	Co58-240	La58-54-6	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7
			Southeast				
Florence, S. C.(A)	0	0	0	+4	0	0	0
Florence, S. C.(B)	-4	-4	+5	0	-4	-4	+9
Hartsville, S. C.(A)	+3	0	0	+3	-2	-3	0
Hartsville, S. C.(B)	0	0	0	0	-4	-3	0
Blackville, S. C.	+2	0	+2	+1	-5	+1	+2
Experiment, Ga.	-1	-1	0	-1	-6	-7	-2
Tifton, Ga.	-2	-2	-1	-4	-2	-5	0
Gainesville, Fla.	+4	-2	-2	+1	-2	-1	+2
Marianna, Fla.	+4	+5	-1	+5	+6	0	+2
Quincy, Fla.	+5	0	+5	+2	+3	-1	0
Jay, Fla.	+6	-1	+2	+1	-5	-5	+1
Fairhope, Ala.	0	0	0	0	0	0	0
Baton Rouge, La.	+10	+2	-6	+7	-2	-5	-2
Mean	+2	0	0	+1	-2	-3	0
			West				
Stoneville, Miss.(A)	+5	0	+1	0	-2	-5	0
St. Joseph, La.	+8	+4	-3	+9	0	-2	+2
Curtis, La.	-2	-2	0	0	+3	-4	0
College Station, Texas	+1	0	+1	+5	+2	+2	+3
Mean	+3	0	0	+4	0	-2	+1

Table 54. - Plant height for the strains in Uniform Group VIII, 1962

Location	Bienville	Jackson	Hampton	Hardee	Stuart	Co58-240
			Southeast			
Florence, S. C.(A)	40	36	38	42	38	30
Florence, S. C.(B)	40	36	38	42	42	38
Hartsville, S. C.(A)	41	41	34	42	38	34
Hartsville, S. C.(B)	36	31	31	38	38	33
Blackville, S. C.	37	33	31	34	35	33
Experiment, Ga.	33	34	30	34	30	32
Tallassee, Ala.	37	29	38	42	39	33
Tifton, Ga.	27	24	20	24	26	23
Live Oak, Fla.	26	22	23	32	34	27
Gainesville, Fla.	41	39	37	43	43	37
Marianna, Fla.	46	43	41	44	42	40
Quincy, Fla.	42	35	35	46	42	37
Jay, Fla.	41	40	38	42	44	39
Fairhope, Ala.	34	32	32	40	36	28
Baton Rouge, La.	30	29	22	30	28	28
Mean	37	34	33	38	37	33
			West			
Stoneville, Miss.(A)	43	41	41	50	49	39
St. Joseph, La.	42	45	32	57	52	40
Curtis, La.	44	34	26	38	44	24
College Station, Texas	33	31	26	32	35	35
Mean	41	38	31	44	45	35

Table 54. - (continued)

Location	La58-54-6	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7
			Southeast			
Florence, S. C.(A)	40	38	34	40	34	40
Florence, S. C.(B)	42	40	36	40	36	44
Hartsville, S. C.(A)	42	40	37	36	36	41
Hartsville, S. C.(B)	36	35	33	35	31	40
Blackville, S. C.	38	35	35	34	31	37
Experiment, Ga.	35	35	29	33	31	33
Tallassee, Ala.	37	38	37	35	41	36
Tifton, Ga.	26	24	20	28	21	25
Live Oak, Fla.	25	31	25	30	21	27
Gainesville, Fla.	41	41	38	41	37	41
Marianna, Fla.	44	43	40	42	40	47
Quincy, Fla.	42	44	35	40	34	48
Jay, Fla.	39	42	38	42	31	42
Fairhope, Ala.	34	36	28	32	28	38
Baton Rouge, La.	28	32	21	27	26	26
Mean	37	37	32	36	32	38
			West			
Stoneville, Miss.	46	45	38	45	39	45
St. Joseph, La.	45	48	46	48	44	44
Curtis, La.	36	38	36	36	34	40
College Station, Texas	32	29	26	33	31	33
Mean	40	40	37	41	37	41

Table 55. - Lodging scores for the strains in Uniform Group VIII, 1962

Location	Bienville	Jackson	Hampton	Hardee	Stuart	Co58-240
			Southeast			
Florence, S. C.(A)	2.0	1.0	1.0	2.0	1.0	1.0
Florence, S. C.(B)	2.0	1.0	2.0	2.0	2.0	2.0
Hartsville, S. C.(A)	1.6	1.0	1.0	2.6	2.3	1.3
Hartsville, S. C.(B)	1.3	1.3	1.3	2.1	2.5	1.6
Blackville, S. C.	1.0	1.0	1.0	1.7	2.7	1.3
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.3
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	2.0	1.7	1.0	1.7	2.0	2.0
Marianna, Fla.	1.0	1.0	2.0	2.0	3.0	2.0
Quincy, Fla.	1.0	1.0	1.0	1.0	2.0	1.0
Jay, Fla.	1.0	1.0	1.0	2.0	3.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
Stoneville, Miss.(A)	3.0	2.7	3.0	3.3	3.7	3.0
St. Joseph, La.	3.0	3.0	3.0	4.0	4.0	3.0
Curtis, La.	2.0	2.0	1.0	2.0	3.0	1.0
College Station, Texas	2.0	1.0	1.0	2.0	2.0	2.0

Table 55. - (continued)

Location	La58-54-6	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7
			Southeast			
Florence, S. C.(A)	1.0	2.0	1.0	2.0	1.0	2.0
Florence, S. C.(B)	2.0	3.0	2.0	3.0	2.0	2.0
Hartsville, S. C.(A)	1.6	2.5	1.3	3.6	2.1	1.6
Hartsville, S. C.(B)	1.3	2.6	1.1	2.1	1.3	1.8
Blackville, S. C.	1.3	1.7	1.3	1.7	1.0	1.0
Experiment, Ga.	1.3	2.0	1.0	2.0	1.3	1.0
Tallassee, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla.	1.0	2.0	1.0	2.0	1.0	1.0
Gainesville, Fla.	2.0	3.7	1.3	3.3	2.0	2.0
Marianna, Fla.	3.0	3.0	2.0	4.0	2.0	1.0
Quincy, Fla.	1.0	2.0	1.0	2.0	1.0	2.0
Jay, Fla.	1.0	3.0	1.0	3.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			West			
Stoneville, Miss.(A)	4.0	4.0	3.0	4.3	3.0	3.3
St. Joseph, La.	3.0	4.0	3.0	4.0	3.0	3.0
Curtis, La.	2.0	2.0	2.0	4.0	2.0	2.0
College Station, Texas	2.0	2.0	1.0	3.0	1.0	1.0

Table 56. - Seed quality scores for the strains in Uniform Group VIII, 1962

Location	Bienville	Jackson	Hampton	Hardee	Stuart	Co-58 240
			Southeast			
Hartsville, S.C.(A)	1.5	2.0	1.5	3.0	2.7	2.5
Blackville, S. C.	1.0	1.0	1.0	2.0	1.0	1.0
Experiment, Ga.	1.0	1.0	1.3	1.0	2.0	1.0
Tallassee, Ala.	2.0	2.0	3.0	3.0	2.0	2.0
Tifton, Ga.	1.0	2.0	3.0	2.0	3.0	2.0
Live Oak, Fla.	2.0	2.0	1.7	2.0	1.7	1.3
Gainesville, Fla.	1.0	1.3	2.0	1.0	1.0	1.0
Quincy, Fla.	2.0	2.0	2.0	2.0	2.0	3.0
Jay, Fla.	1.0	1.0	1.0	2.0	1.0	1.0
Fairhope, Ala.	2.0	1.7	2.0	2.3	2.0	2.0
Baton Rouge, La.	1.0	2.0	3.0	2.0	1.0	1.0
			West			
Stoneville, Miss.(A)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	2.0	2.0	2.0	1.0	3.0
Curtis, La.	1.0	2.0	1.0	1.0	2.0	3.0
College Station, Texas	1.5	2.5	2.0	1.5	3.0	2.5

Table 56. - (continued)

Location	La58-54-6	La58-26-2	Co58-266	F59-1997	La59-7-21	La59-34-7
			Southeast			
Hartsville, S. C.	2.5	3.5	1.7	1.5	2.0	1.5
Blackville, S. C.	1.0	3.0	1.0	1.0	1.0	1.0
Experiment, Ga.	1.3	1.3	1.0	1.3	1.0	1.0
Tallassee, Ala.	3.0	2.0	3.0	2.0	2.0	1.0
Tifton, Ga.	2.0	3.0	2.0	2.0	2.0	2.0
Live Oak, Fla.	1.7	1.7	1.3	1.3	1.7	1.7
Gainesville, Fla.	1.0	1.0	1.3	1.7	1.0	1.0
Quincy, Fla.	2.0	2.0	2.0	2.0	3.0	2.0
Jay, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.3	2.0	3.0	1.7	1.3	2.0
Baton Rouge, La.	1.0	1.0	3.0	2.0	1.0	1.0
			West			
Stoneville, Miss.(A)	2.0	2.3	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	2.0	1.0	2.0	1.0
Curtis, La.	1.0	1.0	3.0	2.0	1.0	1.0
College Station, Texas	1.5	1.5	2.0	2.5	1.5	2.0

PRELIMINARY GROUP VIII

1962

Eight Preliminary Group VIII nurseries were planted. The parentage for the strains included is given in table 57. The results from these nurseries are summarized in tables 58 through 63. There were no lines yielding significantly higher than Bienville, on the basis of the means for all locations, but there were 22 lines yielding significantly less. Hampton ranked highest in yield.

Four high protein selections were included but all yielded significantly below Bienville.

Although none of the new lines yielded significantly better than the check varieties, this is a good group of lines. The mean yield for all tests was 35.3 bushels per acre.

The strain F59-2688 from Seminole x D49-2491 has been included two years. In both years, it has had a mean seed size of 22 grams per 100 seed.

Table 57. - Parentage of strains in Preliminary Group VIII, 1962

	Strain	Parentage	Generation Composited
1.	Bienville		
2.	Hampton		
3.	Co58-220	Majos x Lee	
4.	Co59-264	Majos x Lee	
5.	Co59-267	Majos x Lee	
6.	Co59-270	Majos x Lee	
7.	Co60-231	Majos x Lee	
8.	Co60-235	Majos x Lee	
9.	Co60-239	Majos x Lee	
10.	Co60-240	Majos x Lee	
11.	D60-7911	D55-4090 x D55-4159	F_5
12.	D60-7978	D55-4090 x D55-4159	F_5
13.	D60-8011	D55-4090 x D55-4159	F_5
14.	D60-8023	D55-4090 x D55-4159	F_5
15.	Ga59-817	Jackson x D49-2491	F_7
16.	D58-4450	D49-2491(2) x Improved Pelican	F_4
17.	F58-4667	D51-5091 x Jackson	F_4
18.	F58-6421	D49-772 x Improved Pelican	F_7
19.	F59-1220	Jackson x D49-2491	F_5
20.	F59-1750	D49-2491 x Improved Pelican	F_6
21.	F59-1876	D50-5091 x Jackson	F_5
22.	F59-1938	Improved Pelican x D51-5052	F_5
23.	F59-1999	D49-2491(2) x Improved Pelican	F_5
24.	F59-2008	D49-2491(2) x Improved Pelican	F_5
25.	F59-2643	D49-2491(2) x Barchet	F_5
26.	F59-2688	Seminole x D49-2491	F_5
27.	F59-2723	Seminole x D49-2491	F_5
28.	F59-2734	D49-2491 x Majos	F_6
29.	F60-1873	La49-1-4 x D51-5091	F_5
30.	F60-2331	D49-2491(2) x Improved Pelican	F_6
31.	La59-72-11	Pelican 2 x Ogden	
32.	La60-15-3	Pelican 2 x Ogden	
33.	La60-26-2	Pelican 2 x Ogden	
34.	La60-31-A2	Volstate x Creole	
35.	La60-41-2	Pelican 2 x Ogden	
36.	La60-97-A	Pelican 2 x Ogden	

Table 58. - General summary of performance for the strains in Preliminary Group VIII, 1962

Strain	Seed Yield	Maturity Index	Ht.	Percent Oil	Percent Protein	Bact. Pustule	Purple Stain	Shattering
Bienville	38.6	10-28	36	22.2	39.4	3.0	1.0	3.0
Hampton	40.4	+2	33	22.9+	37.8-	1.0	2.0	1.0
Co58-220	35.0-	+2	33	21.2-	39.5	1.0	2.0	1.0
Co59-264	35.2-	+6	32	20.4-	41.1+	1.0	2.0	1.0
Co59-267	32.2-	+10	37	21.5-	38.9	1.0	2.0	1.0
Co59-270	34.1-	+9	35	20.8-	40.4	1.0	2.0	1.0
Co60-231	36.3	+8	36	20.9-	41.1+	1.0	2.0	1.0
Co60-235	34.1-	+4	32	21.3-	38.5	1.0	2.0	1.0
Co60-239	32.5-	+5	32	20.3-	42.0+	1.0	2.0	1.3
Co60-240	33.7-	+5	33	20.3-	42.0+	1.0	1.0	1.0
D60-7911	33.1-	0	37	18.3-	47.3+	1.0	1.0	1.5
D60-7978	29.9-	-4	32	18.3-	48.2+	1.0	1.0	2.5
D60-8011	31.0-	0	39	17.8-	48.1+	1.0	1.0	1.5
D60-8023	28.9-	-3	37	18.5-	48.1+	1.0	1.0	2.0
Ga59-817	35.6-	+5	34	21.2-	42.2+	1.0	2.0	1.8
F58-4450	33.7-	+3	38	21.8	40.3	1.0	1.0	1.0
F58-4667	37.7	+1	43	22.0	39.7	1.0	1.0	1.8
F58-6421	35.8-	+8	39	21.1-	41.3+	1.0	2.0	1.0
F59-1220	34.1-	0	35	22.5	39.5	1.0	1.0	1.3
F59-1750	32.8-	+5	48	21.0-	42.4+	1.0	1.0	1.8
F59-1876	38.8	+3	44	22.3	38.9	1.0	2.0	1.3
F59-1938	34.3-	+5	43	22.0	39.2	1.0	1.0	1.0
F59-1999	35.0-	+2	36	20.3-	41.3+	1.0	1.0	1.0
F59-2008	36.1	+2	35	22.4	38.3	1.0	1.0	1.0
F59-2643	36.1	+3	33	21.6	40.3	1.0	1.0	1.3
F59-2688	34.2-	+2	42	20.1-	43.4+	1.0	1.0	2.0
F59-2723	35.7-	+1	38	20.7-	42.4+	1.0	1.0	1.5
F59-2734	37.0	+5	34	22.1	39.3	1.0	1.0	1.0
F60-1873	35.8-	+2	36	21.3-	41.2+	1.0	1.0	1.0
F60-2331	33.6-	+1	31	21.0-	41.2+	1.0	1.0	1.3
La59-72-11	39.7	-2	29	21.7	40.4	3.0	1.0	2.2
La60-15-3	38.6	-1	36	22.1	40.5	3.0	1.0	2.7
La60-26-2	38.4	-2	30	22.4	39.9	3.0	2.0	1.5
La60-31-A2	34.5-	0	35	20.7-	39.8	3.0	1.0	1.5
La60-41-2	37.6	0	34	22.3	40.6	3.0	1.0	2.7
La60-97-A	39.7	-1	29	22.3	39.8	3.0	1.0	1.5
L.S.D.(.05)	2.6			0.7	1.6			
L.S.D.(.01)	3.4			1.0	2.1			

Table 59. - Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1962

Strain	Florence, S.C.	Black-ville, S.C.	Experiment, Ga. 1/	Live Oak, Fla. 1/	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Bienville	38.4	31.8	22.4	13.5	43.2	36.6	43.0
Hampton	42.8	37.4+	25.9	23.3+	45.9	46.2+	30.0-
Co58-220	37.9	31.1	18.6	13.3	36.9-	41.2	28.0-
Co59-264	39.4	32.7	15.4	17.5	39.5	42.0	22.3-
Co59-267	25.2-	31.0	25.0	19.7	34.8-	38.4	31.6-
Co59-270	32.1-	31.4	14.3	23.2+	34.1-	39.5	33.6-
Co60-231	33.7	35.0	22.0	23.5+	39.9	41.6	31.3-
Co60-235	37.1	33.1	15.6	19.5	35.0-	40.2	25.1-
Co60-239	35.5	30.5	19.8	25.5+	32.7-	36.5	27.6-
Co60-240	35.8	32.8	21.3	24.3+	33.8-	38.0	28.4-
D60-7911	37.4	27.1-	18.0	19.2	38.0-	30.9-	32.4-
D60-7978	35.3	28.9-	19.5	14.7	34.9-	27.2-	23.1-
D60-8011	35.0	25.7-	15.1	18.3	32.0-	30.1-	32.4-
D60-8023	34.5	24.5-	19.5	16.4	37.2-	25.4-	23.1-
Ga59-817	38.4	32.6	15.4	22.3	38.8	35.2	33.2-
F58-4450	34.0	33.8	22.1	25.7+	39.3	36.2	25.5-
F58-4667	44.1	33.1	12.3	26.8+	40.8	36.9	33.7-
F58-6421	36.1	33.3	20.2	17.8	36.7-	37.7	35.3
F59-1220	38.7	29.5	27.8	30.0+	42.5	35.5	24.3-
F59-1750	30.4-	26.9-	18.1	26.7+	41.2	30.1-	35.7
F59-1876	40.7	31.6	26.9	25.4+	48.1	39.8	34.1-
F59-1938	31.5-	34.0	24.6	20.5	31.9-	41.9	32.4-
F59-1999	36.6	30.9	20.1	20.0	45.1	36.9	25.5-
F59-2008	38.9	31.8	19.9	26.7+	40.9	37.3	31.6-
F59-2643	32.9	29.7	14.4	22.5	45.4	36.9	35.7
F59-2688	34.3	28.3	17.7	24.8+	45.5	31.6	31.6-
F59-2723	38.9	32.0	19.3	31.9+	40.6	33.4	33.6-
F59-2734	32.7	37.0+	22.5	18.1	43.0	40.9	31.6-
F60-1873	38.4	34.6	39.5	26.2+	39.9	35.9	30.4-
F60-2331	36.6	31.7	16.3	18.4	39.4	34.8	26.4-
La59-72-11	41.2	33.1	18.8	21.2	39.9	40.9	43.3
La60-15-3	42.3	30.7	19.1	8.4	41.3	34.1	44.6
La60-26-2	37.9	34.8	27.0	20.1	43.1	38.9	37.3
La60-31-A2	28.3-	26.4-	23.8	17.7	43.9	28.7-	45.4
La60-41-2	39.7	31.5	13.4	20.0	42.0	35.8	39.3
La60-97-A	45.1+	35.6+	24.8	22.4	41.1	35.9	40.9
L.S.D.(.05)	6.1	3.6	N.S.	9.4	5.0	5.6	7.8
C.V.	8%	7%	29%	22%	6%	8%	12%

1/ Not included in combined analysis.

Table 60. - Oil percentages for the strains in Preliminary Group VIII, 1962

Strain	Black-ville, S.C.	Experiment, Ga.	Live Oak, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Bienville	20.7	21.5	21.6	23.4	23.1	22.9
Hampton	21.0	22.1	22.0	24.3	24.4	23.5
Co58-220	18.5	21.1	20.4	22.4	22.2	22.7
Co59-264	18.2	19.1	20.4	20.5	21.6	22.7
Co59-267	20.0	21.5	21.2	21.9	21.8	22.8
Co59-270	19.0	19.2	21.4	21.5	21.6	22.1
Co60-231	18.7	20.5	21.0	22.0	21.7	21.2
Co60-235	18.2	20.6	21.6	22.4	22.7	22.0
Co60-239	17.9	19.6	20.3	21.0	21.2	21.9
Co60-240	17.9	20.1	21.0	21.1	21.0	20.7
D60-7911	17.4	17.6	18.1	19.0	19.0	18.9
D60-7978	17.5	17.8	18.3	18.6	19.2	18.4
D60-8011	17.3	17.4	17.6	17.2	18.4	19.0
D60-8023	17.9	17.8	18.2	19.6	19.0	18.5
Ga59-817	20.1	21.0	21.3	22.8	20.2	21.8
F58-4450	20.4	22.1	21.1	22.4	23.1	21.8
F58-4667	20.9	20.6	22.0	23.4	22.6	22.2
F58-6421	20.4	20.6	20.8	22.1	21.8	20.8
F59-1220	20.9	21.1	22.2	23.8	23.4	23.5
F59-1750	19.7	21.1	20.1	21.7	21.8	21.5
F59-1876	20.5	22.2	22.4	23.9	22.2	22.4
F59-1938	20.4	22.6	22.0	22.3	22.5	22.4
F59-1999	19.4	20.3	18.7	21.3	21.4	20.9
F59-2008	19.4	21.7	22.3	23.5	23.9	23.7
F59-2643	19.6	20.9	21.2	22.6	22.4	23.1
F59-2688	18.3	18.6	19.9	21.1	21.1	21.6
F59-2723	19.1	20.5	20.3	21.8	21.3	21.4
F59-2734	20.5	21.4	21.8	22.3	23.1	23.3
F60-1873	19.3	20.2	21.2	23.1	21.7	22.0
F60-2331	18.9	20.6	20.5	22.2	21.7	22.0
La59-72-11	20.1	20.4	21.4	22.4	23.1	22.5
La60-15-3	20.5	20.7	21.2	23.8	23.6	23.0
La60-26-2	21.1	22.9	22.1	22.7	23.9	21.9
La60-31-A2	19.9	21.7	21.2	22.4	21.5	17.5
La60-41-2	20.5	21.6	21.8	23.8	23.1	22.7
La60-97-A	20.5	21.6	21.8	23.2	24.0	22.8

Table 61. - Protein percentages for the strains in Preliminary Group VIII, 1962

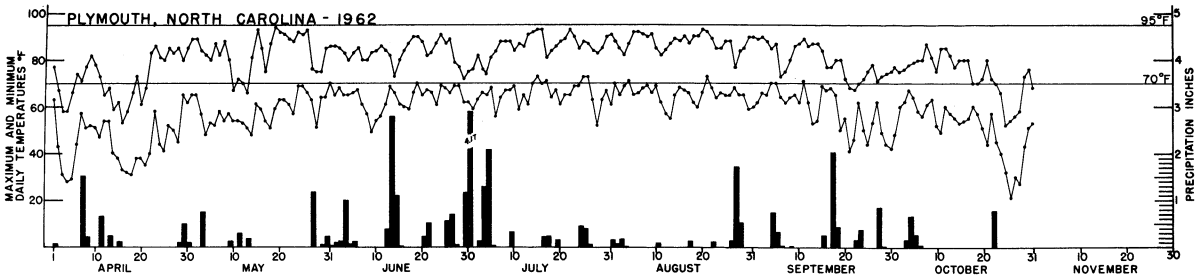
Strain	Black-ville, S.C.	Experiment, Ga.	Live Oak, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Bienville	39.6	39.1	42.0	39.1	37.8	38.7
Hampton	38.1	37.5	40.1	36.5	37.1	37.7
Co58-220	40.7	37.7	42.1	39.8	38.2	38.2
Co59-264	41.1	41.5	43.4	41.1	40.6	39.0
Co59-267	37.8	37.3	40.5	40.0	38.6	39.0
Co59-270	39.8	42.5	41.4	40.0	39.2	39.4
Co60-231	41.3	40.5	42.5	40.8	39.7	42.0
Co60-235	39.0	37.4	39.6	39.0	37.5	38.4
Co60-239	42.0	42.4	43.3	41.6	40.9	41.8
Co60-240	42.7	40.4	43.3	41.7	40.8	43.1
D60-7911	47.8	47.7	49.2	46.8	44.7	47.3
D60-7978	48.7	49.3	49.5	46.8	46.4	48.2
D60-8011	48.4	47.4	50.2	48.4	47.6	46.6
D60-8023	47.6	48.9	49.7	46.6	46.8	48.9
Ga59-817	42.2	42.0	44.6	41.4	41.1	42.0
F58-4450	40.6	41.2	42.5	40.0	38.1	39.6
F58-4667	37.9	41.0	41.1	38.3	38.3	41.3
F58-6421	40.9	40.4	42.4	42.0	41.0	41.0
F59-1220	39.4	39.1	42.2	39.6	38.3	38.3
F59-1750	42.7	41.9	44.1	43.6	39.2	42.9
F59-1876	39.0	37.9	41.2	38.3	37.8	39.4
F59-1938	39.6	38.1	40.8	40.7	37.5	38.7
F59-1999	41.8	39.6	43.1	41.2	38.7	43.2
F59-2008	39.1	39.1	39.3	37.7	37.3	37.4
F59-2643	41.2	40.4	42.1	40.0	39.2	38.9
F59-2688	43.3	44.8	45.6	43.1	41.8	42.0
F59-2723	43.4	40.1	44.6	43.0	40.9	42.2
F59-2734	39.3	39.9	41.7	39.8	36.9	37.9
F60-1873	41.3	41.2	42.3	40.0	40.8	41.3
F60-2331	42.0	41.2	43.8	40.2	41.5	38.3
La59-72-11	40.0	41.7	42.3	39.2	39.3	40.1
La60-15-3	40.6	40.8	42.2	38.8	40.8	39.9
La60-26-2	40.2	37.8	41.9	39.0	39.1	41.6
La60-31-A2	39.9	37.1	41.3	38.9	40.6	40.9
La60-41-2	41.2	38.6	42.8	39.2	40.8	40.8
La60-97-A	40.4	39.4	42.5	39.0	38.7	38.8

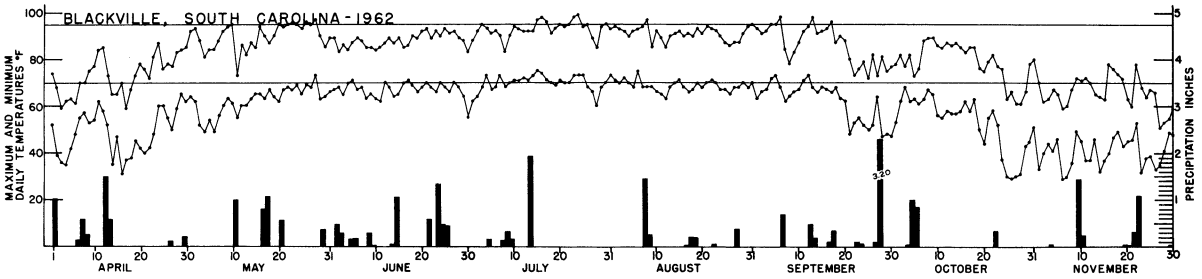
Table 62. - Plant height for the strains in Preliminary Group VIII, 1962

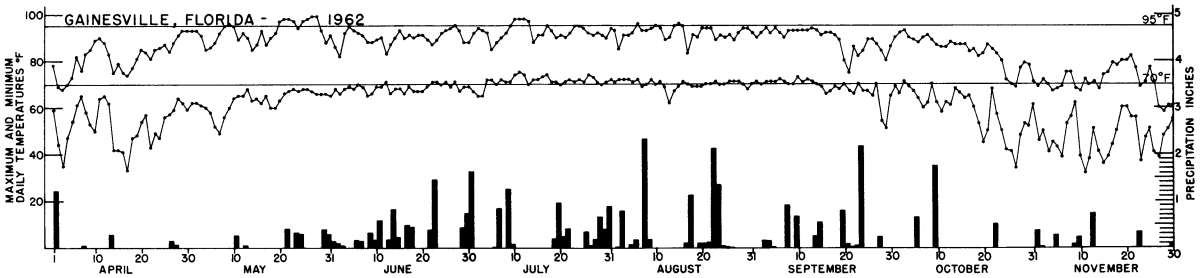
Strain	Florence, S.C.	Black-ville, S.C.	Experi-ment, Ga.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Bienville	38	36	32	25	40	42	39	32
Hampton	36	32	30	24	40	35	39	25
Co58-220	40	33	28	24	36	33	41	28
Co59-264	36	33	32	24	30	35	40	28
Co59-267	42	33	35	27	40	39	48	28
Co59-270	41	34	29	29	38	37	43	30
Co60-231	39	34	33	25	40	38	43	34
Co60-235	38	30	29	22	32	35	41	25
Co60-239	38	32	30	28	26	32	42	28
Co60-240	36	31	34	28	32	35	39	30
D60-7911	40	33	33	30	44	42	44	30
D60-7978	38	31	33	23	36	36	41	20
D60-8011	40	35	30	33	50	45	45	32
D60-8023	43	33	29	29	46	43	44	26
Ga59-817	34	33	32	28	34	40	42	26
F58-4450	38	35	36	32	40	43	46	30
F58-4667	48	40	34	35	48	47	58	30
F58-6421	42	35	35	30	48	45	44	29
F59-1220	40	31	35	28	36	40	45	28
F59-1750	42	40	39	45	50	58	55	52
F59-1876	42	41	43	33	54	52	48	36
F59-1938	44	40	39	37	48	51	52	34
F59-1999	36	31	35	32	38	40	48	28
F59-2008	36	35	31	30	40	39	44	28
F59-2643	35	33	29	27	38	37	37	26
F59-2688	44	41	38	37	42	49	51	37
F59-2723	42	33	33	32	46	41	42	32
F59-2734	39	33	34	25	36	39	40	24
F60-1873	38	35	35	27	48	34	45	28
F60-2331	36	31	27	23	36	30	40	26
La59-72-11	33	30	28	22	36	28	35	20
La60-15-3	41	34	29	25	42	42	44	28
La60-26-2	34	29	36	20	34	27	35	26
La60-31-A2	39	33	36	27	40	37	40	30
La60-41-2	37	32	32	26	38	36	41	26
La60-97-A	36	31	28	22	24	31	36	26

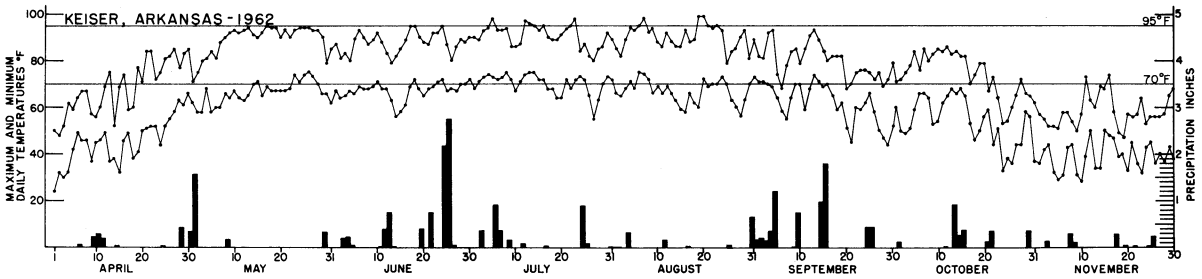
Table 63. - Seed quality scores for the strains in Preliminary Group VIII, 1962

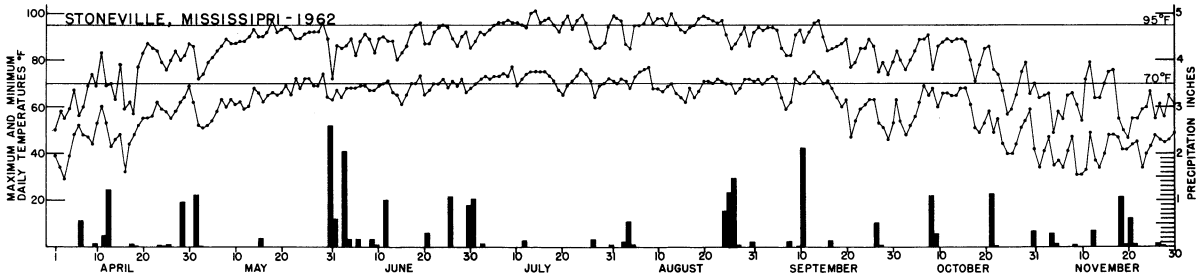
Strain	Blackville, S.C.	Experiment, Ga.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Jay, Fla.	Baton Rouge, La.
Bienville	1.0	1.0	2.5	1.0	2.0	1.0	1.0
Hampton	1.0	1.0	2.0	1.0	2.0	1.0	1.0
Co58-220	1.0	1.0	2.0	1.0	2.0	2.0	1.0
Co59-264	1.0	1.5	1.5	1.0	2.0	1.0	1.0
Co59-267	1.0	1.5	1.0	1.0	2.0	1.0	3.0
Co59-270	1.0	1.5	1.5	1.0	2.0	1.0	1.0
Co60-231	1.0	1.5	1.5	1.0	2.0	2.0	1.0
Co60-235	1.0	1.0	2.0	2.0	2.0	1.0	1.0
Co60-239	1.0	1.0	1.5	3.0	2.0	1.0	1.0
Co60-240	1.0	1.0	1.0	1.0	2.0	2.0	1.0
D60-7911	1.5	1.5	3.0	1.0	2.0	1.0	1.0
D60-7978	2.0	1.0	2.5	1.0	2.0	1.0	1.0
D60-8011	1.0	1.5	3.0	1.0	2.0	1.0	2.0
D60-8023	2.0	2.0	2.5	1.0	2.0	1.0	1.0
Ga59-817	1.0	1.0	2.5	3.0	2.0	1.0	1.0
F58-4450	2.0	2.0	2.0	1.0	2.0	2.0	2.0
F58-4667	1.0	1.5	2.0	1.0	2.0	1.0	1.0
F58-6421	2.0	1.5	2.5	1.0	3.0	2.0	1.0
F59-1220	1.0	1.0	1.5	2.0	2.0	1.0	1.0
F59-1750	1.0	1.5	2.0	1.0	2.0	1.0	1.0
F59-1876	1.0	1.0	1.5	1.0	2.0	1.0	1.0
F59-1938	1.0	1.0	2.5	1.0	2.0	2.0	1.0
F59-1999	1.0	1.5	1.0	1.0	2.0	2.0	1.0
F59-2008	1.5	1.5	1.5	1.0	2.0	2.0	1.0
F59-2643	1.0	1.0	1.5	1.0	2.0	2.0	1.0
F59-2688	1.0	1.5	2.5	2.0	3.0	1.0	1.0
F59-2723	1.0	1.0	2.0	1.0	3.0	1.0	2.0
F59-2734	1.0	1.5	1.5	1.0	2.0	2.0	1.0
F60-1873	1.0	1.0	1.5	1.0	3.0	1.0	2.0
F60-2331	1.0	1.0	2.0	1.0	2.0	1.0	1.0
La59-72-11	1.0	2.0	1.5	1.0	2.0	1.0	1.0
La60-15-3	1.0	1.0	3.0	1.0	2.0	1.0	1.0
La60-26-2	1.0	1.0	1.5	1.0	2.0	1.0	1.0
La60-31-A2	2.0	1.0	1.5	1.0	2.0	2.0	1.0
La60-41-2	1.0	1.0	2.0	1.0	2.0	1.0	2.0
La60-97-A	1.0	1.0	1.5	2.0	2.0	1.0	1.0

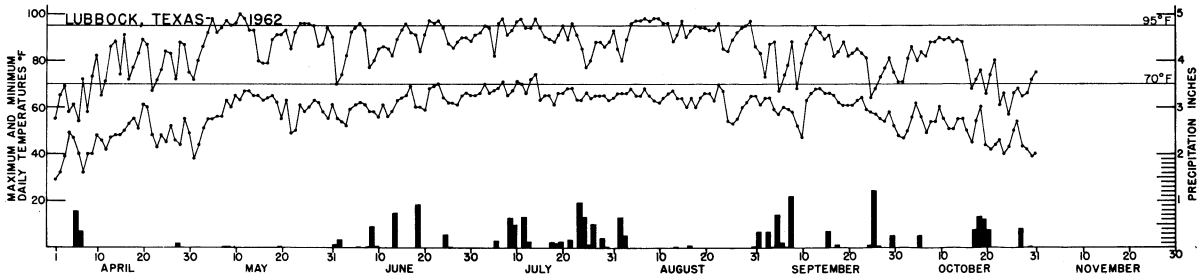

PLYMOUTH, NORTH CAROLINA - 1962
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
95°F
70°F
4.11
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


BLACKVILLE, SOUTH CAROLINA - 1962
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
3.20
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


GAINESVILLE, FLORIDA - 1962
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
95°F
70°F
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


KEISER, ARKANSAS - 1962
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
95°F
70°F
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


STONEVILLE, MISSISSIPPI - 1962
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
95°F
70°F
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


LUBBOCK, TEXAS - 1962
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
95°F
70°F
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER