U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1961 PART II. SOUTHERN STATES

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

PART II. SOUTHERN STATES

1961

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TABLE OF CONTENTS

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INTRODUCTION

The program of the U. S. Regional Soybean Laboratory has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs are conducted at three locations, Stoneville, Mississippi; Raleigh, North Carolina; and Gainesville, Florida. After promising new strains are developed at these breeding centers, or by any other cooperating agency, they are advanced to the preliminary and uniform regional tests, conducted in cooperation with the Southeastern States. This testing program enables the breeder to evaluate new strains under a wide variety of conditions, and permits new strains to be put into production in a minimum amount of time.

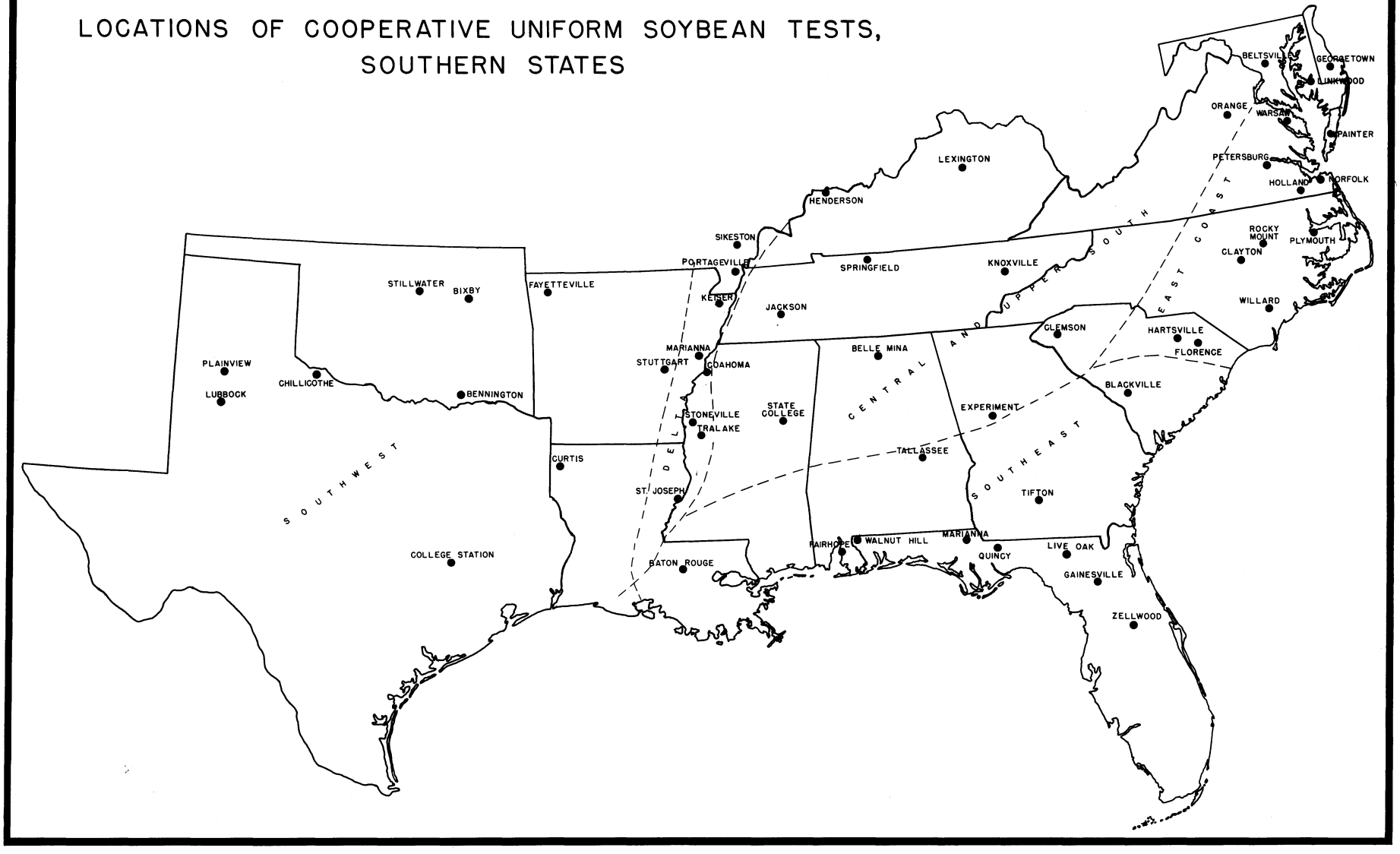
Ten uniform test groups have been established to evaluate the better strains developed in the breeding programs. The Groups 00 through IV are adapted in the northern part of the United States, and the Groups IV through VIII are grown in the southern part. Within their area of adaptation, there is a maturity 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. A map is included to illustrate the five production areas.

On nearly all of the Coastal Plain, Peidmont, 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, rate of fertilization, and number of irrigations is included.

The soil test information is included for many of the locations. Soil analyses were run by laboratories within the states. Different methods are used for extraction and reporting by the various laboratories. Consequently, the analyses may not be too meaningful. For example, a P_2O_5 level of 60 pounds

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES



may be rated as low by the methods of one state and very high by the methods of another state. In most cases soil samples were taken after the soybeans were mature.

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.

Ar	-	Arizona Agricultural Experiment Station
C	-	Purdue Agr. Exp. Sta. and U. S. Regional Soybean Laboratory
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
J.E.W.	-	John Wannamaker, St. Matthews, South Carolina
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

Locations at which cooperative soybean nurseries were grown; and soil type, soil analyses, and fertilization at these locations.

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				Norfolk sandy loam	170	72	6.3	0-30-60	33.1 - A
Linkwood, Md.	1	1	1			Sassafras sandy loam	--	--	---	0-30-60	30.0 - A
Warsaw, Va.	1	1*	1*			Sassafras sandy loam	H	M	6.6	0-0-0	24.3 - B
Painter, Va.	1	1	1			Sassafras sandy loam	VH	M+	6.0	0-0-0	35.1 - B
Petersburg, Va.		1	1			Norfolk fine sandy loam	H	M	6.6	0-0-0	36.0 - B
Norfolk, Va.		1	1			Woodstown sandy loam	VH	H	5.6	0-70-70	23.6 - B
Holland, Va.		1	1			Dragston loamy fine sand	H	M	5.8	0-100-100	36.2 - B
Plymouth, N. C.		1*	1*			Bladen fine sandy loam	H	H	6.0	0-40-80	42.8 - C
Rocky Mt. N.C.				1		Norfolk sandy loam	H	H	6.2	0-40-80	20.7 - C
Willard, N. C.			1	1*		Norfolk sandy loam	VH	M	5.6	0-40-80	41.7 - C
Clayton, N. C.			1	1		Norfolk sandy loam	VH	M	6.0	0-40-80	27.3 - C
Florence, S. C.				1	1*	Marlboro sandy loam				10-27-27	23.0 - D
Hartsville, S. C.			1	1	1	Norfolk sandy loam				9-27-54	37.8 - D
Southeast											
Blackville, S.C.(A)				1*		Norfolk sandy loam	H	M	6.0	0-52-52	33.0 - D
Blackville, S.C.(B)					1*	Norfolk sandy loam	VH	M	5.9	0-42-42	25.3 - G
Tallassee, Ala.			1	1*	1	Cahaba loamy fine sand				0-42-42	43.5 - D
Tifton, Ga.				1	1	Tifton pebbly loam	84	39	5.6	18-54-54	41.9 - F
Live Oak, Fla.				1	1*	Klej fine sand	26	146	6.2	0-50-100	30.1 - D
Gainesville, Fla.			1	1*	1*	Arredonda fine sand	80	181	6.1	0-40-80	34.9 - D
Zellwood, Fla.			1	1*		Muck	90	118	6.0	0-0-0	39.2 - C
Quincy, Fla.			1	1	1*	Faceville sandy loam	9	157	6.2	0-0-0	42.8 - D
Marianna, Fla.				1	1	Ruston sandy loam				24-72-72	
Jay, Fla.			1*	1*	1	Tifton fine sandy loam				24-72-72	32.0 - D
Fairhope, Ala.			1	1	1	Marlboro fine sandy loam				0-56-56	47.1 - F
Baton Rouge, La.			1	1	1*	Olivier silt loam				15-60-60	40.8 - E
Upper and Central South											
Orange, Va.	1	1				Davidson clay loam	M	H	6.4	0-112-56	41.7 - A
Lexington, Ky.	1	1				Guthrie silt loam	VH	M	6.5		36.3 - G
Springfield, Tenn.	1	1				Dickson silt loam				0-60-60	23.3 - A
Jackson, Tenn.		1	1			Richland silt loam	H	H	6.5	0-80-80	39.9 - A
Belle Mina, Ala.		1	1			Decatur sandy loam				0-56-56	25.9 - A
Clemson, S. C.				1		Cecil sandy loam	L	M	5.6	28-84-84	38.1 - C
Experiment, Ga.		1	1	1*	1*	Lloyd sandy clay loam	H	M	6.4	20-60-60	54.9 - C
State College, Miss.		1	1	1		Verona fine sandy loam				0-20-60	44.6 - 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	VH	L	5.9	0-0-80	49.0 - G
Sikeston, Mo.	1	1*	1*			Dexter sandy loam	224	220	5.7	0-40-40	35.0 - A
Portageville, Mo.(A)	1	1	1			Salix silt loam	224	230	5.8		38.6 - A
Portageville, Mo.(B)	1	1	1			Sharkey clay	224+	450	6.0		36.9 - A
Keiser, Ark.(A)	1	1	1			Sharkey clay(overwash)					
Keiser, Ark.(B)	1	1*	1*			Sharkey clay	M	H	6.0	0-36-0	34.0 - A
Marianna, Ark.	1	1	1			Richland silt loam	M	H	5.7	0-40-40	26.1 - A
Stoneville,Miss.(A)		1	1*	1*		Bosket fine sandy loam	M	H+	6.0		50.0 - C
Stoneville,Miss.(B)	1	1*	1*	1		Sharkey clay	H	H+	6.1		45.1 - C
St. Joseph, La.		1	1	1	1	Commerce sandy loam					48.8 - C
West											
Stuttgart, Ark.[3]		1	1	1		Crowley silt loam	VL	L	6.3	0-48-48	47.4 - B
Curtis, La.		1	1	1	1	Yahola fine sandy loam					48.0 - C
Bixby, Okla.	1	1	1			Lonoke very fine sandy loam	65	316	7.4		43.8 - B
Bennington, Okla.			1	1		Miller sandy loam	231	420	7.8		46.1 - C
Chillicothe, Texas			1	1		Abilene loam					
Halfway, Texas[3]		1	1			Amarillo fine clay loam					29.5 - A
Lubbock, Texas[3]		1	1			Amarillo fine sandy loam					37.4 - C
College Station,Texas			1	1	1	Miller clay				24-24-24	34.4 - 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.
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 widths at the different locations vary from 36 to 40 inches. An attempt is 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 175 seed for planting a 19-foot row. This gives a planting rate of 9 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 - 0 to 5% shattered
2 - 6% to 10% shattered
3 - 11% to 24% shattered
4 - 25% to 50% shattered
5 - over 50% shattered

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

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

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

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

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

Maturity is taken as the date when the pods are dry and most of the leaves have dropped. Under most conditions, the stems are also dry. Maturity in all summaries is expressed as days earlier (-) or later (+) than a standard or reference variety. Reference varieties used for the different uniform tests are as follows: Group IV, Kent; Group V, Hill; Group VI, Hood; Group VII, 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"-6" gap between rows
3 - 6"-10" gap between rows
4 - 10"-18" gap between rows
5 - 18"-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 - 0-5% of plants killed.
2 - 6%-10% of plants killed.
3 - 11%-24% of plants killed.
4 - 25%-50% of plants killed.
5 - over 50% of plants killed.

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

1 - 0-5% purple staining.
2 - 6%-10% purple staining.
3 - 11%-24% purple staining.
4 - 25%-50% purple staining.
5 - over 50% 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. SL-1	(Clark(5) x Blackhawk) x (Clark(3) x S4-1714)	F_2
6. S7-5343	Clark(3) x S4-1714	F_3
7. D53-184	D49-2525 x L6-5679	F_5
8. D54-2437	N48-1394 x L6-5679	F_5
9. UD672	C799 x FC33243	F_6
10. D56-1404	PI 179,826 x D49-2510	F_5
11. L57-9809	Hawkeye x Lee	F_6
12. C1245	Korean x C1067	F_6

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.

S4-1714 is a pustule-resistant line from L49-4091 x Clark. L49-4091 is a pustule-resistant selection from (Lincoln(2) x Richland) x (Lincoln x CNS).

N48-1394 is a pustule-resistant line of Group VI maturity selected from the cross Roanoke x N45-745 (a selection from Ogden x CNS).

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

C1067 is a selection from Lincoln x Ogden.

Results of 12 Group IV 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 3-year data are reported for seed yield and oil and protein percentages.

Differences among strains were significant in 8 of the 12 comparisons. Seed used for planting the strains D54-2437 and D56-1404 was weather damaged and as a result poor stands were obtained at some of the locations. Although differences in seed yield were significant at 8 of the 12 locations, there was considerable variety x location interaction and as a result a combined analysis of variance for the East Coast and Delta areas showed strain differences to be nonsignificant.

None of the varieties or strains included in Group IV is ideally adapted for production in the area. Kent has produced good seed yields, but seed is of low quality and it is subject to shattering. The strain SL-1, which is basically Clark but which has resistance to bacterial pustule and phytophthora rot added, yielded essentially similar to Clark at all locations except Stoneville where it exceeded Clark by 12 bushels per acre.

The two strains D56-1404 and C1245, tested for the first time, produces seed too low in quality to be acceptable for the area and should be dropped. D56-1404 does have very high oil content. S7-5343 and D54-2437 have also been adequately tested. D54-2437 combines resistance to bacterial pustule with a high degree of resistance to phytophthora rot, but it produces seed of rather low quality and is susceptible to purple stain development.

The growing season for Kent ranged from 118 days at Marianna, Arkansas to 138 days at Sikeston, Missouri. Kent produced 28.3 bushels per acre at Marianna and 34.4 bushels at Sikeston.

Table 1. General summary of performance for the strains in Uniform Group IV, 1961

	Kent	Scott	Bethel	Clark	SL-1	S7-5343
Seed Yield - 1961						
East Coast	35.5	33.6	34.6	34.8	35.6	32.5
Delta	36.3	34.2	32.2	31.8	34.1	31.3
- 1960-61						
East Coast	37.8	36.4	35.3	34.3	--	33.2
Delta	35.7	33.0	32.0	30.5	--	31.2
- 1959-61						
East Coast	37.6	35.7	35.0	34.1		
Delta	33.1	31.1	30.1	28.1		
Oil Content - 1961	22.3	22.1	22.8	22.5	22.5	22.8
- 1960-61	22.3	22.1	22.0	22.6		
- 1959-61	22.3	21.9	21.6	22.5		
Protein Content - 1961	40.6	38.9-	39.6-	40.4	40.0	40.1
- 1960-61	40.4	38.8	40.6	40.6		
- 1959-61	40.6	38.9	41.6	40.9		
Seed Size	17.6	14.8-	16.1	16.7	16.3	15.7
Maturity Index	9-26	0	0	-8	-8	-8
Height	35	38	40	34	35	33
Seed Quality[1/]	55	55	45	36	45	45
Bacterial Pustule[2/]	3.0	1.0	3.0	4.0	1.0	1.0
Phytophthora Rot[3/]	2.0	3.0	1.0	2.0	1.0	2.0
Purple Stain[4/]	4.0	3.0	3.0	3.0	3.0	3.0
Shattering[5/]	4.0	2.0	1.0	1.7	1.5	1.6

1/ Percentage of comparisons receiving a score of 3 or poorer.
2/ Stoneville data.
3/ Stoneville and Keiser data.
4/ Average of Georgetown, Linkwood, Warsaw, and Orange data.
5/ Average of Warsaw, Orange, Stoneville, and Bixby data.

Table 1. (continued)

	D53-184	D54-2437	UD672	D56-1404	L57-9809	C1245
Seed Yield - 1961						
East Coast	33.8	34.3	35.0	31.1	36.3	35.2
Delta	34.8	--	34.9	--	37.4	35.1
- 1960-61						
East Coast	35.2	34.6	35.7			
Delta	34.5	--	33.6			
- 1959-61						
East Coast	35.1	35.5				
Delta	32.7	--				
Oil Content - 1961	21.9	21.9	21.6-	24.0+	22.7	22.6
- 1960-61	21.9	21.7	22.3			
- 1959-61	21.7	21.6				
Protein Content - 1961	40.6	40.1	41.0	39.8	40.1	40.2
- 1960-61	40.9	40.2	40.3			
- 1959-61	41.2	40.6				
Seed Size	14.2-	14.8-	16.0	19.5+	15.3	20.2+
Maturity Index	0	0	0	0	0	-5
Height	40	32	43	36	39	34
Seed Quality[1/]	9	37	45	44	9	64
Bacterial Pustule[2/]	1.0	1.0	3.0	1.0	1.0	3.0
Phytophthora Rot[3/]	1.0	1.0	1.0	1.0	2.0	2.0
Purple Stain[4/]	3.0	3.0	3.0	4.0	3.0	4.0
Shattering[5/]	1.0	2.7	2.5	2.0	2.3	3.8

Table 2. Seed yield, in bushels per acre, for the strains in Uniform Group IV, 1961

Location	Kent	Scott	Bethel	Clark	SL-1	S7-5343	D53-184
			East Coast				
Georgetown, Del.	35.2	36.1	33.6	40.6	40.3	29.4-	31.2
Linkwood, Md.	33.0	34.0	31.5	36.3	34.7	35.4	33.8
Orange, Va.	47.0	39.8	46.5	41.1	44.6	39.5	42.9
Warsaw, Va.	27.0	27.2	26.7	24.1-	25.1	24.1-	27.2
Painter, Va.	35.3	30.8	34.7	32.0	33.3	34.3	33.8
Mean	35.5	33.6	34.6	34.8	35.6	32.5	33.8
			Upper and Central South				
Lexington, Ky.	36.3	32.5	29.9-	37.5	42.2+	35.4	30.3-
			Delta				
Henderson, Ky.	49.0	44.9	38.8-	44.1	42.2-	36.0-	44.0
Sikeston, Mo.	34.4	28.4	22.8-	33.9	32.3	32.5	28.4
Keiser, Ark. (B)	25.8	17.0-	27.6	20.3	23.0	17.5-	24.0
Marianna, Ark.	28.3	29.0	22.4	23.9	23.6	28.5	24.6
Stoneville, Miss. (B)	42.2	46.2	43.9	34.3-	46.5	34.5-	46.4
Bixby, Okla.	38.1	39.5	37.7	34.3	37.1	38.6	41.2
Mean	36.3	34.2	32.2	31.8	34.1	31.3	34.8

(+) - 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	D54-2437	UD672	D56-1404	L57-9809	C1245	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	27.2-	36.1	29.4-	35.1	37.2	5.7	10%
Linkwood, Md.	31.5	33.1	33.6	37.5	34.5	N.S.	7%
Orange, Va.	53.0	43.9	36.1-	43.3	48.2	8.7	12%
Warsaw, Va.	26.1	27.5	25.7	28.7	25.7	2.6	6%
Painter, Va.	33.5	34.3	30.6	36.7	30.4	N.S.	9%
Mean	34.3	35.0	31.1	36.3	35.2	N.S.	
			Upper and Central South				
Lexington, Ky.	--	29.1-	26.6-	33.3	38.9	5.6	8%
			Delta				
Henderson, Ky.	--	38.4-	--	45.5	49.2	6.4	9%
Sikeston, Mo.	--	31.8	--	32.6	32.3	8.8	12%
Keiser, Ark. (B)	28.2	33.3+	24.0	30.6	19.4-	5.7	14%
Marianna, Ark.	21.7	25.3	18.8	28.9	25.6	N.S.	16%
Stoneville, Miss. (B)	30.9-	40.3	33.7-	46.4	40.8	7.2	10%
Bixby, Okla.	--	40.1	36.3	40.4	43.0	N.S.	9%
Mean	--	34.9	--	37.4	35.1	N.S.	

Table 3. Chemical composition and seed size for the strains in Uniform Group IV, 1961

Location	Kent	Scott	Bethel	Clark	SL-1	S7-5343	D53-184
			Oil Percentage				
Linkwood, Md.	22.3	21.3	22.7	23.1	22.7	23.3	21.7
Warsaw, Va.	23.2	22.5	22.2	23.8	23.2	23.9	22.6
Henderson, Ky.	21.9	21.4	22.2	21.6	21.1	21.3	21.0
Sikeston, Mo.	21.7	21.5	21.5	21.5	22.1	22.2	21.0
Marianna, Ark.	22.9	22.8	24.3	23.2	23.7	23.6	22.6
Stoneville, Miss. (B)	21.8	22.6	24.0	22.0	22.5	22.8	22.6
Bixby, Okla.	22.3	22.3	23.0	22.6	22.2	22.2	21.8
Mean	22.3	22.1	22.8	22.5	22.5	22.8	21.9
			Protein Percentage				
Linkwood, Md.	40.9	41.2	38.6	39.0	39.1	38.8	42.3
Warsaw, Va.	41.2	39.5	41.6	40.1	40.2	39.8	40.6
Henderson, Ky.	41.2	39.2	41.4	41.4	41.4	41.0	41.9
Sikeston, Mo.	41.9	40.6	42.7	41.4	40.5	41.1	41.1
Marianna, Ark.	39.3	36.0	36.0	38.7	37.4	38.9	37.4
Stoneville, Miss. (B)	40.1	38.4	38.2	41.6	40.5	40.4	40.4
Bixby, Okla.	39.9	37.3	38.4	40.5	40.8	40.6	40.2
Mean	40.6	38.9	39.6-	40.4	40.0	40.1	40.6
			Grams Per 100 Seed				
Linkwood, Md.	18.7	15.5	17.9	18.2	17.3	16.8	15.2
Warsaw, Va.	19.3	16.3	18.6	16.3	15.6	15.6	15.0
Henderson, Ky.	20.8	15.5	17.5	18.2	16.7	15.9	15.6
Marianna, Ark.	14.0	12.3	12.3	15.3	13.3	13.3	11.7
Stoneville, Miss. (B)	15.7	13.5	13.4	15.5	17.9	15.9	12.3
Bixby, Okla.	17.2	15.8	16.8	16.9	17.0	16.8	15.5
Mean	17.6	14.8-	16.1	16.7	16.3	15.7	14.2-

Table 3. (continued)

Location	D54-2437	UD672	D56-1404	L57-9809	C1245	L.S.D. (.05)
			Oil Percentage			
Linkwood, Md.	21.1	22.7	23.1	22.7	22.6	
Warsaw, Va.	22.3	22.1	24.3	23.0	23.0	
Henderson, Ky.	-- 1/	20.9	-- 1/	22.6	23.1	
Sikeston, Mo.	-- 1/	21.1	-- 1/	21.2	21.7	
Marianna, Ark.	21.8	20.9	25.3	23.3	23.5	
Stoneville, Miss. (B)	22.2	21.5	24.3	23.8	22.6	
Bixby, Okla.	21.8	21.8	23.1	22.6	21.9	
Mean	21.9	21.6-	24.0	22.7	22.6	0.6
			Protein Percentage			
Linkwood, Md.	41.7	40.8	40.8	41.1	40.2	
Warsaw, Va.	40.1	41.6	41.1	40.1	40.1	
Henderson, Ky.	-- 1/	42.5	-- 1/	40.9	41.2	
Sikeston, Mo.	-- 1/	43.1	-- 1/	41.9	42.0	
Marianna, Ark.	38.4	38.8	36.5	37.4	38.3	
Stoneville, Miss. (B)	41.2	41.0	41.0	40.4	40.0	
Bixby, Okla.	39.4	38.9	40.0	38.9	39.6	
Mean	40.1	41.0	39.8	40.1	40.2	1.0
			Grams Per 100 Seeds			
Linkwood, Md.	15.7	17.5	22.1	15.8	21.8	
Warsaw, Va.	15.0	18.0	20.3	16.3	20.0	
Henderson, Ky.	-- 1/	17.4	-- 1/	16.6	23.1	
Marianna, Ark.	12.0	13.0	17.3	11.7	17.0	
Stoneville, Miss. (B)	13.1	13.5	20.8	14.2	18.8	
Bixby, Okla.	17.9	16.3	21.6	16.9	20.2	
Mean	14.8-	16.0	19.5+	15.3	20.2+	1.5

1/ Values estimated in calculating mean.

Table 4. Relative maturity data, days earlier (-) or later (+) than Kent, for the strains in Uniform Group IV, 1961

Location	Date Planted	Kent Matured	Scott	Bethel	Clark	SL-1
		East Coast				
Georgetown, Del.	5-24	9-29	+2	-1	-8	-8
Linkwood, Md.	5-22	9-28	+2	+2	-10	-10
Orange, Va.	5-22	10-10	-4	-2	-11	-11
Warsaw, Va.	5-22	9-30	0	+4	-5	-5
Mean		10-2	0	+1	-9	-9
		Upper and Central South				
Lexington, Ky.	5-29	10-4	+1	0	-7	-7
		Delta				
Henderson, Ky.	5-25	10-9	+2	0	-3	-5
Sikeston, Mo.	5-1	9-16	+2	+2	-5	-5
Keiser, Ark.(B)	5-13	9-20	+2	+4	-6	-8
Marianna, Ark.	5-16	9-12	0	-2	-4	-5
Stoneville, Miss. (B)	5-8	9-15	0	-1	-14	-13
Bixby, Okla.	5-16	9-18	-4	-5	-10	-6
Mean		9-20	0	0	-7	-7

Table 4. (continued)

Location	S7-5343	D53-184	D54-2437	UD672	D56-1404	L57-9809	C1245
			East Coast				
Georgetown, Del.	-8	+2	+2	0	0	0	-1
Linkwood, Md.	-9	+2	-1	+1	-1	+1	-3
Orange,Va.	-11	-1	-1	-1	-3	-3	-5
Warsaw, Va.	-4	0	0	0	-4	-2	-4
Mean	-8	0	0	0	-2	-1	-3
			Upper and Central South				
Lexington, Ky.	-7	+3	--	+2	+1	0	-7
			Delta				
Henderson, Ky.	-4	+1	--	+2	--	-1	0
Sikeston, Mo.	-4	+2	--	+2	+2	+3	-4
Keiser, Ark. (B)	-8	0	+4	+2	+1	+2	-8
Marianna, Ark.	-5	+1	+2	0	-1	0	-5
Stoneville, Miss. (B)	-14	-1	+3	-3	-2	+3	-11
Bixby, Okla.	-8	-5	-5	-6	-2	-5	-2
Mean	-7	0	+1	0	0	0	-5

Table 5. Height data for the strains in Uniform Group IV, 1961

Location	Kent	Scott	Bethel	Clark	SL-1	S7-5343
			East Coast			
Georgetown, Del.	39	43	44	38	39	37
Linkwood, Md.	31	38	37	32	32	31
Orange, Va.	40	36	39	37	36	36
Warsaw, Va.	26	29	30	25	25	25
Mean	34	37	38	33	33	32
			Upper and Central South			
Lexington, Ky.	44	44	46	40	45	40
			Delta			
Henderson, Ky.	44	46	48	42	41	38
Sikeston, Mo.	38	42	41	36	37	37
Keiser, Ark. (B)	27	30	36	26	27	24
Marianna, Ark.	29	34	34	32	30	31
Stoneville, Miss. (B)	32	31	40	33	32	31
Bixby, Okla.	39	43	45	37	37	38
Mean	35	38	41	34	34	33

Table 5. (continued)

Location	D53-184	D54-2437	UD672	D56-1404	L57-9809	C1245
			East Coast			
Georgetown, Del.	44	37	45	38	44	37
Linkwood, Md.	40	30	43	34	39	32
Orange, Va.	41	34	46	37	42	36
Warsaw, Va.	33	27	33	30	30	26
Mean	40	32	42	35	39	30
			Upper and Central South			
Lexington, Ky.	48	--	50	37	45	44
			Delta			
Henderson, Ky.	46	--	53	--	50	46
Sikeston, Mo.	44	--	41	36	41	35
Keiser, Ark. (B)	34	25	35	35	33	20
Marianna, Ark.	34	32	40	35	34	30
Stoneville, Miss. (B)	34	28	39	35	35	30
Bixby, Okla.	46	38	45	39	41	34
Mean	40	31	42	36	39	33

Table 6. Lodging scores for the strains in Uniform Group IV, 1961

Location	Kent	Scott	Bethel	Clark	SL-1	S7-5343
			East Coast			
Georgetown, Del.	1.0	2.0	1.3	1.3	1.0	3.7
Linkwood, Md.	2.0	2.3	2.0	2.0	2.0	2.0
Orange, Va.	1.0	1.7	1.0	1.3	1.0	1.3
Warsaw, Va.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Lexington, Ky.	1.7	1.8	1.7	2.5	1.8	1.3
			Delta			
Henderson, Ky.	1.5	2.2	2.0	1.7	1.3	1.2
Sikeston, Mo.	1.0	1.1	1.1	1.1	1.1	1.0
Keiser, Ark. (B)	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Ark.	1.0	1.0	1.3	1.0	1.3	1.0
Stoneville, Miss. (B)	2.0	1.7	2.0	2.0	1.7	2.0
Bixby, Okla.	2.3	2.7	3.0	2.3	2.0	2.0

Table 6. (continued)

Location	D53-184	D54-2437	UD672	D56-1404	L57-9809	C1245
			East Coast			
Georgetown, Del.	3.0	3.0	2.0	3.3	3.3	2.7
Linkwood, Md.	2.7	2.0	2.3	3.0	2.7	2.0
Orange, Va.	2.3	1.3	2.0	1.3	2.0	1.0
Warsaw, Va.	1.0	1.0	1.0	1.7	1.5	1.0
			Upper and Central South			
Lexington, Ky.	2.5	---	2.7	1.3	2.8	2.5
			Delta			
Henderson, Ky.	2.5	---	2.2	---	3.3	1.8
Sikeston, Mo.	1.2	1.0	2.2	1.0	2.3	1.0
Keiser, Ark. (B)	2.0	1.0	2.5	1.0	1.0	1.0
Marianna, Ark.	1.0	1.0	1.7	1.0	1.0	1.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	2.3	1.7
Bixby, Okla.	3.3	3.7	4.0	3.3	3.0	2.0

Table 7. Seed quality scores for the strains in Uniform Group IV, 1961

Location	Kent	Scott	Bethel	Clark	SL-1	S7-5343
			East Coast			
Georgetown, Del.	3.7	3.7	1.3	3.3	3.3	3.7
Linkwood, Md.	3.0	3.0	3.0	3.0	3.0	3.0
Orange, Va.	1.7	3.3	2.0	2.0	1.7	2.3
Warsaw, Va.	3.5	3.0	3.0	2.5	2.5	2.5
			Upper and Central South			
Lexington, Ky.	1.5	1.5	1.0	1.5	1.5	1.5
			Delta			
Henderson, Ky.	3.0	2.0	2.0	2.5	3.0	4.0
Sikeston, Mo.	2.2	2.0	3.0	2.3	2.3	2.5
Keiser, Ark. (B)	4.0	3.3	3.7	4.0	4.0	3.7
Marianna, Ark.	3.7	3.0	3.7	3.7	3.0	3.3
Stoneville, Miss. (B)	2.3	2.7	2.7	2.0	2.3	2.7
Bixby, Okla.	1.0	2.0	1.3	1.0	1.0	1.0

Table 7. (continued)

Location	D53-184	D54-2437	UD672	D56-1404	L57-9809	C1245
			East Coast			
Georgetown, Del.	2.3	3.0	2.0	4.3	2.0	4.0
Linkwood, Md.	3.0	3.0	4.0	4.0	3.0	4.0
Orange, Va.	2.0	2.0	2.0	1.3	2.0	2.0
Warsaw, Va.	2.5	2.5	3.0	3.0	2.5	4.0
			Upper and Central South			
Lexington, Ky.	1.5	---	1.5	2.0	1.5	2.5
			Delta			
Henderson, Ky.	2.5	---	2.0	---	2.5	3.0
Sikeston, Mo.	1.8	---	2.2	---	1.8	2.7
Keiser, Ark. (B)	2.3	3.0	3.7	4.0	2.3	4.0
Marianna, Ark.	2.0	2.7	4.0	2.7	2.3	4.0
Stoneville, Miss. (B)	1.3	2.7	3.0	2.3	2.0	3.0
Bixby, Okla.	1.0	2.0	1.0	2.0	1.0	2.0

UNIFORM GROUP V

1961

Variety or Strain	Parentage	Generation Composited
1. Hill	D632-15 x D49-2525	F_5
2. Dorman	Dunfield x Arksoy	F_6
3. D55-8144	Dorman x N48-1515	F_5
4. D56-1231	Perry x Lee	F_5
5. S4-7346		F_5
6. D56-3	Dorman(4) x N48-1515	F_3
7. D56-1087	D51-5108 x Dorman	F_5
8. D56-1131	D51-5108 x Dorman	F_5
9. R57-18	Dorman x D49-2477	F_6
10. S6-7413	D49-2491 x L3-2010	F_4
11. D59-415	Hill x D52-810	F_5
12. D59-693	Hill x D52-810	F_5

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.

D49-2477, D49-2491, and D49-2525 are sister strains to Lee.

N48-1515 is a pustule-resistant line selected from Roanoke x N45-745. N48-1515 was included in Uniform Group VI for the years 1951-1953.

D51-5108 is a selection from D49-772 which was selected from the cross Roanoke x N45-745. Both D49-772 and D51-5108 have been tested in Uniform Group VII.

L3-2010 is a high oil line of Group IV maturity.

D52-810 is a yellow seeded selection from Roanoke x Ogden similar to Ogden in growth type and maturit

Results of 22 Group V nurseries are summarized in tables 8 through 14. Table 8 gives a general summary of seed yields by production areas, agronomic qualities, chemical composition, and reaction to some of the diseases.

Differences among strains were nonsignificant in 11 of the 22 comparisons. Differences among strains within production areas were nonsignificant. Seed used for planting some of the strains was weather damaged and did not produce a satisfactory stand where conditions for germination were less favorable.

D55-8144 was tested in its fourth year. In each of the years it has yielded very well and has high oil content. In 1961, D55-8144 was also included in Uniform Group VI, since it is late in Group V. Seed quality is inferior to that for Hill. The strain also appeared more subject to shattering than is desired in a commercial variety. It appears that D55-8144 has been adequately tested.

D56-1231 and S4-7346 have been tested for 3 years. The 3-year data do not show either of these strains to be sufficiently superior in productivity to warrant further testing. On the clay soils both have appeared to be more susceptible to phytophthora rot than Hill. Both strains have high oil content along with a very good protein percentage.

D56-3 is essentially Dorman with resistance to bacterial pustule added. D56-3 averages higher in seed yield in the East Coast, Upper and Central South, and Delta areas than Dorman. The 2-year average shows a 3, 5, and 5 percent increase in these three production areas. D56-3 is inferior to Hill in seed holding and in resistance to purple seed stain development.

The four strains D56-1087, D56-1131, R57-18, and S6-7413 shattered more than Hill at locations having a very dry period after maturity. Although all of these strains have produced good seed yields, it appears that 2 years testing is adequate for them. It is doubtful that any one of these would ever merit consideration as a variety in any area.

The two strains D59-415 and D59-683 were grown for the first time. Both have Hill as a parent and average 5 to 6 days later in maturity. Both strains produced well but did not demonstrate any striking superiority over Hill in these plantings.

The longest growing season for Hill was 150 days at Sikeston and the shortest was 115 days at Experiment. Hill averaged 35.0 bushels per acre at Sikeston and 45.5 bushels at Experiment.

Table 8. General summary of performance for the strains in Uniform Group V, 1961

	Hill	Dorman	D55-8144	D56-1231	S4-7346	D56-3
Seed Yield - 1961						
East Coast	31.1	30.0	31.8	30.4	30.8	31.0
Upper & Central South	32.8	29.3	35.5	33.1	34.0	33.5
Delta	38.5	35.5	41.2	34.3	38.6	38.3
West	37.0	34.8	37.1	--	35.8	32.9
- 1960-61						
East Coast	34.1	33.2	37.1	34.3	33.1	34.2
Upper & Central South	29.9	28.4	32.2	30.1	31.1	29.9
Delta	36.7	34.6	39.3	35.6	37.3	36.4
West	40.6	37.6	41.8	--	38.3	38.0
- 1959-61						
East Coast	35.0	34.1	38.8	36.2	35.0	
Upper & Central South	28.6	27.7	32.0	29.9	30.3	
Delta	36.1	33.6	39.3	35.2	36.3	
West	36.7	34.5	39.5	--	35.3	
Oil Content - 1961	21.2	21.3	22.4+	21.2	21.1	21.1
- 1960-61	21.5	21.6	23.0	21.5	21.4	21.2
- 1959-61	21.4	21.6	22.9	21.5	21.7	
Protein Content - 1961	40.1	39.6	39.1-	41.4+	41.9+	40.4
- 1960-61	40.0	39.3	38.7	41.5	41.6	40.3
- 1959-61	39.9	39.3	38.5	41.3	41.7	
Seed Size	13.1	14.7	15.5	14.4	14.9	16.1
Maturity Index	10-3	+2	+7	+6	+7	+3
Height	34	37	39	28	31	38
Bacterial Pustule[1/]	1.0	3.0	1.0	1.0	1.0	1.0
Phytophthora Rot[2/]	1.0	1.0	1.0	2.5	1.5	1.0
Purple Seed Stain[3/]	1.0	2.0	2.0	1.0	1.0	3.0
Shattering[4/]	1.2	2.3	3.0	1.5	1.5	2.5

1/ Stoneville data.
2/ Stoneville and Keiser data.
3/ Georgetown, Linkwood, and Warsaw data.
4/ Warsaw, Belle Mina, Stoneville, and St. Joseph data.

Table 8. (continued)

	D56-1087	D56-1131	R57-18	S6-7413	D59-415	D59-693
Seed Yield - 1961						
East Coast	31.8	29.2	29.7	30.6	32.3	31.8
Upper & Central South	35.3	31.4	31.0	33.7	34.1	33.9
Delta	37.5	33.7	38.6	37.5	38.3	38.0
West	36.2	--	34.8	--	39.7	34.8
- 1960-61						
East Coast	36.3	34.1	34.8	33.4		
Upper & Central South	31.8	28.9	28.6	31.2		
Delta	37.2	35.4	37.7	37.1		
West	40.4	--	37.0	--		
- 1959-61						
East Coast						
Upper & Central South						
Delta						
West						
Oil Content - 1961	20.7-	20.3-	21.5	22.1+	20.9	20.6-
- 1960-61	20.7	20.6	21.7	22.2		
- 1959-61						
Protein Content - 1961	40.9+	41.5+	40.3	39.3-	39.5	40.8+
- 1960-61	40.8	41.3	40.1	39.0		
- 1959-61						
Seed Size	13.7	16.2	15.1	14.0	13.8	14.0
Maturity Index	+7	+5	+3	+4	+6	+5
Height	38	35	37	33	33	31
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot[2/]	1.0	1.0	1.0	1.0	1.0	1.0
Purple Seed Stain[3/]	2.0	2.0	2.0	2.0	1.0	1.0
Shattering[4/]	3.0	2.3	4.0	2.5	1.5	1.0

Table 9. Seed yield, in bushels per acre, for the strains in Uniform Group V, 1961

Location	Hill	Dorman	D55-8144	D56-1231	S4-7346	D56-3	D56-1087
			East Coast				
Georgetown, Del.	33.1	33.2	31.4	27.6	31.1	26.5	33.5
Linkwood, Md.	29.9	27.8	31.4	31.0	27.7	29.7	29.6
Warsaw, Va.	24.8	24.5	25.9	25.7	25.9	24.6	27.5
Painter, Va.	36.1	33.3	34.6	38.2	39.5	36.2	38.2
Petersburg, Va.	26.8	26.8	28.5	27.3	30.4	29.0	29.0
Norfolk, Va.	20.7	17.9	17.5	16.2	19.7	21.2	20.3
Holland, Va.	35.7	34.0	43.5+	40.7	36.0	36.6	35.3
Plymouth, N. C.	41.5	41.3	46.9	39.8	38.3	42.7	43.9
Mean	31.1	30.0	31.8	30.4	30.8	31.0	31.8
			Upper and Central South				
Orange Va. 1/	41.7	44.0	40.2	44.4	44.2	40.9	42.7
Lexington, Ky.	20.0	21.7	24.5+	19.4	22.3	27.5+	26.2+
Jackson, Tenn.	39.9	31.9	31.8	37.5	34.1	33.4	31.2
Belle Mina, Ala.	25.9	20.9	24.4	24.7	27.5	24.0	25.9
Experiment, Ga.	45.5	42.9	61.2+	50.6	52.0	49.1	57.8+
Mean	32.8	29.3	35.5	33.1	34.0	33.5	35.3
			Delta				
Henderson, Ky.	39.5	37.2	38.6	40.6	41.7	36.5	40.9
Sikeston, Mo. 1/	34.7	31.7	30.0	--	30.8	33.9	32.5
Marianna, Ark.	26.1	24.0	30.4	24.2	25.5	25.4	21.3
Stoneville, Miss. (B)	39.1	31.8	45.5	26.2-	37.7	42.7	42.6
St. Joseph, La.	49.4	49.0	54.2	46.0	49.7	48.5	45.1
Mean	38.5	35.5	41.2	34.3	38.6	38.3	37.5
			West				
Stuttgart, Ark.	44.9	40.2	47.4	39.3-	43.5	41.7	43.1
Bixby, Okla.	38.0	41.3	46.2+	45.4+	44.9+	41.2	46.7+
Lubbock, Texas	35.7	30.3	26.4	--	30.2	28.3	28.8
Plainview, Texas	29.5	27.5	28.3	27.6	24.5	20.4	26.1
Mean	37.0	34.8	37.1	--	35.8	32.9	36.2

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	D56-1131	R57-18	S6-7413	D59-415	D59-693	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	23.7-	32.4	22.7-	33.6	33.0	6.7	13%
Linkwood, Md.	32.3	31.8	28.8	33.9	34.1	N.S.	8%
Warsaw, Va.	24.8	24.8	26.2	26.8	24.5	N.S.	5%
Painter, Va.	40.6	33.4	39.5	39.1	40.4	N.S.	11%
Petersburg, Va.	30.6	28.0	26.9	29.2	29.7	N.S.	9%
Norfolk, Va.	8.9-	12.8	25.9	21.6	16.2	8.4	27%
Holland, Va.	35.4	44.4+	35.6	41.4+	42.0+	5.2	8%
Plymouth, N. C.	--	39.9	39.9	41.3	42.3	N.S.	8%
Mean	29.2	29.7	30.6	32.3	31.8	N.S.	
			Upper and Central South				
Orange, Va.[1/]	--	42.1	--	43.6	53.7	--	--
Lexington, Ky.	--	22.0	25.4+	20.5	22.2	4.1	10%
Jackson, Tenn.	37.1	34.3	37.7	35.8	35.9	N.S.	11%
Belle Mina, Ala.	24.5	20.3	25.7	27.0	25.2	N.S.	18%
Experiment, Ga.	42.9	47.5	46.0	53.2+	52.1	7.2	9%
Mean	31.4	31.0	33.7	34.1	33.9	N.S.	
			Delta				
Henderson, Ky.	--	37.8	41.0	36.2	42.7	N.S.	8%
Sikeston, Mo.[1/]	--	27.9	--	26.9	32.2	--	--
Marianna, Ark.	24.3	24.9	23.8	20.2	26.4	N.S.	14%
Stoneville, Miss.(B)	29.1-	42.9	39.2	43.9	40.9	8.0	12%
St. Joseph, La.	46.8	48.9	46.2	52.7	41.9	N.S.	10%
Mean	33.7	38.6	37.5	38.3	38.0	N.S.	
			West				
Stuttgart, Ark.	--	46.1	46.1	46.0	41.3	4.9	7%
Bixby, Okla.	48.2+	42.0	51.1+	48.9+	44.4+	5.9	8%
Lubbock, Texas	--	28.9	--	31.4	27.7	N.S.	16%
Plainview, Texas	27.7	22.1	32.5	32.6	25.8	6.3	5%
Mean	--	34.8	--	39.7	34.8	--	

Table 10. Chemical composition and seed size for the strains in Uniform Group V, 1961

Location	Hill	Dorman	D55-8144	D56-1231	S4-7346	D56-3
			Oil Percentage			
Linkwood, Md.	22.0	21.4	22.4	19.4	21.0	20.8
Warsaw, Va.	22.3	21.1	22.4	21.8	20.6	20.4
Plymouth, N. C.	21.6	20.7	22.4	21.4	21.2	19.8
Henderson, Ky.	20.5	20.7	22.3	21.1	21.7	20.5
Sikeston, Mo.	21.0	21.4	21.6	20.9	20.9	21.3
Stoneville, Miss.(B)	21.3	22.5	24.1	23.0	22.0	22.5
Stuttgart, Ark.	21.3	21.1	22.9	21.7	21.9	21.9
Bixby, Okla.	21.6	22.2	23.3	21.5	21.4	21.7
Lubbock, Texas	19.6	20.4	20.4	19.8	19.1	20.7
Mean	21.2	21.3	22.4+	21.2	21.1	21.1
			Protein Percentage			
Linkwood, Md.	39.4	39.9	39.1	41.4	42.6	40.5
Warsaw, Va.	38.2	41.0	41.3	41.8	41.4	42.3
Plymouth, N. C.	41.3	40.5	39.6	41.9	42.1	42.0
Henderson, Ky.	39.8	39.0	37.8	40.5	41.0	39.6
Sikeston, Mo.	41.7	40.8	41.1	43.2	43.2	41.2
Stoneville, Miss.(B)	39.5	38.2	36.4	39.2	40.4	39.0
Stuttgart, Ark.	40.3	38.7	38.5	42.5	42.7	39.8
Bixby, Okla.	39.0	37.4	36.8	40.5	40.4	38.8
Lubbock, Texas	41.9	41.2	41.4	41.9	42.9	40.1
Mean	40.1	39.6	39.1-	41.4+	41.9+	40.4
			Grams Per 100 Seed			
Linkwood, Md.	14.6	17.0	17.4	16.2	16.7	18.2
Warsaw, Va.	14.0	17.0	16.0	14.0	15.0	18.2
Plymouth, N. C.	12.1	13.1	14.1	13.4	14.0	15.4
Henderson, Ky.	13.2	13.2	15.6	14.4	15.5	14.3
Stoneville, Miss.(B)	11.3	11.7	13.9	12.5	13.5	13.4
Stuttgart, Ark.	13.0	14.7	15.3	13.7	14.7	16.7
Bixby, Okla.	12.2	14.6	16.2	14.8	16.0	16.4
Lubbock, Texas	14.1	16.5	15.6	15.9	13.7	15.8
Mean	13.1	14.7+	15.5+	14.4+	14.9+	16.1+

Table 10. (continued)

Location	D56-1087	D56-1131	R57-18	S6-7413	D59-415	D59-693	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	20.5	20.4	21.9	22.2	21.4	20.4	
Warsaw, Va.	20.5	20.0	21.8	22.2	21.3	20.2	
Plymouth, N. C.	19.9	19.6 1/	21.7	22.3	20.4	19.5	
Henderson, Ky.	19.9	-- 1/	20.8	21.8	20.7	21.0	
Sikeston, Mo.	20.7	19.4	20.3	22.6	20.4	20.2	
Stoneville, Miss.(B)	22.0	21.5	23.0	23.7	22.1	22.1	
Stuttgart, Ark.	22.2	21.3	22.1	22.0	20.6	21.3	
Bixby, Okla.	21.1	20.5	22.1	22.2	21.5	21.5	
Lubbock, Texas	19.8	19.7	19.4	20.1	20.0	19.5	
Mean	20.7-	20.3-	21.5	22.1+	20.9	20.6-	0.5
			Protein Percentage				
Linkwood, Md.	40.5	41.3	39.1	37.9	38.9	40.8	
Warsaw, Va.	41.8	42.0	39.7	38.6	38.6	40.5	
Plymouth, N. C.	42.6	42.7 1/	41.1	40.2	39.4	40.9	
Henderson, Ky.	39.8	-- 1/	39.3	37.7	38.9	40.1	
Sikeston, Mo.	42.3	43.8	43.1	39.8	42.1	43.6	
Stoneville, Miss. (B)	39.4	39.5	38.5	38.4	37.6	38.9	
Stuttgart, Ark.	41.1	40.7	40.3	39.8	40.0	41.2	
Bixby, Okla.	38.9	39.6	38.8	38.0	38.1	38.9	
Lubbock, Texas	41.6	42.2	42.7	42.9	41.9	42.0	
Mean	40.9+	41.5+	40.3	39.3-	39.5	40.8+	0.7
			Grams Per 100 Seed				
Linkwood, Md.	13.8	16.6	16.8	15.2	15.1	15.2	
Warsaw, Va.	14.0	16.0 1/	16.0	14.0	13.0	14.0	
Plymouth, N. C.	12.2	-- 1/	13.8	14.0	11.5	12.0	
Henderson, Ky.	14.3	-- 1/	16.2	14.0	14.0	13.7	
Stoneville, Miss. (B)	12.2	12.6 1/	12.8	13.2	13.0	13.3	
Stuttgart, Ark.	12.7	-- 1/	14.7	15.0	12.3	13.0	
Bixby, Okla.	13.9	15.0	16.1	14.2	14.0	14.3	
Lubbock, Texas	16.6	20.8	14.2	12.4	17.2	16.5	
Mean	13.7	16.2+	15.1+	14.0	13.8	14.0	1.1

1/ Values estimated in calculating mean.

Table 11. Relative maturity, days earlier (-) or later (+) than Hill, for the strains in Uniform Group V, 1961

Location	Date Planted	Hill Matured	Dorman	D55-8144	D56-1231	S4-7346
		East Coast				
Georgetown, Del.	5-24	10-8	+5	+8	+6	+8
Linkwood, Md.	5-22	10-1	+4	+6	+6	+6
Warsaw, Va.	5-22	10-5	+3	+5	+2	+6
Petersburg, Va.	5-24	10-1	+2	+5	+9	+9
Holland, Va.	5-25	10-8	+4	+10	+7	+10
Plymouth, N. C.	5-18	10-1	+5	+7	+7	+9
Mean		10-4	+4	+7	+6	+8
		Upper and Central South				
Orange, Va.	5-22	10-15	0	+4	+2	0
Lexington, Ky.	5-29	10-15	+1	+2	+1	+1
Jackson, Tenn.	5-12	9-21	+4	+13	+9	+11
Belle Mina, Ala.	5-17	10-12	-2	+1	+1	+1
Experiment, Ga.	6-2	9-25	+3	+10	+7	+8
Mean		10-6	+1	+6	+4	+4
		Delta				
Henderson, Ky.	5-25	10-18	+2	+2	+4	-3
Sikeston, Mo.	5-1	9-28	+2	+7	+8	+9
Marianna, Ark.	5-16	9-20	-2	+7	+7	+10
Stoneville, Miss.(B)	5-8	9-18	+1	+11	+7	+11
St. Joseph, La.	5-16	9-22	0	+22	+20	+13
Mean		9-27	+1	+10	+9	+8
		West				
Stuttgart, Ark.	5-27	10-1	-1	+1	+1	+4
Bixby, Okla.	5-16	9-26	+9	+13	+11	+12
Lubbock, Texas	6-10	10-18	-4	0	+2	+2
Mean		10-5	+1	+5	+5	+6

Table 11. (continued)

Location	D56-3	D56-1087	D56-1131	R57-18	S6-7413	D59-415	D59-693
			East Coast				
Georgetown, Del.	+5	+11	+6	+5	+4	+10	+9
Linkwood, Md.	+5	+7	+4	+2	+4	+5	+8
Warsaw, Va.	+5	+5	+1	+3	+1	+2	+4
Petersburg, Va.	+5	+8	+6	+5	0	+7	+7
Holland, Va.	+7	+10	+5	+7	+3	+8	+6
Plymouth, N. C.	+7	+9	--	+5	+3	+5	+5
Mean	+6	+8	+4	+5	+3	+6	+7
			Upper and Central South				
Orange, Va.	0	+4	+2	0	0	+3	+2
Lexington, Ky.	+1	+1	--	+2	-1	0	+1
Jackson, Tenn.	+8	+11	+7	+11	+10	+11	+11
Belle Mina, Ala.	-2	-1	0	-3	+1	+1	+1
Experiment, Ga.	+5	+8	+5	+3	+5	+3	+5
Mean	+2	+5	+4	+3	+3	+4	+4
			Delta				
Henderson, Ky.	-1	+6	0	-1	-3	+6	+3
Sikeston, Mo.	+2	+9	--	+5	+7	+6	+5
Marianna, Ark.	+2	+6	+4	+4	+6	+6	+6
Stoneville, Miss.(B)	+2	+7	+7	+3	+7	+7	+7
St. Joseph, La.	+3	+13	+13	+3	+ 27	+12	+3
Mean	+2	+8	+6	+3	+9	+7	+5
			West				
Stuttgart, Ark.	+1	+9	--	+1	+1	0	+1
Bixby, Okla.	+12	+14	+10	+9	+9	+11	+11
Lubbock, Texas	-4	-2	+1	0	-2	+3	+2
Mean	+3	+7	+4	+3	+3	+5	+5

Table 12. Height data for the strains in Uniform Group V, 1961

Location	Hill	Dorman	D55-8144	D56-1231	S4-7346	D56-3
			East Coast			
Georgetown, Del.	39	40	42	31	34	43
Linkwood, Md.	34	42	45	31	38	45
Warsaw, Va.	32	36	36	27	28	38
Petersburg, Va.	28	30	37	24	27	32
Norfolk, Va.	36	36	24	42	32	34
Holland, Va.	37	43	43	34	37	43
Plymouth, N. C.	32	25	36	25	29	39
Mean	34	36	38	31	32	39
			Upper and Central South			
Orange, Va.	37	40	39	27	34	40
Lexington, Ky.	39	45	46	28	30	42
Jackson, Tenn.	38	46	46	36	40	46
Belle Mina, Ala.	35	37	39	31	32	39
Experiment, Ga.	35	33	41	28	34	36
Mean	37	40	42	30	34	41
			Delta			
Henderson, Ky.	42	48	55	34	36	49
Sikeston, Mo.	35	35	48	--	28	43
Marianna, Ark.	30	38	36	21	24	39
Stoneville, Miss.(B)	26	26	28	20	23	27
St. Joseph, La.	32	32	35	26	28	32
Mean	33	36	40	25	28	38
			West			
Stuttgart, Ark.	32	36	35	23	28	35
Bixby, Okla.	33	40	42	27	34	42
Lubbock, Texas	22	28	25	16	20	21
Plainview, Texas	30	35	38	27	28	35
Mean	29	35	35	23	28	33

Table 12. (continued)

Location	D56-1087	D56-1131	R57-18	S6-7413	D59-415	D59-693
			East Coast			
Georgetown, Del.	44	41	41	41	32	35
Linkwood, Md.	44	42	44	39	32	31
Warsaw, Va.	36	39	36	34	28	28
Petersburg, Va.	32	34	37	28	32	29
Norfolk, Va.	31	33	29	27	35	36
Holland, Va.	46	46	46	37	37	37
Plymouth, N. C.	33	--	31	31	28	26
Mean	38	39	38	34	32	32
			Upper and Central South			
Orange, Va.	34	28	35	27	32	30
Lexington, Ky.	41	--	43	35	37	30
Jackson, Tenn.	48	46	48	38	40	36
Belle Mina, Ala.	37	39	38	36	33	31
Experiment, Ga.	35	33	38	33	35	31
Mean	39	37	40	34	35	32
			Delta			
Henderson, Ky.	51	--	55	43	40	35
Sikeston, Mo.	43	--	32	36	34	32
Marianna, Ark.	37	34	31	28	30	32
Stoneville, Miss. (B)	26	24	24	23	26	23
St. Joseph, La.	34	34	32	28	31	28
Mean	38	31	35	32	32	28
			West			
Stuttgart, Ark.	34	--	35	30	31	28
Bixby, Okla.	42	38	38	36	38	34
Lubbock, Texas	30	22	26	22	25	24
Plainview, Texas	34	31	35	34	33	31
Mean	35	30	34	31	32	29

Table 13. Lodging scores for the strains in Uniform Group V, 1961

Location	Hill	Dorman	D55-8144	D56-1231	S4-7346	D56-3
			East Coast			
Georgetown, Del.	2.0	2.7	2.7	2.7	2.0	2.7
Linkwood, Md.	2.7	4.0	3.3	3.0	2.7	3.7
Warsaw, Va.	2.3	3.5	2.0	1.3	1.2	2.8
Petersburg, Va.	1.0	2.0	3.0	1.0	1.0	2.0
Norfolk, Va.	1.3	2.0	2.7	1.7	1.0	1.7
Holland, Va.	3.2	3.3	3.5	2.7	2.3	2.8
Plymouth, N. C.	2.0	2.0	3.0	2.0	2.0	2.5
			Upper and Central South			
Orange, Va.	1.3	2.7	3.0	1.0	1.0	1.7
Lexington, Ky.	2.0	3.3	2.0	1.5	1.2	1.8
Jackson, Tenn.	2.0	3.0	3.0	1.0	1.0	2.0
Belle Mina, Ala.	1.7	2.0	1.0	1.0	1.0	2.0
Experiment, Ga.	2.3	1.7	2.7	1.3	1.3	2.0
			Delta			
Henderson, Ky.	3.5	4.8	4.7	3.5	2.0	4.7
Sikeston, Mo.	1.0	1.2	3.8	1.0	1.0	2.3
Marianna, Ark.	1.3	2.0	2.0	1.0	1.0	2.7
Stoneville, Miss. (B)	1.7	2.0	2.0	2.0	1.7	2.0
St. Joseph, La.	2.0	3.0	2.0	1.0	1.0	2.0
			West			
Stuttgart, Ark.	2.3	3.0	2.7	1.0	1.3	2.7
Bixby, Okla.	3.3	2.3	3.3	2.7	2.3	2.7
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Plainview, Texas	1.0	2.0	1.0	1.0	1.0	2.0

Table 13. (continued)

Location	D56-1087	D56-1131	R57-18	S6-7413	D59-415	D59-693
			East Coast			
Georgetown, Del.	2.7	3.7	2.7	3.0	3.0	1.3
Linkwood, Md.	3.0	3.0	3.3	3.0	2.0	2.3
Warsaw, Va.	1.8	1.5	2.0	1.5	1.2	1.0
Petersburg, Va.	1.0	2.0	2.0	1.0	1.0	1.0
Norfolk, Va.	1.3	1.3	1.3	1.7	1.3	1.7
Holland, Va.	2.5	3.2	2.3	3.2	2.8	2.3
Plymouth, N. C.	2.0	---	2.0	2.0	1.0	1.5
			Upper and Central South			
Orange, Va.	2.0	1.0	1.7	1.0	2.0	2.0
Lexington, Ky.	1.8	---	2.8	1.7	2.5	2.2
Jackson, Tenn.	3.0	4.0	2.0	1.0	3.0	2.0
Belle Mina, Ala.	2.0	3.0	1.7	1.0	1.3	1.0
Experiment, Ga.	2.3	2.3	2.0	1.0	1.3	1.3
			Delta			
Henderson, Ky.	4.0	---	4.7	2.8	2.7	2.8
Sikeston, Mo.	1.7	---	1.3	1.0	1.1	1.1
Marianna, Ark.	2.0	2.7	2.0	1.3	1.3	1.3
Stoneville, Miss.(B)	2.0	2.0	1.7	1.7	1.7	1.7
St. Joseph, La.	2.0	2.0	2.0	1.0	1.0	1.0
			West			
Stuttgart, Ark.	3.0	---	2.0	2.0	2.3	2.0
Bixby, Okla.	2.3	3.0	2.0	2.3	3.3	2.3
Lubbock, Texas	2.0	1.3	1.0	1.0	1.0	1.0
Plainview, Texas	2.0	2.0	1.0	1.0	1.0	1.0

Table 14. Seed quality scores for the strains in Uniform Group V, 1961

Location	Hill	Dorman	D55-8144	D56-1231	S4-7346	D56-3
			East Coast			
Georgetown, Del.	1.0	2.0	1.3	2.0	2.0	2.7
Linkwood, Md.	2.0	3.0	2.0	2.0	3.0	3.0
Warsaw, Va.	1.0	1.5	1.0	1.0	1.0	2.0
Petersburg, Va.	1.0	1.0	1.0	2.0	2.0	1.0
Norfolk, Va.	2.0	2.0	2.0	2.7	2.3	2.0
Holland, Va.	1.5	1.5	1.3	2.0	2.0	1.8
Plymouth, N. C.	1.5	1.5	2.0	1.5	1.5	2.0
			Upper and Central South			
Orange, Va.	1.3	1.0	1.3	1.3	2.0	2.0
Lexington, Ky.	3.0	2.0	1.5	3.5	1.5	2.0
Jackson, Tenn.	2.0	2.0	2.0	2.0	2.0	2.0
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Henderson, Ky.	1.5	1.5	1.5	2.0	1.0	1.0
Sikeston, Mo.	1.5	1.3	1.3	2.0	1.5	1.8
Marianna, Ark.	2.7	2.3	2.0	2.3	3.3	3.0
Stoneville, Miss. (B)	1.7	2.0	2.0	2.0	2.0	1.7
St. Joseph, La.	1.0	2.0	2.0	1.0	2.0	1.0
			West			
Stuttgart, Ark.	2.0	1.3	1.3	2.3	2.0	1.7
Bixby, Okla.	2.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	2.0	2.0	2.0	2.0	2.0
Plainview, Texas	2.0	1.0	2.0	2.0	1.0	2.0

Table 14. (continued)

Location	D56-1087	D56-1131	R57-18	S6-7413	D59-415	D59-693
			East Coast			
Georgetown, Del.	2.0	3.0	2.3	2.3	3.3	1.7
Linkwood, Md.	2.0	3.0	2.0	2.0	2.0	2.0
Warsaw, Va.	1.5	1.0	1.0	1.5	1.0	1.5
Petersburg, Va.	1.0	1.0	2.0	1.0	1.0	1.0
Norfolk, Va.	2.0	2.3	2.7	2.3	2.0	2.0
Holland, Va.	2.2	2.5	1.5	2.7	1.5	1.5
Plymouth, N. C.	1.5	---	1.5	2.0	1.5	1.5
			Upper and Central South			
Orange, Va.	1.7	1.7	1.7	2.0	1.3	1.7
Lexington, Ky.	2.5	---	3.5	3.0	4.0	2.0
Jackson, Tenn.	2.0	2.0	2.0	2.0	2.0	2.0
Experiment, Ga.	1.7	1.5	1.3	1.0	1.0	1.0
			Delta			
Henderson, Ky.	1.0	---	1.0	2.0	3.5	1.0
Sikeston, Mo.	1.5	---	2.0	2.0	1.5	1.3
Marianna, Ark.	3.0	3.0	2.7	3.3	2.3	2.0
Stoneville, Miss.(B)	2.0	2.0	1.7	2.0	1.7	1.7
St. Joseph, La.	2.0	2.0	2.0	3.0	1.0	1.0
			West			
Stuttgart, Ark.	2.0	---	2.0	2.0	2.0	1.3
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	2.0	1.0	1.0	2.0	2.0	2.0
Plainview, Texas	2.0	1.0	3.0	3.0	2.0	2.0

PRELIMINARY GROUP V

1961

Results from growing Preliminary Group V nurseries at five locations are presented in tables 16 through 21. An additional nursery was planted at Keiser, Arkansas, but stands were irregular and data are not included. The parentage for the lines tested are reported in table 15. Twenty-eight of the lines were from the cross Hill x D52-810, while two additional lines also had Hill as one parent.

The Stoneville selections had been subjected to an extended rainy period prior to harvest in 1960. As a result the seed was reduced in vigor and, where germinating conditions were less favorable, thin stands resulted. Data are incomplete for D50-240, D59-331, D59-514, and D59-598. Three strains proved highly susceptible to purple stain development -- D50-204, V10P and V30P. Several strains also proved to be subject to shattering -- R58-1, R59-2, V10P, D59-436, D59-598, and N59-6802.

The strains D59-377, D59-630, N59-6798, N59-6821, N59-6913, N59-6921, N59-6926, N59-6955, and R59-2 appear to merit further testing. In addition to data presented, all had relatively low ratings for diffusion of hilum color at Warsaw. R59-2 shattered at Warsaw, but it did produce consistently good seed yields.

Table 15. Parentage of the strains in Preliminary Group V, 1961

	Strain	Parentage	Generation Composited
1.	Hill	D632-15 x D49-2525	F_5
2.	D50-204	N46-191 x N45-745	F_5
3.	D59-269	Hill x D52-810	F_5
4.	D59-283	Hill x D52-810	F_5
5.	D59-331	Hill x D52-810	F_5
6.	D59-377	Hill x D52-810	F_5
7.	D59-396	Hill x D52-810	F_5
8.	D59-422	Hill x D52-810	F_5
9.	D59-436	Hill x D52-810	F_5
10.	D59-514	Hill x D52-810	F_5
11.	D59-596	Hill x D52-810	F_5
12.	D59-598	Hill x D52-810	F_5
13.	D59-613	Hill x D52-810	F_5
14.	D59-619	Hill x D52-810	F_5
15.	D59-624	Hill x D52-810	F_5
16.	D59-630	Hill x D52-810	F_5
17.	D59-637	Hill x D52-810	F_5
18.	D59-650	Hill x D52-810	F_5
19.	D59-2253	Hill x D55-4168	F_5
20.	D59-2280	Hill x D55-4168	F_5
21.	N59-6798	Hill x D52-810	F_5
22.	N59-6802	Hill x D52-810	F_5
23.	N59-6821	Hill x D52-810	F_5
24.	N59-6865	Hill x D52-810	F_5
25.	N59-6875	Hill x D52-810	F_5
26.	N59-6906	Hill x D52-810	F_5
27.	N59-6911	Hill x D52-810	F_5
28.	N59-6913	Hill x D52-810	F_5
29.	N59-6920	Hill x D52-810	F_5
30.	N59-6921	Hill x D52-810	F_5
31.	N59-6926	Hill x D52-810	F_5
32.	N59-6955	Hill x D52-810	F_5
33.	R58-1	Dorman x D49-2477	
34.	R59-2	D49-507 x D49-2510	
35.	V10P		
36.	V30P		

Table 16. General summary of performance for the strains grown in Preliminary Group V, 1961

Strain	Seed Yield	Maturity Index	Ht.	Oil	Protein	Bact. Pustule[1]	Purple Stain[2]	Shattering[3]
Hill	37.3	9-27	34	21.4	39.9	1.0	1.0	1.5
D50-204	--	+5	30	19.5-	42.9+	1.0	4.0	2.0
D59-269	34.7	+13	33	21.2	41.1+	1.0	2.0	1.0
D59-283	35.7	+8	30	21.4	38.9	1.0	1.0	1.0
D59-331	--	+11	30	22.0	40.4	1.0	2.0	1.0
D59-377	37.9	+9	32	21.6	40.0	1.0	1.0	1.0
D59-396	37.0	+14	33	21.5	38.7-	1.0	2.0	1.0
D59-422	31.7-	+14	29	21.7	40.2	1.0	1.0	1.0
D59-436	38.5	+11	35	21.6	40.5	1.0	1.0	2.5
D59-514	--	+10	30	22.6+	38.7-	1.0	2.0	1.0
D59-596	34.3	+9	34	22.0	37.8-	1.0	1.0	1.0
D59-598	--	+8	29	21.2	40.8	1.0	1.0	2.5
D59-613	34.1	+13	36	21.2	40.9	1.0	1.0	1.0
D59-619	37.7	+14	34	21.8	39.4	1.0	2.0	1.0
D59-624	33.2	+9	27	20.5-	42.9+	1.0	2.0	1.0
D59-630	38.5	+10	30	20.4-	40.7	1.0	1.0	1.0
D59-637	37.0	+10	33	21.1	40.0	1.0	2.0	2.0
D59-650	35.4	+10	34	21.6	40.2	1.0	1.0	1.0
D59-2253	29.8-	+14	34	18.0-	45.3+	1.0	1.0	1.0
D59-2280	29.5-	+11	33	18.2-	43.7+	1.0	2.0	1.0
N59-6798	38.2	+6	36	21.0	41.7+	1.0	1.0	2.0
N59-6802	39.7	+7	32	21.7	40.3	1.0	1.0	3.0
N59-6821	40.2	+8	34	21.8	41.1+	1.0	1.0	1.0
N59-6865	37.5	+7	35	20.3-	43.1+	1.0	1.0	1.5
N59-6875	37.1	+8	34	21.7	40.2	1.0	1.0	1.5
N59-6906	37.1	+8	36	21.2	39.6	1.0	1.0	1.0
N59-6911	36.9	+8	31	21.1	40.7	1.0	2.0	1.0
N59-6913	39.9	+5	30	21.3	40.4	1.0	2.0	1.5
N59-6920	35.6	+8	36	21.6	40.4	1.0	2.0	1.5
N59-6921	40.5	+8	36	21.6	40.8	1.0	2.0	1.0
N59-6926	39.6	+9	34	20.9	40.9	1.0	1.0	1.0
N59-6955	39.3	+6	33	21.4	39.2	1.0	2.0	1.0
R58-1	38.5	+1	36	20.3	42.3+	2.0	2.0	3.5
R59-2	40.5	+4	33	20.5-	42.5+	1.0	---	4.0
V10P	35.0	+6	36	21.0	44.1+	3.0	3.5	3.0
V30P	32.7	+5	41	20.0-	44.4+	3.0	3.5	2.0
L.S.D.(.05)	4.9			0.9	1.2			
L.S.D.(.01)	6.4			1.2	1.6			

1/ Stoneville data

2/ Georgetown and Warsaw data

3/ Warsaw and Stoneville data.

Table 17. Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1961

Strain	Warsaw, Va.	Plymouth, N.C.	Sikeston, Mo.	Portageville, Mo.	Stoneville, Miss.(B)
Hill	28.0	47.2	32.1	34.3	44.8
D50-204	22.0-	38.6	26.5	--	28.0-
D59-269	27.2	46.4	20.1-	33.4	46.7
D59-283	29.4	42.1	28.2	35.9	42.5
D59-331	24.7	32.7-	--	--	20.0-
D59-377	27.9	49.1	30.9	32.7	48.9
D59-396	28.6	50.2	26.0	39.0	41.0
D59-422	26.8	44.9	20.2-	27.7-	38.8
D59-436	28.1	45.0	31.3	40.2+	47.9
D59-514	29.3	42.3	--	--	34.0-
D59-596	25.6	37.2-	25.1	40.6+	42.9
D59-598	27.2	45.5	--	--	33.1-
D59-613	26.5	45.5	26.3	30.9	41.2
D59-619	27.9	48.5	27.7	32.8	51.4
D59-624	27.3	41.1	24.3	37.3	35.9-
D59-630	27.8	51.7	31.3	39.4	42.3
D59-637	26.3	50.8	27.7	34.9	45.2
D59-650	24.3-	48.2	28.4	35.4	40.9
D59-2253	24.2-	36.4-	23.2-	31.0	34.4-
D59-2280	23.7-	38.6	--	25.7-	34.0-
N59-6798	29.1	46.7	29.3	37.8	48.3
N59-6802	28.5	46.4	34.5	38.9	50.2
N59-6821	26.6	49.1	33.9	39.9	51.5
N59-6865	29.5	45.2	27.0	36.8	49.1
N59-6875	27.2	49.5	26.2	33.2	49.5
N59-6906	29.6	50.3	24.9	33.3	47.8
N59-6911	27.9	43.9	29.4	35.6	47.9
N59-6913	27.6	49.1	35.3	39.5	43.2
N59-6920	27.7	47.0	23.7-	35.8	43.9
N59-6921	26.1	55.9	26.7	39.2	54.6+
N59-6926	26.5	56.3	29.6	38.5	47.2
N59-6955	25.3	50.7	32.0	40.3+	48.5
R58-1	25.7	41.2	34.8	43.1+	47.8
R59-2	29.5	53.0	36.2	40.5+	43.5
V10P	26.1	45.5	29.6	34.7	39.3
V30P	23.7-	40.6	30.6	34.9	33.6-
L.S.D.(.05)	3.4	9.9	8.2	5.9	7.1
C.V.	6%	11%	14%	8%	8%

Table 18. Oil percentages for the strains in Preliminary Group V, 1961

Strain	Warsaw, Va.	Plymouth, N.C.	Stoneville, Miss.(B)
Hill	21.4	21.2	21.7
D50-204	19.6	18.8	20.1
D59-269	21.6	20.0	21.9
D59-283	22.3	21.1	20.8
D59-331	21.3	21.6	23.2
D59-377	21.9	20.5	22.5
D59-396	21.9	20.6	21.9
D59-422	21.8	20.8	22.4
D59-436	21.8	20.7	22.2
D59-514	22.5	22.2	23.2
D59-596	22.0	21.2	22.9
D59-598	20.2	20.9	22.6
D59-613	21.6	20.2	21.8
D59-619	21.4	21.4	22.5
D59-624	20.7	19.5	21.4
D59-630	20.5	19.0	21.7
D59-637	21.0	20.4	22.0
D59-650	21.7	20.7	22.4
D59-2253	17.9	17.1	18.9
D59-2280	17.8	17.5	19.5
N59-6798	21.3	20.3	21.5
N59-6802	22.1	20.8	22.2
N59-6821	21.4	21.6	22.3
N59-6865	20.1	19.4	21.3
N59-6875	21.5	21.3	22.2
N59-6906	20.3	21.1	22.3
N59-6911	21.2	20.6	21.6
N59-6913	21.7	20.7	21.5
N59-6920	21.7	21.1	21.9
N59-6921	20.5	21.2	23.0
N59-6926	20.8	20.1	21.8
N59-6955	21.1	20.8	22.3
R58-1	18.3	21.1	21.4
R59-2	19.5	20.6	21.5
V10P	19.9	21.4	21.6
V30P	20.0	19.2	20.7

Table 19. Protein percentages for the strains in Preliminary Group V, 1961

Strain	Warsaw, Va.	Plymouth N.C.	Stoneville, Miss.(B)
Hill	39.3	40.3	40.1
D50-204	42.4	43.1	43.2
D59-269	40.4	41.5	41.5
D59-283	38.9	38.3	39.5
D59-331	41.0	39.9	40.4
D59-377	39.0	41.1	39.9
D59-396	38.5	39.8	37.7
D59-422	41.2	40.7	38.6
D59-436	40.5	42.2	38.9
D59-514	38.7	39.6	37.8
D59-596	37.9	38.4	37.2
D59-598	40.3	41.3	40.7
D59-613	40.8	41.0	40.8
D59-619	40.2	39.9	38.2
D59-624	43.1	43.8	41.9
D59-630	40.5	41.5	40.0
D59-637	39.3	41.5	39.3
D59-650	40.1	41.6	38.8
D59-2253	45.1	46.8	44.1
D59-2280	43.8	45.3	42.0
N59-6798	42.0	42.6	40.5
N59-6802	40.2	41.3	39.4
N59-6821	41.5	41.6	40.1
N59-6865	43.3	43.7	42.4
N59-6875	40.6	40.9	39.2
N59-6906	40.6	40.2	37.9
N59-6911	40.7	41.9	39.4
N59-6913	40.1	41.7	39.5
N59-6920	40.2	41.3	39.8
N59-6921	41.4	41.4	39.6
N59-6926	40.5	41.6	40.6
N59-6955	39.2	39.9	38.4
R58-1	44.2	42.7	39.9
R59-2	43.0	43.5	41.0
V10P	45.3	44.7	42.2
V30P	45.1	45.9	42.1

Table 20. Plant height for the strains in Preliminary Group V, 1961

Strain	Warsaw, Va.	Plymouth, N. C.	Sikeston, Mo.	Portageville, Mo.	Stoneville, Miss. (B)
Hill	32	36	35	40	27
D50-204	27	31	34	37	23
D59-269	30	32	36	39	28
D59-283	29	32	31	34	24
D59-331	31	27	39	32	23
D59-377	28	34	34	37	28
D59-396	34	32	35	38	27
D59-422	26	32	28	35	23
D59-436	29	33	41	41	29
D59-514	28	30	34	32	26
D59-596	29	32	34	43	30
D59-598	30	28	32	34	22
D59-613	33	33	39	43	32
D59-619	31	29	39	39	30
D59-624	23	25	33	33	20
D59-630	28	29	33	37	23
D59-637	31	31	37	42	25
D59-650	31	34	38	42	25
D59-2253	31	32	38	39	31
D59-2280	28	32	36	42	26
N59-6798	30	37	41	41	29
N59-6802	29	32	36	37	25
N59-6821	31	30	36	43	28
N59-6865	33	33	40	40	30
N59-6875	31	32	37	42	26
N59-6906	31	33	41	41	34
N59-6911	27	29	36	35	28
N59-6913	28	29	33	36	25
N59-6920	34	33	41	42	31
N59-6921	31	33	42	43	32
N59-6926	29	35	38	41	26
N59-6955	30	29	37	41	30
R58-1	34	36	40	44	27
R59-2	29	34	39	37	25
V10P	29	35	37	42	36
V30P	30	39	48	48	41

Table 21. Seed quality scores for the strains in Preliminary Group V, 1961

Strain	Warsaw, Va.	Plymouth, N. C.	Sikeston, Mo.	Stoneville, Miss.(B)
Hill	1.2	2.0	1.5	2.0
D50-204	3.0	2.0	2.5	2.0
D59-269	1.0	2.5	1.8	2.0
D59-283	1.0	2.0	1.5	1.0
D59-331	1.0	2.5	2.3	2.0
D59-377	1.0	2.0	1.5	2.0
D59-396	1.0	2.0	1.5	2.0
D59-422	1.5	2.5	1.5	1.0
D59-436	1.5	2.5	1.8	2.0
D59-514	1.0	2.5	1.5	2.0
D59-596	1.0	2.5	1.8	2.0
D59-598	1.0	2.0	2.0	2.0
D59-613	1.0	2.5	1.8	1.5
D59-619	1.5	2.5	2.0	2.0
D59-624	1.2	2.0	1.5	2.0
D59-630	1.0	2.0	1.5	2.0
D59-637	1.5	2.5	2.0	2.0
D59-650	1.5	2.5	1.8	2.0
D59-2253	2.0	2.5	1.5	2.0
D59-2280	1.5	2.0	1.8	2.0
N59-6798	1.2	2.5	1.3	2.0
N59-6802	2.0	2.0	1.3	2.0
N59-6821	1.5	3.0	1.8	2.0
N59-6865	1.5	2.0	2.0	2.0
N59-6875	1.5	2.0	1.8	2.0
N59-6906	1.2	2.0	1.5	2.0
N59-6911	1.0	2.0	1.3	1.0
N59-6913	1.2	2.0	1.3	1.0
N59-6920	1.0	2.0	1.5	2.0
N59-6921	1.5	2.5	1.5	2.0
N59-6926	1.5	2.0	1.5	2.0
N59-6955	1.2	2.0	1.5	1.0
R58-1	1.2	2.5	1.5	2.0
R59-2	1.2	2.5	1.5	2.0
V10P	3.5	2.0	2.8	2.5
V30P	3.5	3.0	1.5	2.0

UNIFORM GROUP VI

1961

	Variety or Strain	Parentage	Generation Composited
1.	Hood	Roanoke x N45-745	F_6
2.	Lee	S-100 x CNS	F_6
3.	N56-4202	N46-1703 x D49-2525	F_6
4.	S5-7075	N48-1248 x Perry	F_8
5.	N57-6736	Jackson x D49-2491	F_6
6.	R56-49	Rogue in Lee	
7.	D58-1894	D49-2491(5) x Dorman	F_3
8.	D55-8144	Dorman x N48-1515	F_5
9.	D57-727	N49-2134 x Lee	F_5
10.	D58-5111	Ogden(2) x D49-2491	F_5
11.	R56-25	D49-2573 x N45-1497	F_7
12.	N58-6979	(N45-2994 x Ogden) x (N44-92 x N44-92 x N48-1867)	F_6

Background of strains used as parents:

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

N46-1703 is a selection from Volstate x Ogden which was included in the Uniform Group VI nursery for the years 1950-1952.

D49-2525 and D49-2491 are sister strains to Lee from the cross S-100 x CNS.

N48-1248 is a bacterial-pustule-resistant line selected from the cross Roanoke x N45-745.

N48-1515 is a selection from Roanoke x N45-745 which was included in Uniform Group VI for the years 1951-1953.

N49-2134 is a sub-line of N46-1703.

N49-2573 is a sub-line of N48-1248.

N45-1497 is a high oil selection from Ralsoy x Ogden.

N45-2994 is a selection from Arksoy x Ogden.

N44-92 is a selection from Haberlandt x Ogden.

N48-1867 is a selection from Roanoke x N45-745 which was included in Uniform Group VII for the years 1951-1953.

The results of 34 Uniform Group VI nurseries are summarized in tables 22 through 28. A general summary of the performance of the lines in 1961, as well as 2- and 3-year averages for seed yield and oil and protein percentages, is given in table 22.

Differences among strains were significant in 23 of the 34 comparisons. Differences among strains were significant within each of the production areas, except in the West. The Upper and Central South was the only production area in which any strain produced significantly higher than Hood.

Two strains, S5-7075 and N58-6979, showed injury from phytophthora rot at Stoneville. S5-7075 had shown similar injury in previous years. Shattering proved to be a problem at eastern locations where shattering is usually not a serious problem. Lee and D58-1894 were the only strains with no shattering.

N56-4202 and S5-7075 have been tested 3 years. In the Delta, N56-4202 has a 1.5 bushel yield advantage over Hood, but in other areas the 3-year average yield is not superior to Hood. It has little, if any, advantage in seed holding over Hood. S5-7075 does not show a yield advantage over Hood in any area, shows greater susceptibility to phytophthora rot, and does not hold its seed as well as Hood. N56-4202 and S5-7075 are good strains but do not appear to be superior to existing varieties.

N57-6736, R56-49, and D58-1894 have been tested 2 years. N57-6736 is 2 days earlier than Lee. It has shown no yield advantage over Lee. R56-49 averages 3 days later than Hood. It has yielded well and has a high oil content. D58-1894 is very similar to Lee but with white flowers and grey pubescence. This combination results in seed with buff hilum. In many tests the performance is similar to Lee. However, in the more northerly tests it is later in maturity than Lee and has not yielded as well.

D55-8144 yielded favorably in Group VI and has high oil but is subject to shattering. D57-727 grows taller than Lee but is also subject to shattering. D58-5111, R56-25, and N58-6979 were all weak in seed holding. N58-6979 yielded significantly less than Hood in the Upper and Central and Delta areas.

The growing season for Hood ranged from 161 days at Sikeston to 110 days at Quincy. The yield at Sikeston was 27 bushels and at Quincy 40 bushels.

Table 22. General summary of the performance for the strains in Uniform Group VI, 1961

	Hood	Lee	N56-4202	S5-7075	N57-6736	R56-49
Seed Yield - 1961						
East Coast	36.5	33.4	35.0	36.1	32.5	37.0
Southeast	34.2	36.5	31.5	32.3	35.7	38.5
Upper & Central South	40.2	38.2	43.7+	43.8+	36.9-	41.8
Delta	36.9	34.1	36.6	32.7	31.2-	36.4
West	41.8	40.5	40.4	38.0	39.1	38.4
- 1960-61						
East Coast	38.6	36.7	38.7	38.8	35.9	39.3
Southeast	35.0	38.4	32.7	34.7	36.9	38.8
Upper & Central South	34.1	30.9	34.3	35.2	31.0	34.0
Delta	37.8	36.0	38.3	36.9	35.3	38.9
West	42.7	41.0	40.0	39.0	39.5	40.2
- 1959-61						
East Coast	38.3	36.7	38.5	38.3		
Southeast	33.7	37.0	31.0	33.7		
Upper & Central South	34.0	29.9	34.3	34.4		
Delta	38.0	36.1	39.5	37.3		
West	40.6	38.3	39.0	38.2		
Oil Content - 1961	21.3	20.7-	19.8-	20.8	20.7-	22.0+
- 1960-61	21.7	20.9	20.0	20.9	20.9	22.3
- 1959-61	21.7	21.0	20.1	21.2		
Protein Content - 1961	40.0	41.0+	42.5+	40.5	40.7	40.2
- 1960-61	40.0	41.5	42.7	40.7	41.1	40.4
- 1959-61	40.0	41.5	42.7	40.8		
Seed Size	15.5	13.0-	14.4-	13.7-	12.6-	14.6-
Maturity Index	10-12	+8	0	0	+6	+3
Height	31	32	30	31	33	30
Bacterial Pustule 1/	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot 1/	1.0	1.0	1.0	1.0	1.0	1.0
Phytophthora Rot 1/	1.0	1.0	1.0	2.5	1.0	1.0
Purple Seed Stain 2/	2.0	1.0	1.0	2.0	1.0	2.0
Shattering 3/	2.9	1.0	2.6	3.5	1.7	1.7

1/ Stoneville data.
2/ Linkwood, Warsaw, Petersburg, and Jay data.
3/ Warsaw, Clayton, Willard, Belle Mina, Tallassee, Stoneville and Bixby data.

Table 22. (continued)

	D58-1894	D55-8144	D57-727	D58-5111	R56-25	N58-6979
Seed Yield - 1961						
East Coast	30.8-	35.0	33.3	35.3	33.6	34.9
Southeast	38.7	34.4	35.8	36.7	33.1	32.5
Upper & Central South	37.8	41.7	34.9-	39.9	38.9	36.2-
Delta	31.6-	34.6	32.7	33.7	34.8	29.5-
West	38.8	37.9	35.6	36.0	37.2	34.9
- 1960-61						
East Coast	35.2					
Southeast	39.4					
Upper & Central South	31.5					
Delta	34.8					
West	39.5					
- 1959-61						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Content - 1961	20.4-	22.5+	20.0-	20.2-	20.7-	21.8
- 1960-61	20.7					
- 1959-61						
Protein Content - 1961	40.6	38.5-	42.6+	42.0+	40.4	40.2
- 1960-61	40.9					
- 1959-61						
Seed Size	12.7-	15.8	13.6-	13.3-	15.1	17.8+
Maturity Index	+9	-2	+6	0	0	0
Height	33	33	38	34	35	32
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot[1/]	1.5	1.0	2.0	1.0	1.0	1.0
Phytophthora Rot[1/]	1.0	1.0	1.0	1.0	1.0	3.0
Purple Seed Stain[2/]	1.0	2.0	1.0	2.0	2.0	1.0
Shattering[3/]	1.0	3.1	2.8	2.9	3.2	3.2

Table 23. Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1961

Location	Hood	Lee	N56-4202	S5-7075	N57-6736	R56-49	D58-1894
East Coast							
Georgetown, Del.	31.9	34.2	33.6	37.0+	34.4	33.2	32.3
Linkwood, Md.	28.7	27.4	29.6	31.7	25.1	31.9	20.5-
Warsaw, Va.	24.3	22.9	24.1	26.3	22.0-	26.8+	20.3-
Painter, Va.	35.1	30.0	36.2	34.6	33.7	33.6	30.3
Petersburg, Va.	36.0	35.8	32.4	36.2	32.6	37.0	35.8
Norfolk, Va. 1/	23.6	20.8	19.5	19.9	15.1	17.9	21.2
Holland, Va.	36.2	35.2	38.4	37.3	34.0	38.0	32.2
Plymouth, N. C.	39.1	42.8	41.6	43.9	37.8	42.2	33.8
Willard, N. C.	46.5	41.7	41.6	35.7-	41.3	45.9	33.2
Clayton, N. C.	43.1	27.3-	38.3	40.6	28.0-	40.0	31.7-
Hartsville, S. C.	44.0	36.7-	34.5-	38.1-	36.3-	41.3	37.9-
Mean	36.5	33.4	35.0	36.1	32.5	37.0	30.8-
Southeast							
Tallassee, Ala.	42.4	44.7	37.4	41.5	46.5	48.8	44.5
Quincy, Fla.	40.4	41.7	37.7	44.1	41.0	45.1	43.7
Jay, Fla.	31.3	32.0	23.2-	22.9-	27.0	33.5	33.2
Fairhope, Ala.	30.9	36.0+	31.9	31.5	38.9+	37.2+	41.8+
Baton Rouge, La.	26.0	28.0	27.3	21.7	25.0	28.0	30.2
Mean	34.2	36.5	31.5	32.3	35.7	38.5	38.7
Upper and Central South							
Jackson, Tenn.	35.8	29.7-	37.5	33.6	29.0-	35.2	31.6
Belle Mina, Ala.	23.4	23.9	25.0	31.8	21.4	22.9	23.3
Experiment, Ga.	56.1	54.9	61.0	55.8	52.8	59.2	48.9
State College, Miss.	45.5	44.4	51.2+	54.0+	44.6	50.0	47.3
Mean	40.2	38.2	43.7+	43.8+	36.9-	41.8	37.8
Delta							
Sikeston, Mo.	26.9	16.2-	22.9	24.4	18.9-	28.5	14.5-
Portageville, Mo.	36.3	34.1	36.6	33.7	30.7	34.1	38.5
Keiser, Ark. (B)	23.1	30.1+	26.4	14.6-	24.6	26.1	28.3
Marianna, Ark.	23.1	13.9-	15.2-	18.8	12.2-	16.2-	13.4-
Stoneville, Miss.(A)	53.6	50.6	53.7	48.9	45.0	48.5	44.3
Stoneville, Miss.(B)	46.0	45.1	50.6	41.6	42.3	50.6	36.6-
St. Joseph, La.	49.0	48.8	50.7	47.0	44.9	50.8	45.3
Mean	36.9	34.1	36.6	32.7	31.2-	36.4	31.6-
West							
Stuttgart, Ark.	47.4	39.6-	44.0	44.3	44.1	44.2	42.2-
Curtis, La.	44.1	48.0	52.5	36.6	53.3	40.4	53.7
Bixby, Okla.	43.8	37.6-	44.2	42.5	37.5-	40.9	37.4-
Bennington, Okla.	50.6	46.1	49.2	46.8	46.7	48.1	48.5
Plainview, Texas 1/	28.9	22.0	26.9	28.8	24.3	25.2	23.5
Lubbock, Texas	32.9	37.4	30.0	28.2	34.0	28.0-	26.2-
College Station, Texas	32.0	34.4	22.3-	29.5	19.2-	28.9	24.6-
Mean	41.8	40.5	40.4	38.0	39.1	38.4	38.8

(+) - 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	D55-8144	D57-727	D58-5111	R56-25	N58-6979	L.S.D. (.05)	C.V.
			East Coast				
Georgetown, Del.	21.9-	33.7	31.9	32.4	29.3	4.7	8%
Linkwood, Md.	30.3	25.5	28.9	24.7-	27.1	4.0	9%
Warsaw, Va.	23.9	21.3-	24.1	20.6-	23.5	2.1	5%
Painter, Va.	32.1	28.1	29.1	31.0	32.8	N.S.	10%
Petersburg, Va.	32.1	36.3	35.0	35.3	33.8	N.S.	8%
Norfolk, Va.[1/]	21.4	18.6	19.4	19.9	19.7	N.S.	33%
Holland, Va.	35.1	34.8	34.4	33.0	34.5	N.S.	8%
Plymouth, N. C.	44.5	38.8	43.0	35.1	41.4	6.2	9%
Willard, N. C.	40.3	43.2	40.8	41.0	54.4+	7.4	10%
Clayton, N. C.	45.1	35.1	44.4	42.6	39.0	11.2	18%
Hartsville, S. C.	44.3	36.4-	40.8	40.5	33.2-	4.4	7%
Mean	35.0	33.3	35.3	33.6	34.9	5.1	
			Southeast				
Tallassee, Ala.	33.8-	44.2	42.0	26.3-	39.0	6.6	10%
Quincy, Fla.	49.3+	40.8	44.5	44.2	42.8	5.3	7%
Jay, Fla.	32.3	27.0	31.1	31.3	23.9-	7.2	15%
Fairhope, Ala.	31.0	37.0+	37.3+	35.3	33.7	4.8	8%
Baton Rouge, La.	25.5	29.7	28.5	28.2	23.2	N.S.	17%
Mean	34.4	35.8	36.7	33.1	32.5	7.3	
			Upper and Central South				
Jackson, Tenn.	39.7	23.8-	33.4	32.2	27.7	5.4	10%
Belle Mina, Ala.	27.0	21.8	24.3	24.7	20.9	N.S.	16%
Experiment, Ga.	55.4	51.3	53.3	54.4	53.4	N.S.	15%
State College, Miss.	45.0	42.5	48.6	44.2	43.0	5.4	7%
Mean	41.7	34.9-	39.9	38.9	36.2-	2.7	
			Delta				
Sikeston, Mo.	24.7	19.6-	20.5-	21.7-	22.3	4.7	13%
Portageville, Mo.	32.9	31.2	32.9	37.4	31.0	N.S.	10%
Keiser, Ark.(B)	22.4	26.4	19.9	24.7	16.5	6.8	17%
Marianna, Ark.	24.5	13.2-	18.2-	18.7	14.5-	4.8	17%
Stoneville, Miss. (A)	45.8	48.6	49.1	48.1	41.6	N.S.	10%
Stoneville, Miss. (B)	42.8	41.4	43.8	43.8	29.9-	6.0	8%
St. Joseph, La.	49.1	48.6	51.7	49.0	51.0	N.S.	8%
Mean	34.6	32.7	33.7	34.8	29.5-	4.6	
			West				
Stuttgart, Ark.	46.2	37.4-	41.6-	44.2	38.7-	4.1	6%
Curtis, La.	37.1	46.1	33.5	40.4	37.1	11.8	16%
Bixby, Okla.	40.3	33.6-	38.0-	38.6-	35.5-	4.7	7%
Bennington, Okla.[1/]	46.8	42.5	48.1	48.7	43.9	N.S.	8%
Plainview, Texas[1/]	21.1	19.6	24.8	24.0	24.8	6.7	5%
Lubbock, Texas	27.2-	32.4	32.2	20.3-	--	4.8	10%
College Station, Texas	29.6	21.4-	22.7-	30.9	19.6-	5.9	13%
Mean	37.9	35.6	36.0	37.2	34.9	N.S.	

1/ Not included in the combined analysis.

Table 24. Chemical composition and seed size for the strains in Uniform Group VI, 1961

Location	Hood	Lee	N56-4202	S5-7075	N57-6736	R56-49
			Oil Percentage			
Linkwood, Md.	20.6	19.8	19.5	20.3	20.4	21.5
Plymouth, N. C.	19.9	19.6	18.1	19.4	19.3	21.0
Clayton, N. C.	21.2	18.9	19.7	20.8	19.0	21.5
Jay, Fla.	23.8	23.2	21.6	22.7	24.2	24.3
Keiser, Ark. (B)	22.6	21.1	20.2	21.8	21.6	23.0
Stoneville, Miss. (A)	20.7	21.2	19.9	20.8	20.8	22.5
Stoneville, Miss. (B)	21.4	21.2	19.7	21.8	21.8	22.6
Stuttgart, Ark.	21.9	20.4	20.1	20.8	20.7	21.9
Lubbock, Texas	19.2	20.7	19.5	19.0	18.9	19.4
Mean	21.3	20.7-	19.8-	20.8	20.7-	22.0+
			Protein Percentage			
Linkwood, Md.	41.5	41.5	43.6	41.5	40.1	40.7
Plymouth, N. C.	41.0	43.3	44.0	40.9	42.2	41.3
Clayton, N. C.	41.0	44.0	44.2	42.3	42.9	42.5
Jay, Fla.	39.4	39.1	40.9	40.3	37.2	37.7
Keiser, Ark. (B)	37.4	38.7	40.5	37.9	38.3	37.5
Stoneville, Miss.(A)	39.4	41.4	43.1	40.5	41.5	40.6
Stoneville, Miss.(B)	37.4	39.5	41.5	38.5	40.2	39.3
Stuttgart, Ark.	40.5	41.4	43.6	41.3	41.9	40.7
Lubbock, Texas	42.3	39.7	41.5	41.5	42.4	41.1
Mean	40.0	41.0+	42.5+	40.5	40.7	40.2
			Grams Per 100 Seed			
Linkwood, Md.	16.8	13.8	16.6	15.5	13.8	16.0
Plymouth, N. C.	13.6	12.2	12.4	12.6	12.5	13.6
Clayton, N. C.	14.3	11.0	12.6	13.7	10.8	13.5
Jay, Fla.	18.3	14.5	16.6	17.8	14.1	17.5
Keiser, Ark. (B)	12.7	11.3	11.7	11.3	10.7	12.0
Stoneville, Miss. (A)	17.6	13.9	16.4	15.0	14.2	16.0
Stoneville, Miss. (B)	15.0	12.2	14.0	11.4	11.3	14.0
Stuttgart, Ark.	15.7	12.3	13.3	12.3	13.3	14.0
Lubbock, Texas	15.5	16.1	15.9	13.6	13.1	14.9
Mean	15.5	13.0-	14.4-	13.7-	12.6-	14.6-

Table 24. (continued)

Location	D58-1894	D55-8144	D57-727	D58-5111	R56-25	N58-6979	L.S.D. (.05)
			Oil Percentage				
Linkwood, Md.	19.6	21.9	19.5	19.7	20.3	20.6	
Plymouth, N. C.	19.1	21.9	19.4	19.1	19.7	20.9	
Clayton, N. C.	18.8	22.8	18.1	18.9	20.5	22.4	
Jay, Fla.	23.2	24.5	22.0	23.2	22.7	24.3	
Keiser, Ark. (B)	22.2	24.0	21.1	21.4	22.0	23.0	
Stoneville, Miss. (A)	20.9	22.1	20.6	20.5	20.6	22.1	
Stoneville, Miss. (B)	21.4	23.0	20.5	20.5	20.7	22.7	
Stuttgart, Ark.	20.3	23.2	19.6	19.5	20.7	21.4	
Lubbock, Texas	18.2	19.2	18.8	19.4	18.8	19.2	
Mean	20.4-	22.5+	20.0-	20.2-	20.7-	21.8	0.6
			Protein Percentage				
Linkwood, Md.	40.5	40.1	43.3	43.6	41.9	42.0	
Plymouth, N. C.	42.6	39.2	44.2	44.1	41.6	41.3	
Clayton, N. C.	43.0	39.7	45.0	43.4	41.3	41.3	
Jay, Fla.	36.6	38.0	40.9	40.1	39.2	38.3	
Keiser, Ark. (B)	38.1	36.0	40.4	40.1	39.0	38.9	
Stoneville, Miss. (A)	40.9	38.6	42.4	41.7	39.2	39.2	
Stoneville, Miss. (B)	38.3	35.8	41.5	41.4	39.5	38.0	
Stuttgart, Ark.	42.2	38.5	42.6	43.0	41.1	41.8	
Lubbock, Texas	42.8	40.9	43.2	40.5	41.1	40.8	
Mean	40.6	38.5-	42.6+	42.0+	40.4	40.2	0.8
			Grams Per 100 Seed				
Linkwood, Md.	14.8	17.2	15.9	15.2	18.2	19.2	
Plymouth, N. C.	11.8	14.2	12.0	12.0	14.4	18.2	
Clayton, N. C.	11.0	16.3	10.7	11.4	15.2	17.6	
Jay, Fla.	15.3	19.7	16.3	16.4	18.9	20.4	
Keiser, Ark. (B)	10.0	13.3	10.7	10.7	12.3	15.7	
Stoneville, Miss. (A)	13.9	17.8	14.8	14.6	15.9	19.8	
Stoneville, Miss. (B)	11.4	13.5	12.4	12.1	13.2	17.2	
Stuttgart, Ark.	13.7	15.0	12.0	11.3	15.3	16.7	
Lubbock, Texas	12.6	15.6	17.8	15.6	12.9	15.3	
Mean	12.7-	15.8	13.6-	13.3-	15.1	17.8+	0.9

Table 25. Relative maturity data, days earlier (-) or later (+) than Hood, for the strains in Uniform Group VI, 1961

Location	Date Planted	Hood Matured	Lee	N56-4202	S5-7075	N57-6736
		East Coast				
Georgetown, Del.	5-23	10-23	+12	0	0	+11
Linkwood, Md.	5-22	10-10	+10	+3	+1	+10
Warsaw, Va.	5-22	10-16	+4	-2	-1	+5
Petersburg, Va.	5-23	10-13	+14	-1	+2	+14
Holland, Va.	5-25	10-21	+6	-3	+2	+8
Plymouth, N. C.	5-18	10-19	+6	-7	-1	+4
Willard, N. C.	5-9	10-9	+5	0	-1	+5
Clayton, N. C.	5-4	10-7	+7	-2	+1	+7
Hartsville, S. C.	5-30	10-10	+5	-3	0	+6
Mean		10-13	+8	-2	0	+8
		Southeast				
Tallassee, Ala.	6-1	10-15	+1	0	-4	+2
Quincy, Fla.	6-23	10-11	+3	-5	+2	+3
Jay, Fla.	6-12	10-5	+3	-5	+3	+5
Fairhope, Ala.	6-29	10-6	+4	0	0	+4
Baton Rouge, La.	5-18	10-15	+10	+3	-6	-8
Mean		10-10	+4	-1	-1	+1
		Upper and Central South				
Jackson, Tenn.	5-12	10-5	+7	-1	-1	+8
Belle Mina, Ala.	5-17	10-19	0	0	0	0
Experiment, Ga.	6-2	10-7	+11	-2	+3	+8
State College, Miss.	5-16	9-28	+13	0	+11	+13
Mean		10-7	+8	0	+3	+7
		Delta				
Sikeston, Mo.	5-1	10-8	+5	+2	-1	+6
Portageville, Mo.	5-24	10-13	+2	0	0	+2
Keiser, Ark. (B)	5-13	10-6	+12	0	0	+12
Marianna, Ark.	5-16	10-3	+14	+1	-1	+14
Stoneville, Miss. (A)	5-16	10-8	+8	0	0	+8
Stoneville, Miss. (B)	5-9	10-4	+8	0	-4	+8
St. Joseph, La.	5-16	10-19	+4	+4	-7	-7
Mean		10-9	+8	+1	-2	+6
		West				
Stuttgart, Ark.	5-27	10-9	+9	+1	+2	+9
Curtis, La.	5-30	10-15	+3	+3	+3	+13
Bixby, Okla.	5-16	10-18	+13	-4	0	+9
Bennington, Okla.	5-18	10-13	--	0	-1	--
Lubbock, Texas	6-10	10-25	0	0	-1	-2
College Station, Texas	5-30	10-22	+5	-1	0	+4
Mean		10-17	+6	0	0	+7

Table 25. (continued)

Location	R56-49	D58-1804	D55-8144	D57-727	D58-5111	R56-25	N58-6979
			East Coast				
Georgetown, Del.	0	+13	-6	+12	0	+2	0
Linkwood, Md.	+8	+21	-2	+17	+3	+6	-1
Warsaw, Va.	+3	+10	-4	+5	+1	0	-2
Petersburg, Va.	+4	+16	-3	+12	+3	+3	-1
Holland, Va.	+4	+6	+2	+8	+3	-2	+4
Plymouth, N. C.	-1	+7	-7	+5	-2	+2	0
Willard, N. C.	+3	+7	+1	+4	-1	0	+2
Clayton, N. C.	+2	+9	-2	+6	0	+2	0
Hartsville, S. C.	0	+8	-2	+5	-3	+2	-3
Mean	+3	+11	-3	+8	0	+2	0
			Southeast				
Tallassee, Ala.	0	+4	+4	-2	-5	-5	+4
Quincy, Fla.	+2	+1	+1	+3	-1	+1	+3
Jay, Fla.	+7	+5	+6	+5	0	+6	+4
Fairhope, Ala.	0	+4	0	+4	0	0	0
Baton Rouge, La.	+5	0	0	+5	0	+1	0
Mean	+3	+3	+2	+3	-2	0	+2
			Upper and Central South				
Jackson, Tenn.	+2	+10	-1	+7	-1	+2	-2
Belle Mina, Ala.	0	0	0	0	0	0	-1
Experiment, Ga.	+7	+8	0	+9	+1	+7	-2
State College, Miss.	+5	+20	-5	+7	+1	-2	+8
Mean	+4	+10	-2	+6	0	+2	0
			Delta				
Sikeston, Mo.	+3	--	-5	+7	0	-2	0
Portageville, Mo.	0	+4	-2	+3	-2	-1	-2
Keiser, Ark. (B)	+4	+10	-2	+12	+4	+6	0
Marianna, Ark.	+4	+16	-2	+8	+3	0	-2
Stoneville, Miss. (A)	+4	+8	+4	+8	0	+5	+2
Stoneville, Miss. (B)	+1	+10	-5	+7	-4	+1	+2
St. Joseph, La.	+4	0	0	+3	-15	-15	-7
Mean	+3	+8	-2	+7	-2	0	-1
			West				
Stuttgart, Ark.	+9	+13	+2	+9	+1	+1	+2
Curtis, La.	+3	+18	+3	+9	+3	+3	+3
Bixby, Okla.	+2	+16	-8	+12	+1	0	-1
Bennington, Okla.	0	--	-4	--	-5	0	-1
Lubbock, Texas	-3	0	-7	+1	-2	-3	-4
College Station, Texas	+2	+5	-6	+3	+2	0	0
Mean	+2	+10	-3	+7	0	0	0

Table 26. Plant height for the strains in Uniform Group VI, 1961

Location	Hood	Lee	N56-4202	S5-7075	N57-6736	R56-49
			East Coast			
Georgetown, Del.	36	41	37	37	40	39
Linkwood, Md.	35	41	36	37	42	38
Warsaw, Va.	29	33	27	30	32	33
Petersburg, Va.	30	36	29	33	37	30
Norfolk, Va.	32	37	28	27	38	24
Holland, Va.	39	42	37	35	40	38
Plymouth, N. C.	29	31	30	29	31	31
Willard, N. C.	37	38	36	34	38	33
Clayton, N. C.	28	33	27	30	27	28
Hartsville, S. C.	32	30	26	30	35	30
Mean	33	36	31	32	36	32
			Southeast			
Tallassee, Ala.	30	33	30	29	34	29
Quincy, Fla.	22	24	18	22	23	22
Jay, Fla.	17	20	15	15	18	17
Fairhope, Ala.	12	18	14	17	18	18
Baton Rouge, La.	24	28	25	26	28	24
Mean	21	25	20	22	24	22
			Delta and Central South			
Jackson, Tenn.	42	42	40	44	42	40
Belle Mina, Ala.	37	36	37	37	38	35
Experiment, Ga.	29	37	33	32	38	32
State College, Miss.	36	35	35	36	34	30
Mean	36	37	37	37	38	34
			Delta			
Sikeston, Mo.	36	39	35	39	38	36
Portageville, Mo.	44	38	45	43	40	39
Keiser, Ark. (B)	27	27	24	24	29	25
Marianna, Ark.	27	26	17	27	24	24
Stoneville, Miss. (A)	35	36	34	38	35	34
Stoneville, Miss. (B)	29	31	30	28	31	27
St. Joseph, La.	31	31	31	33	32	30
Mean	33	33	31	33	33	31
			West			
Stuttgart, Ark.	32	31	31	33	31	29
Curtis, La.	27	30	25	26	29	26
Sibby, Okla.	37	24	35	39	37	36
Lexington, Okla.	38	34	39	41	39	35
Plainview, Texas	35	34	32	33	35	32
Lubbock, Texas	26	26	17	25	30	19
College Station, Texas	26	26	24	25	26	23
Mean	32	31	28	32	33	29

Table 26. (continued)

Location	D58-1894	D55-8144	D57-727	D58-5111	R56-25	N58-6979
			East Coast			
Georgetown, Del.	41	39	47	39	42	38
Linkwood, Md.	40	46	43	40	42	41
Warsaw, Va.	31	37	35	33	35	32
Petersburg, Va.	37	37	41	34	38	33
Norfolk, Va.	36	31	40	29	36	28
Holland, Va.	39	43	47	39	41	36
Plymouth, N. C.	32	36	37	36	35	33
Willard, N. C.	37	37	45	37	41	38
Clayton, N. C.	28	31	33	28	31	27
Hartsville, S. C.	34	33	41	34	38	33
Mean	36	37	41	35	38	34
			Southeast			
Tallassee, Ala.	31	37	34	35	35	35
Quincy, Fla.	27	24	27	23	26	22
Jay, Fla.	19	20	20	19	19	11
Fairhope, Ala.	23	20	18	22	20	19
Baton Rouge, La.	28	18	26	30	24	20
Mean	26	24	25	26	25	21
			Upper and Central South			
Jackson, Tenn.	42	48	48	44	42	44
Belle Mina, Ala.	37	36	44	39	31	40
Experiment, Ga.	36	35	36	33	40	36
State College, Miss.	36	34	44	40	43	28
Mean	38	38	43	39	39	37
			Delta			
Sikeston, Mo.	37	45	49	39	40	35
Portageville, Mo.	39	40	54	44	45	40
Keiser, Ark. (B)	26	25	35	24	32	26
Marianna, Ark.	27	27	35	28	28	24
Stoneville, Miss. (A)	36	36	44	37	37	34
Stoneville, Miss. (B)	31	29	37	32	31	26
St. Joseph, La.	34	32	40	32	33	32
Mean	33	33	42	34	35	31
			West			
Suttgart, Ark.	33	34	41	35	36	33
Curtis, La.	31	28	33	30	38	38
Bixby, Okla.	36	39	46	40	42	41
Bennington, Okla.	34	40	46	41	40	43
Plainview, Texas	34	36	36	34	37	33
Lubbock, Texas	30	24	30	27	28	22
College Station, Texas	28	27	29	25	28	26
Mean	32	33	37	36	36	34

Table 27. Lodging scores for the strains in Uniform Group VI, 1961

Location	Hood	Lee	N56-4202	S5-7075	N57-6736	R56-49
East Coast						
Georgetown, Del.	3.0	3.0	1.3	2.0	3.0	1.7
Linkwood, Md.	4.3	3.0	2.0	2.3	3.0	3.0
Warsaw, Va.	1.5	1.8	1.0	1.0	1.8	1.2
Petersburg, Va.	1.3	3.3	2.0	1.0	3.0	1.3
Norfolk, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.7	2.5	1.7	1.3	2.3	2.0
Plymouth, N. C.	2.5	3.5	2.0	2.5	3.0	2.0
Willard, N. C.	2.5	3.0	3.0	2.0	3.0	2.5
Clayton, N. C.	2.3	3.0	1.6	1.6	2.6	2.3
Hartsville, S. C.	1.9	1.7	1.0	1.2	1.8	1.3
Southeast						
Tallassee, Ala.	2.0	2.0	1.5	1.0	2.0	2.0
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	2.0	1.0	2.0	2.0
Upper and Central South						
Jackson, Tenn.	4.0	2.0	1.0	2.0	2.0	2.0
Belle Mina, Ala.	2.0	2.0	1.3	1.3	1.7	1.0
Experiment, Ga.	1.0	2.0	1.3	1.0	1.0	1.3
State College, Miss.	2.0	2.0	1.0	2.0	2.0	2.0
Delta						
Sikeston, Mo.	1.4	2.8	1.0	1.0	1.4	1.0
Portageville, Mo.	3.5	2.8	1.0	2.5	3.0	2.0
Keiser, Ark. (B)	1.5	1.0	1.0	1.0	1.0	1.0
Marianna, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss. (A)	2.0	3.0	2.0	2.0	3.0	2.0
Stoneville, Miss. (B)	2.0	2.3	1.7	1.0	2.0	1.3
St. Joseph, La.	2.0	2.0	2.0	2.0	2.0	3.0
West						
Stuttgart, Ark.	3.7	2.7	1.3	2.0	2.3	2.0
Curtis, La.	1.0	2.0	1.0	1.0	2.0	1.0
Bixby, Okla.	3.3	3.0	1.3	2.0	3.7	2.3
Bennington, Okla.	1.7	2.0	1.7	2.3	2.0	2.0
Plainview, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.3	1.0
College Station, Texas	1.0	1.0	1.0	1.0	1.0	2.0

Table 27. (continued)

Location	D58-1894	D55-8144	D57-727	D58-5111	R56-25	N58-6979
			East Coast			
Georgetown, Del.	3.3	4.0	2.0	1.7	3.3	2.0
Linkwood, Md.	3.0	3.7	2.3	3.0	3.0	2.3
Warsaw, Va.	2.0	1.8	1.0	1.3	1.8	1.0
Petersburg, Va.	3.0	1.7	2.0	3.0	3.7	1.0
Norfolk, Va.	1.5	1.5	1.7	1.0	1.0	2.0
Holland, Va.	2.7	3.0	2.5	1.8	2.7	2.3
Plymouth, N. C.	3.0	2.5	3.0	2.5	4.0	2.0
Willard, N. C.	2.0	3.5	3.0	2.0	3.5	2.0
Clayton, N. C.	2.3	2.3	3.0	3.0	3.3	2.0
Hartsville, S. C.	1.7	2.5	1.4	2.2	3.3	1.0
			Southeast			
Tallassee, Ala.	1.5	2.5	1.0	2.0	3.0	1.0
Quincy, Fla.	2.0	2.0	2.0	2.0	2.0	1.0
Jay, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	1.0	1.0	2.0	2.0	1.0
			Upper and Central South			
Jackson, Tenn.	2.0	4.0	2.0	3.0	4.0	2.0
Belle Mina, Ala.	2.3	3.3	2.0	2.3	2.7	1.3
Experiment, Ga.	1.0	2.0	1.3	1.7	2.3	1.0
State College, Miss.	2.0	2.0	2.0	2.0	2.0	1.0
			Delta			
Sikeston, Mo.	----	2.3	1.4	1.1	2.4	1.0
Portageville, Mo.	2.8	3.0	3.5	2.5	2.5	2.0
Keiser, Ark. (B)	1.0	1.0	1.5	1.0	2.0	1.0
Marianna, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Stoneville, Miss. (A)	3.0	3.0	2.0	3.0	3.0	2.0
Stoneville, Miss. (B)	2.3	2.0	2.0	2.0	3.0	1.3
St. Joseph, La.	2.0	3.0	2.0	2.0	3.0	1.0
			West			
Stuttgart, Ark.	2.3	3.3	2.3	3.3	3.3	2.7
Curtis, La.	2.0	2.0	1.0	1.0	2.0	2.0
Bixby, Okla.	3.3	2.3	2.7	3.0	3.3	1.7
Bennington, Okla.	2.0	3.7	2.7	2.0	4.0	1.3
Plainview, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	2.0	1.0	1.0	1.0	1.3	1.0
College Station, Texas	1.5	2.0	2.0	1.0	2.0	1.0

Table 28. Seed quality scores for the strains in Uniform Group VI, 1961

Location	Hood	Lee	N56-4202	S5-7075	N57-6736	R56-49
			East Coast			
Georgetown, Del.	1.0	2.0	1.0	1.7	2.7	1.7
Linkwood, Md.	2.0	2.0	2.0	2.0	2.0	2.0
Warsaw, Va.	1.5	1.0	1.0	1.5	1.5	1.0
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Norfolk, Va.	1.7	2.0	2.0	2.3	2.0	2.3
Holland, Va.	1.0	1.0	1.2	2.2	1.2	1.0
Plymouth, N. C.	1.5	1.0	1.0	1.5	1.0	1.0
Willard, N. C.	1.0	1.5	1.0	1.5	1.0	1.5
Clayton, N. C.	1.0	1.0	1.0	1.5	1.0	1.0
Hartsville, S. C.	1.0	2.0	1.0	2.0	2.0	2.0
			Southeast			
Tallassee, Ala.	1.5	1.5	1.5	2.0	1.0	1.5
Jay, Fla.	1.0	1.0	2.0	1.5	1.0	1.0
Fairhope, Ala.	2.3	2.0	3.0	3.3	2.0	2.7
Baton Rouge, La.	3.0	3.0	2.0	1.0	2.0	3.0
			Upper and Central South			
Jackson, Tenn.	2.0	2.0	2.0	2.0	2.0	2.0
Experiment, Ga.	1.0	1.3	1.0	1.0	1.0	1.0
State College, Miss.	1.0	1.0	2.0	2.0	1.0	1.0
			Delta			
Sikeston, Mo.	1.3	1.8	1.5	1.8	1.8	1.5
Portageville, Mo.	1.2	1.4	1.3	1.0	1.7	1.2
Keiser, Ark. (B)	2.7	1.7	2.7	3.3	2.0	2.0
Marianna, Ark.	2.0	2.7	2.7	2.7	2.3	2.0
Stoneville, Miss. (A)	1.7	1.3	2.0	2.0	1.3	1.7
Stoneville, Miss. (B)	1.3	2.0	1.7	2.0	2.0	1.0
St. Joseph, La.	2.0	2.0	1.0	1.0	1.0	2.0
			West			
Stuttgart, Ark.	2.0	2.0	1.3	2.0	2.0	2.0
Curtis, La.	1.0	2.0	1.0	2.0	2.0	1.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Bennington, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Plainview, Texas	1.0	3.0	2.0	1.0	2.0	1.0
Lubbock, Texas	2.0	1.0	2.0	2.0	2.0	1.0
College Station, Texas	2.0	3.0	3.0	3.0	4.0	3.0

Table 28. (continued)

Location	D58-1894	D55-8144	D57-727	D58-5111	R56-25	N58-6979
			East Coast			
Georgetown, Del.	1.7	2.0	2.3	2.0	2.0	2.7
Linkwood, Md.	2.0	3.0	2.0	2.0	2.0	3.0
Warsaw, Va.	1.0	2.0	1.0	1.0	1.5	2.5
Petersburg, Va.	1.0	1.0	1.0	1.0	2.0	2.0
Norfolk, Va.	2.0	2.3	2.0	2.3	2.0	2.0
Holland, Va.	1.0	1.8	1.3	1.8	1.7	2.3
Plymouth, N. C.	1.5	2.0	1.0	2.0	2.0	2.0
Willard, N. C.	1.5	1.0	1.5	1.0	1.5	1.5
Clayton, N. C.	1.0	2.0	1.0	1.0	1.5	1.0
Hartsville, S. C.	1.0	2.0	2.0	3.0	2.0	3.0
			Southeast			
Tallassee, Ala.	1.0	3.0	1.5	2.0	1.5	3.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.5	2.0
Fairhope, Ala.	2.7	3.7	2.3	3.0	3.0	3.3
Baton Rouge, La.	2.0	2.0	2.0	1.0	2.0	3.0
			Upper and Central South			
Jackson, Tenn.	2.0	2.0	3.0	2.0	1.0	2.0
Experiment, Ga.	1.0	1.7	1.0	1.3	1.3	1.0
State College, Miss.	1.0	2.0	2.0	2.0	1.0	2.0
			Delta			
Sikeston, Mo.	1.0	1.5	1.8	1.5	2.0	2.0
Portageville, Mo.	1.3	1.3	1.3	1.3	1.2	1.9
Keiser, Ark. (B)	1.7	3.0	3.0	2.3	2.7	4.0
Marianna, Ark.	3.0	2.0	2.0	3.0	2.7	3.0
Stoneville, Miss. (A)	1.7	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	2.0	2.7
St. Joseph, La.	1.0	3.0	2.0	1.0	2.0	3.0
			West			
Stuttgart, Ark.	2.0	1.7	2.0	2.0	2.0	2.3
Curtis, La.	1.0	2.0	2.0	1.0	2.0	2.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Bennington, Okla.	1.0	1.0	1.0	1.0	1.0	1.7
Plainveiw, Texas	2.0	2.0	2.0	2.0	1.0	2.0
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0
College Station, Texas	3.0	3.0	4.0	3.0	3.0	3.0

PRELIMINARY GROUP VI

1961

The parentage for the strains included in the Group VI nursery are listed in table 29. The results from the 7 nurseries grown are summarized in tables 30 through 35. The general summary of seed yield, maturity, height, oil and protein percentages, and reaction to bacterial pustule and purple seed stain, and shattering are reported in table 30.

Two lines averaged significantly higher in yield than Hood but were not superior to Lee. There were 4 lines which averaged significantly lower in yield than Hood. There were 19 lines tested from the cross Hill x D52-810. Ten of the 11 lines ranking highest in seed yield were from this cross. These 11 lines ranked above Lee in yield and were earlier in maturity.

Two lines, N59-6817 and N59-6958, were segregating for pubescence color while N59-7156 was segregating for flower color.

The 6 strains N59-6800, N59-6972, D59-268, N59-6825, D59-706, and V60-K are suggested for advancing to the Uniform Group VI.

Table 29. Parentage of the strains in Preliminary Group VI, 1961

	Strain	Parentage	Generation Composited
1.	Hood		
2.	Lee		
3.	D59-268	Hill x D52-810	F_5
4.	D59-277	Hill x D52-810	F_5
5.	D59-322	Hill x D52-810	F_5
6.	D59-355	Hill x D52-810	F_5
7.	D59-526	Hill x D52-810	F_5
8.	D59-537	Hill x D52-810	F_5
9.	D59-706	Hill x D52-810	F_5
10.	D59-1585	D51-5427 x D49-2491	F_5
11.	D59-1609	D51-5427 x D49-2491	F_5
12.	D59-1632	D51-5427 x D49-2491	F_5
13.	D59-1673	D51-5427 x D49-2491	F_5
14.	D59-1706	D51-5427 x D49-2491	F_5
15.	D59-2218	D55-4168 x Hill	F_5
16.	D59-2279	D55-4168 x Hill	F_5
17.	Ar58-1341	D49-2491 x Clark	
18.	N59-6800	Hill x D52-810	F_5
19.	N59-6817	Hill x D52-810	F_5
20.	N59-6825	Hill x D52-810	F_5
21.	N59-6863	Hill x D52-810	F_5
22.	N59-6873	Hill x D52-810	F_5
23.	N59-6927	Hill x D52-810	F_5
24.	N59-6937	Hill x D52-810	F_5
25.	N59-6949	Hill x D52-810	F_5
26.	N59-6958	Hill x D52-810	F_5
27.	N59-6972	Hill x D52-810	F_5
28.	N59-6991	Hill x D52-810	F_5
29.	N59-7011	Hill x D52-810	F_5
30.	N59-7113	D55-4168 x Hill	F_5
31.	N59-7156	D55-4168 x Hill	F_5
32.	N59-7189	D55-4168 x Hill	F_5
33.	R58-82	Rogue in Hood	
34.	R59-35	Dortchsoy 67 x Lee	
35.	V12-P		
36.	V60-K	Selected as natural cross from Ogden	

Table 30. General summary of performance for the strains in Preliminary Group VI, 1961

Strain	Seed Yield	Maturity Index	Ht.	Percent Oil	Percent Protein	Bact. Pustule	Purple Stain	Shattering
Hood	32.8	10-9	31	21.2	39.7	1.0	2.5	1.5
Lee	34.2	+8	32	21.1	40.6	1.0	1.0	1.0
D59-268	36.4	+5	33	21.4	40.4	1.0	1.0	1.0
D59-277	32.5	+2	31	21.2	39.7	1.0	1.0	1.0
D59-322	32.4	-2	29	21.0	41.3+	1.0	1.0	2.5
D59-355	33.0	+3	30	20.4-	41.6+	1.0	2.0	1.0
D59-526	34.7	0	29	21.4	39.9	1.0	2.0	1.5
D59-537	36.9	-3	35	21.7	39.2	1.0	2.0	2.0
D59-706	34.5	+3	34	22.0+	41.6+	1.0	2.0	1.0
D59-1585	32.2	+2	30	22.2+	38.3-	1.0	2.0	1.5
D59-1609	31.7	+9	33	20.3-	41.0+	1.0	1.0	1.0
D59-1632	29.3	+12	32	19.6-	39.7	1.0	1.0	1.0
D59-1673	29.7	+8	37	20.8	40.3	1.0	2.0	1.0
D59-1706	32.8	+8	36	20.9	40.9+	1.0	1.0	1.0
D59-2218	29.0	0	31	18.1-	45.1+	1.0	1.0	1.0
D59-2279	26.1-	0	36	17.9-	43.8+	1.0	1.0	1.0
Ar58-1341	29.5	+6	31	20.7	39.9	1.0	2.0	1.0
N59-6800	37.3+	-4	38	21.7	39.7	1.0	2.0	1.5
N59-6817	33.7	0	33	22.2+	39.0	1.0	2.0	1.0
N59-6825	34.9	-3	34	21.5	40.1	1.0	1.0	1.0
N59-6863	35.0	0	32	20.7	41.7+	1.0	2.0	1.5
N59-6873	33.9	-3	31	22.0+	38.6-	1.0	1.0	2.5
N59-6927	34.7	-2	31	21.3	38.9	1.0	1.0	1.5
N59-6937	35.1	+2	34	21.7	39.2	1.0	2.0	1.5
N59-6949	34.0	-2	30	21.5	39.6	1.0	1.0	1.5
N59-6958	37.1+	0	34	21.8	39.7	1.0	1.0	1.5
N59-6972	36.6	-3	32	22.5+	38.8	1.0	1.0	1.0
N59-6991	34.1	-3	35	22.0+	40.6	1.0	2.0	2.0
N59-7011	33.7	0	34	22.0+	39.4	1.0	2.0	1.0
N59-7113	28.5-	-2	34	18.9-	44.0+	1.0	1.0	1.0
N59-7156	26.5-	+2	36	17.6-	45.2+	1.0	1.0	1.0
N59-7189	29.9	0	33	17.8-	44.2+	1.0	1.0	1.0
R58-82	29.4	+4	32	21.0	40.1	1.0	2.0	1.0
R59-35	29.9	+7	28	20.5	40.4	1.0	1.0	1.0
V12-P	27.8-	+1	36	21.9	40.6	3.0	2.0	2.5
V60-K	34.7	-4	32	21.5	39.9	2.0	2.0	2.0
L.S.D.(.05)	4.3			0.8	1.1			
L.S.D.(.01)	5.6			1.0	1.5			

Table 31. Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1961

Strain	Warsaw, Va.	Plymouth, N.C.	Jay Fla.	Sikeston, Mo.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hood	26.5	36.9	34.8	25.8	35.3	29.4	34.3
Lee	24.6	38.4	36.6	20.2	33.3	30.5	41.7+
D59-268	25.2	42.5	39.4	18.8	37.8	34.2	39.5
D59-277	25.1	41.1	21.5	17.7-	--	36.1	34.4
D59-322	24.0	42.8+	23.0	22.4	--	39.6+	35.0
D59-355	23.1-	46.8+	31.9	19.9	31.7	23.4	41.0+
D59-526	26.7	43.9+	33.4	20.0	37.9	30.8	35.8
D59-537	24.7	46.3+	36.9	25.5	34.5	36.1	42.7+
D59-706	24.8	43.2+	26.9	19.5	40.6	28.7	42.7+
D59-1585	25.2	35.5	28.7	18.2	35.2	25.9	42.5+
D59-1609	20.0-	35.4	34.8	10.1-	37.2	26.1	36.6
D59-1632	16.3-	34.0	42.3	7.2-	28.6	25.0	29.7
D59-1673	18.0-	37.0	39.5	19.9	28.5	21.6	38.9
D59-1706	23.1-	39.6	33.4	9.5-	29.7	34.1	37.3
D59-2218	23.5	39.2	28.0	16.2	29.1	20.3	34.1
D59-2279	21.7-	31.4	27.3	20.2	27.0	18.2-	31.4
Ar58-1341	20.9-	35.7	31.6	14.8-	32.4	20.5	36.0
N59-6800	25.0	40.0	36.6	17.3-	42.7	35.4	44.3+
N59-6817	27.3	39.8	37.0	17.7-	34.5	26.0	38.0
N59-6825	26.6	41.4	30.1	19.6	35.1	33.3	42.8+
N59-6863	24.2	40.8	36.2	18.7	39.4	30.7	38.4
N59-6873	24.7	43.6+	29.8	22.8	39.1	26.9	39.7
N59-6927	26.3	44.8+	34.4	23.6	32.4	29.1	41.2+
N59-6937	26.8	44.8+	26.5	15.9-	35.4	32.7	44.7+
N59-6949	27.5	40.7	28.0	17.8	36.8	28.0	43.2+
N59-6958	28.0	50.3+	26.6	17.7-	37.9	35.3	44.3+
N59-6972	27.0	46.0+	26.9	20.3	41.0	36.6	42.3+
N59-6991	24.0	45.1+	32.7	25.4	31.2	31.4	45.5+
N59-7011	26.6	38.8	35.1	19.2	33.6	32.6	35.5
N59-7113	22.9-	38.6	24.4	14.2-	29.2	22.7	33.4
N59-7156	16.6-	29.8-	32.3	12.8-	27.7	18.7-	34.0
N59-7189	19.3-	32.6	35.2	14.8-	29.4	28.2	34.5
R58-82	19.3-	33.0	40.9	12.3-	30.8	23.1	29.2
R59-35	21.3-	35.9	27.6	9.8-	32.9	25.8	35.8
V12-P	21.9-	30.4-	31.9	13.6-	28.8	21.6	32.4
V60-K	27.3	36.2	27.6	18.7	38.2	37.4	41.4+
L.S.D.(.05)	3.2	5.9	N.S.	8.1	N.S.	9.3	6.6
C.V.	7%	7%	20%	23%	17%	16%	9%

Table 32. Oil per centages for the strains in Preliminary Group VI, 1961

Strain	Warsaw, Va.	Plymouth N.C.	Jay, Fla.	Keiser, Ark.	Stoneville, Miss.(B)
Hood	20.2	19.9	22.8	21.5	21.8
Lee	20.3	20.2	23.4	20.0	21.4
D59-268	20.9	20.4	22.9	21.2	21.4
D59-277	20.4	19.9	22.2	21.7	21.9
D59-322	20.5	19.5	22.5	20.6	21.8
D59-355	19.6	19.4	21.5	21.0	20.5
D59-526	20.2	20.3	23 0	21.6	21.7
D59-537	21.6	19.8	23.6	21.9	21.8
D59-706	21.5	21.2	22.8	22.2	22.2
D59-1585	20.0	21.5	24.0	22.4	23.2
D59-1609	19.8	19.2	22.1	20.4	20.1
D59-1632	17.1	18.4	22.3	20.2	20.0
D59-1673	19.4	19.6	22.6	20.7	21.7
D59-1706	19.0	20.6	21.4	21.5	22.0
D59-2218	17.7	16.5	20.3	17.7	18.5
D59-2279	16.9	16.4	20.2	17.5	18.6
Ar58-1341	19.4	19.2	23.5	20.9	20.3
N59-6800	21.0	20.1	24.2	22.0	21.3
N59-6817	20.9	21.5	23.8	23.0	22.0
N59-6825	21.0	20.3	22.9	21.7	21.8
N59-6863	19.7	19.7	22.2	21.0	20.9
N59-6873	21.1	20.9	23.7	22.0	22.4
N59-6927	21.3	20.1	22.7	21.2	21.1
N59-6937	21.0	20.4	23.5	21.8	21.9
N59-6949	21.0	20.0	23.0	21.8	21.8
N59-6958	20.8	20.4	23.8	22.1	21.8
N59-6972	22.6	21.7	24.5	23.0	20.9
N59-6991	21.7	20.6	23.7	21.8	22.0
N59-7011	21.6	20.0	23.6	21.8	23.1
N59-7113	17.8	17.8	20.7	18.6	19.5
N59-7156	14.1	16.5	20.3	18.5	18.4
N59-7189	15.5	16.2	21.6	17.5	18.2
R58-82	18.6	19.6	23.2	21.0	22.6
R59-35	19.7	18.5	23.1	20.1	21.2
V12-P	21.0	21.0	23.8	22.0	21.6
V60-K	19.7	20.7	23.9	21.8	21.6

Table 33. Protein percentages for the strains in Preliminary Group VI, 1961

Strain	Warsaw, Va.	Plymouth, N. C.	Jay, Fla.	Keiser, Ark.	Stoneville, Miss. (B)
Hood	43.4	41.0	40.0	37.1	37.0
Lee	42.1	43.1	39.9	39.3	38.7
D59-268	42.9	41.7	39.3	39.1	38.8
D59-277	40.4	41.6	40.1	38.0	38.5
D59-322	42.9	42.7	40.2	39.6	41.3
D59-355	42.6	43.1	40.6	40.4	41.5
D59-526	41.1	41.7	39.4	38.1	39.1
D59-537	42.1	41.5	36.5	37.4	38.3
D59-706	43.6	43.3	41.7	38.4	40.8
D59-1585	39.5	40.4	37.1	36.8	37.8
D59-1609	42.8	43.9	39.4	37.9	40.8
D59-1632	42.6	42.5	38.5	37.3	37.6
D59-1673	41.8	43.4	39.7	36.8	39.7
D59-1706	41.4	43.7	40.4	38.4	40.5
D59-2218	45.0	47.2	43.2	44.3	45.7
D59-2279	45.3	46.0	42.4	42.1	43.1
Ar58-1341	42.6	42.0	37.9	38.1	39.0
N59-6800	40.5	42.4	37.3	39.1	39.6
N59-6817	40.2	41.9	37.4	37.6	38.1
N59-6825	41.3	42.8	38.5	38.5	39.5
N59-6863	42.3	43.4	40.4	41.0	41.2
N59-6873	39.6	40.7	37.0	37.0	38.7
N59-6927	38.4	41.1	36.9	38.1	39.8
N59-6937	41.1	40.0	37.6	37.9	39.2
N59-6949	40.8	42.0	38.3	37.5	39.6
N59-6958	40.7	41.3	38.8	37.7	39.9
N59-6972	40.9	40.8	37.7	37.1	37.5
N59-6991	41.7	43.0	39.4	38.4	40.3
N59-7011	39.1	42.1	37.5	38.7	39.4
N59-7113	45.8	45.6	43.9	41.7	42.9
N59-7156	48.5	46.7	42.9	43.5	44.5
N59-7189	45.5	47.0	40.9	43.5	44.0
R58-82	43.9	42.5	38.3	37.9	38.0
R59-35	40.4	44.1	39.3	38.1	40.1
V12-P	41.7	42.5	38.3	40.3	40.4
V60-K	42.6	41.7	38.1	37.7	39.3

Table 34. Plant height for the strains in Preliminary Group VI, 1961

Strain	Warsaw, Va.	Plymouth, N.C.	Jay, Fla.	Sikeston, Mo.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hood	33	29	19	40	37	28	28
Lee	35	35	19	40	41	24	30
D59-268	34	35	20	41	42	28	28
D59-277	32	39	19	36	38	23	28
D59-322	30	32	17	34	35	29	25
D59-355	31	35	21	29	37	28	27
D59-526	28	33	20	36	37	24	25
D59-537	35	40	25	38	43	34	33
D59-706	30	40	18	39	47	29	32
D59-1585	32	30	19	35	40	27	30
D59-1609	33	36	19	38	41	30	32
D59-1632	29	36	24	36	40	25	31
D59-1673	36	38	25	45	50	33	33
D59-1706	34	39	27	40	43	32	35
D59-2218	34	36	20	35	42	24	28
D59-2279	36	40	22	44	45	29	34
Ar58-1341	32	38	18	40	38	26	28
N59-6800	38	39	26	43	47	36	35
N59-6817	34	37	21	39	40	30	31
N59-6825	36	36	19	42	46	27	29
N59-6863	32	35	19	43	37	31	28
N59-6873	30	34	20	38	42	28	27
N59-6927	31	33	18	38	39	27	29
N59-6937	35	38	18	42	43	27	33
N59-6949	32	33	18	34	40	26	27
N59-6958	33	37	19	39	44	32	31
N59-6972	33	36	20	38	40	26	28
N59-6991	36	38	23	44	45	29	29
N59-7011	33	36	23	40	44	32	29
N59-7113	35	39	20	39	43	30	31
N59-7156	36	37	27	41	44	30	36
N59-7189	33	39	23	39	41	26	30
R58-82	33	32	19	43	40	30	29
R59-35	29	34	15	32	38	25	26
V12-P	34	37	30	42	43	28	37
V60-K	35	34	20	39	40	27	31

Table 35. Seed quality scores for the strains in Preliminary Group VI, 1961

Strain	Warsaw, Va.	Plymouth, N.C.	Jay, Fla.	Sikeston, Mo.	Portage-ville, Mo.	Keiser, Ark.	Stone-ville, Miss.(B)
Hood	1.0	1.5	1.0	1.8	1.2	2.0	2.0
Lee	1.5	1.5	1.0	2.0	1.2	1.5	1.5
D59-268	1.0	1.0	1.0	1.5	1.3	2.0	1.5
D59-277	1.0	2.5	1.0	1.8	1.0	2.0	2.0
D59-322	1.5	2.0	1.0	1.5	1.0	3.0	2.0
D59-355	1.2	1.5	1.0	1.5	1.4	2.0	1.5
D59-526	1.0	1.5	1.0	2.0	1.4	2.0	2.0
D59-537	1.2	2.0	1.0	1.8	1.0	1.0	1.5
D59-706	2.0	2.5	1.0	1.8	1.2	2.0	2.0
D59-1585	1.5	1.0	1.0	2.3	1.7	3.0	2.0
D59-1609	1.5	2.0	1.0	1.8	1.9	3.0	2.0
D59-1632	1.5	1.5	1.0	2.3	1.7	2.0	2.0
D59-1673	2.0	1.5	1.0	2.3	2.0	3.0	2.0
D59-1706	1.5	1.0	1.5	2.3	1.9	2.0	2.0
D59-2218	2.0	1.5	1.5	2.0	1.5	2.0	2.0
D59-2279	1.5	1.5	1.0	1.8	1.5	2.0	2.0
Ar58-1341	1.2	1.0	1.0	2.0	1.5	2.0	2.0
N59-6800	1.2	1.5	1.0	1.5	1.4	2.0	1.0
N59-6817	2.0	2.0	1.0	1.8	2.4	1.5	1.5
N59-6825	1.5	1.5	1.0	1.8	1.4	2.0	2.0
N59-6863	1.5	1.5	1.0	2.0	1.8	1.5	2.0
N59-6873	1.2	2.0	1.0	1.8	1.4	2.0	2.0
N59-6927	1.2	1.5	1.0	1.8	1.5	2.0	2.0
N59-6937	1.5	1.5	1.0	1.5	1.8	2.0	1.5
N59-6949	1.5	1.0	1.0	2.0	1.4	2.5	2.0
N59-6958	1.2	2.0	1.0	1.8	1.4	2.5	2.0
N59-6972	1.0	1.5	1.0	1.3	1.2	1.0	1.5
N59-6991	2.0	2.0	1.0	1.5	1.4	2.0	2.0
N59-7011	1.5	1.5	1.0	1.8	1.6	1.5	2.0
N59-7113	1.5	2.0	1.0	1.5	1.0	2.0	2.0
N59-7156	2.0	1.0	1.0	2.0	1.4	2.0	2.0
N59-7189	1.2	1.5	1.0	1.8	1.5	2.0	2.0
R58-82	1.0	1.5	1.0	1.8	1.0	2.5	2.0
R59-35	1.0	1.5	1.0	1.8	1.2	2.0	2.0
V12-P	3.0	3.0	1.5	2.8	1.8	3.0	2.0
V60-K	1.5	2.0	1.0	2.3	1.4	3.0	2.0

UNIFORM GROUP VII

1961

	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.	D57-1299	Roanoke x D49-2491	F_6
5.	F55-255	D49-722 x Improved Pelican	F_4
6.	F57-467	Jackson x D49-2491	F_6
7.	F57-481	Jackson x D49-2491	F_6
8.	N57-6279	Jackson x D49-2491	F_5
9.	N57-6725	Jackson x D49-2491	F_5
10.	N57-6801	Jackson x D49-2491	F_5
11.	D58-4300	D51-5052 x D49-2491	F_5
12.	Ga58-33	D49-588 x N51-1956	

Background of strains used as parents:

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

D49-772 is a selection from Roanoke x N45-745 which was included in Uniform Group VII for the years 1952 and 1953.

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

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

The results of 25 Uniform Group VII nurseries are summarized in tables 36 through 42. Table 36 gives a general summary of seed yields, agronomic qualities, chemical composition, and disease reactions. Two- and 3-year data are presented for seed yields and oil and protein percentages.

Differences among strains were significant in 12 of the 25 comparisons. The combined analysis of variance for seed yield by production areas showed mean yields differed only in the East Coast and Southeast production areas. A late season drouth occurred in the East Coast area, and as a result seed yields averaged lower than in recent years.

The strain D55-822 has continued to give excellent performance. In the Southeast, where it has given its best relative performance, it has a 3-year average yield 11% above Jackson. It has averaged slightly taller than Jackson and equals Lee in seed holding. Two sub-lines, F58-3786 and F58-3802, were grown in Preliminary Group VII. These sub-lines gave similar mean yields and ranked at the top of Preliminary VII in seed yield.

Seven strains have been grown 2 years. D55-1299 has yielded very well but does not hold its seed as well as Lee. Because of its shorter growth, it would be adapted to the areas with good growth. The other 6 strains have growth characteristics more nearly like Jackson. None of these have yielded as well or have as good seed holding qualities as F55-822. F55-467 and N57-6801 have very high oil content. Perhaps N57-6801 is the only one of this group that merits further testing.

The 2 new strains D58-4300 and Ga58-33 gave excellent performance. Both yielded significantly above Jackson in the Southeast.

The longest growing season for Jackson in the Group VII plantings was 176 days at Clayton where Jackson averaged 22.0 bushels and F55-822 averaged 25 bushels. The shortest growing season for Jackson was 118 days at Fairhope. There Jackson averaged 37.5 bushels and F55-822 with a 113-day season averaged 47.0 bushels.

Table 36. General summary of performance for the strains in Uniform Group VII, 1961

	Jackson	Lee	F55-822	D57-1299	F55-255	F57-467
Seed Yield - 1961						
East Coast	24.7	29.3	30.5	29.4	27.7	27.0
Southeast	33.8	35.3	39.4+	36.6	36.9	34.3
Upper & Central South	40.3	44.1	44.0	44.6	41.3	43.1
Delta	41.1	44.0	43.3	46.0	41.3	37.8
West	40.4	42.1	40.5	41.5	38.4	33.8
-1960-61						
East Coast	33 4	35.9	38.0	37.5	35.0	33.9
Southeast	34.1	35.3	40.0	36.4	37.3	35.0
Upper & Central South	38.3	38.5	39.3	38.6	37.1	37.9
Delta	41.7	43.9	44.3	46.6	43.0	40.0
West	39.6	41.2	39.5	40.0	38.2	35.4
- 1959-61						
East Coast	35.9	36.0	39.8			
Southeast	35.4	34.2	39.9			
Upper & Central South	37.1	35.7	36.9			
Delta	39.7	43.5	43.4			
West	40.8	42.8	43.8			
Oil Percentage - 1961	21.5	21.5	21.3	21.2	21.7	22.5+
- 1960-61	21.9	21.6	21.7	21.5	21.9	22.8
- 1959-61	22.0	21.7	21.7			
Protein Percentage - 1961	39.4	41.5+	40.5+	40.4+	40.2	40.5+
- 1960-61	39.6	41.8	40.8	40.5	40.3	40.7
- 1959-61	39.5	41.9	41.0			
Seed Size	15.3	14.0	16.2	14.7	14.8	15.5
Maturity Index	10-25	-9	-2	-4	-1	-4
Height	37	29	38	29	34	36
Shattering 1/	3.1	1.0	1.1	1.9	2.0	3.0
Bacterial Pustule 2/	3.0	1.0	1.0	1.0	1.0	1.0
Target Spot 2/	1.0	1.0	1.0	1.0	1.0	2.0
Purple Seed Stain 3/	1.0	1.0	1.0	1.0	1.0	1.0
Photophthora Rot 2/	2.0	1.0	1.5	1.0	1.0	1.0

1/ Rocky Mount, Clayton, Willard, Blackville, Tifton, Tallassee, State College, and College Station data.

2/ Stoneville data.

3/ Jay data.

Table 36. (continued)

	F57-481	N57-6279	N57-6725	N57-6801	D58-4300	Ga58-33
Seed Yield - 1961						
East Coast	27.7	29.0	28.9	33.0+	28.3	31.7+
Southeast	37.4	38.6	38.2	37.5	40.1+	39.3+
Upper & Central South	42.2	40.8	41.6	42.8	41.2	40.7
Delta	41.8	42.8	43.5	47.2	46.8	40.7
West	42.9	39.9	44.1	41.8	42.5	40.8
- 1960-61						
East Coast	35.3	35.5	36.6	39.4		
Southeast	37.4	37.5	36.9	36.5		
Upper & Central South	37.6	35.8	36.8	38.6		
Delta	43.3	45.5	42.6	46.0		
West	39.6	37.8	41.7	40.6		
- 1959-61						
East Coast						
Southeast						
Upper & Central South						
Delta						
West						
Oil Percentage - 1961	21.3	22.2+	22.1+	22.6+	21.4	21.6
- 1960-61	21.6	22.3	22.3	22.9		
- 1959-61						
Protein Percentage - 1961	40.5+	40.3	40.1	39.2	39.0	39.7
- 1960-61	40.9	40.3	40.4	39.4		
- 1959-61						
Seed Size	17.3	16.6	16.2	14.0	13.5	17.4
Maturity Index	-3	-6	-6	-6	-1	0
Height	37	37	35	39	36	40
Shattering[1/]	1.7	2.1	2.0	1.7	1.6	1.6
Bacterial Pustule[2/]	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot[2/]	1.5	1.5	1.5	1.0	1.0	1.0
Purple Seed Stain[3/]	1.0	3.0	1.0	2.0	1.0	1.0
Phytophthora Rot[2/]	1.0	1.0	1.0	2.0	1.0	1.0

Table 37. Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1961

Location	Jackson	Lee	F55-822	D57-1299	F55-255	F57-467	F57-481
			East Coast				
Rocky Mount, N. C.	16.5	20.7	19.2	21.7	19.4	15.8	18.5
Clayton, N. C.	22.0	25.5	24.9	29.7	26.0	27.3	26.5
Willard, N. C.	30.4	36.5	40.5	39.1	27.8	32.8	33.5
Florence, S. C.	16.8	22.4	25.9	16.1	26.0	22.3	22.2
Hartsville, S. C.	37.8	41.7	42.1	40.6	39.2	36.8	37.8
Mean	24.7	29.3	30.5	29.4	27.7	27.0	27.7
			Southeast				
Blackville, S. C.	33.0	39.8+	41.8+	37.0+	36.8	34.5	34.9
Tallassee, Ala.	43.5	42.6	43.8	49.9	47.8	41.3	42.6
Tifton, Ga.	29.4	39.5+	42.1+	38.7+	38.5+	30.5	33.9
Gainesville, Fla.	34.9	19.0-	36.5	25.8-	37.0	34.0	28.5-
Zellwood, Fla.	27.4	39.2+	39.5+	39.0+	26.1	28.2	44.0+
Live Oak, Fla.	28.9	30.9	33.6	33.8	40.5	34.4	38.7
Quincy, Fla.	42.8	46.0	45.1	46.0	42.2	40.4	43.8
Jay, Fla.	32.0	30.8	33.2	33.0	34.7	29.4	36.6
Fairhope, Ala.	37.5	40.1	47.1+	37.7	41.2	40.4	41.3
Baton Rouge, La.	28.3	25.5	31.2	25.0	24.7	29.4	29.3
Mean	33.8	35.3	39.4+	36.6	36.9	34.3	37.4
			Upper and Central South				
Clemson, S. C.	25.9	38.1+	35.1+	34.1+	23.5	25.9	28.8
Experiment, Ga.	51.8	55.1	60.4	54.7	51.2	50.5	54.6
State College, Miss.	39.2	43.1	42.8	43.2	38.4	40.6	42.7
Mean	40.3	44.1	44.0	44.6	41.3	43.1	42.2
			Delta				
Stoneville, Miss.(A)	40.2	40.1	35.6	47.5+	36.0	25.5-	37.7
Stoneville, Miss. (B)	38.7	44.0	46.8	41.1	42.7	44.1	39.6
St. Joseph, La.	44.4	47.9	47.5	49.5	45.1	44.0	48.2
Mean	41.1	44.0	43.3	46.0	41.3	37.8	41.8
			West				
Stuttgart, Ark.	34.8	37.0	39.0+	40.8+	35.5	33.7	41.6
Curtis, La.	46.8	41.3	47.4	48.5	42.6	29.9-	49.8
Bennington, Okla.	43.5	48.4	48.5	51.1+	46.3	40.4	50.7+
College Station, Texas	36.5	41.5	26.9-	25.4-	29.0	31.2	29.4
Mean	40.4	42.1	40.5	41.5	38.4	33.8	42.9

(+) - 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	N57-6279	N57-6725	N57-6801	D58-4300	Ga58-33	L.S.D. (.05)	C.V.
			East Coast				
Rocky Mount, N. C.	18.9	18.7	18.9	20.2	20.2	N.S.	20%
Clayton, N. C.	25.9	30.1	27.7	31.3	33.9	N.S.	16%
Willard, N. C.	32.5	33.7	49.5	33.5	40.1	N.S.	19%
Florence, S. C.	27.8	19.8	24.9	19.9	24.3	N.S.	21%
Hartsville, S. C.	39.9	42.3	44.7	36.7	39.7	N.S.	9%
Mean	29.0	28.9	33.0+	28.3	31.7+	5.9	
			Southeast				
Blackville, S. C.	40.7+	37.9+	37.4+	35.7	36.8	4.0	6%
Tallassee, Ala.	44.9	46.5	43.8	46.7	46.5	N.S.	8%
Tifton, Ga.	37.3+	37.7+	37.7+	39.7+	42.8+	5.8	9%
Gainesville, Fla.	37.9	35.0	35.3	34.5	32.3	3.3	6%
Zellwood, Fla.	39.8+	39.9+	39.8+	46.9+	47.3+	4.8	8%
Live Oak, Fla.	35.1	34.7	34.1	37.9	35.5	N.S.	12%
Quincy, Fla.	47.1	44.3	47.3	45.7	45.5	N.S.	6%
Jay, Fla.	33.0	31.8	29.1	37.8+	37.8+	5.2	9%
Fairhope, Ala.	40.5	44.4+	40.6	45.5+	35.0	5.4	8%
Baton Rouge, La.	30.3	29.5	29.8	30.8	33.8	N.S.	14%
Mean	38.6	38.2	37.5	40.1+	39.3+	5.4	
			Upper and Central South				
Clemson, S. C.	28.7	34.0+	35.8+	29.0	29.8	8.1	16%
Experiment, Ga.	58.3	54.2	55.4	56.6	55.9	N.S.	9%
State College, Miss.	35.4	35.5	49.5	41.0	40.2	N.S.	12%
Mean	40.8	41.6	42.8	41.2	40.7	N.S.	
			Delta				
Stoneville, Miss.(A)	33.9	38.5	41.8	45.8	29.5-	6.4	10%
Stoneville, Miss.(B)	43.3	40.5	47.4	43.7	42.4	N.S.	7%
St. Joseph, La.	51.2	51.3	52.5	50.9	50.2	N.S.	9%
Mean	42.8	43.5	47.2	46.8	40.7	N.S.	
			West				
Stuttgart, Ark.	38.0	40.2+	39.9+	34.4	39.4+	4.0	6%
Curtis, La.	50.3	53.4	53.0	51.6	47.4	7.5	9%
Bennington, Okla.	40.0	46.4	46.0	47.7	44.8	5.6	7%
College Station, Texas	31.5	36.4	28.3-	36.5	31.7	7.7	14%
Mean	39.9	44.1	41.8	42.5	40.8	N.S.	

Table 38. Chemical composition and seed size for the strains in Uniform Group VII, 1961

Location	Jackson	Lee	F55-822	D57-1299	F55-255	F57-467
			Oil Percentage			
Clayton, N. C.	18.5	18.8	18.7	18.6	19.0	19.7
Hartsville, S. C.	20.6	20.4	20.0	20.7	21.5	21.6
Blackville, S. C.	21.0	21.0	20.4	20.7	20.9	21.4
Tallassee, Ala.	21.7	21.8	21.5	21.3	21.6	22.2
Gainesville, Fla.	22.3	21.1	21.2	21.0	21.9	23.0
Zellwood, Fla.	22.3	22.4	23.1	22.6	21.5	23.8
Jay, Fla.	23.0	24.0	23.3	23.3	23.6	23.9
Stoneville, Miss.(B)	21.3	22.0	21.2	21.0	22.1	23.0
St. Joseph, La.	22.7	21.7	22.0	21.7	23.6	23.7
Mean	21.5	21.5	21.3	21.2	21.7	22.5+
			Protein Percentage			
Clayton, N. C.	43.4	43.4	43.9	42.2	43.2	43.8
Hartsville, S. C.	39.8	41.1	41.3	40.0	39.9	39.5
Blackville, S. C.	39.5	42.1	42.8	41.6	40.6	42.1
Tallassee, Ala.	39.9	41.3	39.9	41.5	41.1	40.3
Gainesville, Fla.	39.3	44.4	42.2	41.0	41.0	41.1
Zellwood, Fla.	35.5	40.5	38.4	39.4	38.1	39.3
Jay, Fla.	39.0	37.7	38.1	37.0	37.4	38.9
Stoneville, Miss.(B)	39.4	40.6	38.6	40.3	40.2	39.3
St. Joseph, La.	39.0	42.2	39.4	40.3	40.2	40.4
Mean	39.4	41.5+	40.5+	40.4+	40.2	40.5+
			Grams Per 100 Seed			
Clayton, N. C.	11.4	11.8	11.8	11.9	11.9	12.2
Hartsville, S. C.	14.5	12.0	14.9	13.3	13.5	13.4
Blackville, S. C.	15.2	14.8	15.9	13.3	14.9	14.5
Tallassee, Ala.	16.0	15.5	16.8	15.9	16.6	17.1
Gainesville, Fla.	15.1	12.4	15.3	12.4	13.7	13.7
Zellwood, Fla.	15.0	14.8	17.3	16.4	15.2	16.1
Jay, Fla.	17.5	15.4	16.9	17.5	16.7	17.9
Stoneville, Miss.(B)	15.4	12.8	16.9	14.2	14.1	15.4
St. Joseph, La.	18.0	16.0	20.3	17.5	17.0	19.3
Mean	15.3	14.0-	16.2+	14.7	14.8	15.5

Table 38. (continued)

Location	F57-481	N57-6279	N57-6725	N57-6801	D58-4300	Ga58-33	L.S.D. (.05)
			Oil Percentage				
Clayton, N. C.	18.6	19.8	19.0	20.6	18.3	19.6	
Hartsville, S. C.	20.4	21.3	21.6	22.1	21.0	21.7	
Blackville, S. C.	19.7	21.6	21.1	22.0	20.3	20.9	
Tallassee, Ala.	21.3	22.6	22.2	23.0	21.4	21.7	
Gainesville, Gla.	21.4	23.0	22.3	23.3	22.2	22.9	
Zellwood, Fla.	23.3	23.2	23.1	23.3	22.4	20.9	
Jay, Fla.	23.6	23.3	24.6	24.0	22.9	22.8	
Stoneville, Miss.(B)	21.4	22.9	22.8	22.7	21.9	21.7	
St. Joseph, La.	22.0	22.5	22.4	22.6	22.3	22.4	
Mean	21.3	22.2+	22.1+	22.6+	21.4	21.6	0.5
			Protein Percentage				
Clayton, N. C.	42.9	43.3	42.6	41.3	41.0	40.3	
Hartsville, S. C.	41.7	39.1	40.0	39.4	39.3	39.3	
Blackville, S. C.	42.5	41.8	42.1	41.2	40.0	40.9	
Tallassee, Ala.	41.0	40.1	39.2	38.8	41.1	40.6	
Gainesville, Fa.	43.3	41.3	41.5	40.6	38.6	39.7	
Zellwood, Fla.	37.0	39.7	37.7	37.6	37.6	39.1	
Jay, Fla.	36.6	37.2	36.8	36.4	36.3	39.0	
Stoneville, Miss.(B)	38.7	39.8	40.3	38.3	38.7	39.2	
St. Joseph, La.	40.4	40.4	40.5	38.8	38.1	39.4	
Mean	40.5+	40.3	40.1	39.2	39.0	39.7	0.9
			Grams Per 100 Seed				
Clayton, N. C.	14.2	12.6	11.8	11.1	11.3	15.0	
Hartsville, S. C.	16.1	14.3	14.4	13.0	12.5	15.8	
Blackville, S. C.	16.2	17.2	15.3	15.0	13.2	15.5	
Tallassee, Ala.	19.4	17.5	18.9	14.7	15.1	19.1	
Gainesville, Fla.	16.5	15.2	15.6	13.8	12.5	15.9	
Zellwood, Fla.	17.9	18.5	16.5	14.3	14.4	19.6	
Jay, Fla.	19.7	17.5	17.1	16.0	15.0	17.9	
Stoneville, Miss.(B)	15.9	15.8	16.6	13.5	12.6	17.0	
St. Joseph, La.	19.5	21.0	19.5	15.0	15.3	20.5	
Mean	17.3+	16.6+	16.2+	14.0-	13.5-	17.4+	0.7

Table 39. Relative maturity data, days earlier (-) or later (+) than Jackson, for the strains in Uniform Group VII, 1961

Location	Date Planted	Jackson Matured	Lee	F55-822	D57-1299	F55-255
		East Coast				
Rocky Mount, N. C.	5-19	10-28	-8	-1	-3	+1
Clayton, N. C.	5-4	10-28	-8	-2	-4	0
Willard, N. C.	5-9	10-21	-7	-1	-3	0
Florence, S. C.	5-19	11-1	-16	+12	-1	0
Hartsville, S. C.	5-30	10-26	-11	-3	-5	-4
Mean		10-27	-10	+1	-3	0
		Southeast				
Blackville, S. C.	5-19	10-22	-7	-5	-7	-3
Tallassee, Ala.	6-1	10-23	-9	-3	-4	+1
Gainesville, Fla.	6-12	10-19	-13	-1	-9	-5
Zellwood, Fla.	6-20	10-26	-8	-2	-6	-8
Live Oak, Fla.	6-16	10-16	-4	0	-4	-2
Quincy, Fla.	6-23	10-20	-4	0	-3	-2
Jay, Fla.	6-12	10-20	-11	-4	-8	-4
Fairhope, Ala.	6-29	10-25	-15	-5	-5	-15
Baton Rouge, La.	5-18	11-1	-10	-3	-1	-5
Mean		10-23	-9	-3	-5	-5
		Upper and Central South				
Clemson, S. C.	5-22	10-23	-10	0	0	+3
Experiment, Ga.	6-2	10-23	-5	-3	-4	-4
State College, Miss.	5-16	10-25	-10	-5	0	+2
Mean		10-24	-8	-3	-1	0
		Delta				
Stoneville, Miss.(A)	5-29	10-29	-11	-2	-2	-2
Stoneville, Miss.(B)	5-9	10-23	-8	-1	-5	-3
St. Joseph, La.	5-16	11-6	-14	-14	-14	-14
Mean		10-30	-11	-6	-7	-6
		West				
Stuttgart, Ark.	5-27	10-26	-8	0	0	0
Curtis, La.	5-30	11-2	-13	-4	-3	-5
College Station, Texas	5-30	10-27	0	+3	-2	+4
Mean		10-29	-7	0	-2	0

Table 39. (continued)

Location	F57-467	F57-481	N57-6279	N57-6725	N57-6801	N58-4300	Ga58-33
			East Coast				
Rocky Mount, N. C.	-1	0	-5	-4	-5	-1	+4
Clayton, N. C.	-2	0	-6	-6	-6	-2	+3
Willard, N. C.	-2	0	-4	-9	-8	-1	+4
Florence, S. C.	0	0	-1	0	+3	+12	+9
Hartsville, S. C.	-6	-2	-9	-7	-8	-5	0
Mean	-2	0	-5	-5	-5	0	+4
			Southeast				
Blackville, S. C.	-7	-5	-7	-9	-7	-5	+2
Tallassee, Ala.	-3	-1	-7	-6	-10	-3	+3
Gainesville, Fla.	-6	-2	-10	-7	-8	-3	+1
Zellwood, Fla.	-5	-5	-5	-8	-9	0	0
Live Oak, Fla.	-3	-3	-1	-1	-4	-4	+2
Quincy, Fla.	-4	-2	-3	-2	-4	-1	0
Jay, Fla.	-7	-7	-9	-9	-10	-3	-3
Fairhope, Ala.	-10	-10	-10	-5	-10	-10	-15
Baton Rouge, La.	-8	-8	-6	-8	-8	-5	-7
Mean	-6	-5	-6	-6	-8	-4	-2
			Upper and Central South				
Clemson, S. C.	-4	+1	-6	-5	-8	-1	+2
Experiment, Ga.	-4	-3	-6	-4	-4	-2	0
State College, Miss.	-3	0	-11	-6	-5	-5	+2
Mean	-4	0	-8	-5	-6	-3	+1
			Delta				
Stoneville, Miss. (A)	-2	-3	-1	-5	-2	-2	+1
Stoneville, Miss. (B)	-2	-4	-4	-4	-3	-3	0
St. Joseph, La.	-14	-14	-14	-14	-15	-14	+2
Mean	-6	-7	-6	-8	-7	-6	+1
			West				
Stuttgart, Ark.	0	0	-7	-7	-9	0	0
Curtis, La.	-5	-3	-8	-6	-6	-3	-6
College Station, Texas	+2	+2	-2	+1	+1	0	+2
Mean	-1	0	-6	-4	-5	-1	-1

Table 40. Plant height for the strains in Uniform Group VII, 1961

Location	Jackson	Lee	F55-822	D57-1299	F55-255	F57-467
			East Coast			
Rocky Mount, N. C.	48	36	49	42	43	46
Clayton, N. C.	38	26	35	26	31	34
Willard, N. C.	50	36	48	36	41	48
Florence, S. C.	33	27	35	25	28	31
Hartsville, S. C.	43	34	45	36	39	45
Mean	42	32	42	33	36	41
			Southeast			
Blackville, S. C.	40	28	41	33	39	39
Tallassee, Ala.	39	30	38	30	35	34
Tifton, Ga.	29	26	35	26	29	31
Gainesville, Fla.	31	23	35	24	31	32
Zellwood, Fla.	19	25	21	19	21	18
Live Oak, Fla.	24	20	27	19	27	27
Quincy, Fla.	29	29	28	19	28	29
Jay, Fla.	27	18	25	16	27	23
Fairhope, Ala.	27	20	31	18	30	30
Baton Rouge, La.	38	24	35	28	35	34
Mean	30	24	32	23	30	30
			Upper and Central South			
Clemson, S. C.	41	33	44	32	35	40
Experiment, Ga.	44	38	46	38	44	42
State College, Miss.	48	36	48	36	33	46
Mean	44	36	46	35	37	43
			Delta			
Stoneville, Miss. (A)	41	31	40	33	35	36
Stoneville, Miss. (B)	43	30	41	33	37	36
St. Joseph, La.	38	32	39	32	40	44
Mean	41	31	40	33	37	39
			West			
Stuttgart, Ark.	41	30	44	34	36	41
Curtis, La.	38	30	40	28	38	34
Bennington, Okla.	50	33	46	38	43	46
College Station, Texas	30	24	30	20	29	29
Mean	40	29	40	30	37	38

Table 40. (continued)

Location	F57-481	N57-6279	N57-6725	N57-6801	D58-4300	Ga58-33
			East Coast			
Rocky Mount, N. C.	47	47	46	48	46	49
Clayton, N. C.	34	35	34	33	34	39
Willard, N. C.	46	47	43	52	47	51
Florence, S. C.	32	35	32	35	29	32
Hartsville, S. C.	43	43	41	45	41	45
Mean	40	41	39	43	39	43
			Southeast			
Blackville, S. C.	39	40	37	41	40	48
Tallassee, Ala.	37	36	36	37	37	42
Tifton, Ga.	30	28	28	33	30	36
Gainesville, Fla.	33	33	32	32	31	35
Zellwood, Fla.	25	26	23	28	28	21
Live Oak, Fla.	27	27	21	25	25	28
Quincy, Fla.	28	28	27	29	30	28
Jay, Fla.	27	26	25	24	25	28
Fairhope, Ala.	29	31	25	30	29	30
Baton Rouge, La.	36	40	37	45	37	43
Mean	31	32	29	32	31	34
			Upper and Central South			
Clemson, S. C.	44	43	41	46	38	45
Experiment, Ga.	48	46	42	52	44	47
State College, Miss.	45	44	44	46	43	50
Mean	46	44	42	48	42	47
			Delta			
Stoneville, Miss. (A)	39	39	37	36	38	43
Stoneville, Miss. (B)	41	41	35	41	39	46
St. Jospeh, La.	41	38	37	40	41	45
Mean	40	39	36	39	39	45
			West			
Stuttgart, Ark.	40	42	40	45	39	43
Curtis, La.	36	41	39	48	34	40
Bennington, Okla.	50	46	47	48	41	52
College Station, Texas	30	32	30	32	29	34
Mean	39	40	39	43	36	42

Table 41. Lodging scores for the strains in Uniform Group VII, 1961

Location	Jackson	Lee	F55-822	D57-1299	F55-255	F57-467
			East Coast			
Rocky Mount, N. C.	2.5	3.0	2.5	3.0	3.0	2.0
Clayton, N. C.	3.0	3.0	3.0	3.0	3.0	2.0
Willard, N. C.	2.0	3.0	3.0	3.0	3.0	2.0
Florence, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S. C.	2.3	1.7	2.2	2.5	1.7	2.9
			Southeast			
Blackville, S. C.	1.0	1.0	1.3	1.3	1.0	1.7
Tallassee, Ala.	1.0	1.5	1.5	1.0	1.5	1.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Zellwood, Fla.	2.0	2.0	3.0	1.7	1.0	3.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	2.0	2.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	1.0	2.0	1.0	2.0	2.0
			Upper and Central South			
Clemson, S. C.	1.0	1.0	1.7	1.2	1.5	2.0
Experiment, Ga.	1.3	1.0	2.0	1.3	1.0	1.0
State College, Miss.	2.0	2.0	3.0	2.0	2.0	3.0
			Delta			
Stoneville, Miss. (A)	3.0	2.3	2.7	2.7	2.3	2.7
Stoneville, Miss. (B)	2.7	2.3	3.0	2.0	2.7	2.7
St. Joseph, La.	3.0	2.0	3.0	3.0	3.0	3.0
			West			
Stuttgart, Ark.	2.0	2.3	2.0	2.0	2.0	3.0
Curtis, La.	2.0	1.0	3.0	1.0	3.0	2.0
Bennington, Okla.	2.7	2.0	2.7	2.0	2.0	2.3
College Station, Texas	2.0	1.0	2.0	1.0	2.0	2.0

Table 41. (continued)

Location	F57-481	N57-6279	N57-6725	N57-6801	D58-4300	Ga58-33
			East Coast			
Rocky Mount, N. C.	2.0	3.0	3.0	2.5	3.0	3.0
Clayton, N. C.	2.0	3.0	3.0	3.0	3.0	3.0
Willard, N. C.	2.0	3.0	3.0	2.5	3.0	3.0
Florence, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S. C.	3.0	4.0	2.2	1.6	1.8	3.4
			Southeast			
Blackville, S. C.	1.0	2.0	1.3	1.3	1.0	2.0
Tallassee, Ala.	1.5	2.0	1.5	1.5	1.0	2.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.3	1.0	1.0	1.0
Zellwood, Fla.	3.0	3.0	2.7	2.0	2.0	3.3
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	3.0	1.0	1.0	1.0	2.0
Jay, Fla.	1.0	1.0	1.0	1.0	1.0	2.0
Fairhope, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	3.0	2.0	3.0	2.0	3.0
			Upper and Central South			
Clemson, S. C.	1.2	1.3	1.2	1.0	1.5	2.0
Experiment, Ga.	1.3	1.7	1.3	1.7	1.0	2.0
State College, Miss.	2.0	3.0	2.0	3.0	3.0	5.0
			Delta			
Stoneville, Miss. (A)	2.7	3.3	3.0	2.3	2.3	2.7
Stoneville, Miss. (B)	3.0	3.7	2.7	2.3	2.3	3.3
St. Joseph, La.	3.0	3.0	2.0	3.0	2.0	3.0
			West			
Stuttgart, Ark.	2.7	4.0	3.3	2.7	2.0	3.0
Curtis, La.	2.0	2.0	2.0	2.0	2.0	3.0
Bennington, Okla.	2.3	2.7	2.0	2.0	2.0	2.7
College Station, Texas	2.0	3.0	2.0	3.0	2.0	3.0

Table 42. Seed quality scores for the strains in Uniform Group VII, 1961

Location	Jackson	Lee	F55-822	D57-1299	F55-255	F57-467
			East Coast			
Rocky Mount, N. C.	1.5	1.5	1.5	1.5	1.5	1.5
Clayton, N. C.	1.5	1.0	1.5	1.0	1.0	1.5
Willard, N. C.	1.5	1.5	1.0	1.0	1.0	1.5
Hartsivlle, S. C.	1.0	2.0	3.0	1.0	4.0	3.0
			Southeast			
Blackville, S. C.	1.0	1.0	1.0	1.0	2.0	1.0
Tallassee, Ala.	1.5	1.5	1.5	1.5	1.0	1.5
Gainesville, Fla.	1.0	1.0	1.7	1.3	1.0	1.0
Zellwood, Fla.	3.0	3.0	2.3	2.0	2.7	3.0
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.5	1.0	1.0	1.0
Fairhope, Ala.	2.7	2.0	1.7	3 3	2.3	2.3
Baton Rouge, La.	3.0	2.0	1.0	1.0	3.0	2.0
			Upper and Central South			
Clemson, S. C.	2.0	1.0	1.5	1.0	2.0	2.0
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
State College, Miss.	1.0	2.0	2.0	1.0	2.0	1.0
			Delta			
Stoneville, Miss. (A)	3.0	3.0	3.0	3.0	3.0	3.0
Stoneville, Miss. (B)	2.0	1.7	2.0	2.0	2.0	2.0
St. Joseph, La.	3.0	2.0	2.0	2.0	2.0	2.0
			West			
Stuttgart, Ark.	1.3	2.3	1.7	2.3	2.3	2.3
Bennington, Okla.	1.0	1.0	1.0	1.0	1.0	1.3
Curtis, La.	3.0	2.0	3.0	1.0	3.0	4.0
College Station, Texas	3.0	3.0	4.0	3.0	4.0	3.0

Table 42. (continued)

Location	F57-481	N57-6279	N57-6725	N57-6801	D58-4300	Ga58-33
			East Coast			
Rocky Mount, N. C.	1.5	1.5	1.5	1.5	1.5	3.0
Clayton, N. C.	1.5	1.5	1.0	1.0	1.0	2.0
Willard, N. C.	1.5	1.5	1.0	1.5	1.5	1.5
Hartsville, S. C.	3.0	1.0	4.0	3.0	2.0	3.0
			Southeast			
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Tallassee, Ala.	1.5	2.0	1.0	1.0	1.5	2.0
Gainesville, Fla.	1.3	1.0	1.0	1.0	1.0	1.7
Zellwood, Fla.	1.7	3.0	3.0	3.0	3.0	2.3
Live Oak, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.0	1.0	1.5	1.0	1.0
Fairhope, Ala.	2.0	3.0	1.3	2.7	2.3	2.7
Baton Rouge, La.	3.0	2.0	1.0	3.0	3.0	2.0
			Upper and Central South			
Clemson, S. C.	1.0	1.0	1.0	1.5	1.5	1.5
Experiment, Ga.	1.0	1.0	1.0	1.5	1.0	1.0
State College, Miss.	2.0	2.0	1.0	1.0	1.0	2.0
			Delta			
Stoneville, Miss. (A)	3.0	4.0	3.3	3.3	3.0	3.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	2.0	1.0	2.0	2.0	3.0
			West			
Stuttgart, Ark.	2.3	2.0	2.0	3.0	2.3	2.0
Bennington, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Curtis, La.	3.0	2.0	1.0	1.0	2.0	2.0
College Station, Texas	3.0	3.0	3.0	3.0	3.0	3.0

PRELIMINARY GROUP VII

1961

Eight Preliminary Group VII nurseries were grown. The parentage for the strains grown is listed in table 43. Table 44 gives a general summary of seed yield, chemical composition, shattering, and reaction to disease. Data from individual locations are reported in tables 45 through 49.

Five strains had a mean yield significantly above Jackson, but none yielded significantly above Lee. Two sub-lines from F55-822, which has been giving good yields in Uniform VII, ranked highest in yield with identical mean yields. F58-3786 was the only strain equalling Lee in seed holding. F58-3802 developed frogeye at two locations. F55-822 had been observed to be segregating for frogeye reaction.

Excellent information on shatter resistance was obtained at Willard, Blackville, and Tallassee. Many of the strains appeared weak in this regard. In a planting on clay at Stoneville, several lines appeared susceptible to phytophthora rot.

The line D58-10,054 selected for resistance to the leaf infecting stage of Cercospora kikuchii appeared extremely vigorous in all plantings. The field appearance of this strain suggests that the apparent foliar resistance is probably associated with a vigorous root system. While the strain yielded well, it is subject to shattering.

D59-9289, a strain selected for high protein, ranked above both check varieties in seed yield.

Among the better performing lines are F58-3786, D57-1501, N58-5850, F58-3810, and FWH57-1.

Table 43. Parentage of strains in Preliminary Group VII, 1961

	Strain	Parentage	Generation Composited
1.	Jackson		
2.	Lee		
3.	D57-1501	Jackson x D49-2491	F_6
4.	D58-4163	D51-5052 x D49-2491	F_5
5.	D58-4185	D51-5052 x D49-2491	F_5
6.	D58-4330	D51-5052 x D49-2491	F_5
7.	D58-4384	D51-5052 x D49-2491	F_5
8.	D58-4416	D51-5052 x D49-2491	F_5
9.	D58-4546	D51-5052 x D49-2491	F_5
10.	D58-4690	D51-5052 x D49-2491	F_5
11.	D58-4985	D49-2491(2) x D51-5108	F_5
12.	D58-10,054	D49-2491 x (D51-5052 x PI 171,438)	F_5
13.	D59-1616	D51-5427 x D49-2491	F_5
14.	D59-9289	D51-4877 x D55-4168	F_4
15.	FWH57-1	Jackson x Lee	
16.	F57-701	Jackson x D49-2491	F_6
17.	F57-1559	Jackson x D49-2491	F_6
18.	F58-3786	Sub-line F55-822	
19.	F58-3802	Sub-line F55-822	
20.	F58-3810	Jackson x D49-2491	F_7
21.	F58-4591	D51-5091 x N50-2542	F_4
22.	F58-4699	D51-5091 x Jackson	F_4
23.	F59-1361	Jackson x D49-2491	F_5
24.	F59-1842	D51-5091 x Jackson	F_5
25.	N58-4823	N51-1881 x Lee	F_5
26.	N58-4861	N51-1881 x Lee	F_5
27.	N58-4866	N51-1881 x Lee	F_5
28.	N58-5006	N51-1881 x Lee	F_5
29.	N58-5064	N51-1881 x Lee	F_5
30.	N58-5076	N51-1881 x Lee	F_5
31.	N58-5849	N51-1971 x D49-2491	F_5
32.	N58-5850	N51-1971 x D49-2491	F_5
33.	N58-5862	N51-2140 x Lee	F_5
34.	N58-5865	N51-2140 x Lee	F_5
35.	N58-6010	N50-2336 x N47-309	F_6
36.	J.E.W. 46		

Table 44. General summary of performance for the strains in Preliminary Group VII, 1961

Strain	Seed Yield	Maturity Index	Ht.	Percent Oil	Percent Protein	Bact. Pustule 1/	Target Spot 1/	Phytoph-thora 1/	Shatter-ing 2/
Jackson	36.9	10-23	35	21.8	39.4	3.0	1.0	2.0	3.8
Lee	38.3	-9	31	21.1-	41.8	1.0	1.0	1.0	1.0
D57-1501	42.6+	-6	32	21.8	40.0+	1.0	1.0	2.0	1.3
D58-4163	41.1	-2	36	20.5-	41.0	1.0	1.0	1.0	3.0
D58-4185	42.2+	-6	33	22.5+	40.0	1.0	1.0	3.0	2.0
D58-4330	40.2	-5	37	21.2	41.1	1.0	1.0	1.0	2.7
D58-4384	42.6+	-1	33	22.0	40.5	1.0	1.0	1.0	3.5
D58-4416	41.3	-6	35	22.3	39.0	1.0	1.0	1.0	3.8
D58-4546	41.6	-7	29	21.3	40.2	1.0	1.0	1.0	2.5
D58-4690	40.7	-3	30	20.6-	41.4	1.0	1.0	2.0	2.5
D58-4985	38.8	-6	30	21.6	39.7	1.0	1.0	1.0	2.2
D58-10,054	38.3	+1	35	19.6-	42.2	1.0	1.0	1.0	4.5
D59-1616	33.3	-3	37	20.7-	41.3	1.0	1.0	1.0	2.8
D59-9289	39.4	-8	34	18.4-	44.9	1.0	1.0	1.0	4.0
FWH57-1	39.1	0	39	20.7-	41.4	1.0	1.0	3.0	1.5
F57-701	40.9	-1	37	21.7	40.1	1.0	1.0	2.0	3.0
F57-1559	40.5	-6	34	20.6-	40.0	1.0	1.0	1.0	4.0
F58-3786	42.8+	-3	36	21.1-	40.8	1.0	1.0	1.0	1.0
F58-3802	42.8+	-3	35	21.1-	41.4	1.0	1.0	1.0	2.2
F58-3810	40.9	-3	41	21.8	38.8	1.0	1.0	1.0	1.8
F58-4591	37.6	0	41	20.8-	41.1	1.0	1.0	1.0	3.0
F58-4699	38.9	0	36	20.8-	40.5	1.0	1.0	3.0	1.5
F59-1361	41.2	-2	41	20.9-	41.4	1.0	1.0	1.0	3.5
F59-1842	38.2	0	35	21.0-	39.9	1.0	1.0	2.0	3.0
N58-4823	36.3	-3	32	21.2	40.4	1.0	1.0	2.0	3.8
N58-4861	38.3	-7	34	22.1	41.1	1.0	1.0	1.0	3.8
N58-4866	37.9	-6	33	21.7	40.8	1.0	1.0	3.0	3.3
N58-5006	40.3	-6	29	21.9	40.4	1.0	1.0	4.0	3.8
N58-5064	38.9	-5	33	21.4	41.8	1.0	1.0	2.0	3.2
N58-5076	36.5	-6	35	22.0	40.7	1.0	1.0	1.0	3.3
N58-5849	37.6	-2	40	21.2	41.4	1.0	1.0	2.0	3.5
N58-5850	41.4	-1	33	21.7	41.0	1.0	1.0	1.0	1.8
N58-5862	41.2	-6	30	21.8	42.0	1.0	1.0	1.0	4.3
N58-5865	39.9	-10	33	22.4	40.2	1.0	1.0	1.0	4.2
N58-6010	36.5	-8	35	22.7+	38.7	1.0	1.0	1.0	4.5
J.E.W. 46	33.8	-7	44	21.6	39.0	1.0	3.0	1.0	3.8
L.S.D.(.05)	5.3			0.7	1.0				
L.S.D.(.01)	N.S.			0.9	1.3				

1/ Stoneville data
2/ Willard, Tallassee, and Blackville data.

Table 45. Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1961

Strain	Willard, N.C.	Blackville, S.C.	Experiment, Ga.	Tallassee, Ala.	Gainesville, Fla.	Zellwood, Fla.	Jay, Fla.	Stoneville, Miss.(A)
Jackson	46.0	31.2	41.0	46.3	35.6	27.2	29.4	39.4
Lee	26.5-	36.7	51.8	50.0	32.0	33.5	33.0	35.5
D57-1501	47.5	37.6	53.3	47.6	34.2	34.8+	44.4+	44.4
D58-4163	40.2	29.1	44.4	50.0	39.3	44.7+	45.5+	42.5
D58-4185	46.8	34.2	58.2	42.2	34.2	40.4+	41.6+	38.6
D58-4330	34.1	36.5	46.1	44.5	34.2	37.4+	44.1+	36.4
D58-4384	37.7	35.7	55.0	43.5	32.1	46.4+	44.8+	39.5
D58-4416	37.0	36.3	56.2	45.2	27.4	36.6+	45.2+	37.8
D58-4546	42.4	33.4	45.8	51.0	32.6	38.2+	48.1+	44.2
D58-4690	47.9	30.6	34.7	44.6	32.7	43.9+	50.9+	45.6
D58-4985	29.4-	39.0	43.7	48.0	31.3	35.1+	45.5+	43.9
D58-10,054	37.6	25.8	34.9	43.5	31.2	43.7+	46.6+	44.3
D59-1616	32.6-	28.0	45.7	35.0	24.0	38.6+	30.8	40.4
D59-9289	42.0	35.2	41.3	42.5	32.5	37.7+	40.5+	41.9
FWH57-1	46.2	30.2	36.1	43.2	36.0	35.7+	42.3+	42.9
F57-701	40.8	32.4	46.8	47.4	34.7	33.8	47.7+	42.4
F57-1559	49.0	35.2	39.4	43.2	40.7	38.9+	38.4	38.9
F58-3786	43.8	31.8	54.5	51.0	43.0	36.8+	45.9+	42.8
F58-3802	44.6	33.8	56.5	44.9	40.0	40.0+	38.4	41.1
F58-3810	46.6	31.6	44.6	38.8	36.6	41.2+	45.2+	36.0
F58-4591	41.8	37.1	35.9	37.7	37.9	34.4+	37.3	40.4
F58-4699	36.8	32.5	41.8	44.9	38.1	40.6+	39.8	45.1
F59-1361	48.4	28.4	45.0	44.5	40.1	36.1+	47.7+	45.5
F59-1842	35.0	34.0	38.5	41.2	40.3	--	42.7+	46.4+
N58-4823	19.8-	24.2	47.5	45.6	29.3	33.2	46.6+	41.3
N58-4861	42.7	35.8	50.0	36.4	35.6	24.5	36.2	40.3
N58-4866	44.0	42.3	42.1	37.1	28.6	33.0	32.3	38.7
N58-5006	44.4	34.5	52.2	47.9	33.0	26.9	39.1	42.8
N58-5064	49.0	34.4	54.8	43.9	31.3	26.3	30.8	31.4-
N58-5076	34.2	30.6	45.1	47.3	23.8	27.5	41.6+	43.8
N58-5849	24.2-	32.6	49.8	43.9	31.8	34.2	41.6+	42.9
N58-5850	47.4	29.7	37.9	50.3	41.3	39.8+	42.7+	43.6
N58-5862	46.2	30.5	45.0	38.8	33.7	47.0+	42.3+	46.5+
N58-5865	35.3	34.1	52.8	46.6	29.9	46.9+	41.2+	32.9
N58-6010	25.4-	37.3	48.3	38.1	30.1	40.3+	36.2	36.5
J.E.W. 46	34.4	33.1	42.3	41.5	33.9	21.1	41.3+	22.6-
L.S.D.(.05)	13.0	N.S.	N.S.	N.S.	N.S.	7.5	11.0	7.5
C.V.	16%	16%	17%	14%	15%	10%	13%	9%

Table 46. Oil percentages for the strains in Preliminary Group VII, 1961

Strain	Willard, N.C.	Black-ville, S.C.	Experi-ment, Ga.	Tallas-see, Ala.	Gaines-ville, Fla.	Zellwood, Fla.	Jay, Fla.
Jackson	20.1	20.5	21.8	23.3	22.4	23.0	21.8
Lee	19.6	20.6	21.4	22.3	21.2	22.5	22.3
D57-1501	21.6	20.6	21.4	21.7	21.9	23.0	22.6
D58-4163	20.1	18.8	19.2	21.4	21.8	20.8	21.5
D58-4185	20.6	20.8	21.1	22.8	22.3	21.6	23.0
D58-4330	20.1	19.7	19.9	21.3	22.4	22.7	22.2
D58-4384	20.5	21.0	21.6	22.0	23.2	23.0	22.6
D58-4416	21.5	20.4	21.6	23.5	22.2	23.0	23.8
D58-4546	20.5	20.0	19.5	22.5	22.3	22.0	22.4
D58-4690	20.0	19.0	18.9	21.0	21.7	21.6	21.9
D58-4985	20.9	20.3	20.2	21.8	22.1	23.2	22.8
D58-10,054	17.8	17.9	19.2	20.5	19.4	21.2	21.1
D59-1616	18.9	19.2	20.8	21.5	19.0	23.4	22.1
D59-9289	17.7	17.6	17.8	18.8	18.5	19.0	19.3
FWH57-1	20.0	18.9	19.6	21.4	20.9	21.8	22.4
F57-701	20.8	19.4	21.5	21.8	22.0	24.1	22.4
F57-1559	19.1	19.5	19.0	21.1	21.2	22.3	21.8
F58-3786	20.0	18.8	21.7	21.6	21.3	22.5	21.7
F58-3802	19.5	19.5	21.2	21.3	21.8	22.3	22.4
F58-3810	20.0	19.9	22.0	22.8	22.5	22.7	22.9
F58-4591	19.4	18.7	20.3	21.4	22.1	22.0	21.4
F58-4699	19.2	19.3	19.8	21.2	22.3	22.4	21.4
F59-1361	19.9	18.2	21.1	21.0	21.5	22.8	21.6
F59-1842	20.0	19.4	20.9	21.5	22.5	--	21.7
N58-4823	19.9	19.8	20.8	22.0	21.9	22.2	22.0
N58-4861	20.6	21.2	21.6	22.7	22.6	22.4	23.3
N58-4866	20.3	20.7	20.4	22.8	22.3	21.9	23.2
N58-5006	20.3	21.4	21.1	22.6	22.7	22.6	22.9
N58-5064	20.7	20.5	22.1	21.5	22.2	21.1	22.0
N58-5076	21.0	20.9	20.5	22.2	23.4	24.0	22.3
N58-5849	19.6	20.1	20.9	21.6	22.3	22.0	21.6
N58-5850	20.4	20.0	20.8	22.2	23.4	22.6	22.3
N58-5862	20.7	20.4	21.8	22.8	22.2	22.1	22.4
N58-5865	20.9	20.9	22.2	22.9	22.9	22.7	24.1
N58-6010	21.5	21.1	23.0	22.1	23.4	24.2	23.7
J.E.W. 46	21.6	20.2	21.2	21.2	22.2	23.3	21.4

Table 47. Protein percentages for the strains in Preliminary Group VII, 1961

Strain	Willard, N.C.	Blackville, S.C.	Experiment, Ga.	Tallassee, Ala.	Gainesville, Fla.	Zellwood, Fla.	Jay, Fla.
Jackson	42.1	40.9	39.5	38.4	40.0	36.0	39.1
Lee	44.3	43.7	41.2	40.1	43.2	39.4	40.6
D57-1501	40.9	40.9	39.3	39.8	41.0	38.6	39.5
D58-4163	41.7	43.0	41.8	40.8	40.4	39.5	39.3
D58-4185	42.0	40.7	39.8	37.3	40.2	40.5	38.7
D58-4330	42.6	42.9	40.8	41.3	41.7	38.9	39.2
D58-4384	42.1	41.1	40.4	39.7	41.3	38.3	40.5
D58-4416	42.1	39.4	38.4	36.9	39.9	38.9	37.3
D58-4546	41.5	42.3	40.4	38.4	40.6	39.0	39.3
D58-4690	43.4	43.1	41.1	41.3	41.1	39.8	39.9
D58-4985	42.2	40.4	40.0	40.6	39.2	37.8	37.7
D58-10,054	44.9	43.7	42.1	41.4	43.3	40.1	40.0
D59-1616	45.5	42.8	40.4	40.8	43.0	37.1	39.7
D59-9289	45.8	45.6	44.3	46.7	44.8	43.2	43.6
FWH57-1	43.7	42.1	43.0	42.3	41.6	38.5	38.9
F57-701	42.6	41.4	39.4	40.2	41.3	35.5	40.1
F57-1559	43.2	41.3	39.8	38.6	40.1	37.9	39.3
F58-3786	42.6	43.3	40.4	41.6	41.1	37.3	39.5
F58-3802	43.9	42.7	40.9	43.3	41.5	38.4	38.8
F58-3810	41.6	40.8	38.3	37.1	39.5	36.9	37.2
F58-4591	43.3	42.8	42.7	40.9	40.2	37.7	39.8
F58-4699	43.0	42.7	41.2	41.4	40.4	37.0	38.1
F59-1361	42.9	42.6	40.9	42.4	41.0	38.9	40.9
F59-1842	42.0	41.6	40.1	40.2	39.8	--	39.2
N58-4823	43.1	41.6	40.3	39.6	40.3	38.3	39.4
N58-4861	42.9	42.1	41.4	41.6	41.2	38.3	40.2
N58-4866	42.3	41.7	41.5	39.3	41.1	39.1	40.8
N58-5006	42.2	40.9	40.2	42.1	40.2	38.3	38.6
N58-5064	42.7	42.6	41.5	42.2	41.7	40.8	40.8
N58-5076	42.8	42.0	41.8	41.3	41.1	36.4	39.4
N58-5849	43.6	42.5	41.0	42.0	41.4	38.4	41.2
N58-5850	42.8	42.6	42.0	41.8	40.7	37.1	40.1
N58-5862	44.7	43.1	40.7	40.1	42.8	41.2	41.2
N58-5865	41.6	42.1	39.7	39.1	41.7	38.8	38.6
N58-6010	40.3	39.6	39.6	39.5	39.4	35.7	37.1
J.E.W. 46	39.9	40.2	39.5	38.8	39.5	37.1	38.0

Table 48. Height data for the strains in Preliminary Group VII, 1961

Strain	Willard, N.C.	Black-ville, S.C.	Experi-ment, Ga.	Tallas-see, Ala.	Gaines-ville, Fla.	Zellwood, Fla.	Jay, Fla.	Stone-ville, Miss.(A)
Jackson	42	37	39	40	30	22	26	42
Lee	36	26	32	36	25	23	24	46
D57-1501	40	32	35	33	23	21	25	47
D58-4163	39	31	39	40	30	27	33	54
D58-4185	39	30	39	36	27	21	26	53
D58-4330	40	37	39	38	28	29	36	47
D58-4384	37	31	39	33	27	27	26	54
D58-4416	42	36	41	38	28	21	32	43
D58-4546	33	27	30	33	23	21	25	38
D58-4690	35	30	30	33	24	24	25	48
D58-4985	34	28	31	36	26	20	27	44
D58-10,054	37	32	35	39	33	28	34	36
D59-1616	43	34	42	38	31	29	32	46
D59-9289	38	35	36	37	26	23	34	49
FWH57-1	44	36	38	45	33	29	35	52
F57-701	45	42	44	39	31	23	35	41
F57-1559	41	33	35	39	28	26	29	46
F58-3786	45	34	42	39	34	20	29	41
F58-3802	42	33	40	36	29	21	27	46
F58-3810	44	40	47	40	34	27	38	46
F58-4591	48	47	44	41	37	27	38	40
F58-4699	42	40	37	38	31	22	32	46
F59-1361	44	43	41	46	36	27	38	42
F59-1842	41	37	38	41	31	22	32	44
N58-4823	38	24	33	43	28	23	24	38
N58-4861	37	33	35	37	25	22	31	40
N58-4866	34	34	34	37	24	24	31	37
N58-5006	33	25	34	36	22	19	22	41
N58-5064	40	30	35	37	28	22	26	42
N58-5076	41	34	35	39	26	24	30	44
N58-5849	44	40	46	45	32	28	31	48
N58-5850	36	30	35	38	28	24	27	45
N58-5862	39	28	31	33	24	22	26	38
N58-5865	34	30	37	37	26	28	25	43
N58-6010	41	36	37	35	27	29	31	45
J.E.W. 46	48	44	46	40	39	35	46	52

Table 49. Seed quality scores for the strains in Preliminary Group VII, 1961

Strain	Blackville, S.C.	Experiment, Ga.	Tallassee, Ala.	Gainesville, Fla.	Zellwood, Fla.	Jay, Fla.	Stoneville, Miss.(A)
Jackson	1.0	1.0	1.5	1.0	3.0	1.0	4.0
Lee	1.0	1.0	1.0	1.0	3.0	1.0	3.0
D57-1501	1.0	1.0	1.0	1.0	3.0	1.0	3.0
D58-4163	1.0	1.5	1.5	1.0	2.0	1.0	3.0
D58-4185	1.0	1.0	1.5	1.5	3.0	1.0	3.0
D58-4330	1.0	1.0	1.5	1.5	2.0	1.0	3.5
D58-4384	1.0	1.0	1.0	1.0	2.0	1.0	3.5
D58-4416	1.0	1.0	1.0	1.5	3.0	1.0	3.0
D58-4546	1.0	1.5	1.5	1.5	3.0	1.0	3.5
D58-4690	1.0	1.5	1.5	1.0	2.0	1.0	3.0
D58-4985	1.0	1.5	1.0	1.5	3.0	1.0	3.5
D58-10,054	1.0	1.0	1.0	2.0	1.0	1.5	4.0
D59-1616	1.0	1.0	1.5	1.0	3.0	1.0	4.0
D59-9289	1.0	1.0	1.5	1.0	2.0	1.0	4.0
FWH57-1	1.0	1.0	1.0	1.0	1.0	1.0	2.5
F57-701	1.0	1.0	1.0	1.0	2.0	1.5	3.0
F57-1559	1.0	1.0	1.5	1.0	3.0	1.0	3.0
F58-3786	1.0	1.0	1.0	1.5	2.0	1.0	3.0
F58-3802	1.0	1.0	1.5	1.5	2.0	1.0	3.5
F58-3810	1.0	1.0	1.0	1.0	2.0	1.0	3.5
F58-4591	1.0	1.0	1.5	1.0	2.0	1.5	3.5
F58-4699	1.0	1.0	1.5	1.5	3.0	1.0	3.5
F59-1361	1.0	1.0	1.0	1.0	1.5	1.5	3.0
F59-1842	1.0	1.0	1.0	1.0	---	1.0	3.5
N58-4823	1.0	1.0	1.5	1.0	2.5	1.0	4.5
N58-4861	1.0	1.5	1.5	1.5	3.0	1.0	3.0
N58-4866	1.0	1.0	1.5	1.5	3.0	1.0	4.0
N58-5006	1.0	1.0	1.0	1.5	4.0	1.5	3.0
N58-5064	1.0	1.0	1.5	1.5	3.0	1.0	3.0
N58-5076	1.0	1.0	1.5	1.5	3.5	1.0	3.5
N58-5849	1.0	1.0	1.5	1.5	3.0	1.0	2.5
N58-5850	1.0	1.5	1.0	1.0	2.0	1.0	3.5
N58-5862	1.0	1.0	1.5	1.5	3.0	1.0	3.0
N58-5865	1.0	1.0	1.0	1.5	3.0	1.0	4.5
N58-6010	1.0	1.0	1.5	1.0	4.0	1.0	4.0
J.E.W. 46	1.0	1.0	1.5	1.0	4.0	1.0	4.0

UNIFORM GROUP VIII

1961

	Variety or Strain	Parentage
1.	Bienville	Pelican #2 x Ogden
2.	Jackson	Volstate(2) x Palmetto
3.	F56-3492	Jackson x D49-2491
4.	Hampton (Co57-225)	Majos x Lee
5.	F57-734	D49-772 x Improved Pelican
6.	F57-735	D49-772 x Improved Pelican
7.	F58-3734	D49-772 x Improved Pelican
8.	Co57-257	Majos x Lee
9.	Co58-240	Majos x Lee
10.	F58-6217	D49-772 x Improved Pelican
11.	La58-54-6	Pelican #2 x Ogden
12.	La58-26-2	Ogden x Creole

Background of strains used as parents:

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

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.

The results of 16 Uniform Group VIII nurseries are summarized in tables 50 through 56. Table 50 gives a general summary of seed yields, agronomic qualities, chemical composition, and disease reactions. Two- and 3-year data are reported for seed yield and oil and protein percentages.

Differences among strains were significant in all tests grown in the Southeast. However, on the basis of a combined analysis of variance for the area, none of the strains yielded significantly above Bienville, and only one, F56-3492, yielded significantly better than Jackson.

The strain Co57-225 has been named Hampton and seed will be offered for sale for 1962 plantings. The 2-year mean yield for Hampton is above that for Bienville and Jackson in the Southeast. Hampton is also superior in seed holding.

F56-3492 has been tested 3 years and has exceeded Bienville and Jackson in seed yield in the Southeast. This strain is weak in seed holding and is susceptible to frogeye leaf spot.

The 3 strains F57-734, F57-735, and F58-3734 have been tested 2 years. F58-3734 has been superior in seed yield in the Southeast and is also superior in seed holding. F58-3734 is in the process of being increased for release. It appears well suited for production on some of the lighter soils of north Florida. Its performance at Live Oak in test B illustrates its performance on these soils. F58-3734 is a tall growing type and will be too tall on heavier soils or in early plantings.

Of the strains tested one year, F58-6217 yielded significantly less than Bienville in 7 comparisons and significantly better in two Florida tests. Co57-257 yielded well but its high susceptibility to target spot is a hazard with regard to its production.

Table 50. General summary of performance for the strains in Uniform Group VIII, 1961

	Bienville	Jackson	F56-3492	Hampton	F57-734	F57-735
Seed Yield - 1961						
Southeast	33.3	31.3	38.1	35.8	31.0	32.9
West	43.0	39.0	39.6	42.7	36.2	39.4
- 1960-61						
Southeast	34.0	33.8	38.8	36.8	32.1	34.0
West	41.8	38.4	40.8	39.7	38.0	38.2
- 1959-61						
Southeast	35.5	33.8	38.8			
West	42.0	40.0	42.3			
Oil Percentage - 1961	21.8	22.1	22.2	22.2	21.2	21.5
- 1960-61	22.0	22.6	22.6	22.8	21.4	21.9
- 1959-61	22.0	22.6	22.5			
Protein Percentage - 1961	40.8	39.2	37.8	38.3	40.8	41.2
- 1960-61	41.0	39.3	38.1	38.7	41.3	41.5
- 1959-61	41.1	39.7	38.3			
Seed Size	15.1	15.7	15.5	15.8	13.9	13.8
Maturity Index	10-26	0	0	+2	+6	+4
Height	31	32	33	32	38	40
Bacterial Pustule	3.0	2.5	1.0	1.0	1.0	1.0
Target Spot	1.0	1.0	1.0	1.0	1.0	1.0
Shattering[1/]	2.5	3.2	3.3	1.0	1.7	1.8

1/ Blackville, Tallassee, and Tifton data.

Table 50. (continued)

	F58-3734	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2
Seed Yield - 1961						
Southeast	35.2	32.1	32.0	30.7	34.2	33.0
West	37.4	37.0	40.1	36.5	40.7	42.0
- 1960-61						
Southeast	36.3					
West	38.2					
- 1959-61						
Southeast						
West						
Oil Percentage - 1961	20.9-	20.1-	19.3-	19.5-	21.2-	20.4-
- 1960-61	21.4					
- 1959-61						
Protein Percentage - 1961	41.5	41.4	42.2+	41.9+	40.9	40.6
- 1960-61	41.5					
- 1959-61						
Seed Size	14.4	19.1+	16.7+	15.5	15.5	15.3
Maturity Index	+7	+6	+2	+6	+2	+2
Height	40	36	32	42	35	36
Bacterial Pustule	1.0	1.0	1.0	1.0	3.0	3.0
Target Spot	1.0	3.5	1.0	1.5	1.0	1.5
Shattering[1/]	1.2	1.3	1.3	1.8	2.7	2.3

Table 51. Seed yield, in bushels per acre, for the strains in Uniform Group VIII, 1961

Location	Bien-ville	Jackson	F56-3492	Hampton	F57-734	F57-735	F58-3734
Southeast							
Florence, S. C.	24.8	23.0	32.0+	26.6	18.7-	22.4	22.6
Hartsville, S. C.	21.2	25.2+	25.0	27.2+	24.0	27.5+	28.2+
Blackville, S. C.	25.5	21.1-	29.4	25.3	15.9-	20.1-	18.9-
Experiment, Ga.	51.6	51.1	53.5	52.4	40.7-	44.8	46.4
Tallassee, Ala.	42.6	38.1	42.0	46.7	36.5-	35.6	40.2
Tifton, Ga.	--	37.5	44.6+	41.9	33.1	38.3	37.3
Live Oak, Fla.(A)	31.0	30.1	46.0+	32.3	37.4	39.1+	43.5+
Live Oak, Fla.(B)	16.6	16.5	20.0	25.1+	23.4+	26.1+	30.3+
Gainesville, Fla.	24.2	24.5	34.0+	30.3	29.0	29.7	33.3+
Quincy, Fla.	41.8	37.4	44.9	39.1	38.2	36.7-	41.4
Jay, Fla.	36.8	36.5	44.4+	38.9	34.4	32.5	38.2
Fairhope, Ala.	38.6	35.3	44.6+	47.1+	42.4	41.3	45.3+
Baton Rouge, La.	40.8	30.6-	35.4-	32.6-	29.6-	33.8-	32.0-
Mean	33.3	31.3	38.1	35.8	31.0	32.9	35.2
West							
St. Joseph, La.	46.9	42.4-	44.3-	45.4	38.1-	37.3-	36.0
Curtis, La.	47.3	45.8	47.4	49.2	46.1	46.7	45.6
College, Station,Texas	34.7	28.9	27.0	33.5	24.6	34.2	30.7
Mean	43.0	39.0	39.6	42.7	36.2	39.4	37.4

Table 51. (continued)

Location	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2	L.S.D. (.05)	C.V.
			Southeast				
Florence, S. C.	21.9	21.1	16.8-	23.4	26.2	5.9	15%
Hartsville, S. C.	23.8	20.0	23.0	25.4+	23.7	3.9	10%
Blackville, S. C.	17.9-	20.2-	19.1-	20.5-	17.5-	4.1	12%
Experiment, Ga.	45.4	45.0	39.3-	52.0	39.8-	7.9	10%
Tallassee, Ala.	37.4-	35.4-	34.0-	37.0-	34.3-	4.6	7%
Tifton, Ga.	33.3	35.7	34.9	37.7	32.9	5.0	8%
Live Oak, Fla. (A)	34.9	35.6	36.8	43.9+	38.8+	7.3	11%
Live Oak, Fla. (B)	24.7+	29.0+	21.7+	20.7	25.1+	4.2	15%
Gainesville, Fla.	33.4+	24.4	32.4+	29.5	28.6	6.5	13%
Quincy, Fla.	32.8-	37.5	30.0-	36.1-	36.6-	4.5	7%
Jay, Fla.	37.5	38.0	37.0	34.7	38.9	4.6	7%
Fairhope, Ala.	45.5+	39.7	43.0	39.7	43.6	5.4	8%
Baton Rouge, La.	28.4-	34.2-	31.1-	43.7	42.5	4.5	8%
Mean	32.1	32.0	30.7	34.2	33.0	5.0	
			West				
St. Joseph, La.	34.6-	43.5-	35.7-	48.5	43.9-	2.5	4%
Curtis, La.	47.6	48.2	46.4	48.2	49.7	N.S.	11%
College Station, Texas	28.8	28.7	27.4	25.3	32.6	N.S.	14%
Mean	37.0	40.1	36.5	40.7	42.0	N.S.	

Table 52. Chemical composition and seed size for the strains in Uniform Group VIII, 1961

Location	Bienville	Jackson	F56-3492	Hampton	F57-734	F57-735
			Oil Percentage			
Hartsville, S. C.	23.0	22.5	22.9	23.1	21.9	22.3
Blackville, S. C.	19.0	20.6	20.4	19.3	19.5	18.9
Tallassee, Ala.	21.4	21.6	21.8	22.2	21.0	21.7
Live Oak, Fla.	21.9	23.5	23.0	23.4	22.1	22.3
Gainesville, Fla.	21.4	22.4	22.9	22.2	21.5	20.7
Quincy, Fla.	22.7	22.2	22.1	21.7	20.8	21.2
Jay, Fla.	23.4	22.1	23.4	23.3	22.1	22.7
Baton Rouge, La.	22.2	23.1	22.1	22.7	21.6	22.4
Curtis, La.	21.5	20.9	21.6	22.9	20.7	21.0
Mean	21.8	22.1	22.2	22.2	21.2-	21.5
			Protein Percentage			
Hartsville, S. C.	37.1	36.3	34.7	35.3	35.7	36.1
Blackville, S. C.	42.2	40.0	38.7	40.8	42.1	42.5
Tallassee, Ala.	41.1	39.5	38.5	38.9	41.0	41.0
Live Oak, Fla.	43.4	41.3	40.3	40.5	43.3	43.4
Gainesville, Fla.	42.6	41.5	39.9	40.2	43.0	43.2
Quincy, Fla.	42.0	39.1	39.3	39.4	41.7	42.6
Jay, Fla.	39.1	38.8	35.3	35.3	37.5	38.0
Baton Rouge, La.	40.0	38.8	37.1	38.3	41.9	41.7
Curtis, La.	39.6	37.7	36.5	36.2	41.1	41.9
Mean	40.8	39.2-	37.8-	38.3-	40.8	41.2
			Grams Per 100 Seed			
Hartsville, S. C.	12.3	13.0	13.2	13.5	11.7	12.0
Blackville, S. C.	12.0	12.0	12.2	12.5	11.2	10.7
Tallassee, Ala.	16.5	15.8	15.5	18.2	15.2	14.9
Live Oak, Fla.	16.4	18.1	18.8	16.4	15.4	14.7
Gainesville, Fla.	14.3	15.2	14.7	14.7	12.8	13.4
Quincy, Fla.	14.0	15.0	15.0	14.0	12.0	12.0
Jay, Fla.	16.9	17.9	16.5	16.9	14.0	14.3
Baton Rouge, La.	17.3	17.5	16.5	18.0	16.0	16.0
Curtis, La.	16.3	17.0	17.0	18.0	17.0	16.5
Mean	15.1	15.7	15.5	15.8	13.9-	13.8-

Table 52. (continued)

Location	F58-3734	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2	L.S.D. (.05)
			Oil Percentage				
Hartsville, S. C.	21.7	19.6	20.5	19.4	22.6	20.9	
Blackville, S. C.	17.3	17.7	16.5	17.7	19.0	17.6	
Tallassee, Ala.	20.8	19.4	19.5	18.9	20.8	20.0	
Live Oak, Fla.	22.3	21.8	20.5	20.2	21.8	20.9	
Gainesville, Fla.	21.5	20.8	19.0	20.1	20.7	19.9	
Quincy, Fla.	20.1	19.8	18.4	18.7	20.2	20.5	
Jay, Fla.	22.1	20.9	20.2	20.4	22.3	22.0	
Baton Rouge, La.	21.2	20.4	19.6	20.1	21.9	21.0	
Curtis, La.	21.2	20.6	19.5	20.0	21.3	21.0	
Mean	20.9-	20.1-	19.3-	19.5-	21.2-	20.4-	0.5
			Protein Percentage				
Hartsville, S. C.	37.1	37.3	38.5	37.2	37.1	36.9	
Blackville, S. C.	45.3	46.0	46.0	44.0	43.4	43.2	
Tallassee, Ala.	41.2	41.5	42.8	43.0	42.5	41.3	
Live Oak, Fla.	43.3	42.3	42.8	44.2	41.8	42.0	
Gainesville, Fla.	42.3	42.0	43.4	43.0	42.1	42.1	
Quincy, Fla.	42.0	41.8	42.7	42.4	41.2	41.0	
Jay, Fla.	39.2	39.0	40.6	40.2	38.5	38.1	
Baton Rouge, La.	43.0	42.1	42.7	42.1	41.3	40.7	
Curtis, La.	40.2	40.4	40.4	41.0	40.0	40.5	
Mean	41.5	41.4	42.2+	41.9+	40.9	40.6	0.8
			Grams Per 100 Seed				
Hartsville, S. C.	12.0	15.2	13.2	12.2	13.0	12.5	
Blackville, S. C.	11.8	13.3	12.6	12.7	12.3	12.4	
Tallassee, Ala.	15.5	19.4	17.8	15.5	17.9	14.8	
Live Oak, Fla.	15.3	20.9	18.5	17.7	16.0	16.2	
Gainesville, Fla.	12.9	19.5	16.2	14.4	13.4	14.1	
Quincy, Fla.	13.0	14.0	14.0	15.0	14.0	13.0	
Jay, Fla.	16.2	25.7	18.7	18.2	16.5	17.8	
Baton Rouge, La.	16.5	22.0	20.0	16.3	18.5	19.0	
Curtis, La.	16.3	21.5	19.0	17.5	18.0	18.0	
Mean	14.4	19.1+	16.7+	15.5	15.5	15.3	1.0

Table 53. Relative maturity data, days earlier (-) or later (+) than Bienville, for the strains in Uniform Group VIII, 1961

Location	Date Planted	Bienville Matured	Jackson	F56-3492	Hampton	F57-734
			Southeast			
Florence, S. C.	5-19	11-1	0	0	+3	+12
Hartsville, S. C.	7-9	10-30	-2	-3	-1	+5
Blackville, S. C.	6-20	10-20	+2	0	0	+9
Experiment, Ga.	6-2	10-25	+3	+2	+2	+6
Tallassee, Ala.	6-1	10-26	-2	-2	+2	+7
Live Oak, Fla. (A)	6-16	10-17	+1	0	+2	+5
Gainesville, Fla.	6-13	10-21	-2	-3	-1	+3
Quincy, Fla.	6-23	10-19	+1	+1	+4	+4
Fairhope, Ala.	6-29	10-25	-5	+5	0	+5
Baton Rouge, La.	5-18	11-1	0	-4	+9	+9
Mean		10-25	0	0	+2	+7
			West			
St. Joseph, La.	5-16	11-2	-1	-2	-1	-1
Curtis, La.	5-30	11-5	0	+3	+4	+6
College Station, Texas	5-30	11-2	-3	-1	+4	+6
Mean		11-3	-1	0	+2	+4

Table 53. (continued)

Location	F57-735	F58-3734	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2
			Southeast				
Florence, S. C.	0	+14	+12	+4	+12	+14	+9
Hartsville, S. C.	+5	+6	+7	-2	+6	-2	+1
Blackville, S. C.	+8	+9	+10	+2	+10	+3	+5
Experiment, Ga.	+5	+5	+5	+2	+4	+1	+1
Tallassee, Ala.	+6	+8	+8	+2	+7	+1	+4
Live Oak, Fla. (A)	+5	+6	+6	+2	+6	0	0
Gainesville, Fla.	+3	+3	+7	+4	+4	0	-1
Quincy, Fla.	+4	+4	+5	+1	+6	+4	+3
Fairhope, Ala.	+5	+8	+5	0	+8	0	+5
Baton Rouge, La.	+7	+9	+13	+7	+7	+8	0
Mean	+5	+7	+8	+2	+7	+3	+3
			West				
St. Joseph, La.	0	0	-2	-1	-1	-1	-3
Curtis, La.	+7	+7	+6	+5	+6	-1	-3
College Station, Texas	+1	+7	0	0	+1	+3	+6
Mean	+3	+5	+1	+1	+2	0	+2

Table 54. Height data for the strains in Uniform Group VIII, 1961

Location	Bienville	Jackson	F56-3492	Hampton	F57-734	F57-735
			Southeast			
Florence, S. C.	31	35	37	36	38	41
Hartsville, S. C.	30	29	32	30	36	38
Blackville, S. C.	30	25	30	25	36	37
Experiment, Ga.	46	44	42	40	47	46
Tallassee, Ala.	40	38	37	38	41	43
Tifton, Ga.	29	30	31	30	39	33
Live Oak, Fla. (A)	27	25	31	27	36	37
Live Oak, Fla. (B)	20	23	25	23	29	31
Gainesville, Fla.	27	25	34	27	36	35
Quincy, Fla.	23	29	31	30	36	34
Jay, Fla.	28	30	30	29	38	39
Fairhope, Ala.	32	30	32	26	36	38
Baton Rouge, La.	30	38	31	40	32	42
Mean	30	31	33	31	37	38
			West			
St. Joseph, La.	44	47	29	39	52	54
Curtis, La.	40	40	39	39	48	55
College Station, Texas	25	26	31	27	32	34
Mean	36	38	33	35	44	48

Table 54. (continued)

Location	F58-3734	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2
			Southeast			
Florence, S. C.	42	37	33	42	35	39
Hartsville, S. C.	34	33	29	37	32	34
Blackville, S. C.	34	34	29	35	35	29
Experiment, Ga.	47	46	43	48	48	46
Tallassee, Ala.	38	39	36	43	42	38
Tifton, Ga.	36	34	28	38	34	32
Live Oak, Fla. (A)	39	32	29	39	31	33
Live Oak, Fla. (B)	29	25	24	28	24	27
Gainesville, Fla.	37	32	30	38	33	34
Quincy, Fla.	36	30	30	32	34	30
Jay, Fla.	36	32	29	40	29	29
Fairhope, Ala.	32	35	28	36	31	32
Baton Rouge, La.	41	36	31	40	32	40
Mean	37	34	31	38	34	34
			West			
St. Joseph, La.	60	45	39	69	44	48
Curtis, La.	60	48	42	66	42	44
College Station, Texas	38	30	27	37	35	36
Mean	53	41	36	57	40	43

Table 55. Lodging scores for the strains in Uniform Group VIII, 1961

Location	Bienville	Jackson	F56-3492	Hampton	F57-734	F57-735
			Southeast			
Florence, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Hartsville, S. C.	1.2	1.7	1.2	1.6	2.1	1.9
Blackville, S. C.	1.0	1.0	1.0	1.0	2.3	2.3
Experiment, Ga.	2.0	1.0	1.3	1.3	2.3	2.3
Tallassee, Ala.	2.0	1.0	2.0	1.5	3.0	3.0
Tifton, Ga	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla. (A)	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla. (B)	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.3	1.0	1.0	1.0	1.0	1.3
Quincy, Fla.	2.0	1.0	2.0	1.0	3.0	3.0
Jay, Fla.	1.5	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	2.0	1.0	3.0	3.0
			West			
St. Joseph, La.	3.0	3.0	3.0	3.0	5.0	5.0
Curtis, La.	3.0	3.0	3.0	3.0	4.0	4.0
College Station, Texas	1.0	1.0	2.0	2.0	3.0	3.0

Table 55. (continued)

Location	F58-3734	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2
			Southeast			
Florence, S. C.	1.0	1.0	1.0	1.0	1.0	2.0
Hartsville, S. C.	1.9	2.6	1.8	2.6	2.0	2.1
Blackville, S. C.	2.0	2.3	2.0	2.7	2.3	2.7
Experiment, Ga.	2.7	3.0	1.0	2.3	3.0	4.3
Tallassee, Ala.	2.0	2.5	1.5	3.0	2.5	3.0
Tifton, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla. (A)	1.3	1.7	1.0	1.7	1.0	1.3
Live Oak, Fla. (B)	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.7	1.7	2.0	1.7	2.0
Quincy, Fla.	3.0	3.0	2.0	3.0	3.0	1.3
Jay, Fla.	1.0	2.0	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.	3.0	3.0	2.0	3.0	2.0	2.0
			West			
St. Joseph,La.	5.0	4.0	3.0	5.0	3.0	4.0
Curtis, La.	4.0	4.0	3.0	4.0	3.0	3.0
College Station, Texas	3.0	2.0	2.0	3.0	3.0	4.0

Table 56. Seed quality scores for the strains in Uniform Group VIII, 1961

Location	Bienville	Jackson	F56-3492	Hampton	F57-734	F57-735
			Southeast			
Hartsville, S. C.	3.0	2.0	3.0	2.0	2.0	2.0
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	1.0	1.0	1.3	1.3	1.0	1.3
Tallassee, Ala.	2.0	2.0	2.0	2.0	2.0	1.5
Live Oak, Fla. (A)	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla. (B)	1.3	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.7	1.7	1.3	1.3	1.0	1.0
Quincy, Fla.	1.5	2.0	2.0	1.5	2.0	2.5
Jay, Fla.	1.0	1.0	1.5	1.0	1.0	2.0
Fairhope, Ala.	2.7	2.0	2.7	2.7	2.3	2.3
Baton Rouge, La.	3.0	3.0	3.0	3.0	2.0	3.0
			West			
St. Joseph, La.	1.0	2.0	2.0	1.0	1.0	1.0
Curtis, La.	2.0	3.0	3.0	2.0	2.0	1.0
College Station, Texas	3.0	3.0	3.0	4.0	4.0	4.0

Table 56. (continued)

Location	F58-3734	Co57-257	Co58-240	F58-6217	La58-54-6	La58-26-2
			Southeast			
Hartsville, S. C.	2.0	2.0	2.0	4.0	2.0	4.0
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	1.3	1.0	1.0	1.3	1.0	1.0
Tallassee, Ala.	1.5	1.5	1.5	1.0	2.0	1.5
Live Oak, Fla. (A)	1.0	1.0	1.0	1.0	1.0	1.0
Live Oak, Fla. (B)	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.7	1.0	1.0	1.0
Quincy, Fla.	2.0	2.0	1.5	1.5	1.5	1.5
Jay, Fla.	1.0	1.0	1.5	1.5	1.0	1.0
Fairhope, Ala.	2.0	1.3	1.7	2.0	1.7	1.7
Baton Rouge, La.	3.0	3.0	2.0	2.0	2.0	2.0
			West			
St. Joseph, La.	2.0	1.0	1.0	2.0	1.0	1.0
Curtis, La.	2.0	2.0	2.0	1.0	1.0	1.0
College Station, Texas	4.0	3.0	3.0	4.0	4.0	4.0

PRELIMINARY GROUP VIII

1961

The strains included in the Preliminary Group VIII nursery are listed in table 57 along with their parentage. Six nurseries were grown. The results are summarized in tables 58 through 63. Table 58 gives a general summary of the performance of the lines.

Yield level was good in 5 of the 6 nurseries. A late drouth at Blackville reduced yields and contributed to an extremely high coefficient of variability for the test. Blackville data was not included in the combined analysis of variance for seed yield.

Many of the strains shattered considerably at Blackville. There were 7 strains which showed no shattering and 11 additional strains which showed some shattering but receive a score of 2 or less.

Lines producing good yields and holding their seed reasonably well and which should merit further testing are: Co58-266, Co59-240, F58-6421, F59-1997, La59-7-21 and La59-34-7. The line F59-2688 selected from Seminole x D49-2491 was not outstanding in yield but it had seed averaging 22 grams per 100.

Table 57. Parentage of strains in Preliminary Group VIII, 1961

	Strain	Parentage	Generation Composited
1.	Bienville		
2.	Jackson		
3.	Co58-220	Majos x Lee	
4.	Co58-266	Majos x Lee	
5.	Co59-216	Majos x Lee	
6.	Co59-235	Majos x Lee	
7.	Co59-240	Majos x Lee	
8.	Co59-247	Majos x Lee	
9.	Co59-264	Majos x Lee	
10.	Co59-265	Majos x Lee	
11.	Co59-267	Majos x Lee	
12.	Co59-270	Majos x Lee	
13.	J.E.W. 101		
14.	J.E.W. 101-2		
15.	F58-3729	D49-772 x Improved Pelican	F_7
16.	F58-4450	D49-2491(2) x Improved Pelican	F_4
17.	F58-4489	D49-2491(2) x Improved Pelican	F_4
18.	F58-4667	D51-5091 x Jackson	F_4
19.	F58-6231	D49-772 x Improved Pelican	F_7
20.	F58-6302	D49-772 x Improved Pelican	F_7
21.	F58-6331	D49-772 x Improved Pelican	F_7
22.	F58-6420	D49-772 x Improved Pelican	F_7
23.	F58-6421	D49-772 x Improved Pelican	F_7
24.	F59-1876	D51-5091 x Jackson	F_5
25.	F59-1997	D49-2491(2) x Improved Pelican	F_5
26.	F59-2095	D49-772 x Improved Pelican	F_8
27.	F59-2455	D49-772 x Improved Pelican	F_8
28.	F59-2688	Seminole x D49-2491	F_5
29.	F59-2734	D49-2491 x Majos	F_6
30.	F59-2936	D55-4090 x D55-4159	F_4
31.	La58-58-1		
32.	La59-7-21		
33.	La59-34-7		
34.	La59-35-7		
35.	La59-38-11		
36.	La59-72-11		

Table 58. General summary of performance for the strains in Preliminary Group VIII, 1961

Strain	Seed Yield	Maturity	Ht.	Percent Oil	Percent Protein	Bact. Pustule	Target Spot	Shattering 1/
Bienville	37.1	10-27	33	21.3	42.4	3.0	1.0	3.5
Jackson	37.0	-2	32	21.9	40.1-	3.0	1.0	4.5
Co58-220	36.2	+3	33	20.2-	41.3	1.0	3.5	2.0
Co58-266	38.4	+2	29	21.8	39.8-	1.0	1.0	2.0
Co59-216	35.0	+3	34	20.9	41.6	1.0	1.0	3.5
Co59-235	36.4	+4	32	20.4-	42.6	1.0	1.0	2.5
Co59-240	38.4	+3	32	20.4-	41.6	1.0	1.0	2.0
Co59-247	35.2	+2	30	20.3-	40.9-	1.0	4.0	2.0
Co59-264	34.8	+3	32	18.8-	43.0	1.0	1.0	1.5
Co59-265	34.9	+3	32	19.1-	43.6+	1.0	1.0	2.5
Co59-267	33.2	+5	34	20.0-	41.6	1.0	1.0	2.0
Co59-270	33.5	+4	34	20.0-	42.5	1.0	3.0	1.0
J.E.W. 101	32.8	0	34	20.6	40.9-	1.0	3.0	1.5
J.E.W. 101-2	37.1	+2	31	20.6	41.6	1.0	2.5	2.5
F58-3729	34.2	+4	39	20.9	42.2	1.0	1.0	1.5
F58-4450	35.7	0	39	20.9	41.9	1.0	1.0	1.0
F58-4489	32.7	+1	35	20.9	42.4	1.0	1.0	1.0
F58-4667	38.5	+1	39	21.4	41.1-	1.0	1.0	4.0
F58-6231	34.9	+2	38	20.9	42.2	1.0	1.0	2.0
F58-6302	32.6	+4	42	20.3-	41.5	1.0	1.0	2.0
F58-6331	35.3	+3	37	20.8	41.7	1.0	1.0	3.5
F58-6420	35.9	+4	38	20.0-	42.9	1.0	1.0	3.0
F58-6421	35.8	+5	38	19.8-	42.3	1.0	1.0	1.0
F59-1876	38.2	0	39	21.3	40.3-	1.0	1.0	3.5
F59-1997	36.8	0	35	21.0	41.9	1.0	1.0	1.0
F59-2095	35.2	+2	32	20.3-	43.1	1.0	1.0	2.5
F59-2455	30.5	+6	39	19.4-	42.8	2.0	1.0	1.0
F59-2688	32.8	+1	39	20.0-	43.8+	1.0	1.0	3.0
F59-2734	35.2	+3	32	20.9	41.3	1.0	1.0	1.0
F59-2936	32.7	+1	35	19.5-	45.2+	1.0	1.0	2.0
La58-58-1	39.4	-2	29	21.8	42.0	3.0	1.0	4.0
La59-7-21	38.9	0	29	22.0	41.1-	3.0	1.0	2.5
La59-34-7	37.9	+2	37	21.2	41.9	3.0	1.0	2.5
La59-35-7	38.0	+2	37	21.7	41.7	3.0	1.0	3.0
La59-38-11	37.8	-2	28	21.7	41.7	3.0	1.0	3.5
La59-72-11	40.3	-2	29	22.2+	40.6-	3.0	1.0	3.5
L.S.D.(.05)	N.S.			0.7	1.1			
L.S.D.(.01)	N.S.			0.9	1.4			

1/ Blackville data.

Table 59. Seed yield, in bushels per acre, for the strains in Preliminary Group VIII, 1961

Strain	Blackville, S.C. 1/	Experiment, Ga.	Live Oak, Fla.	Gainesville, Fla.	Quincy, Fla.	Baton Rouge, La.
Bienville	19.6	42.1	39.5	23.3	39.0	41.8
Jackson	16.9	41.4	40.1	35.9	37.6	30.2-
Co58-220	21.1	40.3	38.2	29.2	39.3	33.9-
Co58-266	18.8	45.0	39.4	35.2	38.4	34.2-
Co59-216	10.9	32.3	40.5	35.8	31.7-	34.7-
Co59-235	14.5	44.4	41.9	27.1	33.5-	35.0-
Co59-240	14.9	38.3	40.5	36.5	40.4	36.2-
Co59-247	17.5	33.4	41.3	30.0	39.8	31.4-
Co59-264	14.4	42.6	35.7	37.1	29.4-	29.3-
Co59-265	12.4	39.2	35.4	37.4	31.1-	31.3-
Co59-267	18.7	36.2	36.1	30.0	29.5-	34.4-
Co59-270	14.5	36.1	38.2	28.6	31.1-	33.7-
J.E.W. 101	16.9	37.3	32.4-	33.6	35.9	25.0-
J.E.W. 101-2	12.9	40.5	39.8	43.5	35.1	26.5-
F58-3729	17.0	30.8	41.3	38.9	30.9-	29.1-
F58-4450	19.8	37.5	40.1	38.0	32.5-	30.6-
F58-4489	15.5	35.1	36.2	28.2	37.0	26.8-
F58-4667	16.2	35.2	42.3	39.9	40.1	34.9-
F58-6231	13.3	36.4	37.1	34.8	33.5-	32.6-
F58-6302	14.7	30.3	35.8	35.1	30.5-	31.2-
F58-6331	17.0	36.5	38.8	37.1	34.7	29.6-
F58-6420	12.1	24.9	42.2	45.3	34.8	32.6-
F58-6421	16.6	33.5	42.0	41.4	32.1-	30.1-
F59-1876	20.2	38.2	41.2	36.7	42.5	32.6-
F59-1997	17.5	32.6	36.8	42.2	38.0	34.3-
F59-2095	16.8	38.2	38.2	37.7	31.3-	30.6-
F59-2455	12.1	28.6	31.3-	35.8	27.7-	29.1-
F59-2688	19.0	31.3	34.0	38.1	33.0-	27.5-
F59-2734	12.1	39.2	33.0-	38.8	28.1-	36.7
F59-2936	19.3	34.2	32.8-	32.2	34.2	30.1-
La58-58-1	15.9	45.0	41.8	29.8	37.6	42.8
La59-7-21	21.0	46.5	37.1	30.2	41.2	39.6
La59-34-7	17.6	38.3	39.0	38.3	35.2	38.8
La59-35-7	18.9	43.0	36.2	32.7	35.9	42.3
La59-38-11	18.8	42.3	37.3	30.6	37.8	41.3
La59-72-11	21.5	32.3	37.3	29.9	42.5	43.5
L.S.D.(.05)	N.S.	N.S.	6.2	N.S.	4.9	4.6
C.V.	26%	15%	8%	17%	7%	7%

1/ Not included in combined analysis.

Table 60. Oil percentages for the strains in Preliminary Group VIII, 1961

Strain	Black-ville, S.C.	Experi-ment, Ga.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Baton Rouge, La.
Bienville	19.7	21.0	22.0	21.9	21.3	21.8
Jackson	20.3	21.0	22.9	22.4	22.7	21.9
Co58-220	19.0	20.1	21.5	20.0	19.6	21.2
Co58-266	19.7	21.2	23.1	22.4	21.6	22.9
Co59-216	18.5	20.4	22.6	21.7	20.5	21.4
Co59-235	17.7	20.6	22.1	21.1	19.5	21.2
Co59-240	17.0	19.5	22.1	21.8	21.1	21.0
Co59-247	18.5	19.7	21.4	21.7	19.7	21.0
Co59-264	17.1	18.2	20.9	20.0	17.0	19.8
Co59-265	17.5	18.8	20.3	20.0	18.0	19.9
Co59-267	18.8	19.5	21.3	20.8	19.5	20.2
Co59-270	18.7	18.6	21.6	20.7	19.6	20.7
J.E.W. 101	18.2	19.1	22.3	22.0	21.2	20.9
J.E.W. 101-2	16.5	19.4	22.8	22.1	20.7	21.8
F58-3729	18.7	20.2	22.5	22.3	20.6	21.3
F58-4450	18.2	19.7	22.3	21.8	21.3	21.8
F58-4489	18.6	19.6	22.5	21.7	21.4	21.6
F58-4667	19.6	19.8	22.7	22.0	22.0	22.2
F58-6231	18.5	20.9	22.5	21.2	20.7	21.3
F58-6302	18.8	19.5	21.3	21.1	19.9	21.3
F58-6331	19.8	19.6	22.0	21.6	21.0	20.6
F58-6420	17.2	19.8	21.3	21.3	20.7	19.8
F58-6421	18.0	19.3	21.5	19.5	19.6	20.6
F59-1876	18.4	21.0	22.4	21.9	22.0	22.1
F59-1997	17.7	20.4	22.3	22.9	20.6	22.3
F59-2095	17.5	19.9	21.7	21.3	20.8	20.3
F59-2455	17.8	18.8	20.8	21.0	18.9	19.3
F59-2688	19.0	19.6	20.6	20.8	19.5	20.6
F59-2734	18.4	21.3	22.2	21.4	19.6	22.5
F59-2936	18.4	19.4	19.6	20.4	19.9	19.5
La58-58-1	19.3	20.6	23.0	22.8	22 3	22.8
La59-7-21	18.8	21.4	23.3	22.5	22.9	22.8
La59-34-7	19.8	20.5	22.0	21.8	20.3	22.9
La59-35-7	19.4	21.3	23 0	21.6	22.3	22.7
La59-38-11	18.3	21.6	23.2	22.6	21.9	22.6
La59-72-11	19.8	21.6	23.2	22.1	22.9	23.7

Table 61. Protein percentages for the strains in Preliminary Group VIII, 1961

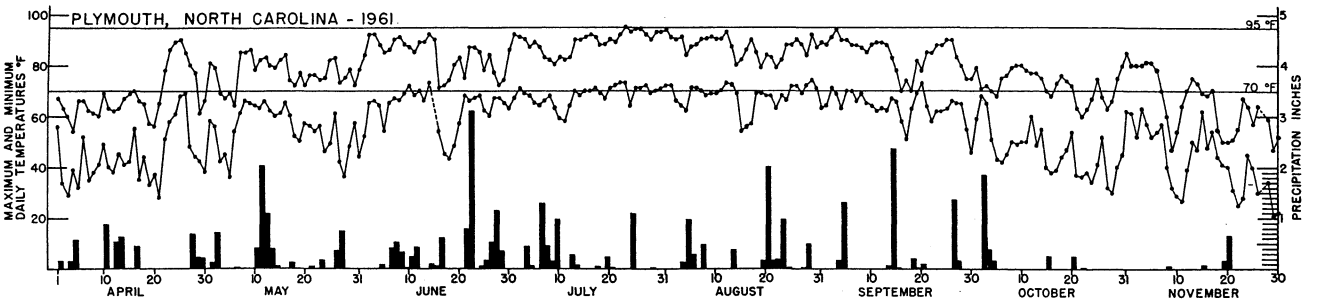
Strain	Black-ville, S.C.	Experi-ment, Ga.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Baton Rouge, La.
Bienville	43.3	42.8	42.7	44.0	41.1	40.3
Jackson	41.1	40.4	39.7	40.1	38.9	40.3
Co58-220	43.1	40.8	40.7	41.7	40.5	41.0
Co58-266	41.2	39.9	39.8	39.7	39.4	38.5
Co59-216	44.4	41.4	41.3	40.6	41.6	40.5
Co59-235	44.8	41.2	41.8	43.1	42.1	42.3
Co59-240	46.2	39.8	40.5	41.0	42.1	40.1
Co59-247	43.1	40.6	40.6	40.6	39.8	40.7
Co59-264	45.7	42.4	42.2	42.4	44.0	41.5
Co59-265	45.9	42.6	43.1	43.0	43.8	42.9
Co59-267	42.8	40.1	40.8	40.8	43.0	42.0
Co59-270	44.0	41.5	42.2	43.1	41.7	42.2
J.E.W. 101	42.2	40.5	39.7	39.7	41.9	41.5
J.E.W. 101-2	46.2	41.5	40.2	39.5	40.3	41.7
F58-3729	42.5	41.3	42.8	42.0	41.4	42.9
F58-4450	43.6	41.3	41.7	41.7	41.5	41.7
F58-4489	43.4	43.6	42.0	41.9	41.8	41.8
F58-4667	43.1	41.5	40.8	40.2	40.0	41.0
F58-6231	43.7	41.0	42.0	41.0	41.3	43.9
F58-6302	42.4	41.7	41.8	41.3	40.2	41.7
F58-6331	42.2	41.3	42.9	40.8	40.4	42.5
F58-6420	45.1	42.7	42.9	41.0	42.6	42.8
F58-6421	43.3	42.6	43.1	40.7	41.5	42.7
F59-1876	42.5	39.7	39.7	39.0	39.7	41.3
F59-1997	44.6	42.0	41.6	40.4	41.4	41.6
F59-2095	45.4	43.7	42.5	41.9	41.1	43.7
F59-2455	44.1	43.4	41.2	41.2	43.0	44.1
F59-2688	44.0	43.7	44.3	43.5	43.9	43.3
F59-2734	44.2	40.9	40.7	40.1	42.6	39.0
F59-2936	44.4	45.8	47.2	44.5	44.1	45.3
La58-58-1	43.0	42.7	41.7	42.5	41.4	40.7
La59-7-21	42.9	41.6	40.7	41.1	40.2	40.1
La59-34-7	43.2	42.6	41.0	40.5	43.2	40.6
La59-35-7	42.5	42.1	41.7	42.4	41.2	40.4
La59-38-11	43.9	42.3	40.8	41.5	41.2	40.7
La59-72-11	41.6	41.1	40.6	41.4	40.0	38.9

Table 62. Height data for the strains in Preliminary Group VIII, 1961

Strain	Black-ville, S.C.	Experi-ment, Ga.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Baton Rouge, La.
Bienville	25	42	32	32	32	34
Jackosn	24	40	31	28	30	40
Co58-220	29	44	36	27	29	35
Co58-266	23	40	29	26	28	30
Co59-216	22	40	38	34	33	36
Co59-235	26	39	36	28	33	29
Co59-240	21	45	30	30	32	34
Co59-247	22	41	32	26	28	30
Co59-264	25	45	29	30	32	30
Co59-265	24	40	32	32	31	32
Co59-267	30	39	41	31	32	30
Co59-270	26	41	39	31	33	36
J.E.W. 101	27	42	35	35	29	34
J.E.W. 101-2	23	38	33	34	28	32
F58-3729	32	46	42	38	33	42
F58-4450	31	55	39	38	33	42
F58-4489	31	42	35	31	35	34
F58-4667	28	49	45	40	34	38
F58-6231	32	45	42	37	31	40
F58-6302	35	52	44	43	32	46
F58-6331	28	48	41	34	31	37
F58-6420	24	56	40	40	32	37
F58-6421	27	43	43	36	38	36
F59-1876	31	46	42	38	36	42
F59-1997	27	46	33	36	29	36
F59-2095	24	42	35	34	31	33
F59-2455	30	50	41	39	31	40
F59-2688	30	48	35	40	35	44
F59-2734	24	42	33	32	31	32
F59-2936	26	40	37	35	34	36
La58-58-1	22	39	26	26	33	26
La59-7-21	25	40	27	24	29	30
La59-34-7	31	46	37	38	40	32
La59-35-7	30	43	35	35	38	38
La59-38-11	20	41	26	27	27	24
La59-72-11	23	40	28	25	28	30

Table 63. Seed quality scores for the strains in Preliminary Group VIII, 1961

Strain	Black-ville, S.C.	Experi-ment, Ga.	Live Oak, Fla.	Gaines-ville, Fla.	Quincy, Fla.	Baton Rouge, La.
Bienville	1.0	1.0	1.0	1.0	1.5	2.0
Jackson	1.0	1.0	1.0	1.0	1.5	3.0
Co58-220	1.0	1.0	1.0	1.0	2.0	1.0
Co58-266	1.0	1.0	1.0	1.0	2.0	2.0
Co59-216	1.0	1.5	1.0	1.0	2.5	2.0
Co59-235	1.0	1.5	1.0	1.0	2.0	1.0
Co59-240	1.0	1.0	1.0	1.0	2.5	2.0
Co59-247	1.0	1.0	1.0	1.0	2.0	2.0
Co59-264	1.0	1.0	1.0	1.0	2.0	3.0
Co59-265	1.0	1.0	1.0	1.0	1.5	3.0
Co59-267	1.0	1.0	1.0	1.0	2.0	1.0
Co59-270	1.0	1.0	1.0	1.0	2.5	2.0
J.E.W. 101	1.0	1.0	1.0	1.0	2.0	2.0
J.E.W. 101-2	1.0	1.0	1.0	1.0	2.0	3.0
F58-3729	1.0	1.5	1.0	1.0	2.0	3.0
F58-4450	1.0	1.0	1.0	1.0	2.5	2.0
F58-4489	1.0	1.0	1.0	1.5	2.5	1.0
F58-4667	1.0	1.0	1.0	1.0	2.5	4.0
F58-6231	1.0	1.0	1.0	1.0	2.0	4.0
F58-6302	1.0	1.0	1.0	1.0	2.5	3.0
F58-6331	1.0	1.0	1.0	1.0	2.5	3.0
F58-6420	1.0	1.0	1.0	1.0	2.0	3.0
F58-6421	1.0	1.0	1.0	1.0	2.0	1.0
F59-1876	1.0	1.0	1.0	1.0	2.0	4.0
F59-1997	1.0	1.0	1.0	1.0	1.5	1.0
F59-2095	1.0	1.5	1.0	1.0	2.0	2.0
F59-2455	1.0	1.0	1.0	1.0	1.5	2.0
F59-2688	1.0	1.0	1.0	1.0	2.5	1.0
F59-2734	1.0	1.5	1.0	1.0	2.5	1.0
F59-2936	1.0	1.0	1.0	1.0	2.5	4.0
La58-58-1	1.0	1.0	1.0	1.0	2.0	1.0
La59-7-21	1.0	1.0	1.0	1.0	2.0	1.0
La59-34-7	1.0	1.0	1.0	1.0	2.5	1.0
La59-35-7	1.0	1.0	1.0	1.0	2.0	1.0
La59-38-11	1.0	1.0	1.0	1.0	2.0	2.0
La59-72-11	1.0	1.0	1.0	1.0	2.0	1.0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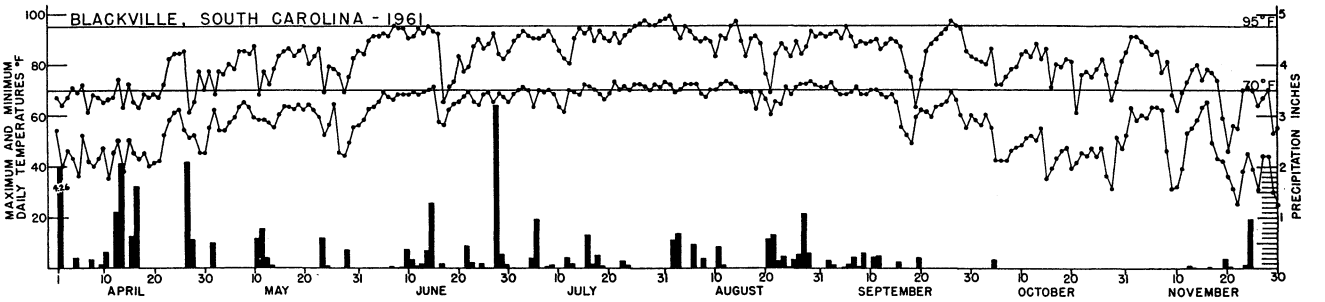
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER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PRECIPITATION INCHES
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70 °F
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MAY
JUNE
JULY
AUGUST
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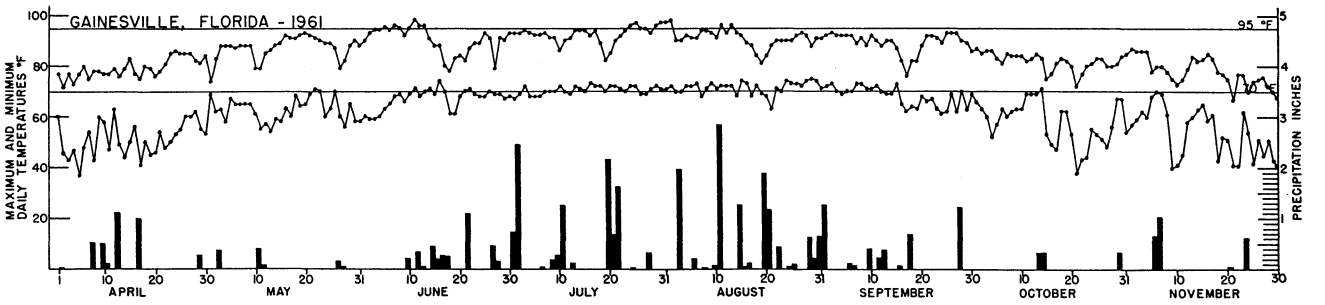
GAINESVILLE, FLORIDA - 1961
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
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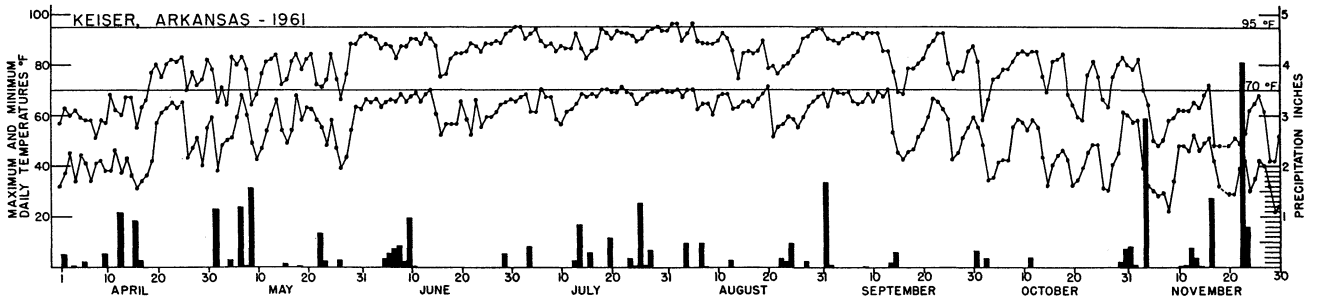
KEISER, ARKANSAS - 1961
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
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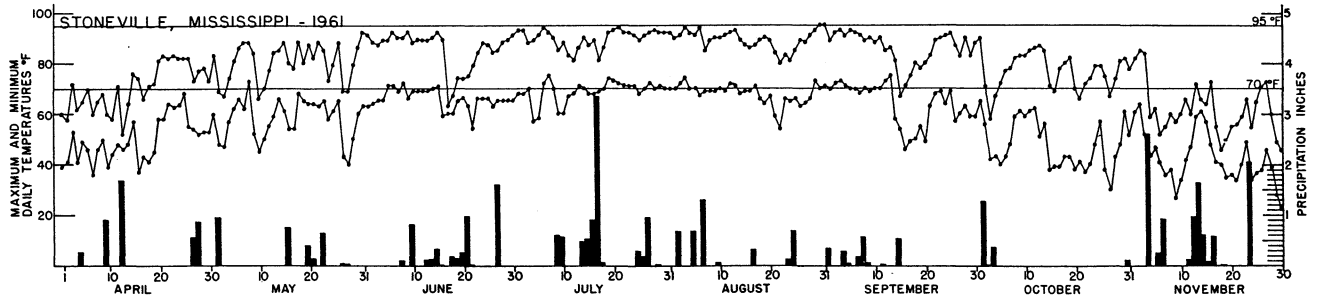
STONEVILLE, MISSISSIPPI - 1961
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
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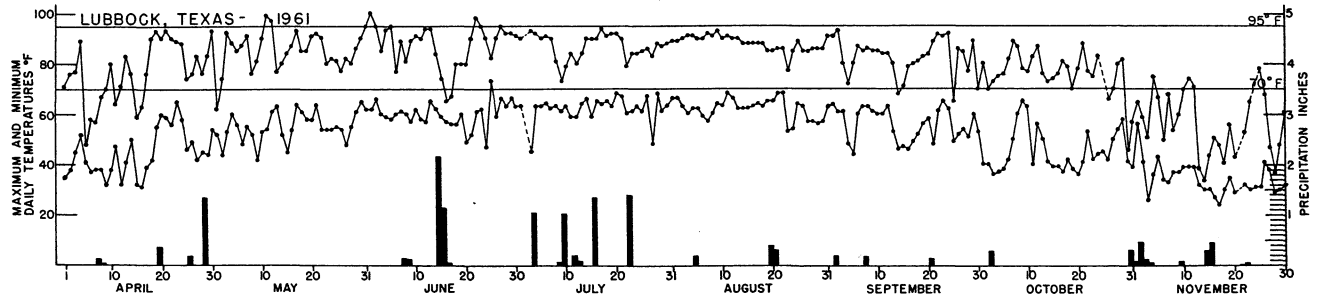
NOVEMBER


LUBBOCK, TEXAS - 1961
MAXIMUM AND MINIMUM DAILY TEMPERATURES °F
PRECIPITATION INCHES
95 °F
70 °F
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER