U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1955 PART II. SOUTHERN STATES

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

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RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS

PART II. SOUTHERN STATES

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1955

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Introduction

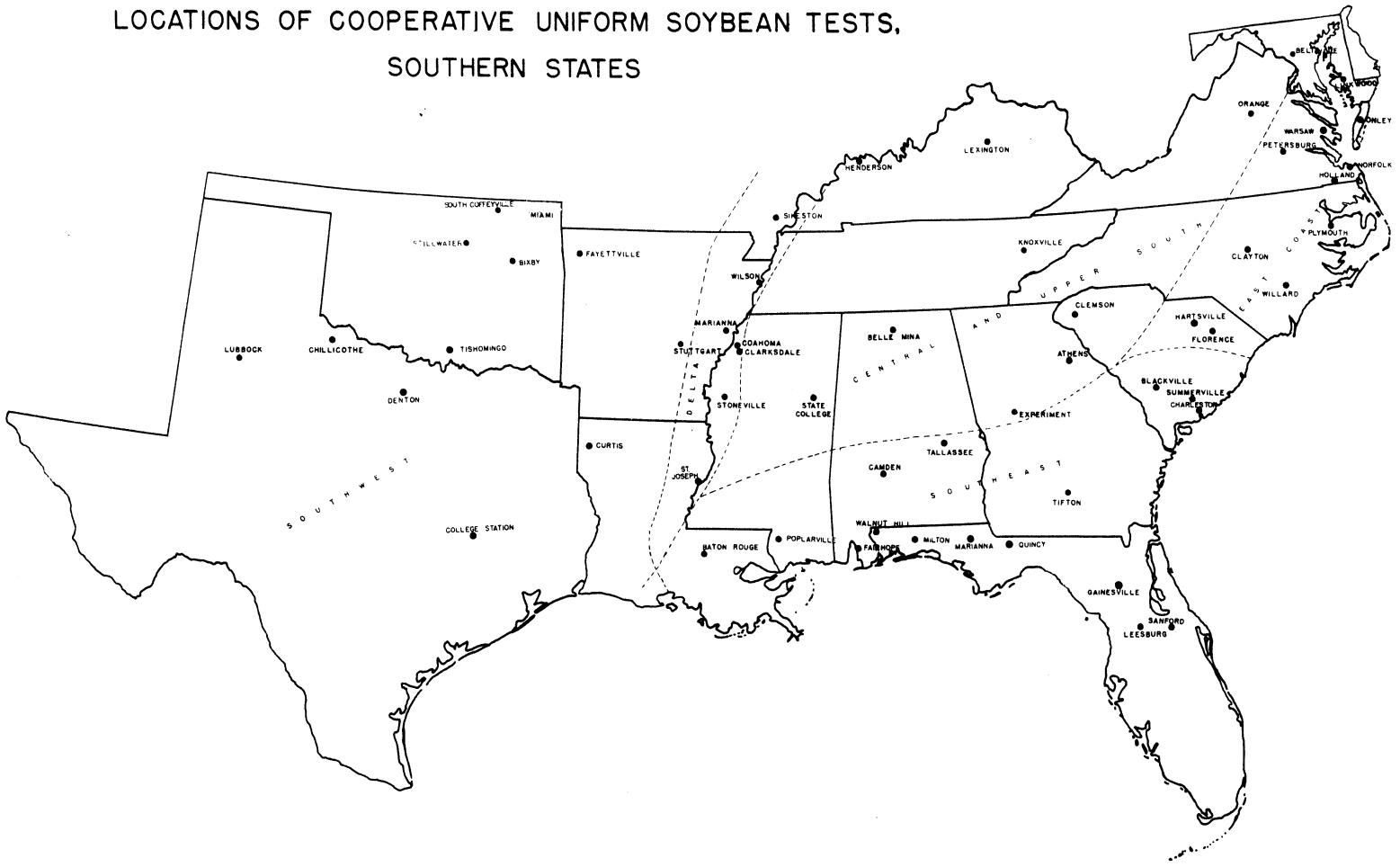
The program of the U. S. Regional Soybean Laboratory has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs are conducted at the two research centers, Stoneville, Mississippi, and Raleigh, North Carolina. A new location, Gainesville, Florida, has been added for breeding and genetic studies. After promising new strains are developed at these breeding centers, they are advanced to the 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.

Nine uniform test groups have been established to evaluate the better strains developed in the breeding programs. The Groups 0 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, and seed quality. For the groups grown in the southern area, the check varieties are Perry, Dorman, Ogden, Jackson, and Improved Pelican. 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: Perry, September 6; Dorman, September 20; Ogden, October 10; Jackson, October 25; and Improved Pelican, November 8.

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, most of the potential soybean-growing areas are on the alluvial river valley soils. The high plains of Texas are an important potential area. A map is included to illustrate the five production areas.

On nearly all of the Coastal Plain, Piedmont, and loessal soils, fertilization is essential for satisfactory soybean production. A table showing soil types and rate of fertilization is included.

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES



Rainfall distribution was much better in nearly all production areas in 1955 than it had been in the past several years. In general, yields were good over the entire region, Particularly noteworthy is the average yield of 36.9 bushels per acre for the 10 Group VII nurseries grown in the Southeast.

As an indication of the temperature and rainfall pattern in areas where much of the breeding work is being done, daily minimum and maximum temperatures and rainfall are reported for Plymouth, North Carolina; Gainesville, Florida; Stoneville, Mississippi; and Stillwater, Oklahoma.

Strain Identification

The strains designated by number carry a letter prefix. This letter identifies the state where this strain was selected.

C - Purdue Agric. Expt. Station and U. S. Regional Soybean Laboratory.
D - Delta Branch Expt. Station and U. S. Regional Soybean Laboratory.
L - Illinois Agric. Expt. Station and the U. S. Regional Soybean Laboratory.
La - Louisiana Agric. Expt. Station and U. S. Regional Soybean Laboratory.
N - North Carolina Agric. Expt. Station and U. S. Regional Soybean Laboratory.
S - Missouri Agric. Expt. Station and U. S. Regional Soybean Laboratory.

Location of Cooperative Nurseries

Location	Cooperator	IV	V	VI	VII	VIII	Soil Type	Fertilizer[1/]
	East Coast							
Linkwood, Md.	J. C. Johnson	1*	1*				Sassafras sandy loam	0-60-60
Warsaw, Va.	Eastern Va. Research Sta.	1*	1*	1			Sassafras sandy loam	0-70-70
Onley, Va.	Eastern Shore Va. Truck Expt. Sta.		1	1	1		Sassafras sandy loam	25-50-50
Petersburg, Va.	Virginia State College Fld. Sta.		1	1	1		Norfolk fine sandy loam	0-56-56
Norfolk, Va.	Virginia Truck Expt. Sta.		1	1	1		Woodstown sandy loam	25-50-50
Holland, Va.	Tidewater Field Sta.		1	1	1		Dragston loamy fine sand	10-60-60
Plymouth, N. C.	Tidewater Branch Sta.		1*	1*	1		Bladen fine sandy loam	0-40-80
Willard, N. C.	Lower Coastal Plain Expt. Sta.			1	1*		Norfolk sandy loam	0-40-80
Clayton, N. C.	N. C. Agric. Expt. Sta.			1*	1*		Norfolk sandy loam	0-40-80
Florence, S. C.	Pee Dee Expt. Sta.				1		Dunbar fine sandy loam	0-40-80
Hartsville, S. C.	Coker Pedigreed Seed Co.			1	1	1	Norfolk sandy loam	7-30-30
	Southeast							
Summerville, S. C.	Coast Expt. Sta.				1		Norfolk fine sandy loam	12-36-36
Blackville, S. C.	Edisto Expt. Sta.				1		Dunbar sandy loam	10-36-36
Tallassee, Ala.	Alabama Agric. Expt. Sta.			1	1	1	Cahaba fine sandy loam	0-56-56
Tifton, Ga.	Georgia Coastal Plain Expt. Sta.				1	1	Tifton Pebbly loam	0-40-80
Gainesville, Fla.	Fla. Agric. Expt. Sta.			1	1*	1	Lakeland fine sandy loam	0-48-48
Quincy, Fla.	North Florida Expt. Sta.			1*	1*	1	Norfolk loamy fine sand	20-50-35
Marianna, Fla.	Mobile Unit #3			1	1		Ruston sandy loam	24-72-72
Jay, Fla.	West Fla. Expt. Sta.			1	1	1	Tifton fine sandy loam	24-72-72
Walnut Hill, Fla.	N. Fla. Expt. Sta. (Mobile Unit #2)			1	1	1	Tifton fine sandy loam	24-60-42
Fairhope, Ala.	Gulf Coast Substa.			1	1		Marlboro fine sandy loam	0-42-42
Baton Rouge, La.	La. Agric. Expt. Sta.			1	1	1	Olivier silt loam	15-60-60
	Upper and Central South							
Orange, Va.	Piedmont Field Sta.	1					Davidson clay	80-80-80
Lexington, Ky.	Ky. Agric. Expt. Sta.	1	1				Maury silt loam	0-0-120
Belle Mina, Ala.	Tenn. Valley Substa.		1	1			Decatur sandy loam	none
Clemson, S. C.	S. C. Agric. Expt. Sta.				1		Lloyd sandy loam	15-60-60
Athens, Ga.	University of Georgia		1	1	1		Cecil sandy loam	24-72-72
Experiment, Ga.	Ga. Agric. Expt. Sta.		1	1	1	1	Cecil clay loam	16-48-48
State College, Miss.	Miss. Agric. Expt. Sta.		1	1	1		Verona fine sandy loam	30-40-40

Location	Cooperator	IV	V	VI	VII	VIII	Soil Type	Fertilizer 1/
	Delta							
Henderson, Ky.	Ohio Valley Soybean Coop.	1	1	1			Falaya local alluvium	0-60-60
Sikeston, Mo.	Missouri Agric. Expt. Sta.	1	1	1			Dexter sandy loam	0-60-60
Wilson, Ark.	Alfalfa Sub-station	1*	1*	1*			Sharkey clay	none
Marianna, Ark.	Cotton Branch Sta.	1	1	1			Richland silt loam	none
Coahoma, Miss.	J. M. Slater	1	1	1			Sharkey clay	none
Clarksdale, Miss.	J. E. Weeks	1*	1				Sharkey clay	none
Stoneville, Miss. (A)	Delta Branch Expt. Station		1	1*	1*	1	Bosket fine sandy loam	none
Stoneville, Miss. (B)	Delta Branch Expt. Station	1*	1*	1*	1*		Sharkey clay	none
Louise, Miss.	L. S. Stoner			1	1		Dundee silt loam	none
St. Joseph, La.	N.E. La. Expt. Sta.		1	1	1	1	Sarpy clay loam	none
	West							
Stuttgart, Ark. 2/	Rice Branch Expt. Sta.		1	1	1		Crowley silt loam	0-47-60
Curtis, La.	Red River Valley Expt. Sta.		1	1	1	1	Miller very fine sandy loam	none
Fayetteville, Ark.	Ark. Agric. Expt. Sta.	1	1	1			Bolivar silt loam	none
Miami, Okla.	N. E. A&M College	1	1				Persons silt loam	none
South Coffeeville, Okla.	Paul O. Schultz	1	1				Verdigris silt loam	none
Ixby, Okla.	Okla. Veg. Research Sta.	1*	1*	1*			Yahola very fine sandy loam	15-25-0
Stillwater, Okla.	Okla. Agric. Expt. Sta.	1*	1*	1			Vanoss very fine sandy loam	
Milburn, Okla.	Murray State Jr. College			1	1		Ochlocknee-Iuka	none
Chillicothe, Texas	Texas Substa. No. 12	1*	1	1	1		Abilene loam	none
Lubbock, Texas 3/	Texas Substation No. 8		1	1	1		Amarillo fine sandy loam	none

1/Fertilizer applied converted to pounds of N, P_2O_5, K_2O, for example, 400 pounds of 2-12-12 equals 8-48-48.
2/Flood irrigated 8/18, 8/30, and 9/15 with approximately 1-1/2 inches of water per irrigation.
3/Area received 3 irrigations of approximately 4 inches each on 3-15, 8-6, and 8-20.
*Preliminary nursery grown in addition to uniform nursery.

METHODS

The uniform nurseries were planted in 4-row plots with three replications in 1955. All seed was packeted at Stoneville, Mississippi, for planting 19-foot rows. 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.

Planting Rate: Since the later-maturing varieties usually make heavier growth than earlier-maturing varieties, lighter planting rates can be used and have equal or superior ground cover. Planting later-maturing varieties at a thinner rate reduces lodging. The number of seed packeted for 19 feet of row for the various groups were as follows: IV -225 seeds; V - 225 seeds; VI -200 seeds; VII - 170 seeds; and VIII - 170 seeds. This gave a planting rate of 12 seeds per foot for Groups IV and V; 10-1/2 for VI; and 9 for VII and VIII.

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 all strains has a uniform moisture content.

Shattering notes, where taken, are on the border rows, fourteen 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 for Groups IV, V, and VIII. For Groups VI and VII, samples were analyzed from each plot at each location. 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 in Groups IV, V, and VIII was determined from a composite sample from all replications at a location. Seed size for strains in Groups VI and VII was determined by replication at each location. Seed size is reported as weight in grams per 100 seeds.

Lodging notes were 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 was 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, Perry; Group V, Dorman; Group VI, Ogden; Group VII, Jackson; and Group VIII, Improved Pelican.

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

1. Very good
2. Good
3. Fair
4. Poor
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 eight weeks after emergence. The estimates are recorded on a scale of 1 to 5 as follows:

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

Disease Ratings were given on a scale of 1 to 5 as follows:

1. Immune to highly resistant
2. Lesions small and few in number
3. Lesions moderate in mumber and size
4. Lesions numerous and necrosis surrounding lesion
5. Leaves covered with lesions and much necrosis

Purple Stain ratings were given to seed samples on a scale of 1 to 5 as follows:

1. 0 - 5% purple staining
2. 6% to 10% purple staining
3. 11% to 24% purple staining
4. 25% to 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. Yield data from tests with extremely low yields or an extremely high coefficient of variability were not included in calculating averages.

UNIFORM GROUP IV

1955

	Variety or Strain	Parentage	Generation Composited
1.	Perry	Patoka x L7-1355	F_7
2.	Wabash	Dunfield x Mansoy	F_8
3.	Clark	Lincoln (2) x Richland	F_8
4.	C985	Lincoln x Ogden	F_4
5.	C1069	Selection from C985	F_7
6.	D52-52	N48-1248 x Adams	F_5
7.	D52-131	N48-1248 x Perry	F_5
8.	D52-212	N48-1248 x Perry	F_5
9.	D52-1951	D632-15 x D49-2525	F_4
10.	D53-163	D49-2525 x L6-5679	F_5
11.	D53-184	D49-2525 x L6-5679	F_5
12.	D53-441	D49-2525 x L6-5679	F_5

N48-1248 is a pustule-resistant line of VI maturity selected from Roanoke x N45-745 (Ogden x CNS selection).

D632-15 is a selection from Dunfield x Haberlandt which was included in Group V for several years.

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

Nineteen Group IV nurseries were planted in the Southern Region. Results of 14 of these nurseries are summarized in tables 1 through 28. Differences among strains were significant in 12 of the 14 tests.

Of the three named varieties, Perry, Wabash, and Clark, Wabash has consistently produced lower seed yields. Yield of Wabash was significantly lower than that of Perry in the East Coast, Delta, and West Coast areas. The two-year and three-year means also show Wabash to be a lower-yielding variety than Perry. Wabash is approximately 7 days earlier than Perry and gives less ground cover during the growing season.

Clark, like Wabash, averages 7 days earlier in maturity than Perry, but has equalled Perry in seed yield, has better seed-holding qualities. All three of the named varieties produce rather poor quality seed in this area. At Warsaw, Virginia, all showed considerable development of purple stain on the seed.

C985 has produced somewhat higher seed yields than Perry. C985 also gives better ground cover during the growing season and has produced somewhat better quality seed than Perry. C985 is weak in seed-holding when hot, dry conditions exist at harvest time. In 1955 a sub-line of C985, C1069, was included. C1069 averaged one day later in maturity and grew

two inches taller than C985. It ranked higher in yield than C985 in the Delta and Western area. In these two areas it yielded signifcantly better than Perry. C1069, like C985, is weak in seed-holding.

D52-212 yielded significantly more than Perry in the East Coast and Western area and equalled Perry in the Delta area. Its two-year mean is above that of Perry in the East Coast and Delta areas. D52-212 averages 3 days later than Perry, is superior in ground cover, seed quality, seed-holding, and is resistant to bacterial pustule.

Of the new lines tested, D53-184 is perhaps the most promising. This strain yielded well in all production areas, has excellent seed-holding qualities, is resistant to bacterial pustule, and had a low purple stain rating. D53-184 had better seed quality than C1069 in 9 comparisons and poorer quality in one comparison.

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

	Perry	Wabash	Clark	C985	C1069	D52-52
Seed Yield - 1955						
East Coast	32.5	27.5-	32.4	35.3	34.1	32.2
Delta	32.0	28.9-	33.4	35.6+	38.3+	30.8
West	15.4	12.3-	15.7	16.9	19.6+	15.2
-1954-55						
East Coast	27.9	24.2	28.2	30.6	-	27.7
Delta	27.4	24.6	28.0	28.1	-	26.6
-1953-55						
East Coast	28.5	24.6	28.1	29.8		
Delta	31.1	28.5	32.3	32.7		
Oil Content - 1955	22.4	22.4	22.3	22.2	22.3	22.4
- 1954-55	22.3	22.6	22.6	22.6	-	22.8
-1953-55	22.7	23.1	22.9	23.0		
Protein Content - 1955	40.6	40.1	40.0	39.8	39.7	38.5
-1954-55	40.6	39.7	39.6	39.1	-	38.2
-1953-55	39.7	38.9	39.0	38.4		
Maturity Index	9-21	-7	-7	+2	+3	+2
Height	34	38	34	38	40	41
Shattering[1/]	2	2	1	3.3	3	1
Ground Cover[2/]	3	2	3.3	4	4.3	4.7
Downy Mildew[2/]	4	1.7	1.7	2	1	2
Bacterial Pustule[1/]	3	4	4	3	3	1
Target Spot[1/]	1	1	1	1.5	2	1.5
Purple Stain[3/]	4	4	5	2	3	1

1/Stoneville data.
2/Stoneville and Clarksdale data.
3/Warsaw, Virginia, data.

Table 1. (Continued)

	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
Seed Yield - 1955						
East Coast	32.0	35.5+	30.6	33.1	33.6	31.4
Delta	30.5	32.1	33.8	33.6	35.1+	31.4
West	15.6	19.1+	14.9	16.1	19.1+	19.4+
-1954-55						
East Coast	-	29.6				
Delta	-	28.1				
-1953-55						
East Coast						
Delta						
Oil Content - 1955	21.3	21.1	21.2	21.2	21.6	21.1
-1954-55	-	21.3				
-1953-55						
Protein Content - 1955	41.1	40.1	39.3	40.4	40.8	39.0
- 1954-55	-	40.0				
-1953-55						
Maturity Index	+2	+3	+3	+1	+4	+1
Height	34	35	41	37	41	38
Shattering[1/]	3	1	1	1	1	2
Ground Cover[2/]	2.7	4	5	3.3	5	3.3
Downy Mildew[2/]	2	3	1	1.7	2.7	3
Bacterial Pustule[1/]	2	1	1	3	1	3
Target Spot[1/]	2	1	2.5	1	1.5	1
Purple Stain[3/]	1	3	2	1	2	2

Table 2. Yield, in bushels per acre, for the strains in Uniform Group IV, 1955

Location	Perry	Wabash	Clark	C985	C1069	D52-52	D52-131
East Coast							
Linkwood, Md.[1/]	34.4	27.8-	31.8	30.4-	29.3-	-	-
Orange, Va.	29.1	25.4-	31.1	32.3	31.8	27.6-	28.1-
Warsaw, Va.	35.8	29.6-	33.6	38.3	36.4	36.7	35.7
Mean	32.5	27.5-	32.4	35.3	34.1	32.2	32.0
Upper and Central South							
Lexington, Ky.	17.0	17.4	21.9+	20.6	17.4	22.6+	20.5
Delta							
Henderson, Ky.	38.0	34.3	44.8	38.4	43.4	34.1	32.8
Sikeston, Mo.[1/]	21.3	23.2	23.7	15.8	20.7	-	19.0
Wilson, Ark.	7.5	15.4	14.6	13.0	14.7	8.1	6.7
Marianna, Ark.	30.6	20.5	30.0	43.6+	43.4+	34.2	41.7+
Coahoma, Miss.	36.4	38.9	41.9	44.1+	50.1+	37.4	37.3
Clarksdale, Miss.	30.9	27.1-	27.5-	31.0	27.9-	23.9-	26.2-
Stoneville, Miss. (B)	48.5	37.1-	41.9	43.3	50.7	47.0	38.2-
Mean	32.0	28.9-	33.4	35.6+	38.3+	30.8	30.5
West							
Fayetteville, Ark.	16.3	15.0	15.8	18.5	20.3	16.6	17.9
Miami, Okla.	11.9	4.8-	10.7	10.9	15.2	10.5	9.5
South Coffeeville, Okla.	19.6	17.1	20.6	21.4	23.4	18.6	19.3
Mean	15.4	12.3-	15.7	16.9	19.6+	15.2	15.6

1/Not included in mean.

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

Table 2: (Continued)

Location	D52-212	D52-1951	D53-163	D53-184	D53-441	L.S.D. (5%)	C.V.
			East Coast				
Linkwood, Md.[1/]	32.1	31.5	31.0	34.0	29.0-	3.5	7%
Orange, Va.	29.8	25.3-	31.5	29.3	31.2	3.7	7%
Warsaw, Va.	41.2+	35.9	34.7	38.0	31.6	4.7	8%
Mean	35.5+	30.6	33.1	33.6	31.4	2.9	8%
			Upper and Central South				
Lexington, Ky	20.8	15.6	19.0	16.1	19.2	4.3	13%
			Delta				
Henderson, Ky	38.7	36.1	35.9	36.1	38.5	N.S.	14%
Sikeston, Mo.[1/]	21.3	18.1	19.5	23.6	22.3		
Wilson, Ark	8.0	11.7	12.7	11.0	7.2	4.7	26%
Marianna, Ark.	33.6	38.2	37.3	40.8	31.7	11.1	19%
Coahoma, Miss.	35.2	50.1+	41.7	44.3+	37.1	6.9	10%
Clarksdale, Miss.	29.4	22.6-	29.0	31.0	32.2	2.9	6%
Stoneville, Miss. (B)	47.6	44.2	45.0	47.6	41.7	6.9	9%
Mean	32.1	33.8	33.6	35.1+	31.4	2.9	13%
			West				
Fayetteville, Ark.	21.1	16.7	19.2	21.2	20.4	N.S.	15%
Miami, Okla.	14.5	9.3	8.9	12.8	13.7	5.3	29%
South Coffeeville, Okla.	21.8	18.6	20.2	23.2	24.2	3.8	11%
Mean	19.2+	14.9	16.1	19.1+	19.4+	2.5	16%

Table 3. Chemical composition for the strains in Uniform Group IV, 1955

Location	Perry	Wabash	Clark	C985	C1069	D52-52
			OIL PERCENTAGE			
Linkwood, Md.	20.6	21.0	20.4	21.1	20.9	20.2
Orange, Va.	22.6	23.3	23.7	22.6	23.5	23.8
Warsaw, Va.	21.3	21.6	21.7	21.7	22.0	20.9
Henderson, Ky.	21.9	20.8	20.9	21.6	22.3	21.4
Marianna, Ark.	23.2	23.3	22.7	23.2	23.4	24.3
Coahoma, Miss.	23.1	23.3	23.5	23.0	23.4	23.3
Clarksdale, Miss.	23.6	23.2	21.9	21.4	20.5	22.2
Stoneville, Miss. (B)	23.0	23.0	23.2	22.7	22.6	23.6
South Coffeeville, Okla.	21.9	22.5	22.5	22.4	22.4	22.2
Mean	22.4	22.4	22.3	22.2	22.3	22.4
			PROTEIN PERCENTAGE			
Linkwood, Md.	42.4	42.0	41.4	39.7	40.9	39.8
Orange, Va.	41.2	39.2	38.8	39.1	38.4	34.8
Warsaw, Va.	43.0	42.4	43.0	42.0	42.3	40.3
Henderson, Ky.	39.5	39.2	39.5	39.8	39.0	38.1
Marianna, Ark.	39.9	39.9	40.1	39.3	38.5	37.4
Coahoma, Miss.	39.3	38.7	39.4	39.3	39.4	39.3
Clarksdale, Miss.	40.0	38.9	39.5	39.2	39.7	39.0
Stoneville, Miss.	40.4	40.3	40.3	38.5	37.8	38.1
South Coffeeville, Okla.	39.3	40.1	38.2	41.1	41.0	40.0
Mean	40.6	40.1	40.0	39.8	39.7	38.5

Table 3. (Continued)

Location	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
			OIL PERCENTAGE			
Linkwood, Md.	19.6	20.0	19.0	19.3	19.3	18.4
Orange, Va.	24.3	22.4	21.9	21.6	23.1	22.6
Warsaw, Va.	19.4	20.0	19.2	20.4	20.1	20.0
Henderson, Ky.	20.8	19.9	19.9	21.0	20.0	19.3
Marianna, Ark.	22.0	21.6	22.8	22.1	22.5	21.6
Coahoma, Miss.	21.7	22.0	22.7	22.4	23.3	23.2
Clarksdale, Miss.	20.1	20.3	21.8	20.0	21.2	21.0
Stoneville, Miss. (B)	22.1	22.4	22.7	23.0	23.1	22.8
South Coffeeville, Okla.	22.0	21.2	21.1	21.5	22.0	21.3
Mean	21.3	21.1	21.2	21.2	21.6	21.1
			PROTEIN PERCENTAGE			
Linkwood, Md.	42.2	41.2	39.7	41.4	42.0	40.1
Orange, Va.	37.1	37.0	35.6	40.5	38.3	38.3
Warsaw, Va.	44.0	42.6	42.9	43.0	43.7	41.3
Henderson, Ky.	40.0	38.9	39.2	39.2	39.8	39.0
Marianna, Ark.	41.4	39.4	38.4	39.7	40.1	37.8
Coahoma, Miss.	41.4	40.1	39.0	39.8	40.9	38.1
Clarksdale, Miss.	41.8	40.8	40.8	39.4	39.4	38.1
Stoneville, Miss. (B)	40.0	38.9	37.0	39.6	41.4	37.9
South Coffeville, Okla.	42.2	42.3	41.0	41.4	42.0	40.1
Mean	41.1	40.1	39.3	40.4	40.8	39.0

Table 4. Relative maturity data, days earlier (-) or later (+) than Perry, for the strains in Uniform Group IV, 1955

Location	Date Planted	Perry Matured	Wabash	Clark	C985	C1069
		East Coast				
Linkwood, Md.	6-3	10-4	-6	-5	+2	+2
Warsaw, Va.	6-6	10-13	-12	-10	-7	-5
Mean		10-8	-9	-7	-3	-1
		Upper and Central South				
Lexington, Ky.	5-27	10-4	-4	-7	-1	-1
		Delta				
Henderson, Ky.	5-25	10-4	-4	-7	0	0
Sikeston, Mo.	5-14	9-14	-4	-3	+2	+5
Wilson, Ark.	5-3	9-19	-5	-5	-3	+2
Marianna, Ark.		9-10	-1	-4	+5	+7
Coahoma, Miss.	5-2	9-6	-11	-11	0	+2
Clarksdale, Miss.	5-6	9-1	-6	-6	+3	+3
Stoneville, Miss. (B)	5-3	9-4	-3	-3	+2	+2
Mean			-5	-6	+1	+3
		West				
Fayetteville, Ark.	5-9	9-20	-4	-2	-1	-1
Miami, Okla.	5-19	10-8	-27	-25	+6	+7
South Coffeeville, Okla.	5-19	9-16	-2	-1	+15	+16
Mean			-11	-9	+7	+7

Table 4. (Continued)

Location	D52-52	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
			East Coast				
Linkwood, Md.	-1	+5	+5	+3	+1	+6	-2
Warsaw, Va.	-3	-4	0	-1	-5	-2	-11
Mean	-1	0	+2	+1	-2	+2	-6
			Upper and Central South				
Lexington, Ky.	-1	-3	+2	0	-4	0	-1
			Delta				
Henderson, Ky.	0	-2	+3	+1	-3	+2	0
Sikeston, Mo.	0	+5	+4	+1	+2	+3	0
Wilson, Ark.	0	0	-1	0	-1	0	-1
Marianna, Ark.	+5	+9	+4	+5	+4	+7	+2
Coahoma, Miss.	+4	0	+4	+6	+2	+2	+2
Clarksdale, Miss.	+5	+3	+3	+5	+3	+3	+3
Stoneville, Miss. (B)	+5	+1	+2	+4	+2	+2	+1
Mean	+3	+2	+3	+3	+1	+3	+1
			West				
Fayetteville, Ark.	-1	-1	-1	-1	-1	0	-1
Miami, Okla.	+5	-1	0	+5	0	+7	+7
South Coffeeville, Okla.	+12	+12	+14	+14	+13	+15	+16
Mean	+5	+3	+4	+6	+4	+7	+7

Table 5: Height data for the strains in Uniform Group IV, 1955

Location	Perry	Wabash	Clark	C985	C1069	D52-52
			East Coast			
Linkwood, Md.	39	41	39	41	44	42
Orange, Va.	41	46	41	42	45	50
Warsaw, Va.	34	34	32	39	42	43
Mean	38	40	37	41	44	45
			Upper and Central South			
Lexington, Ky.	31	34	32	37	38	35
			Delta			
Henderson, Ky.	51	53	53	62	61	60
Sikeston, Mo.	43	46	41	44	45	45
Wilson, Ark.	20	27	24	26	27	25
Marianna, Ark.	38	42	38	40	41	45
Coahoma, Miss.	29	40	31	33	39	45
Clarksdale, Miss.	34	43	35	41	44	49
Stoneville, Miss. (B)	34	37	33	38	43	50
Mean	36	41	36	40	43	46
			West			
Fayetteville, Ark.	26	29	24	29	32	32
Miami, Okla.	23	25	25	26	28	23
South Coffeeville, Okla.	27	30	28	28	31	33
Mean	25	28	26	28	30	29

Table 5: (Continued)

Location	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
			East Coast			
Linkwood, Md	41	39	42	42	44	43
Orange, Va.	44	41	48	45	52	46
Warsaw, Va.	34	34	41	36	43	34
Mean	40	38	44	41	46	41
			Upper and Central South			
Lexington, Ky	32	35	39	32	37	37
			Delta			
Henderson, Ky.	56	50	61	56	70	66
Sikeston, Mo.	40	44	45	45	50	48
Wilson, Ark.	21	22	28	24	24	21
Marianna, Ark.	40	37	36	43	45	44
Coahoma, Miss.	29	33	45	41	35	35
Clarksdale, Miss.	35	41	47	42	46	39
Stoneville, Miss. (B)	33	37	42	41	41	37
Mean	36	38	43	42	44	41
			West			
Fayetteville, Ark.	26	30	36	28	32	29
Miami, Okla.	19	24	25	21	25	25
South Coffeeville, Okla.	28	28	33	27	32	30
Mean	24	27	31	25	30	28

Table 6. Lodging scores for the strains in Uniform Group IV, 1955

Location	Perry	Wabash	Clark	C985	C1069	D52-52
East Coast						
Linkwood, Md.	1.7	2.7	1.7	2.0	2.7	3.0
Orange, Va.	2.3	3.7	3.7	3.3	3.7	3.3
Warsaw, Va.	1.7	2.5	1.3	1.7	2.3	1.7
Upper and Central South						
Lexington, Ky.	1.0	1.0	1.0	1.3	1.3	1.3
Delta						
Henderson, Ky.	3.0	4.7	4.7	3.7	3.7	3.3
Sikeston, Mo.	1.0	1.0	1.0	1.0	1.0	2.0
Wilson, Ark.	1.0	1.0	1.0	1.0	1.3	1.0
Marianna, Ark.	2.3	2.3	1.7	2.3	3.0	3.3
Coahoma, Miss.	1.0	1.7	1.0	1.0	1.3	4.0
Clarksdale, Miss.	1.0	2.0	1.0	1.7	2.3	3.0
Stoneville, Miss. (B)	1.0	1.3	1.0	1.7	2.0	3.0
West						
Fayetteville, Ark.	1.0	1.0	1.0	1.0	1.3	1.3
Miami, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
South Coffeeville, Okla.	1.0	1.0	1.0	2.0	1.7	1.0

Table 6. (Continued)

Location	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
			East Coast			
Linkwood, Md.	2.7	2.0	3.3	1.3	3.0	3.0
Orange, Va.	2.7	1.7	5.0	2.7	3.0	1.7
Warsaw, Va.	1.7	1.0	4.3	1.3	2.0	1.3
			Upper and Central South			
Lexington, Ky.	1.7	1.0	1.3	1.0	1.0	1.0
			Delta			
Henderson, Ky.	4.0	3.0	5.0	3.7	5.0	3.7
Sikeston, Mo.	2.0	2.0	1.0	1.0	2.0	1.0
Wilson, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Ark.	3.7	3.3	4.3	3.7	3.3	2.3
Coahoma, Miss.	1.0	1.3	3.7	1.0	1.0	1.0
Clarksdale, Miss.	1.3	2.0	3.0	1.3	2.0	1.3
Stoneville, Miss. (B)	1.3	1.0	2.7	1.7	1.0	1.0
			West			
Fayetteville, Ark.	1.0	1.0	1.7	1.0	1.0	1.0
Miami, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
South Coffeeville, Okla.	1.0	1.0	1.7	1.0	1.7	1.0

Table 7. Seed quality scores for the strains in Uniform Group IV, 1955

Location	Perry	Wabash	Clark	C985	C1069	D52-52
			East Coast			
Linkwood, Md.	4.0	4.0	4.0	3.0	3.0	4.0
Orange, Va.	4.7	2.3	2.0	2.7	3.7	1.0
Warsaw, Va.	3.0	3.0	5.0	2.0	2.0	1.0
			Upper and Central South			
Lexington, Ky	3.0	1.8	2.3	2.2	2.5	1.8
			Delta			
Henderson, Ky	2.7	2.3	3.0	2.7	3.0	2.0
Sikeston, Mo.	2.0	2.0	2.0	2.0	2.0	-
Wilson, Ark.	4.0	2.3	3.0	3.0	3.0	3.0
Marianna, Ark.	2.7	3.0	2.0	3.0	3.0	3.0
Coahoma, Miss.	3.3	3.3	3.3	3.0	2.3	2.3
Clarksdale, Miss.	3.0	3.0	3.0	3.3	3.0	2.7
Stoneville, Miss. (B)	3.0	4.0	3.0	3.0	3.0	1.3
			West			
Fayetteville, Ark.	4.0	3.0	3.0	3.0	3.0	2.3
Miami, Okla.	3.3	3.0	2.0	2.3	2.0	2.0
South Coffeeville, Okla.	3.0	2.0	1.7	2.5	2.3	1.0

Table 7. (Continued)

Location	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
			East Coast			
Linkwood, Md.	2.7	3.7	2.0	4.0	3.0	4.0
Orange, Va.	1.0	2.0	2.0	1.3	2.0	2.7
Warsaw, Va.	1.0	2.0	2.0	1.0	3.0	2.0
			Upper and Central South			
Lexington, Ky.	3.0	2.5	2.0	1.7	2.2	2.0
			Delta			
Henderson, Ky.	3.0	2.7	2.3	2.3	2.0	2.0
Sikeston, Mo.	2.0	2.0	1.0	2.0	1.0	1.0
Wilson, Ark.	3.0	3.0	2.0	3.0	3.0	3.0
Marianna, Ark.	3.0	3.0	2.3	3.0	3.0	2.7
Coahoma, Miss.	2.0	2.3	2.0	2.0	2.0	2.0
Clarksdale, Miss.	3.0	3.0	2.0	3.0	2.0	2.3
Stoneville, Miss. (B)	2.7	2.0	2.0	2.3	2.3	3.0
			West			
Fayetteville, Ark.	3.3	3.0	2.0	3.0	2.3	3.0
Miami, Okla.	2.0	1.3	1.6	1.0	2.0	2.3
South Coffeeville, Okla.	1.0	2.0	2.0	1.0	2.0	2.7

Table 8. Seed weight, in grams per 100 seeds, for the strains in Uniform Group IV, 1955

Location	Perry	Wabash	Clark	C985	C1069	D52-52
			East Coast			
Linkwood, Md.	18.2	15.2	18.2	16.3	16.4	14.9
Orange, Va.	20.9	17.0	18.3	20.5	21.0	18.4
Warsaw, Va.	19.4	17.0	19.1	18.4	18.2	17.1
Mean	19.5	16.4	18.5	18.4	18.5	16.8
			Upper and Central South			
Lexington, Ky.	10.8	9.7	10.0	10.0	9.7	10.8
			Delta			
Henderson, Ky.	15.0	12.0	13.7	14.3	15.3	13.3
Wilson, Ark.	14.0	10.3	11.7	11.7	11.0	10.7
Marianna, Ark.	15.0	12.0	14.0	14.0	15.0	14.0
Coahoma, Miss.	14.8	12.9	15.4	14.5	14.9	13.9
Clarksdale, Miss.	12.2	10.2	11.9	11.4	10.5	11.3
Stoneville, Miss. (B)	17.9	15.5	20.1	16.2	16.8	15.5
Mean	14.8	12.2	14.5	13.7	13.9	13.1
			West			
Fayetteville, Ark.	18.7	14.7	16.7	16.3	17.0	13.0
Miami, Okla.	15.5	12.7	15.3	17.5	18.3	14.1
South Coffeeville, Okla.	15.3	13.7	11.0	15.9	16.9	14.5
Mean	16.5	13.7	14.3	16.6	17.4	13.9

Table 8. (Continued)

Location	D52-131	D52-212	D52-1951	D53-163	D53-184	D53-441
			East Coast			
Linkwood, Md.	16.2	15.2	11.8	15.7	15.0	13.1
Orange, Va.	18.9	16.8	13.6	16.7	16.2	16.3
Warsaw, Va.	17.9	17.8	13.5	15.8	17.2	13.2
Mean	17.7	16.6	13.0	16.1	16.1	14.2
			Upper and Central South			
Lexington, Ky.	10.5	9.3	7.8	9.0	8.8	8.2
			Delta			
Henderson, Ky.	14.7	12.3	9.7	13.0	12.3	11.3
Wilson, Ark.	11.3	11.0	9.0	10.3	10.7	10.3
Marianna, Ark.	16.0	12,0	11.0	14.0	14.0	11.0
Coahoma, Miss.	13.6	11.6	11.0	12.6	12.1	11.9
Clarksdale, Miss.	11.4	9.9	8.9	9.6	10.3	9.9
Stoneville, Miss. (B)	16.1	12.2	11.9	15.0	13.7	13.7
Mean	13.8	11.5	10.3	12.4	12.2	11.4
			West			
Fayetteville, Ark.	16.7	13.0	11.0	15.0	14.7	15.0
Miami, Okla.	15.1	13.2	11.5	14.8	13.9	13.8
South Coffeeville, Okla.	15.2	13.5	10.7	14.2	12.9	13.0
Mean	15.7	13.2	11.1	14.7	13.8	13.9

PRELIMINARY GROUP IV

1955

Thirty-four new strains were grown, along with Perry and Clark, at eight locations. Parentage of these lines is reported in table 9. Agronomic and chemical data are reported in tables 10 through 15. Incomplete data were obtained at Linkwood and Sikeston because of irregular stands of some of the strains. Yields at Wilson and Chillicothe were low. Yields from these four locations were not included in the combined analysis of variance for seed yield. Strains of Class IV maturity are too early for late planting at Chillicothe, but were grown there on an exploratory basis to observe their reaction under the conditions existing.

Only two strains, D52-107 and D53-239, yielded significantly higher than Perry, based on the four locations, Warsaw, Clarksdale, Stoneville, and Bixby. D52-107 is segregating for reaction to bacterial pustule and, consequently, must be reselected. D53-239 had generally good ratings for other qualities but had poor quality seed at Linkwood.

Improved seed quality is a much desired characteristic for strains of this maturity in this region. Several of the strains show considerable improvement over Perry and Clark. One of the better-appearing lines is D53-138, which received a score of 1 or 2 at six of the locations and a score of 3 in the two western locations. D53-138 appeared satisfactory in all other qualities measured.

Thirty-three of the 34 lines tested gave better ground cover than Perry at the two Mississippi locations. Similarly, all but one of the lines were superior in seed-holding. Twenty-nine lines were given lower scores for purple stain at Warsaw than Perry or Clark.

Five of the lines had significantly lower oil content than Perry. Two of these five lines were significantly higher in protein content than Perry, while two lines had significantly lower protein content than Perry.

Several of the strains showed considerable killing from pod and stem blight at Wilson, Arkansas. Killing was first observed on July 22. On September 3 the following strains were showing considerable loss of stand: D52-50, -203, -3378, D53-120, -122, -148, -186, -225, -328, and -330.

The top-ranking lines from this group will be advanced to the Uniform IV nursery for 1956.

Table 9. Parentage of the strains in Preliminary IV, 1955

	Strain	Parentage	Generation Composited
1.	Perry	Patoka x L7-1355	
2.	Clark	Lincoln (2) x Richland	
3.	D52-50	N48-1248 x Adams	F_5
4.	D52-62	N48-1248 x Adams	F_5
5.	D52-107	N48-1248 x Perry	F_5
6.	D52-167	N48-1248 x Perry	F_5
7.	D52-184	N48-1248 x Perry	F_5
8.	D52-193	N48-1248 x Perry	F_5
9.	D52-201	N48-1248 x Perry	F_5
10.	D52-203	N48-1248 x Perry	F_5
11.	D52-232	N48-1248 x Perry	F_5
12.	D52-1177	D49-2525 x L6-5679	F_4
13.	D52-3378	Selection from L6-5679	
14.	D53-57	D49-2525 x L6-5679	F_5
15.	D53-100	D49-2525 x L6-5679	F_5
16.	D53-120	D49-2525 x L6-5679	F_5
17.	D53-122	D49-2525 x L6-5679	F_5
18.	D53-138	D49-2525 x L6-5679	F_5
19.	D53-148	D49-2525 x L6-5679	F_5
20.	D53-158	D49-2525 x L6-5679	F_5
21.	D53-167	D49-2525 x L6-5679	F_5
22.	D53-186	D49-2525 x L6-5679	F_5
23.	D53-190	D49-2525 x L6-5679	F_5
24.	D53-206	D49-2525 x L6-5679	F_5
25.	D53-225	D49-2525 x L6-5679	F_5
26.	D53-229	D49-2525 x L6-5679	F_5
27.	D53-233	D49-2525 x L6-5679	F_5
28.	D53-239	D49-2525 x L6-5679	F_5
29.	D53-322	D49-2525 x L6-5679	F_5
30.	D53-328	D49-2525 x L6-5679	F_5
31.	D53-330	D49-2525 x L6-5679	F_5
32.	D53-354	D49-2525 x L6-5679	F_5
33.	D53-371	D49-2525 x L6-5679	F_5
34.	D53-398	D632-15 x D49-2525	F_5
35.	D53-547	D49-2570 x C490	F_5
36.	D53-556	D49-2570 x C490	F_5

Table 10. General summary of the performance of the strains in Preliminary Group IV, 1955

Strain	Seed[1] Yield	Maturity Index	Height	Percent Oil	Percent Protein	Shattering[2]
Perry	31.9	9-16	33	21.2	40.0	3.0
Clark	31.5	-5	31	21.8	40.5	1.5
D52-50	32.2	+2	40	21.8	38.8	1.0
D52-62	28.8	+2	36	21.6	39.3	1.0
D52-107	35.6+	+6	36	20.8	41.3	1.5
D52-167	26.0-	+6	36	20.6	40.3	2.0
D52-184	31.5	+7	33	21.1	40.5	1.0
D52-193	30.8	+6	36	21.3	40.7	2.0
D52-201	32.1	+4	36	20.6	40.2	1.0
D52-203	32.5	+5	38	20.4	39.7	1.0
D52-232	19.5-	+4	40	21.5	38.3-	1.5
D52-1177	34.1	+1	38	20.9	38.5	1.5
D52-3378	31.4	+4	37	20.9	38.9	1.0
D53-57	29.5	+2	36	20.1-	42.2+	3.5
D53-100	33.4	+2	37	20.7	39.2	1.0
D53-120	33.5	0	38	21.2	39.1	1.5
D53-122	34.1	+2	40	21.1	41.2	2.0
D53-138	32.3	+2	38	20.3	41.0	1.5
D53-148	25.2-	+17	44	21.1	39.1	1.0
D53-158	29.3	+4	43	20.9	40.8	1.0
D53-167	29.5	+3	36	20.8	40.2	1.0
D53-186	32.1	+4	39	20.4	40.8	1.5
D53-190	31.3	+1	35	20.2-	40.9	1.5
D53-206	31.3	+3	36	20.1-	40.3	1.0
D53-225	31.6	+6	37	21.9	38.2-	1.5
D53-229	29.3	+4	38	19.6-	40.9	1.0
D53-233	31.6	+3	39	20.0	40.7	1.0
D53-239	36.2+	+1	36	20.9	39.7	1.0
D53-322	32.3	+3	39	21.1	39.0	1.5
D53-328	33.9	+6	40	21.0	40.4	1.0
D53-330	30.4	+3	36	20.6	40.7	1.0
D53-354	32.9	+1	36	20.4	39.7	1.0
D53-371	31.9	+2	37	20.8	39.1	2.0
D53-398	29.1	+7	44	20.4	39.0	1.0
D53-547	26.5-	+5	35	20.7	40.5	2.5
D53-556	27.3-	+5	47	19.3-	42.5+	1.0
L.S.D. (5%)	3.5			0.9	1.5	
C.V.	11%			4%	3%	

1/ Based upon four locations, Warsaw, Clarksdale, Stoneville, and Bixby.
2/ Stoneville data.
3/ Clarksdale and Stoneville data.
4/ Warsaw, Va., data.

Table 10. (Continued)

Strain	Ground Cover[3]	Downy Mildew[3]	Bacterial Pustule[2]	Target Spot[2]	Purple Stain[4]
Perry	3.0	2.5	3.0	1.0	3.0
Clark	4.0	1.5	4.0	1.0	3.0
D52-50	5.0	1.5	1.0	1.0	1.0
D52-62	4.0	2.0	1.0	2.0	1.0
D52-107	4.3	1.0	3.0	1.5	2.0
D52-167	3.8	1.0	3.0	2.0	2.0
D52-184	3.0	1.0	3.0	2.0	1.0
D52-193	3.3	1.0	1.0	2.0	2.0
D52-201	5.0	2.0	1.0	1.0	1.0
D52-203	5.0	2.0	3.0	1.0	2.0
D52-232	3.2	3.0	1.0	4.5	2.0
D52-1177	4.8	1.0	1.0	2.0	1.0
D52-3378	4.8	1.0	3.0	1.5	1.0
D53-57	5.0	1.5	1.0	2.5	3.0
D53-100	4.3	1.5	1.0	1.0	3.0
D53-120	3.3	3.5	1.0	2.0	2.0
D53-122	4.8	1.5	1.0	1.5	4.0
D53-138	4.0	1.0	1.0	2.0	2.0
D53-148	5.0	1.0	2.0	-	0
D53-158	4.5	3.0	3.0	1.0	1.0
D53-167	4.5	1.0	1.0	1.5	2.0
D53-186	4.0	3.0	1.0	2.0	2.0
D53-190	4.0	1.0	1.0	1.5	1.0
D53-206	5.0	1.0	1.0	1.5	3.0
D53-225	3.5	3.5	1.0	2.0	1.0
D53-229	4.8	1.0	1.0	2.0	1.0
D53-233	4.8	1.0	1.0	2.0	2.0
D53-239	4.5	1.0	1.0	1.5	2.0
D53-322	4.5	1.0	1.0	3.5	2.0
D53-328	4.5	1.0	1.0	2.0	2.0
D53-330	4.3	1.0	2.5	1.0	1.0
D53-354	5.0	1.0	1.0	1.0	1.0
D53-371	4.5	1.0	1.0	1.0	3.0
D53-398	5.0	1.0	1.0	1.5	0
D53-547	4.2	1.5	1.0	1.5	1.0
D53-556	5.0	1.0	1.5	1.0	0
L.S.D. (5%)					
C.V.					

Table 11. Seed yield, in bushels per acre, for the strains in Preliminary Group IV, 1955

Strain	Linkwood, Md.	Warsaw, Va.	Sikeston, Mo.	Wilson, Ark.	Clarksdale, Miss.	Stoneville, Miss.	Bixby, Okla.	Chillicothe, Texas
Perry	30.1	30.9	26.2	11.4	33.9	39.2	23.6	5.8
Clark	27.0	25.6-	29.4	13.2	35.2	42.0	23.0	8.0
D52-50	-	23.6-	22.8	7.8	29.4	45.0	31.0	11.6+
D52-62	-	21.0-	-	6.8	30.0	40.8	23.6	7.6
D52-107	33.2	31.9	29.3	10.1	34.4	47.4+	28.8	9.3
D52-167	-	22.8-	-	7.4	26.2-	30.4-	24.7	5.2
D52-184	31.9	30.0	24.6	8.5	31.6	35.5	28.8	8.8
D52-193	30.0	28.8	18.5	8.8	29.5	38.9	26.1	8.8
D52-201	-	30.4	23.6	8.0	31.8	46.2+	20.2	9.2
D52-203	35.4	28.8	23.5	8.3	29.4	47.8+	24.2	8.0
D52-232	-	22.2-	-	7.8	24.6-	21.4-	9.6-	10.8+
D52-1177	27.5	28.9	26.2	9.8	33.0	51.6+	23.0	8.1
D52-3378	30.4	25.4-	25.7	6.2-	33.0	47.8+	19.5	9.2
D53-57	34.0	27.6	23.0	7.4	30.4	42.8	17.0	6.2
D53-100	34.4	27.8	22.3	6.4-	30.9	46.2+	28.9	9.4
D53-120	28.4	27.2	25.2	6.6	34.3	42.8	29.7	6.0
D53-122	29.6	27.1	24.9	4.8-	33.5	48.6+	27.4	8.2
D53-138	31.8	29.8	20.8	15.1	32.4	43.9	23.1	5.8
D53-148	29.0	28.8	11.7	4.8-	20.8-	36.8	14.5	11.2+
D53-158	26.9	22.2-	19.9	7.2	25.1-	44.6	25.2	9.4
D53-167	29.4	24.2-	20.7	8.7	28.0-	46.0	19.6	9.4
D53-186	29.8	27.4	21.7	7.0	31.1	47.7+	22.3	7.8
D53-190	32.4	27.0-	25.4	13.0	35.4	49.1+	13.8	8.6
D53-206	29.0	29.8	22.3	7.6	30.9	47.6+	16.8	6.3
D53-225	35.8	24.0-	25.0	6.4-	29.3	42.2	30.7	9.8+
D53-229	31.6	27.2	19.5	3.7-	28.5-	47.0+	14.3	9.0
D53-233	29.7	30.8	17.4	10.9	27.2-	52.8+	15.7	9.1
D53-239	33.0	26.8-	19.8	10.0	33.4	51.6+	33.0	9.2
D53-322	33.8	26.2-	23.4	8.5	31.4	51.8+	19.6	6.4
D53-328	29.0	27.9	20.5	10.2	29.1	46.2	32.6	9.2
D53-330	33.4	23.8-	21.0	12.2	26.8-	44.8	26.0	8.8
D53-354	29.8	27.6	22.8	11.2	32.1	49.4+	22.9	6.7
D53-371	31.0	25.7-	22.8	8.2	29.6	46.6+	25.9	8.9
D53-398	28.2	25.9-	21.7	13.6	19.7-	44.0	26.9	15.2+
D53-547	-	22.8-	-	8.8	26.7-	39.5	16.8	10.2+
D53-556	23.8	28.0	18.1	10.4	23.8-	40.1	17.2	7.8
L.S.D.(5%)	N.S.	3.8	-	5.0	5.3	7.0	10.8	3.7
C.V.	10%	7%		28%	9%	8%	23%	21%

Table 12. Summary of the oil percentage for the strains grown in Preliminary Group IV, 1955

Strain	Linkwood, Md.	Warsaw, Va.	Clarksdale, Miss.	Stoneville, Miss.	Bixby, Okla.	Chillicothe, Texas
Perry	20.8	20.6	23.1	24.2	21.3	17.4
Clark	20.8	21.0	22.9	23.2	21.1	21.6
D52-50	20.4	20.9	22.2	23.2	22.3	21.7
D52-62	20.0	20.5	22.4	22.9	22.2	21.5
D52-107	19.5	19.1	21.9	22.5	21.5	20.2
D52-167	19.9	19.3	20.4	21.9	20.7	21.3
D52-184	19.7	20.5	21.9	23.2	22.2	19.0
D52-193	19.7	19.5	22.0	24.2	21.8	20.4
D52-201	20.2	20.2	20.7	21.8	20.4	20.2
D52-203	19.7	19.2	19.9	21.4	21.4	20.7
D52-232	20.6	20.4	20.5	23.9	21.6	21.9
D52-1177	18.7	19.5	21.2	22.4	20.9	22.4
D52-3378	19.2	20.3	21.4	22.3	20.0	22.3
D53-57	18.3	19.6	20.7	22.4	19.4	20.1
D53-100	18.9	19.0	20.3	22.9	21.3	21.6
D53-120	19.7	19.7	21.5	22.8	22.2	21.4
D53-122	19.0	19.1	22.2	22.6	21.7	21.7
D53-138	18.3	18.9	20.6	22.0	20.8	21.4
D53-148	19.8	19.9	21.2	21.9	20.7	22.9
D53-158	18.8	20.2	21.4	22.4	20.5	22.0
D53-167	18.9	20.7	21.3	21.8	20.7	21.2
D53-186	18.2	19.1	20.7	22.0	20.5	21.6
D53-190	19.1	20.2	21.0	22.8	18.7	19.1
D53-206	17.9	19.5	21.5	22.2	19.0	20.4
D53-225	19.7	20.4	22.9	23.4	22.9	22.3
D53-229	17.7	18.8	19.2	21.6	18.5	21.8
D53-233	18.4	18.9	20.1	21.7	19.2	21.8
D53-239	18.4	20.3	21.3	22.5	21.2	21.7
D53-322	18.6	19.9	22.3	21.8	20.9	23.3
D53-328	19.0	20.3	20.8	22.0	21.6	21.2
D53-330	18.7	20.2	20.7	21.8	21.3	21.0
D53-354	18.8	19.9	21.1	21.6	21.1	19.8
D53-371	19.1	20.4	20.6	21.9	21.3	21.6
D53-398	18.8	19.3	20.9	21.5	20.4	21.3
D53-547	19.7	20.2	19.4	22.2	21.8	20.7
D53-556	18.6	18.5	18.9	20.9	19.1	19.7
Mean	19.2	19.8	21.1	22.4	20.9	21.1

Table 13. Summary of the protein percentage for the strains in Preliminary Group IV, 1955

Strain	Linkwood, Md.	Warsaw, Va.	Clarksdale, Miss.	Stoneville, Miss.	Bixby, Okla.	Chillicothe, Texas
Perry	40.5	41.2	39.3	40.9	39.5	38.5
Clark	42.3	39.7	39.4	40.5	39.8	41.4
D52-50	39.8	38.2	37.7	38.9	38.1	40.1
D52-62	39.1	41.9	38.1	38.4	38.0	40.1
D52-107	41.1	41.7	40.7	41.5	39.7	42.9
D52-167	39.4	39.6	40.2	40.9	40.9	40.6
D52-184	40.6	39.8	40.0	40.1	39.6	43.1
D52-193	40.7	40.5	39.3	41.5	40.3	41.7
D52-201	39.1	38.3	40.2	39.8	42.0	41.5
D52-203	39.2	39.4	41.6	40.1	39.8	38.0
D52-232	37.9	38.5	40.3	36.9	37.9	38.0
D52-1177	39.3	38.6	39.4	39.5	37.5	36.7
D52-3378	40.3	38.1	38.0	37.5	41.0	38.3
D53-57	42.0	41.6	41.9	41.4	42.7	43.6
D53-100	39.6	40.3	39.8	39.3	37.5	38.8
D53-120	40.6	39.6	39.9	40.1	37.1	37.4
D53-122	42.2	43.3	40.0	41.1	38.5	42.1
D53-138	41.4	42.0	41.5	41.4	38.8	40.6
D53-148	39.8	37.9	39.7	40.2	39.7	37.1
D53-158	42.1	39.9	40.7	40.3	40.6	41.4
D53-167	42.3	39.2	39.6	40.2	41.1	38.8
D53-186	42.1	41.5	40.5	39.9	40.2	40.6
D53-190	40.5	38.8	38.8	40.0	43.9	43.4
D53-206	40.1	39.7	38.8	39.1	43.5	40.4
D53-225	37.9	38.3	38.1	38.2	36.4	40.0
D53-229	41.6	39.0	41.0	39.9	44.4	39.2
D53-233	41.3	39.3	41.5	41.0	42.6	38.7
D53-239	41.4	37.9	40.1	39.0	38.3	41.2
D53-322	40.7	38.1	38.9	39.2	39.4	37.6
D53-328	40.7	41.0	41.3	39.4	38.9	41.3
D53-330	41.9	40.0	40.6	39.9	39.4	42.2
D53-354	39.4	39.0	38.8	39.0	38.6	43.6
D53-371	39.9	37.5	39.7	38.6	38.6	40.4
D53-398	39.5	38.1	39.7	37.1	40.2	39.3
D53-547	39.7	38.0	43.2	40.2	39.8	41.9
D53-556	42.2	40.0	43.3	42.4	44.3	41.4
Mean	40.5	39.6	40.0	39.8	40.0	40.3

Table 14. Summary of the height data for strains in Preliminary Group IV, 1955

Strain	Link-wood, Md.	Warsaw, Va.	Sikes-ton, Mo.	Wilson, Ark.	Clarks-dale, Miss.	Stone-ville, Miss.	Bixby, Okla.	Chilli-cothe, Texas
Perry	40	32	44	23	32	35	25	16
Clark	40	26	42	20	34	33	25	15
D52-50	44	35	47	20	50	44	40	16
D52-62	44	29	43	21	45	40	32	14
D52-107	42	36	-	25	42	39	31	17
D52-167	44	34	-	24	42	37	33	13
D52-184	40	34	-	23	40	30	28	15
D52-193	42	35	-	27	45	33	35	18
D52-201	41	33	44	23	45	38	29	13
D52-203	43	36	45	26	44	42	31	12
D52-232	45	35	51	25	48	35	38	16
D52-1177	42	36	48	24	44	43	30	11
D52-3378	44	34	47	22	45	40	27	15
D53-57	43	35	44	19	43	40	26	15
D53-100	43	35	46	21	41	41	35	12
D53-120	42	32	48	18	42	41	36	12
D53-122	44	37	48	22	46	47	36	15
D53-138	44	35	48	23	42	44	33	13
D53-148	50	46	51	23	54	50	35	12
D53-158	44	37	55	23	46	50	43	13
D53-167	44	33	50	22	40	36	27	13
D53-186	43	34	51	25	44	46	33	13
D53-190	40	32	48	24	39	41	24	12
D53-206	44	33	45	22	40	40	26	12
D53-225	44	34	47	18	43	40	32	14
D53-229	44	37	48	20	45	47	27	13
D53-233	44	40	48	25	44	42	28	12
D53-239	45	32	45	21	40	39	31	14
D53-322	43	35	53	26	43	46	29	11
D53-328	44	37	51	21	43	44	39	14
D53-330	41	34	50	22	42	35	31	12
D53-354	42	33	47	22	40	38	31	12
D53-371	46	37	49	19	42	39	28	13
D53-398	48	43	51	36	48	47	37	13
D53-547	39	32	32	29	44	40	32	15
D53-556	48	42	54	35	53	55	40	14

Table 15. Summary of the seed quality scores for the strains in Preliminary Group IV, 1955

Strain	Linkwood, Md	Warsaw, Va.	Sikeston, Mo.	Wilson, Ark.	Clarksdale, Miss.	Stoneville, Miss.	Bixby, Okla.	Chillicothe, Texas
Perry	4.0	3.0	2.0	4.0	4.0	2.5	3.0	3.0
Clark	3.5	3.3	2.0	3.0	3.0	1.5	3.0	3.0
D52-50	2.5	1.0	2.0	3.0	3.0	2.0	2.0	3.0
D52-62	3.5	1.0	-	3.0	3.0	1.5	3.0	3.0
D52-107	3.0	2.0	2.0	3.0	2.0	2.0	2.0	3.0
D52-167	3.5	1.0	-	3.0	2.0	3.0	2.5	3.0
D52-184	4.0	2.0	2.0	3.0	3.0	3.0	2.5	4.0
D52-193	3.5	3.0	2.0	3.0	3.0	2.5	2.0	3.0
D52-201	3.0	1.0	2.0	3.5	2.5	2.0	3.0	2.0
D52-203	3.5	2.0	2.0	3.5	2.0	2.0	2.5	2.0
D52-232	3.0	2.0	-	3.0	3.0	2.0	2.0	2.0
D52-1177	3.0	1.0	1.0	2.0	2.0	1.0	2.0	2.0
D52-3378	4.0	2.0	2.0	3.0	2.5	2.0	3.0	3.0
D53-57	4.0	3.0	1.0	3.0	3.0	2.0	3.0	4.0
D53-100	3.0	2.0	1.0	2.5	2.0	2.0	2.0	3.0
D53-120	2.5	2.0	1.0	3.0	3.0	1.5	2.5	2.0
D53-122	4.0	4.0	2.0	3.0	3.0	2.5	2.0	3.0
D52-138	2.0	2.0	1.0	2.0	2.0	1.0	3.0	3.0
D53-148	2.5	1.0	1.0	3.0	3.0	2.0	2.0	2.0
D53-158	3.5	2.0	1.0	3.5	3.0	1.5	2.0	3.0
D53-167	3.5	2.0	1.0	2.0	3.0	2.5	2.0	2.0
D53-186	4.0	3.0	2.0	2.5	2.5	2.0	2.0	3.0
D53-190	2.5	2.0	1.0	2.0	3.0	1.0	2.0	3.0
D53-206	4.0	3.0	2.0	3.5	3.0	1.5	3.0	3.0
D53-225	3.5	2.0	1.0	3.5	3.0	2.5	2.0	2.0
D53-229	2.5	1.0	1.0	3.0	3.0	2.5	3.0	2.0
D53-233	3.0	2.0	1.0	2.5	3.0	1.0	3.0	2.0
D53-239	4.0	2.0	3.0	3.0	3.0	1.0	2.0	3.0
D53-322	2.5	2.0	2.0	3.0	2.0	1.5	2.5	3.0
D53-328	2.5	3.0	2.0	2.5	2.0	3.0	2.0	3.0
D53-330	3.5	2.0	1.0	3.0	3.0	2.0	2.0	2.0
D53-354	3.0	1.0	2.0	2.5	2.0	1.0	2.5	3.0
D53-371	3.0	2.0	2.0	3.5	3.0	1.5	2.5	3.0
D53-398	2.0	3.0	2.0	2.0	3.0	2.0	2.0	3.0
D53-547	3.0	1.0	2.0	2.3	3.5	3.0	2.0	2.0
D53-556	4.0	1.0	2.0	3.0	2.5	2.0	2.0	2.0

UNIFORM GROUP V

1955

	Variety or Strain	Parentage	Generation Composited
1.	Dorman	Dunfield x Arksoy	F_6
2.	S-100	Rogue in Illini	
3.	Dortchsoy 67	Macoupin selection x Ogden	
4.	D52-16	N48-1248 x Adams	F_5
5.	D52-18	N48-1248 x Adams	F_5
6.	D52-137	N48-1248 x Perry	F_5
7.	D52-1776	D632-15 x D49-2525	F_4
8.	D53-375	D49-2525 x L6-5679	F_5
9.	D53-492	D632-15 x D49-2525	F_5
10.	D53-500	D632-15 x D49-2525	F_5
11.	D53-526	D632-15 x D49-2525	F_5
12.	Composite A	(50% D53-375 and 50% D53-492)	

N48-1248 is a pustule-resistant line of VI maturity selected from Roanoke x N45-745 (Ogden x CNS selection).

D632-15 is a selection from Dunfield x Haberlandt, which was included in Group V for several years.

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

L6-5679 is a selection from Lincoln x Richland which was tested in Group IV for several years.

Thirty-four Group V nurseries were planted. Results of 28 nurseries are summarized in tables 16 through 23. Seed yields were generally good and provided a much better opportunity to evaluate strains than the low yields of 1954. Of the 28 nurseries summarized, differences among strains were significant in 23.

Three named varieties, Dorman, S-100 and Dortchsoy 67, were evaluated along with 8 selections and one composite. Six of the selections were resistant to bacterial pustule. The composite was included to measure the comparative performance of a mixture varying in height and maturity.

Dorman, released to seed producers in 1953, has given good performance as an early-maturing variety in the Delta region. Height of Dorman increases appreciably as it is grown farther north as does lodging. Seed quality has been consistently good. Dorman holds its seed very well after maturity.

As in previous years, S-100 consistently produced seed of poorer quality than Dorman. S-100 has a tendency for stems to remain green after seed is mature and does not give complete ground cover during the growing season.

S-100 yielded significantly less than Dorman in the East Coast and Delta areas and significantly more than Dorman in the Upper and Central area.

Dortchsoy 67 has yielded very well in all production area and gives excellent ground cover during the growing season. Dortchsoy 67 is perhaps comparable to Ogden in seed-holding, but because of its earlier maturity is usually subjected to higher temperatures after maturity than Ogden; and, consequently, losses from shattering are more likely to be experienced.

The three lines, D52-16, D52-18, and D52-137, were tested for the second year. D52-137 was one of the better yielding lines in the 1954 tests, but, in general, had lower quality seed than Dorman. In 1955, stands were thin for this strain in several of the plantings. Seed yield was significantly less than that for Dorman in the Delta section. The strain is somewhat weak in seed-holding and is segregating for reaction to bacterial pustule. D52-16 and D52-18 are very similar in appearance. Both lines yielded significantly more than Dorman in the East Coast area. It is interesting that in both 1954 and 1955, these two lines were appreciably taller than Dorman in the southern locations, such as Stoneville, Mississippi; while at the northern locations, such as Linkwood, Maryland, or Warsaw, Virginia, where Dorman grew appreciably taller than at Stoneville, D52-16 and D52-18 were shorter than at Stoneville.

D53-375, a strain of IV maturity, was included since it also made up 50 per cent of Composite A, along with D53-492. These two strains differed in maturity by 6 days and in height by 7 inches. D53-375 yielded significantly less than Dorman in the East Coast and Delta areas, while D53-492 produced yields comparable to Dorman in all production areas. In the Delta area where D53-375 yielded significantly less than Dorman, the yield of the composite was slightly higher than Dorman and approximately the same as the yield for D53-492. In other areas, the yield of the composite approximated the mean yield of the two component strains.

The four strains, D52-1776, D53-492, D53-500, and D53-526, are from the same cross, but represent two rather distinct growth types. D53-492 and D53-526 are short, bushy strains, while the other two are taller-growing. Yield differences among the four strains were small. D52-1776 and D53-492 had lower oil content and higher protein content than Dorman. D53-500 showed a tendency to shatter. D53-526 equalled Dorman in oil content, had higher protein content, had no shattering 8 weeks after maturity, and was resistant to downy mildew, bacterial pustule, target spot and purple stain. In several of the Delta tests, S-100, Dortchsoy 67, and D53-492 developed considerable bacterial blight. Under these conditions, D53-526 showed very little bacterial blight infection.

Table 16. General summary of performance of the strains in Group V, 1955

	Locations	Dorman	S-100	Dortch-soy 67	D52-16	D52-18
Seed yield - 1955						
East Coast	6	31.2	25.8-	30.7	33.7+	33.8+
Upper & Central South	4	19.8	22.2+	21.7	18.6	19.3
Delta	8	34.2	31.6-	35.5	32.3	32.7
West	8	21.6	21.0	26.2+	23.8	23.9
-1954-55						
East Coast		26.7	23.4	27.7	28.6	28.8
Upper & Central South		15.8	18.0	17.2	15.2	15.6
Delta		28.2	26.8	29.0	26.4	26.2
West		13.4	13.5	16.9	15.8	16.3
Oil Content - 1955		21.2	18.8	21.0	21.5	21.3
-1954-55		21.6	19.0	21.7	21.8	21.8
Protein Content - 1955		38.4	42.7	38.9	40.5	40.8
- 1954-55		39.2	42.6	38.8	40.6	40.6
Maturity Index		9-27	+2	+2	+3	+5
Height		35	41	32	46	44
Shattering[1/]		1.0	2.3	2.3	1.0	1.0
Downy Mildew[2/]		1.0	2.0	1.0	3.0	3.0
Bacterial Pustule[1/]		3.5	3.5	4.0	1.0	1.0
Target spot		3.0	1.5	4.0	2.0	2.0
Purple Stain[3/]		1.0	4.0	1.0	1.0	0

1/Stoneville data.
2/Stoneville and Clarksdale data.
3/Warsaw, Virginia, data.

Table 16. (Continued)

	D52-137	D52-1776	D53-375	D53-492	D53-500	D53-526	Composite A
Seed yield - 1955							
East Coast	29.3	32.5	24.9-	32.4	32.8	30.1	28.5-
Upper & Central South	20.0	18.8	20.8	18.7	17.0-	18.9	20.2
Delta	26.3-	32.4	30.4-	35.5	33.6	34.5	34.8
West	19.0-	22.6	22.7	24.7+	23.6	22.3	22.9
-1954-55							
East Coast	26.4						
Upper & Central South	16.2						
Delta	25.6						
West	12.3						
Oil Content - 1955	21.7	19.9	20.7	19.8	20.6	21.2	20.0
- 1954-55	22.0						
Protein Content - 1955	40.0	40.1	39.7	41.2	39.6	39.2	41.1
- 1954-55	39.8						
Maturity Index	-1	+5	-6	0	-1	0	
Height	31	42	39	32	40	30	
Shattering[1/]	2.0	1.0	2.3	1.0	2.0	1.0	
Downy Mildew[2/]	1.3	3.0	1.0	1.0	1.3	1.0	
Bacterial Pustule[1/]	2.5	1.0	3.5	1.0	1.0	1.0	
Target Spot[1/]	1.5	2.0	1.0	2.0	2.0	2.0	
Purple Stain[3/]	-	1.0	3.0	0	2.0	0	

Table 17. Yield, in bushels per acre, for the strains in Uniform Group V, 1955

Location	Dorman	S-100	Dortch-soy 67	D52-16	D52-18	D52-137	D52-1776
			East Coast				
Linkwood, Md.[1/]	27.4	31.3	33.0	34.6	37.9	-	31.4
Warsaw, Va.	34.1	32.6	33.8	38.2+	40.3+	37.5	35.6
Onley, Va.	22.5	24.4	23.8	22.0	24.5	26.2	22.4
Norfolk, Va.	33.3	18.6-	26.3	35.4	34.1	23.3-	32.4
Petersburg, Va.	37.4	33.0	39.1	41.8	41.5	34.8	42.8
Holland, Va.	32.5	21.1-	29.4	31.2	32.1	27.7-	31.2
Plymouth, N. C.	27.3	25.2	31.7+	33.8+	30.4	26.5	30.8+
Mean	31.2	25.8-	30.7	33.7+	33.8+	29.3	32.5
			Upper and Central South				
Lexington, Ky.	13.2	17.3	17.5	17.4	16.8	16.6	16.8
Belle Mina, Ala.	18.5	18.9	15.7	16.0	16.1	18.1	15.2
Athens, Ga.	15.1	17.8	19.8	15.4	16.3	18.4	16.6
State College, Miss.	32.2	34.7	34.0	25.4-	27.8	26.9-	26.8-
Mean	19.8	22.2+	21.7	18.6	19.3	20.0	18.8
			Delta				
Henderson, Ky.	37.2	37.8	40.0	31.3	34.0	30.7	35.1
Sikeston, Mo.	16.6	15.5	13.7	14.6	11.8	-	11.0
Wilson, Ark.	16.7	8.2-	14.1	13.6	12.6	8.7-	12.8
Marianna, Ark.	40.3	35.9	39.9	41.5	40.5	39.5	36.9
Coahoma, Miss.	50.0	35.8-	51.4	46.3	46.5	31.2-	48.0
Clarksdale, Miss.	23.0	28.6+	24.9	23.4	23.6	26.6+	19.5-
Stoneville, Miss. (A)	28.3	29.6	32.7	20.1	24.5	21.2	32.2
Stoneville, Miss. (B)	45.2	40.6	44.2	42.2	40.3	29.3-	41.1
St. Joseph, La.	33.1	36.1	36.9	40.1+	39.6+	23.5-	33.3
Mean	34.2	31.6-	35.5	32.3	32.7	26.3-	32.4
			West				
Stuttgart, Ark.	31.8	28.2	36.6	36.0	34.1	29.6	35.4
Curtis, La.	30.0	35.3	39.3+	36.9	40.5+	29.7	25.1
Fayetteville, Ark.	17.1	18.8	20.4+	19.0	15.3	18.0	15.5
Miami, Okla.	9.8	9.3	12.0	13.1+	12.3+	9.7	12.7+
South Coffeeville, Okla.	18.6	19.8	20.7	18.5	18.2	15.4	18.5
Bixby, Okla.	32.8	23.2	34.2	27.2	26.1	21.3	31.2
Chillicothe, Texas	9.4	9.5	13.2	14.7	15.0	9.5	17.3
Lubbock, Texas	23.0	23.8	33.1	25.3	29.5	19.0	24.8
Mean	21.6	21.0	26.2+	23.8	23.9	19.0-	22.6

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

1/ - Not included in the mean.

Table 17. (Continued)

Location	D53-375	D53-492	D53-500	D53-526	Composite A	L.S.D. (5%)	C.V.
			East Coast				
Linkwood, Md.[1/]	31.4	33.0	31.5	34.5	35.2	N.S.	10%
Warsaw, Va.	31.6	36.2	34.8	36.0	36.6	3.6	6%
Onley, Va.	23.1	26.0	29.8	22.9	21.6	N.S.	16%
Norfolk, Va.	17.3-	31.5	36.3	28.1	23.7-	7.4	15%
Petersburg, Va.	33.3	40.0	34.6	31.7	37.0	6.0	10%
Holland, Va.	24.1-	32.6	32.4	31.3	25.3-	4.3	9%
Plymouth, N. C.	19.8-	28.4	28.8	31.0+	26.8	3.2	7%
Mean	24.9-	32.4	32.8	30.1	28.5-	2.1	11%
			Upper and Central South				
Lexington, Ky.	17.0	14.2	12.0	16.1	19.3+	4.5	16%
Belle Mina, Ala.	19.0	14.7	12.6-	16.2	12.4-	4.3	16%
Athens, Ga.	15.2	15.7	16.3	18.4	16.2	N.S.	11%
State College, Miss.	31.9	30.2	26.2-	24.8-	33.0	4.7	9%
Mean	20.8	18.7	17.0-	18.9	20.2	2.0	13%
			Delta				
Henderson, Ky	35.9	37.9	36.3	33.0	34.3	N.S.	11%
Sikeston, Mo.	15.2	15.2	16.9	13.4	19.9	4.5	19%
Wilson, Ark.	10.5-	13.8	15.4	16.4	11.3-	4.3	20%
Marianna, Ark.	34.6-	43.2	37.7	43.5	43.5	5.0	7%
Coahoma, Miss.	27.4-	47.3	51.8	51.1	44.4	7.4	10%
Clarksdale, Miss.	29.7+	27.3+	25.4	27.3+	30.0+	3.3	7%
Stoneville, Miss. (A)	30.4	35.6+	33.1	36.3+	36.3+	6.5	13%
Stoneville, Miss. (B)	40.5	39.4	40.9	38.9	42.9	7.0	10%
St. Joseph, La.	34.0	39.4+	28.7	30.0	35.8	6.2	11%
Mean	30.4-	35.5	33.6	34.5	34.8	2.0	11%
			West				
Stuttgart, Ark.	30.2	31.7	29.4	31.5	30.1	5.4	10%
Curtis, La.	44.3+	31.6	39.4+	27.7	38.2+	8.1	14%
Fayetteville, Ark.	21.5+	20.4+	19.4+	18.5	18.9	2.2	7%
Miami, Okla.	10.1	12.4+	9.9	13.8+	9.3	2.4	13%
South Coffeeville, Okla.	17.1	19.2	18.9	20.9+	21.6	2.2	10%
Bixby, Okla.	24.0	42.6	34.3	32.2	31.6	N.S.	24%
Chillicothe, Texas	7.1	11.1	9.5	12.9	6.7	4.5	24%
Lubbock, Texas	27.2	28.5	27.7	21.1	26.6	N.S.	19%
Mean	22.7	24.7+	23.6	22.3	22.9	2.5	16%

Table 18. Chemical composition for the strains in Uniform Group V, 1955

Location	Dorman	S-100	Dortch-soy 67	D52-16	D52-18	D52-137
			OIL PERCENTAGE			
Linkwood, Md.	18.9	17.6	19.3	19.8	20.1	19.8
Warsaw, Va.	19.7	18.9	19.5	21.0	20.7	20.0
Plymouth, N. C.	21.6	18.8	20.4	21.4	20.6	21.0
Henderson, Ky.	20.5	18.8	20.8	21.6	21.7	20.9
Wilson, Ark	22.5	18.5	22.0	22.9	22.5	22.7
Coahoma, Miss.	21.9	19.3	21.8	22.6	22.7	23.1
Stoneville, Miss. (A)	21.1	19.0	21.0	21.1	20.9	22.2
Stoneville, Miss. (B)	22.5	20.1	22.4	23.4	22.8	23.2
Bixby, Okla.	22.0	18.2	22.0	19.9	19.9	22.6
Mean	21.2	18.8	21.0	21.5	21.3	21.7
			PROTEIN PERCENTAGE			
Linkwood, Md.	38.3	43.3	38.8	40.0	40.4	40.7
Warsaw, Va.	41.3	44.0	40.3	41.3	41.4	41.4
Plymouth, N. C.	38.4	43.0	40.2	43.5	44.3	41.9
Henderson, Ky.	38.2	41.3	37.6	40.0	39.5	38.3
Wilson, Ark.	37.2	42.3	38.9	37.3	38.8	39.3
Coahoma, Miss.	37.6	43.4	38.9	39.0	40.1	39.3
Stoneville, Miss. (A)	38.6	42.0	40.3	42.4	42.0	41.8
Stoneville, Miss. (B)	37.9	42.3	38.5	39.0	39.6	39.2
Bixby, Okla.	37.7	42.9	36.4	41.7	41.4	38.0
Mean	38.4	42.7	38.9	40.5	40.8	40.0

Table 18. (Continued)

Location	D52-1776	D53-375	D53-492	D53-500	D53-520	Composite A
			OIL PERCENTAGE			
Linkwood, Md.	18.1	19.6	18.1	19.6	19.3	18.8
Warsaw, Va.	18.5	19.8	18.8	18.7	19.8	18.1
Plymouth, N. C.	19.3	19.3	19.5	20.2	21.3	20.3
Henderson, Ky.	19.4	20.2	18.8	20.0	21.0	19.8
Wilson, Ark.	20.7	20.9	21.1	21.2	21.8	20.9
Coahoma, Miss.	20.3	22.0	21.3	22.0	21.6	21.1
Stoneville, Miss. (A)	20.0	21.5	19.5	20.3	21.0	20.0
Stoneville, Miss. (B)	21.2	22.2	20.1	22.2	22.7	20.9
Bixby, Okla.	21.6	20.8	20.9	21.0	22.2	20.0
Mean	19.9	20.7	19.8	20.6	21.2	20.0
			PROTEIN PERCENTAGE			
Linkwood, Md.	40.7	39.5	40.6	39.0	39.1	41.4
Warsaw, Va.	41.0	40.5	43.8	41.9	40.7	43.3
Plymouth, N. C.	42.8	41.2	42.7	41.1	39.6	43.0
Henderson, Ky.	39.3	38.7	39.3	37.7	38.1	40.2
Wilson, Ark.	38.1	38.7	40.1	39.1	38.9	39.2
Coahoma, Miss.	40.3	39.0	40.7	39.7	39.0	40.6
Stoneville, Miss. (A)	40.8	39.8	42.7	40.4	40.2	41.2
Stoneville, Miss. (B)	40.6	39.9	40.9	39.0	39.5	40.3
Bixby, Okla.	37.0	39.7	40.5	38.5	37.7	40.9
Mean	40.1	39.7	41.2	39.6	39.2	41.1

Table 19. Relative maturity data, days earlier (-) or later (+) than Dorman, for the strains in Uniform Group V, 1955

Location	Date Planted	Dorman Matured	S-100	Dortch-soy 67	D52-16	D52-18
		East Coast				
Linkwood, Md.	6-3	10-11	0	+4	+7	+8
Warsaw, Va.	6-6	10-15	-3	+1	0	+3
Petersburg, Va.	5-19	10-10	-4	+3	+4	+8
Holland, Va.	5-16	10-10	0	+7	+1	+3
Plymouth, N. C.	5-2	10-6	-6	-3	+2	+4
Mean			-3	+2	+3	+5
		Upper and Central South				
Lexington, Ky.	5-28	10-11	+1	+2	+12	+14
Belle Mina, Ala.	5-18	9-23	0	0	0	0
Athens, Ga.	5-5	9-12	-4	+6	+2	+6
State College, Miss.	5-28	9-21	-1	+3	+2	+5
Mean			-1	+3	+4	+6
		Delta				
Henderson, Ky.	5-25	10-14	-2	0	+12	+12
Sikeston, Mo.	5-14	9-22	-2	+3	+4	+9
Wilson, Ark.	5-3	9-17	+15	+13	+7	+10
Marianna, Ark.		9-22	+1	0	+1	+2
Coahoma, Miss.	5-2	9-16	0	+4	+2	+3
Clarksdale, Miss.	5-6	9-10	-3	+4	+1	+3
Stoneville, Miss. (A)	5-11	9-15	+1	+2	+1	0
Stoneville, Miss. (B)	5-3	9-15	0	0	0	+2
St. Joseph, La.	5-18	9-15	+5	+4	-2	+2
Mean			+1	+3	+3	+6
		West				
Stuttgart, Ark.	5-30	9-27	+13	0	0	0
Curtis, La.	5-16	9-21	+5	0	-1	+4
Fayetteville, Ark.	5-9	9-23	+5	+2	+3	+5
Miami, Okla.	5-19	10-10	+7	+5	+2	+2
South Coffeeville, Okla.	5-19	9-28	+5	+3	+6	+8
Bixby, Okla.	5-13	9-25	+12	+3	+12	+15
Lubbock, Texas	6-20	10-10	0	-3	0	+5
Mean			+7	+1	+3	+5

Table 19. (Continued)

Location	D52-137	D52-1776	D53-375	D53-492	D53-500	D53-526
		East Coast				
Linkwood, Md.	-1	+9	-7	-5	-4	-2
Warsaw, Va.	-2	+4	-13	-3	-3	-4
Petersburg, Va.	-1	+6	-3	-1	-9	-7
Holland, Va.	-1	+4	-10	-2	-4	-7
Plymouth, N. C.	-6	+4	-6	-2	-2	-4
Mean	-2	+5	-8	-3	-4	-5
		Upper and Central South				
Lexington, Ky.	-3	+13	-3	-2	-2	+4
Belle Mina, Ala.	0	0	0	0	0	0
Athens, Ga.	-5	+7	-10	-1	-3	+4
State College, Miss.	0	+3	0	-3	-1	-1
Mean	-2	+6	-4	-1	-1	+2
		Delta				
Henderson, Ky.	-4	+14	-2	-3	-3	+2
Sikeston, Mo.	0	0	-3	-5	-8	-3
Wilson, Ark.	+7	+8	-1	+4	-1	+5
Marianna, Ark.	+1	+1	-9	-2	-6	-4
Coahoma, Miss.	-3	+3	-10	+1	-1	-1
Clarksdale, Miss.	-3	+1	-7	-2	-2	-1
Stoneville, Miss. (A)	0	+1	-4	0	0	-1
Stoneville, Miss. (B)	-7	+1	-11	+1	-2	-2
St. Joseph, La.	0	-1	+6	+9	+6	+7
Mean	-1	+3	-5	0	-2	0
		West				
Stuttgart, Ark.	0	0	0	0	0	0
Curtis, La.	-1	+4	-6	+1	-4	-5
Fayetteville, Ark.	-1	+5	-5	-1	-3	-3
Miami, Okla.	+2	+7	-6	+6	+6	+2
South Coffeeville, Okla.	+4	+8	-10	+3	+3	+6
Bixby, Okla.	0	+12	-3	+2	+1	-2
Lubbock, Texas	0	0	0	+14	+4	+14
Mean	+1	+5	-4	+3	+1	+2

Table 20. Height data for the strains in Uniform Group V, 1955

Location	Dorman	S-100	Dortch-soy 67	D52-16	D52-18	D52-137
		East Coast				
Linkwood, Md.	43	46	38	51	49	38
Warsaw, Va.	40	42	33	50	42	35
Accomac, Va.	30	36	30	41	40	34
Petersburg, Va.	36	48	31	61	56	37
Holland, Va.	41	45	30	49	48	34
Plymouth, N. C.	50	50	38	54	50	37
Mean	40	44	33	51	48	36
		Upper and Central South				
Lexington, Ky.	33	41	33	42	40	28
Belle Mina, Ala.	39	38	30	41	40	27
Athens, Ga.	40	38	34	38	36	31
Mean	37	39	32	40	39	29
		Delta				
Henderson, Ky.	52	57	48	61	67	48
Sikeston, Mo.	43	53	34	54	49	36
Wilson, Ark.	33	28	26	35	35	24
Marianna, Ark.	40	48	35	47	49	37
Coahoma, Miss.	33	31	34	53	52	28
Clarksdale, Miss.	35	48	37	54	54	35
Stoneville, Miss. (A)	37	51	37	55	53	33
Stoneville, Miss. (B)	36	47	37	58	57	31
St. Joseph, La.	35	52	32	58	51	35
Mean	38	46	36	53	52	34
		West				
Stuttgart, Ark.	33	36	32	40	40	27
Curtis, La.	29	44	31	57	52	36
Fayetteville, Ark.	33	37	27	40	36	28
Miami, Okla.	25	24	21	25	21	18
South Coffeeville, Okla.	27	31	24	35	33	22
Bixby, Okla.	28	35	26	40	35	31
Chillicothe, Texas	18	27	20	32	29	18
Lubbock, Texas	23	30	28	36	34	20
Mean	27	33	26	38	35	25

Table 20. (Continued)

Location	D52-1776	D53-375	D53-492	D53-500	D53-526	Composite A
		East Coast				
Linkwood, Md.	48	46	36	41	35	38
Warsaw, Va.	43	41	38	44	35	36
Accomac, Va.	31	41	31	28	27	30
Petersburg, Va.	43	51	37	39	28	41
Holland, Va.	51	43	38	43	33	38
Plymouth, N. C.	50	48	36	51	37	40
Mean	44	45	36	41	32	37
		Upper and Central South				
Lexington, Ky	40	37	32	38	31	33
Belle Mina, Ala.	43	37	32	37	35	34
Athens, Ga.	44	32	36	41	33	33
Mean	42	35	33	39	33	33
		Delta				
Henderson, Ky.	71	63	47	67	41	52
Sikeston, Mo.	50	53	36	46	38	-
Wilson, Ark.	33	24	31	32	25	28
Marianna, Ark.	34	47	34	43	34	35
Coahoma, Miss.	44	33	29	47	30	31
Clarksdale, Miss.	47	42	33	49	35	-
Stoneville, Miss. (A)	43	45	33	43	30	36
Stoneville, Miss. (B)	49	37	32	45	32	35
St. Joseph, La.	46	44	29	47	31	36
Mean	46	43	34	46	33	36
		West				
Stuttgart, Ark.	40	34	27	37	25	26
Curtis, La.	41	46	20	37	22	34
Fayetteville, Ark.	38	32	29	38	28	30
Miami, Okla.	29	23	23	27	23	20
South Coffeeville, Okla.	32	28	24	34	35	28
Bixby, Okla.	36	28	28	34	27	29
Chillicothe, Texas	31	23	24	33	16	21
Lubbock, Texas	33	30	25	31	25	26
Mean	35	31	25	34	25	27

Table 21. Lodging scores for the strains in Uniform Group V, 1955

Location	Dorman	S-100	Dortch-soy 67	D52-16	D52-18	D52-137
		East Coast				
Linkwood, Md.	4.0	2.3	3.0	2.3	1.7	2.7
Warsaw, Va.	5.0	2.0	2.3	1.7	1.7	1.7
Accomac, Va.	3.0	3.0	4.0	3.0	3.0	3.0
Norfolk, Va.	3.0	2.0	1.0	1.0	2.0	3.0
Petersburg, Va.	3.7	4.0	4.0	3.0	3.7	3.0
Holland, Va.	4.0	2.7	3.7	2.3	2.3	3.7
Plymouth, N. C.	3.7	3.3	3.2	3.2	4.0	4.0
		Upper and Cental South				
Lexington, Ky.	1.0	1.0	1.0	1.0	1.0	1.7
Belle Mina, Ala.	2.7	1.0	1.0	1.0	1.0	1.0
Athens, Ga.	2.0	1.0	1.0	1.0	1.0	1.3
State College, Miss.	1.0	1.0	1.0	2.0	2.0	1.0
		Delta				
Henderson, Ky.	4.3	2.3	3.0	4.3	3.3	3.0
Sikeston, Mo.	2.0	2.0	1.0	1.0	2.0	2.0
Wilson, Ark.	1.3	1.0	1.0	2.0	2.7	1.0
Marianna, Ark.	3.3	4.0	2.7	4.0	4.3	2.7
Coahoma, Miss.	2.0	2.7	2.5	3.7	4.0	1.3
Clarksdale, Miss.	2.0	2.7	3.3	3.3	3.0	2.0
Stoneville, Miss. (A)	2.3	3.0	3.0	4.0	4.0	2.0
Stoneville, Miss. (B)	2.0	2.7	3.0	3.3	3.3	1.3
St. Joseph, La.	3.0	3.0	2.7	2.3	3.0	2.0
		West				
Stuttgart, Ark.	1.7	1.0	1.7	2.0	2.0	1.0
Curtis, La.	2.0	2.0	2.0	3.0	3.0	2.0
Fayetteville, Ark.	2.3	2.0	1.0	2.0	2.0	1.0
Miami, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
South Coffeeville, Okla.	2.3	1.0	1.0	2.7	2.0	1.0
Bixby, Okla.	1.7	1.7	1.7	2.0	2.7	2.0
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	2.0	2.0	1.0

Table 21. (Continued)

Location	D52-1776	D53-375	D53-492	D53-500	D53-526	Composite A
			East Coast			
Linkwood, Md.	4.0	1.7	3.0	4.0	2.0	2.7
Warsaw, Va.	3.3	2.0	2.8	4.0	3.3	2.7
Accomac, Va.	2.0	3.0	3.0	3.0	3.0	3.0
Norfolk, Va.	3.0	1.0	3.0	3.0	3.0	2.0
Petersburg, Va.	3.0	3.3	3.3	3.7	3.3	3.3
Holland, Va.	4.0	3.0	3.7	4.0	3.7	2.7
Plymouth, N. C.	4.0	3.7	2.8	4.3	4.3	3.0
			Upper and Central South			
Lexington, Ky.	2.0	1.0	1.7	1.3	1.0	1.0
Belle Mina, Ala.	2.0	1.0	1.0	1.0	1.0	1.0
Athens, Ga.	1.0	1.0	1.0	1.3	1.7	1.0
State College, Miss.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Henderson, Ky.	5.0	3.0	4.3	5.0	4.0	2.7
Sikeston, Mo.	2.0	1.0	1.0	3.0	1.0	1.0
Wilson, Ark.	2.0	1.0	1.0	2.3	1.0	1.0
Marianna, Ark.	4.0	1.7	2.0	3.9	1.3	2.3
Coahoma, Miss.	3.0	1.0	1.0	3.0	1.7	1.0
Clarksdale, Miss.	4.0	1.3	1.7	4.0	2.0	-
Stoneville, Miss. (A)	3.0	2.3	1.0	2.3	1.3	1.3
Stoneville, Miss. (B)	2.7	1.0	1.0	3.0	1.0	1.0
St. Joseph, La.	2.0	1.7	1.0	3.3	1.3	1.3
			West			
Stuttgart, Ark.	2.0	1.0	1.0	1.7	1.0	1.0
Curtis, La.	2.0	2.0	1.0	2.0	1.0	2.0
Fayetteville, Ark.	3.0	1.0	1.0	2.7	1.0	1.0
Miami, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
South Coffeeville, Okla.	2.3	1.0	1.3	2.0	2.7	1.3
Bixby, Okla.	3.0	1.0	1.3	2.7	1.0	1.3
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	2.0	1.0	1.0	2.0	1.0	1.0

Table 22. Seed quality scores for the strains in Uniform Group V, 1955

Location	Dorman	S-100	Dortch-soy 67	D52-16	D52-18	D52-137
			East Coast			
Linkwood, Md.	1.7	3.7	1.0	2.3	3.0	4.0
Warsaw, Va.	1.0	2.0	1.0	1.0	1.0	2.0
Accomac, Va.	3.0	3.0	3.0	2.0	2.5	3.0
Petersburg, Va.	1.0	3.3	1.0	1.0	1.0	1.3
Holland, Va.	2.0	4.0	1.0	3.0	2.3	4.0
Plymouth, N. C.	2.0	5.0	2.0	4.0	4.0	5.0
			Upper and Central South			
Lexington, Ky.	2.0	2.0	2.0	2.0	2.0	3.0
Athens, Ga.	2.0	3.0	2.0	2.0	1.0	2.0
			Delta			
Henderson, Ky.	2.7	3.0	2.7	2.7	2.5	3.0
Sikeston, Mo.	1.0	2.0	2.0	2.0	3.0	-
Wilson, Ark.	2.0	3.3	3.0	3.0	3.0	3.0
Marianna, Ark.	3.0	4.0	3.0	3.3	3.3	3.7
Coahoma, Miss.	1.0	3.3	2.7	3.0	2.3	3.0
Clarksdale, Miss.	2.0	4.0	3.0	2.7	3.0	3.0
Stoneville, Miss. (A)	1.7	3.3	3.3	3.3	3.0	3.0
Stoneville, Miss. (B)	2.0	3.3	3.0	2.0	2.7	2.7
St. Joseph, La.	1.7	2.3	1.3	1.3	1.0	2.0
			West			
Stuttgart, Ark.	2.0	3.7	3.0	3.0	3.0	4.0
Curtis, La.	1.0	1.7	1.0	2.0	1.0	2.0
Fayetteville, Ark.	2.3	3.0	3.7	3.0	3.0	4.0
Miami, Okla.	2.7	2.0	2.7	2.0	2.3	2.5
South Coffeeville, Okla.	1.0	1.0	2.0	2.0	3.7	2.0
Bixby, Okla.	1.7	2.7	2.0	2.0	3.3	2.0
Chillicothe, Texas	3.0	4.0	2.0	2.0	2.0	3.0
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	3.0

Table 22. (Continued)

Location	D52-1776	D53-375	D53-492	D53-500	D53-526	Composite A
			East Coast			
Linkwood, Md	2.0	4.0	1.0	2.0	2.3	3.3
Warsaw, Va.	5.0	2.0	1.0	1.0	1.0	4.0
Accomac, Va.	2.5	2.0	3.0	3.0	3.0	3.0
Petersburg, Va.	1.3	2.7	1.7	2.0	1.0	2.7
Holland, Va.	2.0	4.0	3.0	2.3	2.0	3.0
Plymouth, N. C.	2.0	5.0	3.5	3.0	4.0	5.0
			Upper and Central South			
Lexington, Ky.	2.0	2.3	2.7	2.0	3.0	2.0
Athens, Ga.	2.0	2.0	2.0	2.0	2.0	2.0
			Delta			
Henderson, Ky.	3.0	2.7	2.3	2.7	2.7	2.3
Sikeston, Mo.	1.0	2.0	2.0	2.0	2.0	2.0
Wilson, Ark.	2.0	3.0	2.3	2.0	2.0	2.0
Marianna, Ark.	2.7	3.3	2.0	2.7	2.3	2.7
Coahoma, Miss.	1.0	2.7	1.0	1.0	1.3	2.0
Clarksdale, Miss.	2.0	3.0	2.0	2.0	2.0	2.3
Stoneville, Miss. (A)	2.0	2.3	2.0	2.0	2.0	2.0
Stoneville, Miss. (B)	2.0	3.0	2.0	2.0	1.7	1.7
St. Joseph, La.	1.0	2.3	2.0	1.7	1.7	3.0
			West			
Stuttgart, Ark.	2.3	3.3	2.0	2.0	2.0	2.3
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Fayetteville, Ark.	2.0	3.7	2.7	2.7	2.7	3.0
Miami, Okla.	1.3	1.7	2.0	2.0	2.0	2.3
South Coffeeville, Okla.	1.0	2.0	1.0	1.0	2.0	1.0
Bixby, Okla.	2.0	2.3	2.0	2.0	2.7	3.3
Chillicothe, Texas	3.0	3.0	3.0	3.0	2.0	2.0
Lubbock, Texas	2.0	3.0	2.0	2.0	2.0	3.0

Table 23. Seed weight, in grams per 100 seeds, for the strains in Uniform Group V, 1955

Location	Dorman	S-100	Dortch-soy 67	D52-16	D52-18	D52-137
		East Coast				
Linkwood, Md.	13.5	16.7	12.0	14.6	14.4	18.9
Warsaw, Va.	15.6	16.7	11.1	13.6	13.6	17.1
Petersburg, Va.	13.0	15.1	12.1	14.2	12.7	17.5
Holland, Va.	14.9	14.6	12.4	15.2	15.4	16.4
Plymouth, N. C.	11.6	12.5	10.4	13.6	14.1	15.2
Mean	13.7	15.1	11.6	14.2	14.0	17.0
		Upper and Central South				
Lexington, Ky.	8.5	11.2	10.0	10.5	12.5	12.0
Athens, Ga.	12.3	14.5	13.2	13.2	13.8	15.2
Mean	10.4	12.8	11.6	11.8	13.2	13.6
		Delta				
Henderson, Ky.	10.0	12.8	11.0	13.3	13.3	15.3
Wilson, Ark.	9.7	11.3	8.3	11.0	10.0	13.7
Marianna, Ark.	13.0	16.0	10.0	13.0	12.0	16.0
Coahoma, Miss.	12.4	14.9	11.6	12.6	13.6	14.9
Clarksdale, Miss.	8.5	10.5	7.9	8.8	9.1	10.7
Stoneville, Miss. (A)	10.7	13.1	10.6	10.4	10.3	14.3
Stoneville, Miss. (B)	13.4	15.3	11.6	12.9	12.4	16.6
St. Joseph, La.	10.1	13.8	8.9	11.2	11.7	14.4
Mean	11.0	13.5	10.0	11.6	11.6	14.5
		West				
Stuttgart, Ark.	13.0	14.3	11.3	12.3	12.7	18.3
Fayetteville, Ark.	12.3	13.7	9.0	11.3	12.0	17.3
Miami, Okla.	14.8	15.3	12.6	12.2	11.8	18.0
South Coffeeville, Okla.	13.1	14.5	12.0	11.0	12.1	15.7
Bixby, Okla.	14.5	15.2	13.1	12.5	11.7	17.8
Lubbock, Texas	15.9	15.9	13.9	13.7	13.5	18.0
Mean	13.9	14.8	12.0	12.2	12.3	17.5

Table 23. (Continued)

Location	D52-1776	D53-375	D53-492	D53-500	D53-526	Composite A
			East Coast			
Linkwood, Md.	13.6	14.9	12.2	11.9	11.5	13.8
Warsaw, Va.	14.2	14.7	13.2	13.7	13.0	14.8
Petersburg, Va.	12.0	14.0	11.7	12.3	11.7	14.0
Holland, Va.	14.3	14.0	13.5	13.1	13.7	14.6
Plymouth, N. C.	13.3	10.3	11.9	11.9	11.5	12.4
Mean	13.5	13.6	12.5	12.6	12.3	13.9
			Upper and Central South			
Lexington, Ky.	10.8	10.0	7.0	7.5	8.0	8.8
Athens, Ga.	13.2	12.7	11.0	11.5	11.7	12.3
Mean	12.0	11.4	9.0	9.5	9.8	10.6
			Delta			
Henderson, Ky.	13.2	13.0	10.3	10.3	10.0	11.0
Wilson, Ark.	9.3	11.3	9.7	9.0	10.7	9.7
Marianna, Ark.	13.0	12.0	12.0	12.0	12.0	13.0
Coahoma, Miss.	13.2	13.2	13.6	11.8	12.3	12.5
Clarksdale, Miss.	7.9	9.9	8.6	8.9	8.1	8.9
Stoneville, Miss. (A)	10.8	11.2	11.0	10.9	10.8	13.3
Stoneville, Miss. (B)	12.5	14.6	14.0	12.5	11.9	14.2
St. Joseph, La.	10.0	11.7	10.6	9.3	10.1	12.0
Mean	11.2	12.1	11.2	10.6	10.7	11.8
			West			
Stuttgart, Ark.	12.0	13.0	12.3	12.0	12.0	12.3
Fayetteville, Ark.	10.7	14.7	11.3	11.0	9.3	11.3
Miami, Okla.	12.7	14.8	12.7	13.3	13.0	13.1
South Coffeeville, Okla.	11.6	13.8	11.7	11.0	11.0	13.2
Bixby, Okla.	12.3	13.1	14.4	12.3	12.6	12.1
Lubbock, Texas	14.0	13.6	15.9	13.8	15.7	15.8
Mean	12.2	13.8	13.0	12.2	12.3	13.0

PRELIMINARY GROUP V

1955

Thirty-two new strains along with Dorman, Dortchsoy 67, and two composites were grown at seven locations. Parentage of these lines is reported in table 24. Agronomic and chemical data are reported in tables 25 through 30. Data from Linkwood and Sikeston were incomplete because of poor stands for some of the strains. Yields from Wilson were low and were not used in the combined analysis.

Not any of the new lines yielded significantly higher than Dorman, based upon the mean yield for Warsaw, Plymouth, Stoneville, and Bixby. Thirteen strains produced significantly lower seed yields.

Seed quality of the seven lines selected from the cross N48-1248 x Perry was in general poorer than the seed quality of the crosses N48-1248 x Adams, or D632-15 x D49-2525. Several of the selections from D632-15 x D49-2525 had dark hilums and, consequently, showed considerable color diffusion into the seed coat. Strains showing the most color diffusion at Warsaw were: D53-421, -425, -429, -533, and -542. Only two strains, D53-473 and S2-7158, received a score of "3" for purple stain, while all other strains received a score of "1" or "2". S-100 in Uniform Group V received a score of "4".

Five lines had significantly higher oil content than Dorman, while six lines had significantly lower oil content. Twenty-two lines had significantly higher protein content than Dorman. Three lines were significantly higher in both protein and oil, while 16 lines were higher in protein and equal in oil. These lines would have a higher value per bushel than Dorman.

Pod and stem blight caused severe killing of some of the strains in the nursery at Wilson, Arkansas. Strains showing considerable killing were: D52-197, D52-220, D52-222, D52-265, D53-647, D53-660, V51-19, and S2-7158. Eighteen lines were resistant to both bacterial pustule and target spot. Five lines were not included in the target spot nursery because of insufficient seed.

The best lines from this group will replace some of the poorer performing strains in Uniform Group V.

Table 24. Parentage of the strains in Preliminary Group V, 1955

	Strain	Parentage	Generation Composited
1.	Dorman		
2.	Dortchsoy 67		
3.	D52-15	N48-1248 x Adams	F_5
4.	D52-17	N48-1248 x Adams	F_5
5.	D52-91	N48-1248 x Adams	F_5
6.	D52-159	N48-1248 x Perry	F_5
7.	D52-182	N48-1248 x Perry	F_5
8.	D52-195	N48-1248 x Perry	F_5
9.	D52-197	N48-1248 x Perry	F_5
10.	D52-220	N48-1248 x Perry	F_5
11.	D52-222	N48-1248 x Perry	F_5
12.	D52-265	N48-1248 x Perry	F_5
13.	D53-421	D632-15 x D49-2525	F_5
14.	D53-425	D632-15 x D49-2525	F_5
15.	D53-429	D632-15 x D49-2525	F_5
16.	D53-436	D632-15 x D49-2525	F_5
17.	D53-437	D632-15 x D49-2525	F_5
18.	D53-453	D632-15 x D49-2525	F_5
19.	D53-460	D632-15 x D49-2525	F_5
20.	D53-473	D632-15 x D49-2525	F_5
21.	D53-481	D632-15 x D49-2525	F_5
22.	D53-483	D632-15 x D49-2525	F_5
23.	D53-503	D632-15 x D49-2525	F_5
24.	D53-515	D632-15 x D49-2525	F_5
25.	D53-518	D632-15 x D49-2525	F_5
26.	D53-531	D632-15 x D49-2525	F_5
27.	D53-533	D632-15 x D49-2525	F_5
28.	D53-542	D632-15 x D49-2525	F_5
29.	D53-550	D49-2570 x C490	F_5
30.	D53-640	D49-2570 x L3-2010	F_5
31.	D53-647	D49-2570 x L3-2010	F_5
32.	D53-660	D49-2570 x L3-2010	F_5
33.	Composite B	(Equal parts strains 3 - 12)	
34.	Composite C	(Equal parts strains 13 - 28)	
35.	V51-19	Wabash x Ogden	
36.	S2-7158	D49-2525 x L6-5679	F_4

Table 25. General summary of the performance of the strains in Preliminary Group V, 1955

Strain	Seed Yield[1]	Maturity Index	Height	Percent Oil	Percent Protein
Dorman	33.9	9-29	37	20.8	37.5
Dortchsoy 67	33.4	+3	33	20.5	37.5
D52-15	27.2-	+6	44	21.4	38.7
D52-17	30.8	+6	44	21.8+	39.3+
D52-91	29.2-	-2	34	21.8+	39.0+
D52-159	29.1-	+7	37	20.5	40.6+
D52-182	34.4	+6	37	20.4	40.6+
D52-195	27.4-	+1	38	21.1	40.9+
D52-197	33.1	+6	40	21.4	40.6+
D52-220	33.4	+11	37	20.8	39.6+
D52-222	32.0	+16	41	20.3	39.5+
D52-265	25.2-	+4	40	21.2	40.7+
D53-421	29.9	+4	39	19.9-	40.2+
D53-425	30.5	+2	42	20.2	39.0+
D53-429	32.9	+6	44	19.8-	39.2+
D53-436	27.7-	+1	30	21.5+	39.2+
D53-437	28.1-	-1	30	19.8-	40.6+
D53-453	31.1	+2	42	21.1	38.5
D53-460	31.4	+2	44	20.2	40.8+
D53-473	30.4	-1	42	22.0+	37.8
D53-481	32.0	-1	31	21.1	38.7+
D53-483	27.4-	0	31	20.4	39.3+
D53-503	35.5	-1	34	21.5+	37.4
D53-515	32.8	0	41	20.8	37.9
D53-518	30.0	0	33	19.6-	39.8+
D53-531	29.2-	+2	40	21.1	38.2
D53-533	35.0	-1	42	21.3	37.9
D53-542	35.7	-1	41	20.4	38.4
D53-550	25.7-	+2	37	19.9-	41.6+
D53-640	28.2-	+11	35	18.8-	40.6+
D53-647	25.4-	+2	25	21.1	37.7
D53-660	27.4-	+3	34	20.6	38.4
Composite B	32.7	+8	-	21.1	39.5+
Composite C	31.4	+2	-	20.7	38.8+
V51-19	29.0-	0	44	21.5+	37.9
S2-7158	33.0	-1	35	21.4	37.4
L.S.D. (5%)	4.1			0.7	1.2
C.V.	13%			3%	3%

1/Average for Warsaw, Plymouth, Stoneville, and Bixby.
2/Stoneville data.
3/Warsaw data.

Table 25. (Continued)

Strain	Shattering[2/]	Bacterial Pustule[2/]	Target Spot[2/]	Purple Stain[3/]
Dorman	1.0	3.5	3.0	1.0
Dortchsoy 67	2.0	4.0	4.0	1.0
D52-15	1.0	1.0	2.0	2.0
D52-17	1.0	1.0	2.0	1.0
D52-91	1.0	2.0	1.0	2.0
D52-159	1.0	1.5	2.5	1.0
D52-182	1.0	2.5	1.5	2.0
D52-195	1.0	1.0	1.0	2.0
D52-197	1.0	1.0	1.0	2.0
D52-220	1.0	1.0	1.5	2.0
D52-222	1.0	2.0	3.0	1.0
D52-265	3.0	3.0	4.5	2.0
D53-421	1.0	1.0	2.0	1.0
D53-425	1.0	1.0	2.5	1.0
D53-429	1.0	1.0	2.0	1.0
D53-436	1.0	1.0	-	1.0
D53-437	1.0	1.0	1.0	1.0
D53-453	1.0	1.0	2.0	1.0
D53-460	1.0	1.0	2.5	1.0
D53-473	1.0	1.0	1.5	3.0
D53-481	1.0	1.0	1.5	2.0
D53-483	1.0	1.0	2.0	1.0
D53-503	2.0	1.0	-	1.0
D53-515	1.0	3.5	1.5	2.0
D53-518	1.0	1.0	1.5	1.0
D53-531	1.0	1.0	2.0	1.0
D53-533	1.0	1.0	-	1.0
D53-542	1.0	1.0	-	2.0
D53-550	1.0	1.0	1.0	1.0
D53-640	1.0	1.0	1.0	1.0
D53-647	1.0	1.0	1.0	2.0
D53-660	1.0	1.0	1.5	2.0
Composite B	-	-	-	2.0
Composite C	-	-	-	2.0
V51-19	1.0	2.5	2.0	2.0
S2-7158	2.0	1.0	-	3.0
L.S.D. (5%)				
C.V.				

Table 26. Seed yield, in bushels per acre, for the strains in Preliminary Group V, 1955

Strain	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N. C.	Sikes-ton, Mo.	Wilson, Ark.	Stone-ville, Miss.	Bixby, Okla.
Dorman	27.4	28.0	33.0	30.3	11.3	38.9	35.5
Dortchsoy 67	34.6+	28.2	32.5	37.6	16.1	41.8	31.1
D52-15	35.6+	25.3	29.7	33.5	9.9	28.0	25.8
D52-17	-	25.6	24.8	50.9	12.3	40.1	32.6
D52-91	-	27.8	29.8	35.0	9.6	27.2-	31.9
D52-159	32.0	31.0	32.4	38.9	7.5	31.8	21.8-
D52-182	36.4+	30.8	33.0	44.0	11.2	44.0	29.7
D52-195	-	26.8	31.6	33.3	9.1	23.3-	28.1
D52-197	28.8	28.5	29.5	45.8	10.6	29.4	45.2
D52-220	35.8+	30.1	27.0	37.5	5.8	47.4	28.8
D52-222	28.8	29.0	30.2	42.8	10.9	44.3	24.7
D52-265	30.0	26.9	26.1	32.1	4.6-	29.0	18.6-
D53-421	29.4	25.0	30.2	32.3	13.7	40.1	24.5-
D53-425	26.0	26.4	36.2	41.2	15.2	41.4	18.0-
D53-429	31.4	27.3	34.2	44.6	12.8	43.0	27.2
D53-436	29.8	26.6	28.1-	26.1	12.2	24.4-	31.7
D53-437	34.2+	24.1-	28.3-	30.8	8.6	38.5	21.6-
D53-453	31.3	26.9	32.4	29.3	11.4	36.8	28.6
D53-460	35.2+	26.0	31.4	32.4	14.6	43.2	24.4-
D53-473	28.2	26.4	25.8-	32.3	7.8	42.6	26.5
D53-481	33.2+	26.6	28.5-	32.7	14.1	41.6	31.2
D53-483	27.6	25.8	28.2-	38.4	9.0	31.2	24.3-
D53-503	31.8	29.0	34.9	26.3	16.4	43.2	34.7
D53-515	31.6	30.2	30.4	39.6	7.7	44.5	26.2
D53-518	32.6	24.9	29.7	38.8	13.7	38.7	27.6
D53-531	-	25.8	30.1	29.9	12.5	35.2	25.9
D53-533	32.8	27.4	36.4	32.5	18.3+	43.6	32.3
D53-542	30.9	26.2	36.0	33.5	16.5	52.4+	28.4
D53-550	-	24.4	26.8	38.4	9.6	32.1	19.5-
D53-640	-	28.0	27.4	37.8	13.0	36.6	20.6-
D53-647	-	20.2-	29.5	-	9.8	19.0-	33.1
D53-660	-	10.5-	29.4	-	14.2	29.1	40.4
Composite B	32.7	27.8	31.1	35.5	9.8	34.2	29.8
Composite C	27.2	27.9	31.7	27.9	12.0	42.2	31.8
V51-19	-	25.0	28.0	22.2	10.9	33.7	29.4
S2-7158	37.0+	27.6	30.4	37.2	6.1	43.0	30.9
L.S.D. (5%)	5.7	3.7	4.3		6.7	11.3	11.0
C.V.	9%	7%	7%		29%	15%	19%

Table 27. Summary of the oil percentage for the strains in Preliminary Group V, 1955

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N. C.	Wilson, Ark.	Stoneville, Miss.	Bixby, Okla.
Dorman	18.6	19.6	20.4	21.7	21.2	23.1
Dortchsoy 67	19.4	18.4	20.0	21.7	22.1	21.6
D52-15	19.9	20.4	21.6	22.1	23.1	21.1
D52-17	20.5	21.5	21.1	22.7	23.2	21.5
D52-91	20.9	20.2	21.1	23.0	22.6	22.9
D52-159	19.0	19.6	19.5	22.2	22.0	20.9
D52-182	19.4	19.6	19.5	20.6	22.1	21.3
D52-195	20.4	20.6	19.6	21.9	22.8	21.2
D52-197	19.3	21.2	21.2	20.6	22.9	23.3
D52-220	19.5	20.7	20.1	20.1	21.9	22.2
D52-222	18.7	20.2	19.6	20.3	21.8	21.1
D52-265	19.6	20.8	20.8	21.4	23.3	21.1
D53-421	18.4	18.8	19.2	21.4	21.8	19.8
D53-425	18.0	18.7	19.3	22.0	21.7	21.6
D53-429	18.5	18.6	18.8	20.5	21.2	21.0
D53-436	19.6	20.2	20.9	22.1	23.1	23.0
D53-437	17.5	18.4	20.3	20.8	21.2	20.3
D53-453	19.5	20.2	20.5	22.2	22.3	22.0
D53-460	18.8	19.6	20.0	21.9	21.0	19.9
D53-473	19.8	21.3	22.0	22.9	23.2	22.7
D53-481	19.4	20.2	21.1	22.3	21.1	22.5
D53-483	17.8	19.5	20.4	21.8	21.4	21.5
D53-503	19.1	20.2	21.8	22.7	22.4	23.0
D53-515	18.5	19.9	20.8	21.5	22.6	21.7
D53-518	18.4	18.7	18.0	20.7	20.7	21.1
D53-531	19.7	20.4	20.3	21.9	22.4	22.0
D53-533	19.1	20.2	21.8	21.8	22.4	22.6
D53-542	18.4	19.4	20.3	21.5	21.8	21.2
D53-550	18.4	19.5	19.4	20.3	21.0	21.0
D53-640	17.4	17.6	17.9	20.6	19.3	19.9
D53-647	19.6	19.7	21.6	21.0	21.8	23.0
D53-660	19.1	18.0	21.1	21.6	22.0	21.6
Composite B	19.2	20.4	20.7	21.7	22.1	22.3
Composite C	18.9	19.6	20.6	21.8	21.7	21.4
V51-19	19.6	20.6	21.6	21.6	22.7	22.8
S2-7158	19.6	19.9	21.8	21.9	22.3	22.6
Mean	19.1	19.8	20.4	21.6	22.0	21.7

Table 28. Summary of the protein percentage for the strains in Preliminary Group V, 1955

Strain	Link-wood, Md.	Warsaw, Va.	Ply-mouth, N. C.	Wilson, Ark.	Stone-ville, Miss.	Bixby, Okla.
Dorman	38.3	38.3	38.9	36.6	38.1	34.9
Dortchsoy 67	38.0	37.6	38.3	35.4	38.1	37.3
D52-15	40.0	37.7	39.2	37.3	38.7	39.3
D52-17	39.9	36.6	41.1	38.3	40.4	39.5
D52-91	39.9	38.6	43.3	37.3	39.7	35.3
D52-159	41.5	38.4	42.6	38.8	40.6	41.5
D52-182	41.7	38.4	43.2	40.0	40.4	40.1
D52-195	41.5	39.3	43.6	39.1	40.3	41.6
D52-197	42.3	39.6	41.8	41.2	40.9	37.8
D52-220	41.4	37.9	41.4	40.6	39.3	36.9
D52-222	41.8	37.3	42.0	39.4	39.5	36.8
D52-265	41.4	38.8	42.6	40.9	39.1	41.3
D53-421	40.2	37.1	43.7	38.9	40.5	41.0
D53-425	39.8	36.7	42.6	37.8	40.0	36.8
D53-429	39.5	37.4	43.1	38.4	40.2	36.8
D53-436	39.3	38.4	42.5	38.3	39.5	37.2
D53-437	41.7	39.3	42.0	38.1	41.3	41.4
D53-453	40.2	35.8	41.5	36.9	39.8	36.8
D53-460	40.6	38.7	43.7	39.0	41.2	41.6
D53-473	38.5	36.2	40.4	36.1	39.1	36.3
D53-481	39.5	36.4	41.9	37.5	40.6	36.5
D53-483	40.1	38.4	40.6	37.7	40.0	38.9
D53-503	39.6	37.6	38.6	36.8	37.9	34.1
D53-515	39.3	36.5	39.4	35.9	37.7	38.5
D53-518	39.6	36.5	42.4	39.4	41.7	39.4
D53-531	38.3	34.8	41.7	36.3	39.9	38.3
D53-533	38.6	36.4	40.7	36.0	38.9	37.0
D53-542	38.4	37.8	40.0	36.5	39.5	38.4
D53-550	42.5	39.2	44.5	41.4	42.2	39.5
D53-640	40.7	39.4	44.1	38.8	41.2	39.6
D53-647	37.6	38.0	37.8	37.2	39.2	36.2
D53-660	38.9	38.6	39.0	38.8	39.6	35.5
Composite B	41.0	37.8	41.7	38.4	39.8	38.3
Composite C	37.9	37.2	41.3	37.3	40.4	38.6
V51-19	38.2	36.1	41.4	37.3	39.3	35.2
S2-7158	37.8	37.0	39.5	37.1	37.4	35.5
Mean	39.9	37.7	41.4	38.1	39.8	38.0

Table 29. Summary of the height data for strains in Preliminary Group V, 1955

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N. C.	Sikeston, Mo.	Wilson, Ark.	Stoneville, Miss.	Bixby, Okla.
Dorman	44	30	48	42	34	33	28
Dortchsoy 67	38	30	39	33	29	35	28
D52-15	45	42	53	49	28	50	42
D52-17	46	36	55	50	26	55	42
D52-91	40	29	42	39	24	34	32
D52-159	42	35	45	41	27	37	30
D52-182	42	36	43	45	23	42	30
D52-195	42	37	45	44	26	37	34
D52-197	46	38	48	47	27	37	37
D52-220	42	32	44	42	19	45	38
D52-222	44	36	48	48	29	44	38
D52-265	43	37	51	52	20	41	35
D53-421	44	38	50	47	28	38	31
D53-425	45	40	52	50	33	42	35
D53-429	47	41	52	51	36	48	33
D53-436	36	28	40	34	25	25	25
D53-437	40	34	34	37	22	27	27
D53-453	45	41	47	46	35	44	39
D53-460	48	39	49	50	34	43	42
D53-473	46	35	54	47	29	44	36
D53-481	40	26	33	40	27	27	27
D53-483	36	25	37	40	24	26	28
D53-503	40	36	49	44	30	37	33
D53-515	47	39	48	50	25	43	34
D53-518	40	31	38	40	27	30	25
D53-531	44	39	48	46	30	39	34
D53-533	47	38	51	45	29	47	37
D53-542	44	39	52	45	32	45	31
D53-550	40	33	45	42	25	37	34
D53-640	41	33	47	42	18	38	24
D53-647	30	21	32	32	25	17	20
D53-660	40	28	44	36	30	37	24
V51-19	45	37	56	46	31	49	46
S2-7158	42	33	43	44	14	36	33

Table 30. Summary of the seed quality scores for strains in Preliminary Group V, 1955

Strain	Linkwood, Md.	Warsaw, Va.	Plymouth, N. C.	Sikeston, Mo.	Wilson, Ark.	Stoneville, Miss.	Bixby, Okla.
Dorman	2.0	1.0	2.0	1.0	2.0	1.0	2.0
Dortchsoy 67	1.0	1.0	1.5	2.0	3.0	2.5	2.5
D52-15	2.0	2.0	3.0	2.0	3.0	2.0	1.0
D52-17	1.5	2.0	3.5	2.0	2.5	2.5	2.0
D52-91	2.5	1.0	3.5	3.0	3.0	2.0	2.5
D52-159	2.5	3.0	4.0	3.0	3.0	2.5	3.5
D52-182	3.0	4.0	3.5	3.0	3.0	2.0	2.5
D52-195	4.0	4.0	3.5	3.0	3.0	2.0	2.5
D52-197	3.0	3.0	4.0	3.0	3.0	3.0	2.0
D52-220	2.5	3.0	3.5	3.0	3.0	2.0	2.5
D52-222	3.0	3.0	3.0	3.0	3.0	2.0	3.0
D52-265	3.0	2.0	3.5	3.0	3.0	2.0	3.0
D53-421	2.0	2.0	2.5	1.0	2.0	1.5	2.0
D53-425	2.0	2.0	2.0	1.0	2.0	2.0	1.5
D53-429	2.0	2.0	2.5	1.0	2.0	1.5	1.5
D53-436	2.0	1.0	2.0	2.0	3.0	3.0	1.0
D53-437	1.0	2.0	2.5	1.0	1.0	1.5	1.0
D53-453	2.0	3.0	2.0	1.0	2.0	2.0	2.0
D53-460	2.0	1.0	3.0	1.0	2.5	1.5	1.0
D53-473	2.0	2.0	4.5	2.0	1.5	1.0	2.0
D53-481	2.0	1.0	3.0	1.0	1.5	1.0	1.0
D53-483	2.0	1.0	3.0	2.0	1.5	1.5	2.5
D53-503	2.0	1.0	2.0	2.0	2.0	1.5	1.0
D53-515	2.0	3.0	3.0	2.0	1.5	1.0	2.0
D53-518	1.5	1.0	3.0	2.0	1.0	1.5	1.5
D53-531	2.5	2.0	2.5	2.0	1.5	1.5	2.0
D53-533	2.0	1.0	2.5	1.0	2.0	1.5	2.0
D53-542	2.0	2.0	2.0	2.0	2.0	1.0	2.0
D53-550	3.5	3.0	3.0	2.0	1.0	2.0	2.0
D53-640	2.0	2.0	3.0	3.0	1.0	1.0	2.0
D53-647	2.0	3.0	3.5	-	1.0	2.5	1.0
D53-660	3.0	3.0	3.0	-	1.0	3.0	2.0
Composite B	3.0	3.0	3.5	3.0	3.0	2.0	2.5
Composite C	2.0	3.0	3.0	2.0	2.0	1.0	2.0
V51-19	3.0	1.0	4.5	3.0	2.0	2.0	2.0
S2-7158	2.0	3.0	4.0	2.0	3.0	2.5	1.5

UNIFORM GROUP VI

1955

	Variety or Strain	Parentage	Generation Composited
1.	Ogden	Tokio x P.I. 54610	
2.	Lee	S-100 x CNS	F_6
3.	N51-1971	Roanoke x Ogden	F_6
4.	N51-2043	Roanoke x Ogden	F_6
5.	N51-2140	Roanoke x N45-745	F_6
6.	D51-4839	Roanoke x N45-745	F_6
7.	D51-4863	Roanoke x N45-745	F_6
8.	D51-4871	Roanoke x N45-745	F_6
9.	D51-4888	Roanoke x N45-745	F_6
10.	D51-4891	Roanoke x N45-745	F_6
11.	D51-4977	Roanoke x N45-745	F_6
12.	D51-5100	Roanoke x N45-745	F_6

Thirty-nine Group VI nurseries were planted. Results of 35 nurseries are summarized in tables 31 through 39. In contrast to the 1954 results, when only 8 nurseries had a mean yield of 30 bushels per acre, 26 nurseries had a mean yield of 30 bushels or more per acre in 1955.

Ogden which had been the leading variety of this maturity class is being replaced by Lee as rapidly as seed stocks are available. Lee is superior to Ogden in seed holding, seed quality and resistance to diseases. In addition to these advantages for Lee, the green seed coat of Ogden has been meeting with objections in foreign markets. Over the 5-year period, 1951-1955 as an average of all Group VI tests, Lee has averaged 6 per cent higher in yield than Ogden. In 1955 there was little difference in yield between Ogden and Lee, except in the Delta area where Lee yielded 13 per cent more than Ogden. For the two-year period, 1954-55, Lee averaged 0.1 per cent higher in oil than Ogden and 0.6 per cent higher in protein.

In addition to Ogden and Lee, the Group VI nursery included the same 10 strains as in 1954. These same strains will be continued in 1956 to permit a three-year study of variety x year x location interaction.

Mean seed yield, oil content, protein content, maturity and height are reported in table 31 for each area, along with the two-year means for seed yield, oil and protein percentages. Ratings are also given for shattering, bacterial pustule, and target spot. All strains are superior to Ogden in seed holding except N51-2140. Similar results were obtained in 1953 and 1954. Nine of the strains are resistant to bacterial pustule and only one, N51-2140, is susceptible to target spot. This strain was rated as susceptible in the target spot nursery in 1953.

Strains of VI maturity produced excellent yields in the Southeast, but in general, strains which make adequate growth in the East Coast and Delta areas are too short in much of the Southeast for satisfactory harvesting. Taller strains such as D51-4871 make adequate growth in the Southeast but make excessive growth in other areas. An intermediate type such as D51-5100 may be acceptable in all areas.

In 1954, both Lee and D51-4888 yielded significantly more than Ogden in the East Coast area. In 1955, neither strain differed significantly from Ogden. However, the two-year mean for D51-4888 in the East Coast area is 2.4 bushels per acre higher than Ogden. In addition to this, D51-4888 has averaged 0.6 per cent higher in oil and 0.2 per cent higher in protein in the East Coast area. D51-4888 yielded significantly higher than Ogden in the Delta tests.

Table 31. General summary of the performance for strains in Uniform Group VI, 1955

	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839
Seed Yield - 1955						
East	31.8	31.8	32.3	33.5+	32.2	31.7
Southeast	35.8	37.2	35.0	32.5-	34.0	32.3-
Upper & Cen. South	23.6	21.9	33.5	24.5	25.3	21.9
Delta	32.8	37.1+	32.1	33.0	30.7	31.7
West	26.9	26.7	22.2-	26.6	25.0	23.1-
-1954-55						
East	27.2	28.4	27.6	28.6	27.6	27.3
Southeast	27.8	28.7	27.8	25.4	26.0	25.4
Upper & Cen. South	17.6	17.1	19.8	18.7	19.5	16.4
Delta	31.0	36.2	30.2	32.1	28.2	31.7
West	17.6	18.4	14.9	17.0	16.1	16.0
Oil - 1955						
East	19.6	19.7	20.8+	20.4+	20.9+	19.7
Southeast	21.6	21.3-	22.7+	22.4+	22.6+	22.0+
Delta	20.3	20.7+	21.3+	20.8+	21.5+	20.0-
West	20.6	21.1	21.4+	20.9	20.8	20.3
Regional	20.5	20.6	21.5	21.1	21.7	20.5
1954-55						
East	20.0	19.8	21.0	20.6	20.8	19.9
Southeast	21.5	21.3	22.5	22.0	22.1	21.7
Delta	21.0	21.3	22.1	21.5	21.9	20.8
West	20.5	21.1	21.2	20.8	20.8	20.4
Regional	20.6	20.7	21.6	21.2	21.5	20.6
Protein - 1955						
East	41.5	42.8+	40.8-	41.6	40.9-	42.1+
Southeast	40.6	41.2+	39.5-	40.5	40.3	40.5
Delta	40.9	41.5+	39.4-	40.7	40.8	42.1+
West	40.7	39.2-	38.8-	40.2	40.9	41.0
Regional	40.9	41.6	39.8	40.8	40.6	41.5
- 1954-55						
East	42.6	43.7	41.8	42.6	42.1	42.9
Southeast	41.5	42.3	40.7	41.4	41.2	41.3
Delta	40.6	40.9	39.4	40.7	40.6	41.3
West	41.5	40.4	40.4	40.9	41.8	41.5
Regional	41.7	42.3	40.9	41.6	41.5	42.0

Table 31. (Continued)

	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100
Seed Yield - 1955						
East	31.2	30.2-	32.8	30.2-	30.9	30.9
Southeast	35.0	35.4	32.7-	36.9	36.1	37.3
Upper & Cen. South	21.3	23.9	23.2	22.4	22.2	25.9
Delta	32.1	32.6	36.1+	32.9	32.5	34.5
West	23.5-	21.5-	28.2	22.5-	24.7	24.3
- 1954-55						
East	26.6	25.1	29.6	25.2	26.3	26.8
Southeast	27.5	28.2	26.1	28.8	28.3	28.6
Upper & Cen. South	16.0	17,0	17.7	15.6	17.6	19.1
Delta	30.6	32.1	33.2	31.8	30.2	33.3
West	16.4	15.0	18.4	14.9	16.7	15.5
Oil - 1955						
East	20.4+	20.4+	20.0+	20.0+	19.6	19.4
Southeast	22.2+	22.6+	22.3+	22.1+	21.9+	21.9+
Delta	20.3	21.3+	20.8+	20.9+	20.9+	20.8+
West	20.6	20.4	20.9	20.6	20.5	20.7
Regional	21.1	21.3	21.1	20.9	20.7	20.6
- 1954-55						
East	20.5	20.6	20.6	20.3	20.1	19.9
Southeast	21.7	22.3	21.9	22.1	22.0	21.9
Delta	20.9	22.0	21.6	21.7	21.3	21.5
West	20.6	20.4	20.9	20.3	20.5	20.6
Regional	21.0	21.3	21.3	21.0	20.9	20.9
Protein - 1955						
East	40.7-	41.4	41.7	41.6	41.4	42.1+
Southeast	39.7-	40.0-	40.1-	40.8	39.8-	39.9-
Delta	41.0	40.0-	40.4	40.5	40.0-	39.8-
West	40.0	39.1-	39.1-	40.1	40.1	40.4
Regional	40.2	40.2	40.5	40.8	40.4	40.7
- 1954-55						
East	41.9	42.1	42.2	42.6	42.2	42.6
Southeast	41.0	41.0	40.9	41.5	40.5	40.7
Delta	41.0	39.6	39.8	40.3	40.2	39.9
West	40.4	40.1	40.6	41.3	40.8	41.1
Regional	41.2	41.0	41.2	41.6	41.1	41.3

Table 31. (Continued)

	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839
Maturity Index - 1955						
East	10-19	+9	+4	0	-1	-2
Southeast	10-9	+6	+4	-2	-2	-2
Upper & Cen. South	10-7	+9	-3	+2	-5	+2
Delta	10-10	+9	0	-3	-3	-2
West	10-19	+6	-1	-3	-3	-2
Height - 1955						
East	38	36	42	34	40	30
Southeast	24	24	26	21	25	18
Upper & Cen. South	36	34	39	32	38	29
Delta	37	33	41	34	40	31
West	29	29	31	27	30	23
Shattering[1/]	3.0	1.0	1.0	2.0	3.0	1.0
Bacterial pustule[1/]	2.5	1.0	3.0	3.0	1.0	1.0
Target Spot[1/]	2.0	1.0	2.0	1.5	4.0	1.0

1/Stoneville data.

Table 31. (Continued)

	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100
Maturity Index - 1955						
East	0	+9	0	+2	+4	+2
Southeast	-3	+5	-2	+2	0	0
Upper & Cen. South	0	+5	-5	+4	+1	+1
Delta	-1	+4	-2	+2	0	0
West	-1	+5	-3	+2	0	-1
Height - 1955						
East	30	47	34	48	44	42
Southeast	20	32	22	32	34	29
Upper & Cen. South	29	41	33	40	40	39
Delta	32	48	35	46	44	44
West	22	39	28	38	38	32
Shattering[1/]	2.0	2.0	1.0	1.0	1.0	1.0
Bacterial Pustule[1/]	1.0	1.0	1.0	1.0	1.0	1.0
Target Spot[1/]	1.0	1.5	1.5	2.5	2.0	1.5

Table 32. Seed yield, in bushels per acre, for the strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839	D51-4863
			East Coast				
Warsaw, Va.	33.3	35.3	34.6	36.9+	37.4+	33.8	32.7
Accomac, Va.	13.1	15.6	20.0+	21.3+	16.4	14.2	17.3
Norfolk, Va.	29.4	27.6	29.4	33.3	31.1	31.5	28.1
Petersburg, Va.	38.8	41.6	37.8	41.3	37.5	38.0	39.0
Holland, Va.	36.9	35.3	37.2	36.5	35.9	37.1	35.9
Plymouth, N. C.	30.3	32.8	28.5	31.1	30.6	25.2-	27.8
Willard, N. C.	31.3	24.1	26.2	28.9	30.1	27.6	25.4
Clayton, N. C.	32.7	27.4-	34.0	29.0-	33.7	36.8+	31.9
Hartsville, S. C.	40.5	46.6	43.2	42.7	37.0	41.8	43.2
Mean	31.8	31.8	32.3	33.5+	32.2	31.7	31.2
			Southeast				
Tallassee, Ala.	39.2	37.5	37.2	31.8-	39.5	34.8	32.8-
Gainesville, Fla.	32.8	34.2	28.7	27.4	35.4	24.3-	33.8
Marianna, Fla.	42.0	40.5	41.6	39.7	38.1	36.8	40.6
Quincy, Fla.	29.1	31.0	27.4	28.1	30.3	28.4	30.5
Jay, Fla.	38.9	42.8	42.8	31.7	35.2	38.0	37.5
Walnut Hill, Fla.	40.6	42.4	40.3	37.3	39.6	35.3	38.3
Fairhope, Ala.	25.7	33.2	26.1	30.0	25.4	30.2	29.8
Baton Rouge, La.	37.9	36.0	37.2	33.0	28.7	30.8	36.8
Mean	35.8	37.2	35.0	32.5-	34.0	32.3-	35.0
			Upper and Central South				
Belle Mina, Ala.	14.9	9.9	14.9	20.0	17.0	20.8	15.8
Athens, Ga.	17.9	14.3	18.6	15.9	17.5	15.1	14.4
Experiment, Ga.	37.1	42.2	47.2	44.3	44.6	31.1	40.4
State College, Miss.	24.7	21.2	19.9	17.7	22.2	20.6	14.6
Mean	23.6	21.9	25.2	24.5	25.3	21.9	21.3
			Delta				
Sikeston, Mo.	16.0	19.7	17.3	12.0	12.7	15.7	19.3
Wilson, Ark.	16.9	22.6	17.5	16.1	16.6	14.9	19.1
Marianna, Ark.	35.0	40.7	33.2	35.9	34.1	35.8	34.9
Coahoma, Miss.	43.1	49.1	45.4	47.1	46.4	40.8	41.5
Stoneville, Miss. (A)	35.1	39.6	30.7	34.3	33.1	29.5	32.1
Stoneville, Miss. (B)	37.7	43.1+	38.9	42.8+	37.3	41.2+	35.8
St. Joseph, La.	45.5	45.1	41.7	43.0	35.2-	44.0	41.9
Mean	32.8	37.1+	32.1	33.0	30.7	31.7	32.1
			West				
Stuttgart, Ark.	31.3	35.1	33.7	35.1	33.8	29.7	33.9
Curtis, La.	37.9	30.6	24.8	37.4	36.6	31.9	31.4
Fayetteville, Ark.	13.3	20.1	11.6	13.3	11.0	12.6	13.2
Bixby, Okla.	32.8	30.0	27.6	31.1	28.2	26.8	25.3
Milburn, Okla.[1/]	4.5	7.7	6.4	6.3	2.1	5.5	5.1
Chillicothe, Texas	14.8	16.3	12.2	12.3	15.1	11.1	12.8
Lubbock, Texas	31.1	28.1	23.1	30.7	25.4	26.5	24.4
Mean	26.9	26.7	22.2-	26.6	25.0	23.1-	23.5-

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

Table 32: (Continued)

Location	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100	L.S.D. (5%)	C.V.
			East Coast				
Warsaw, Va.	30.0	36.4	33.3	33.8	34.7	3.4	6%
Accomac, Va.	12.5	13.7	16.0	18.9+	12.0	5.0	19%
Norfolk, Va.	19.8-	28.9	22.4-	25.9	25.9	6.9	15%
Petersburg, Va.	40.6	39.9	38.4	39.9	39.7	N.S.	6%
Holland, Va.	32.3	37.9	37.2	32.3	36.1	N.S.	8%
Plymouth, N. C.	29.6	30.4	31.6	29.9	31.8	4.0	8%
Willard, N. C.	26.8	28.1	27.4	26.7	27.7	N.S.	8%
Clayton, N. C.	36.7+	38.1+	27.8-	31.9	31.3	3.7	7%
Hartsville, S. C.	42.4	41.3	37.8	39.4	39.5	N.S.	11%
Mean	30.2-	32.8	30.2-	30.9	30.9	1.6	9%
			Southeast				
Tallassee, Ala.	35.5	36.3	36.9	35.5	30.9-	4.9	8%
Gainesville, Fla.	36.7	31.3	40.0	37.6	41.7+	7.3	13%
Marianna, Fla.	40.3	35.8	38.8	40.3	40.7	N.S.	11%
Quincy, Fla.	28.8	34.9	29.6	29.7	30.8	N.S.	8%
Jay, Fla.	41.6	34.0	38.4	35.3	38.8	N.S.	11%
Walnut Hill, Fla.	36.0	36.3	38.3	44.4	40.1	N.S.	9%
Fairhope, Ala.	35.1	27.6	31.4	34.4	35.5	7.0	14%
Baton Rouge, La.	29.2	25.1	42.0	32.3	39.9	9.0	16%
Mean	35.4	32.7-	36.9	36.1	37.3	2.3	12%
			Upper and Central South				
Belle Mina, Ala.	11.9	17.1	12.7	16.7	16.7	4.3	16%
Athens, Ga.	13.7	18.7	12.5	14.9	14.8	N.S.	16%
Experiment, Ga.	43.4	39.6	43.3	37.6	48.7	8.4	12%
State College, Miss.	26.7	17.6	21.1	19.8	23.3	N.S.	27%
Mean	23.9	23.2	22.4	22.2	25.9	N.S.	18%
			Delta				
Sikeston, Mo.	18.4	19.1	17.3	17.8	17.2	N.S.	20%
Wilson, Ark.	18.1	14.7	18.1	18.8	20.0	4.1	14%
Marianna, Ark.	30.6	40.8	32.5	32.8	35.3	N.S.	13%
Coahoma, Miss.	41.7	43.7	45.6	44.3	46.6	N.S.	8%
Stoneville, Miss. (A)	39.4	39.4	31.5	37.8	41.9	N.S.	14%
Stoneville, Miss. (B)	38.8	42.4+	42.6+	38.4	39.9	3.4	5%
St. Joseph, La.	41.1	52.6+	42.5	37.3-	40.5	5.3	7%
Mean	32.6	36.1+	32.9	32.5	34.5	2.2	11%
			West				
Stuttgart, Ark.	30.3	36.7	32.7	35.7	34.3	4.0	7%
Curtis, La.	32.2	38.5	35.5	36.1	28.9	N.S.	15%
Fayetteville, Ark.	12.0	16.4	11.0	15.2	15.1	N.S.	27%
Bixby, Okla.	26.5	33.1	25.6	27.7	30.1	N.S.	18%
Milburn, Okla.[1/]	3.2	5.4	1.9	3.4	6.2		
Chillicothe, Texas	13.2	16.1	10.9	12.6	17.1	4.0	17%
Lubbock, Texas	14.5	28.1	19.6	20.7	20.3	6.9	17%
Mean	21.5-	28.2	22.5-	24.7	24.3-	2.6	16%

Table 33. Summary of the percentage oil for strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839	D51-4863
			East Coast				
Warsaw, Va.	19.2	19.5	20.8+	20.3+	20.9+	18.7	19.9+
Accomac, Va.	18.9	19.1	19.2	19.3	19.5	19.3	19.4
Norfolk, Va.	18.6	19.3+	20.3+	19.2	19.2	18.2	19.3+
Petersburg, Va.	18.9	18.7	20.0+	19.5	20.5+	19.3	19.5
Holland, Va.	19.0	18.9	20.3+	19.1	19.9+	18.6	19.8+
Plymouth, N. C.	19.4	19.4	20.3+	20.1+	20.2+	19.0	20.2+
Willard, N. C.	21.0	20.6	21.5+	21.8+	22.9+	21.8+	21.8+
Clayton, N. C.	20.2	20.1	21.6+	20.9+	21.7+	20.7	21.2+
Hartsville, S. C.	21.6	21.5	23.0+	23.2+	23.3+	22.1	22.3+
Mean	19.6	19.7	20.8+	20.4+	20.9+	19.7	20.4+
			Southeast				
Tallassee, Ala.	21.3	21.5	22.7+	22.3+	22.4+	21.7	21.5
Gainesville, Fla.	21.4	21.3	23.0+	22.8+	22.5+	22.6+	22.9+
Marianna, Fla.	20.9	19.5-	21.3	21.8+	22.0+	21.2	21.7+
Walnut Hill, Fla.	21.5	21.0-	22.7+	22.2+	22.8+	21.5	21.7
Fairhope, Ala.	22.3	22.7	23.1+	22.8+	22.7	22.9+	23.2+
Baton Rouge, La.	22.0	22.0	23.3+	22.7+	23.1+	21.9	22.4
Mean	21.6	21.3-	22.7+	22.4+	22.6+	22.0+	22.2+
			Upper and Central South				
Experiment, Ga.	23.1	22.2	23.3	22.7	23.3	22.6	23.5
			Delta				
Sikeston, Mo.	18.5	18.9	20.1+	17.5	18.5	17.1-	19.4
Marianna, Ark.	20.9	21.8+	22.0+	22.0+	23.1+	20.7	20.6
Coahoma, Miss.	21.7	21.8	22.5+	22.4+	22.5+	21.6	21.5
Stoneville, Miss. (A)	20.9	21.7+	21.5	21.1	22.0+	19.8-	20.9
Stoneville, Miss. (B)	21.0	20.8	21.8+	21.7+	22.5+	20.7	20.2-
St. Joseph, La.	18.8	19.4+	19.7+	19.8+	20.3+	19.4+	18.9
Mean	20.3	20.7+	21.3+	20.8+	21.5+	20.0-	20.3
			West				
Fayetteville, Ark.	20.3	20.0	20.2	19.8	19.6	19.2	19.3
Bixby, Okla.	21.1	22.1	22.1	21.6	21.6	21.3	21.9
Lubbock, Texas	20.4	21.2	21.8	21.2	21.2	20.4	20.7
Mean	20.6	21.1	21.4+	20.9	20.8	20.3	20.6

Table 33. (Continued)

Location	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100	L.S.D. (5%)
		East Coast				
Warsaw, Va.	19.6	18.8	19.6	19.8+	19.4	.6
Accomac, Va.	19.1	18.8	19.3	18.9	18.6	N.S.
Norfolk, Va.	18.8	18.5	18.3	18.3	18.2	.7
Petersburg, Va.	20.2+	19.4	19.1	19.3	18.7	.7
Holland, Va.	19.3	20.0+	19.6	18.4	18.6	.8
Plymouth, N. C.	20.3+	19.5	19.5	19.2	18.6-	.6
Willard, N. C.	22.1+	21.7+	21.0	20.5-	20.1-	.5
Clayton, N. C.	20.7	20.9+	20.0	19.7	20.8	.7
Hartsville, S. C.	23.2+	22.3+	22.2+	22.2+	22.3+	.6
Mean	20.4+	20.0+	20.0+	19.6	19.4	.2
		Southeast				
Tallassee, Ala.	22.8+	22.1+	21.9	21.7	22.2+	.8
Gainesville, Fla.	22.9+	23.0+	22.6+	21.9+	22.0+	.5
Marianna, Fla.	21.0	21.4	20.6	20.8	20.6	.8
Walnut Hill, Fla.	22.5+	22.2+	21.9	22.1+	22.0+	.5
Fairhope, Ala.	23.4+	22.7	22.6	22.3	22.6	.5
Baton Rouge, La.	23.1+	22.2	23.0+	22.6+	22.5+	.5
Mean	22.6+	22.3+	22.1+	21.9+	21.9+	.2
		Upper and Central South				
Experiment, Ga.	23.6	22.8	22.3	22.7	21.9	N.S.
		Delta				
Sikeston, Mo.	19.7	18.0	19.7	19.9+	19.9+	1.4
Marianna, Ark.	21.8+	21.5	21.8+	22.4+	22.4+	.9
Coahoma, Miss.	22.6+	22.1	22.0	21.5	21.9	.5
Stoneville, Miss. (A)	21.8+	21.5	20.8	21.3	20.9	.8
Stoneville, Miss. (B)	22.0+	21.7+	21.3	21.1	20.8	.4
St. Joseph, La.	20.0+	20.1+	19.7+	19.1	19.1	.5
Mean	21.3+	20.8+	20.9+	20.9+	20.8+	.3
		West				
Fayetteville, Ark.	19.6	19.4	20.0	20.0	20.0	N.S.
Bixby, Okla.	21.6	21.9	21.2	21.6	21.6	N.S.
Lubbock, Texas	20.1	21.3	20.7	20.0	20.4	.8
Mean	20.4	20.9	20.6	20.5	20.7	.6

Table 34. Summary of the percentage protein for the strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839	D51-4863
			East Coast				
Warsaw, Va.	41.8	42.7	41.0	41.7	40.8-	43.4+	41.2
Accomac, Va.	41.0	42.0	41.6	41.2	41.2	40.5	39.9
Norfolk, Va.	42.9	44.4+	42.7	43.0	43.0	44.4+	43.7
Petersburg, Va.	42.6	44.4+	41.6	42.5	40.7-	43.2	41.3
Holland, Va.	43.6	44.7+	41.9-	43.9	42.5-	43.8	42.0-
Plymouth, N. C.	42.1	43.6	41.6	42.1	41.7	43.4	41.0
Willard, N. C.	39.7	41.3+	38.9-	39.2	38.7-	40.2	39.3
Clayton, N. C.	40.5	42.1+	39.2	41.0	40.3	40.7	39.2-
Hartsville, S. C.	39.3	40.4+	38.7	39.6	39.4	39.5	38.5
Mean	41.5	42.8+	40.8-	41.6	40.9-	42.1+	40.7-
			Southeast				
Tallassee, Ala.	41.0	42.0	41.0	41.7	41.5	41.2	41.5
Gainesville, Fla.	40.5	42.5+	39.1-	40.4	40.7	39.7	39.2
Marianna, Fla.	43.3	43.6	41.6-	42.7	41.9-	42.8	41.5-
Walnut Hill, Fla.	40.1	40.7	39.6	40.0	39.9	40.9	38.8-
Fairhope, Ala.	39.6	39.8	38.6	39.7	39.7	39.8	38.6
Baton Rouge, La.	39.3	38.7	37.2	38.4	37.8	38.8	38.3
Mean	40.6	41.2+	39.5-	40.5	40.3	40.5	39.7-
			Upper and Central South				
Experiment, Ga.	37.6	39.7	38.7	38.5	38.4	38.9	36.5
			Delta				
Sikeston, Mo.	43.8	44.1	41.0-	44.4	44.5	45.5	43.6
Marianna, Ark.	40.2	39.5	39.4	40.0	39.2	41.6	40.8
Coahoma, Miss.	39.4	40.2	37.5-	38.3	39.4	40.1	39.1
Stoneville, Miss. (A)	41.2	42.4	40.9	41.0	41.2	42.9+	41.1
Stoneville, Miss. (B)	40.3	42.3+	39.1-	40.7	40.2	41.5+	40.9
St. Joseph, La.	40.7	40.7	38.6-	39.9	40.2	40.8	40.4
Mean	40.9	41.5+	39.4-	40.7	40.8	42.1+	41.0
			West				
Fayetteville, Ark.	45.4	45.0	44.9	45.3	46.1	46.7	45.0
Bixby, Okla.	38.0	36.1	36.3	38.5	38.1	38.1	36.5
Lubbock, Texas	38.6	36.4-	35.1-	36.8	38.5	38.3	37.3
Mean	40.7	39.2-	38.8-	40.2	40.9	41.0	40.0

Table 34. (Continued)

Location	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100	L.S.D. (5%)
			East Coast			
Warsaw, Va.	42.2	42.5	42.4	41.7	42.6	1.0
Accomac, Va.	41.2	41.4	40.8	41.1	41.9	N.S.
Norfolk, Va.	43.3	43.9+	44.6+	43.9+	44.4+	.9
Petersburg, Va.	41.3	42.4	42.1	42.1	43.4	1.6
Holland, Va.	44.1	43.0	42.3-	43.6	43.9	.8
Plymouth, N. C.	42.1	43.0	42.5	40.6	42.2	N.S.
Willard, N. C.	40.3	40.0	39.8	39.8	40.4	.8
Clayton, N. C.	40.2	40.3	40.4	41.1	41.5+	.8
Hartsville, S. C.	37.9	38.3	38.5	38.3	38.8	.8
Mean	41.4	41.7	41.6	41.4	42.1+	.4
			Southeast			
Tallassee, Ala.	40.3	40.6	40.3	41.1	41.2	N.S.
Gainesville, Fla.	39.3	39.2	40.9	39.3	39.7	1.4
Marianna, Fla.	42.7	43.0	43.6	42.3	42.3	1.1
Walnut Hill, Fla.	39.4	39.8	40.3	39.6	39.2	1.0
Fairhope, Ala.	39.4	39.5	40.5	39.4	39.1	N.S.
Baton Rouge, La.	38.6	38.5	38.1	37.2	38.1	N.S.
Mean	40.0-	40.1-	40.8	39.8-	39.9-	.5
			Upper and Central South			
Experiment, Ga.	37.6	37.2	38.6	38.8	38.2	N.S.
			Delta			
Sikeston, Mo.	41.4	43.9	42.7	41.2	42.2	2.6
Marianna, Ark.	39.5	40.5	40.9	39.0	37.5-	1.5
Coahoma, Miss.	38.2	38.5	38.7	39.9	38.5	1.3
Stoneville, Miss. (A)	40.2	40.0	41.0	39.0-	40.3	1.4
Stoneville, Miss. (B)	39.1-	40.0	39.7	39.9	40.4	.9
St. Joseph, La.	39.6-	39.2-	39.9	40.2	40.1	1.0
Mean	40.0-	40.4	40.5	40.0-	39.8-	0.6
			West			
Fayetteville, Ark.	44.8	44.7	45.6	44.4	45.1	N.S.
Bixby, Okla.	37.1	35.2	38.5	37.8	38.1	N.S.
Lubbock, Texas	35.3-	37.3	36.2-	38.1	38.0	2.1
Mean	39.1-	39.1-	40.1	40.1	40.4	1.3

Table 35. Relative maturity data, days earlier (+) or later (-) than Ogden, for the strains in Uniform Group VI, 1955

Location	Date Planted	Ogden Matured	Lee	N51-1971	N51-2043	N51-2140
			East Coast			
Warsaw, Va.	6-6	10-28	+4	+4	+1	-1
Petersburg, Va.	5-19	10-30	+6	+5	0	-3
Holland, Va.	5-17	10-25	+9	+3	+2	-4
Plymouth, N. C.	5-2	10-10	+13	+2	+1	+1
Willard, N. C.	5-2	10-10	+10	+3	+1	+2
Clayton, N. C.	5-6	10-15	+11	+6	0	-1
Hartsville, S. C.	6-15	10-18	+7	+4	-2	-1
Mean			+9	+4	0	-1
			Southeast			
Tallassee, Ala.	5-27	10-7	+11	+8	0	-2
Gainesville, Fla.	6-13	10-11	+9	0	-4	-1
Marianna, Fla.	6-27	10-10	+2	+6	+1	-2
Quincy, Fla.	7-6	10-13	+2	+2	0	-3
Jay, Fla.	6-13	10-5	0	+8	0	0
Walnut Hill, Fla.	6-14	9-29	+10	+4	-2	+1
Fairhope, Ala.	6-17	10-19	+1	+2	-6	-3
Baton Rouge, La.	5-23	10-10	+10	+1	-6	-7
Mean			+6	+4	-2	-2
			Upper and Central South			
Belle Mina, Ala.	5-18	10-13	+4	-7	-7	-7
Athens, Ga.	5-5	9-29	+11	-1	-1	-7
Experiment, Ga.	5-20	10-5	+8	+3	-1	-1
State College, Miss.	5-28	10-12	+12	-7	+18	-7
Mean			+9	-3	+2	-5
			Delta			
Sikeston, Mo.	5-14	10-25	+9	-3	-10	-5
Wilson, Ark.	5-3	10-21	+4	+3	-1	-3
Marianna, Ark.		10-5	+18	+1	-2	-2
Coahoma, Miss.	5-2	10-4	+10	+2	-2	-3
Stoneville, Miss. (A)	5-11	10-6	+9	0	-3	-3
Stoneville, Miss. (B)	5-3	9-28	+11	0	-2	-2
St. Joseph, La.	5-18	10-11	+2	-1	-4	-5
Mean			+9	0	-3	-3
			West			
Stuttgart, Ark.	5-30	10-17	+14	0	0	0
Curtis, La.	5-16	10-10	+9	+1	-6	-7
Fayetteville, Ark.	5-9	10-14	+11	+1	-2	-2
Bixby, Okla.	5-13	10-27	0	-1	-2	-4
Lubbock, Texas	6-20	10-30	-5	-5	-5	0
Mean			+6	-1	-3	-3

Table 35. (Continued)

Location	D51-4839	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100
			East Coast				
Warsaw, Va.	-3	0	+17	-2	+4	+4	+3
Petersburg, Va.	-2	-2	+6	0	+2	+4	+1
Holland, Va.	0	0	+5	-5	+2	+6	0
Plymouth, N. C.	-2	+2	+11	+2	+3	+3	+3
Willard, N. C.	-2	+1	+6	+2	+2	+3	+1
Clayton, N. C.	-2	-1	+10	+3	+5	+6	+5
Hartsville, S. C.	-3	-2	+5	-1	0	+2	+1
Mean	-2	0	+9	0	+2	+4	+2
			Southeast				
Tallassee, Ala.	-2	-3	+10	-2	+5	+4	+1
Gainesville, Fla.	-3	-5	+1	-1	0	-1	-1
Marianna, Fla.	0	-1	+5	+2	+3	+1	+5
Quincy, Fla.	+2	-3	+2	0	0	-3	-3
Jay, Fla.	0	0	+8	0	+3	0	0
Walnut Hill, Fla.	-7	-4	+11	-6	+4	+3	+3
Fairhope, Ala.	-4	-3	+2	-4	0	-1	-3
Baton Rouge, La.	-4	-4	+2	-7	0	+2	-4
Mean	-2	-3	+5	-2	+2	0	0
			Upper and Central South				
Belle Mina, Ala.	-3	0	+4	-7	+4	+4	-3
Athens, Ga.	-3	+9	+10	-4	+10	+8	+6
Experiment, Ga.	-3	0	+2	-1	+2	-2	+2
State College, Miss.	+18	-10	+3	-10	-1	-7	-7
Mean	+2	0	+5	-5	+4	+1	+1
			Delta				
Sikeston, Mo.	-3	+1	+9	-8	+4	+1	+3
Wilson, Ark.	-1	-3	+4	0	+1	-3	-3
Marianna, Ark.	-2	-2	+3	-1	+1	0	-1
Coahoma, Miss.	-3	0	+5	-1	+3	+3	+2
Stoneville, Miss. (A)	-3	-1	+1	-1	0	0	0
Stoneville, Miss. (B)	-1	-1	+4	-2	+1	0	0
St. Joseph, La.	-2	-3	+1	-5	+2	+2	-4
Mean	-2	-1	+4	-2	+2	0	0
			West				
Stuttgart, Ark.	0	0	+9	0	0	0	0
Curtis, La.	-4	-4	+1	-6	0	+1	-4
Fayetteville, Ark.	-2	+4	+14	-2	+11	+7	+1
Bixby, Okla.	-5	-6	+1	-6	0	-7	-3
Lubbock, Texas	0	0	0	0	0	0	0
Mean	-2	-1	+5	-3	+2	0	-1

Table 36. Summary of the height data for the strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839
			East Coast			
Warsaw, Va.	44	40	45	39	43	33
Accomac, Va.	32	29	38	31	38	28
Petersburg, Va.	39	40	44	37	43	32
Holland, Va.	42	38	47	41	44	31
Plymouth, N. C.	45	42	46	38	45	32
Willard, N. C.	40	34	38	35	40	30
Clayton, N. C.	29	31	34	26	33	25
Hartsville, S. C.	30	31	34	28	32	25
Mean	38	36	42	34	40	30
			Southeast			
Tallassee, Ala.	39	40	41	34	36	33
Gainesville, Fla.	17	18	18	15	18	11
Marianna, Fla.	23	25	26	19	26	18
Quincy, Fla.	17	21	20	14	22	12
Jay, Fla.	26	21	30	23	29	21
Walnut Hill, Fla.	27	24	28	21	27	20
Fairhope, Ala.	10	12	12	12	12	11
Baton Rouge, La.	30	30	31	26	27	19
Mean	24	24	26	21	25	18
			Upper and Central South			
Belle Mina, Ala.	40	37	43	37	41	35
Athens, Ga.	35	33	37	30	37	27
Experiment, Ga.	34	32	36	30	37	25
Mean	36	34	39	32	38	29
			Delta			
Sikeston, Mo.	43	50	49	44	47	41
Wilson, Ark.	31	24	31	28	32	22
Marianna, Ark.	35	34	35	34	39	30
Coahoma, Miss.	34	29	39	32	41	33
Stoneville, Miss. (A)	38	31	43	35	37	30
Stoneville, Miss. (B)	39	30	42	30	43	31
St. Joseph, La.	38	35	46	36	42	29
Mean	37	33	41	34	40	31
			West			
Stutgart, Ark.	32	32	37	28	37	26
Curtis, La.	26	26	22	21	24	20
Fayetteville, Ark.	34	30	35	31	35	25
Bixby, Okla.	34	30	35	29	35	23
Milburn, Okla.	31	26	34	26	33	21
Chillicothe, Texas	14	27	23	20	18	18
Lubbock, Texas	33	34	30	32	31	28
Mean	29	29	31	27	30	23

Table 36. (Continued)

Location	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	N51-5100
			East Coast			
Warsaw, Va.	33	52	35	51	47	45
Accomac, Va.	29	39	31	48	41	40
Petersburg, Va.	30	61	39	55	46	47
Holland, Va.	33	53	34	52	52	46
Plymouth, N. C.	31	50	36	51	48	48
Willard, N. C.	33	45	36	50	45	41
Clayton, N. C.	22	37	31	33	36	31
Hartsville, S. C.	25	41	27	40	40	34
Mean	30	47	34	48	44	42
			Southeast			
Tallassee, Ala.	36	45	37	45	45	40
Gainesville, Fla.	13	26	17	26	28	25
Marianna, Fla.	18	33	20	29	37	28
Quincy, Fla.	16	28	19	27	26	24
Jay, Fla.	19	37	25	36	37	33
Walnut Hill, Fla.	23	33	26	34	34	28
Fairhope, Ala.	9	16	13	18	22	17
Baton Rouge, La.	23	36	21	41	40	34
Mean	20	32	22	32	34	29
			Upper and Central South			
Belle Mina, Ala.	30	47	37	46	45	44
Athens, Ga.	27	39	31	39	40	37
Experiment, Ga.	29	28	31	36	36	36
Mean	29	41	33	40	40	39
			Delta			
Sikeston, Mo.	40	49	44	51	46	52
Wilson, Ark.	26	36	27	34	36	34
Marianna, Ark.	29	49	31	47	44	39
Coahoma, Miss.	33	45	37	41	45	44
Stoneville, Miss. (A)	31	47	33	47	47	46
Stoneville, Miss. (B)	33	53	35	49	47	45
St. Joseph, La.	31	58	38	51	44	46
Mean	32	48	35	46	44	44
			West			
Stuttgart, Ark.	24	41	31	45	41	39
Curtis, La.	17	43	25	43	45	25
Fayetteville, Ark.	25	39	30	40	39	37
Bixby, Okla.	27	39	31	37	39	36
Milburn, Okla.	24	42	28	41	40	36
Chillicothe, Texas	10	35	17	31	28	17
Lubbock, Texas	29	35	32	35	36	34
Mean	22	39	28	38	38	32

Table 37. Summary of the lodging scores for the strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839
		East Coast				
Warsaw, Va.	1.0	3.7	1.0	1.3	2.0	2.0
Accomac, Va.	3.0	2.7	3.0	2.7	3.0	3.0
Norfolk, Va.	2.0	2.0	2.0	2.0	3.0	2.0
Petersburg, Fa.	2.7	2.3	2.3	3.0	2.0	2.3
Holland, Va.	3.0	3.0	2.0	3.0	2.3	3.0
Plymouth, N. C.	3.0	3.2	2.5	2.3	2.5	2.8
Willard, N. C.	2.5	3.0	3.2	2.3	2.5	3.7
Clayton, N. C.	1.3	1.8	2.0	1.0	1.2	1.3
Hartsville, S. C.	1.0	2.0	2.0	1.0	2.0	1.0
		Southeast				
Tallassee, Ala.	1.7	1.7	2.0	1.0	2.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.7	1.3	1.3	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.3	1.0	1.0	1.0	1.0
Walnut Hill, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	2.0	1.7	1.0	1.3	1.0
		Upper and Central South				
Belle Mina, Ala.	1.0	1.0	1.3	1.7	2.0	1.7
Athens, Ga.	1.0	1.3	1.0	1.0	1.0	1.0
Experiment, Ga.	1.3	1.7	2.0	2.0	2.0	2.3
State College, Miss.	1.0	1.0	1.0	1.0	1.0	1.0
		Delta				
Sikeston, Mo.	1.0	1.0	1.0	1.0	1.0	1.0
Wilson, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Ark.	2.7	2.0	2.7	2.0	2.7	1.7
Coahoma, Miss.	3.0	2.0	3.0	2.0	2.0	2.0
Stoneville, Miss. (A)	2.0	1.7	2.0	2.0	2.0	1.3
Stoneville, Miss. (B)	2.0	1.3	2.3	1.7	2.0	2.3
St. Joseph, La.	1.7	1.3	1.7	1.0	2.3	2.3
		West				
Stuttgart, Ark.	1.3	1.3	1.3	1.0	1.0	1.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Fayetteville, Ark.	1.3	1.7	1.7	1.3	1.0	1.0
Bixby, Okla.	1.0	1.0	1.0	1.0	1.0	1.0
Milburn, Okla.	1.0	1.0	1.0	1.0	1.3	1.0
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 37. (Continued)

Location	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100
			East Coast			
Warsaw, Va.	1.7	2.0	1.0	3.0	2.7	1.0
Accomac, Va.	3.0	3.0	2.7	3.0	3.0	3.0
Norfolk, Va.	2.0	2.0	3.0	3.0	3.0	2.0
Petersburg, Va.	1.7	2.3	3.0	3.0	2.0	2.7
Holland, Va.	3.0	2.3	4.0	2.3	3.0	3.0
Plymouth, N. C.	2.8	3.2	3.3	3.2	3.2	2.8
Willard, N. C.	3.3	3.2	3.8	3.0	2.8	2.2
Clayton, N. C.	1.0	1.3	2.2	1.5	2.2	1.2
Hartsville, S. C.	1.0	1.7	1.0	2.0	2.3	1.3
			Southeast			
Tallassee, Ala.	1.0	2.0	1.0	2.3	1.7	1.7
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	2.3	1.0	2.3	2.7	1.7
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.3	1.0	1.7	1.7	1.3
Walnut Hill, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.7	1.0	2.0	2.0	2.0
			Upper and Central South			
Belle Mina, Ala.	1.7	1.0	1.3	1.7	2.3	1.3
Athens, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	1.3	2.0	3.0	3.0	2.0	2.7
State College, Miss.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Sikeston, Mo.	1.0	1.0	1.0	1.0	1.0	1.0
Wilson, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Ark.	1.3	2.7	2.7	4.0	3.7	2.7
Coahoma, Miss.	2.3	3.0	1.7	3.0	3.0	2.3
Stoneville, Miss. (A)	1.7	2.3	1.3	2.3	2.0	2.0
Stoneville, Miss. (B)	2.7	3.0	1.7	3.0	3.0	2.0
St. Joseph, La.	2.3	2.3	2.0	2.3	3.0	2.0
			West			
Stuttgart, Ark.	1.0	2.0	1.0	3.0	2.3	2.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Fayetteville, Ark.	1.0	2.0	1.3	2.0	2.0	1.3
Bixby, Okla.	1.0	1.3	1.0	2.0	1.0	1.0
Milburn, Okla.	1.3	2.0	1.3	1.6	1.6	1.0
Chillicothe, Texas	1.0	2.0	1.0	2.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 38. Seed quality scores for the strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839
			East Coast			
Warsaw, Va.	3.0	3.3	2.0	2.0	3.0	1.0
Accomac, Va.	2.0	2.0	2.0	2.0	1.7	2.0
Norfolk, Va.	2.7	2.3	2.0	2.7	2.3	3.0
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.0	1.0	1.0	2.0	1.3	1.0
Plymouth, N. C.	2.2	1.5	1.8	2.3	2.0	1.8
Willard, N. C.	2.0	1.2	1.8	1.5	1.8	1.3
Clayton, N. C.	1.0	1.0	1.3	1.3	1.3	1.0
			Southeast			
Tallassee, Ala.	1.0	1.0	2.0	1.7	2.0	2.0
Gainesville, Fla.	2.3	1.7	3.0	2.3	2.3	2.0
Marianna, Fla.	2.3	2.0	2.7	2.7	2.7	2.0
Walnut Hill, Fla.	2.0	2.7	2.7	2.0	2.7	2.0
Fairhope, Ala.	3.0	2.0	2.3	2.0	4.0	1.3
Baton Rouge, La.	1.7	1.0	2.0	2.0	2.3	2.0
			Upper and Central South			
Athens, Ga.	1.5	2.3	1.7	2.0	1.7	1.3
Experiment, Ga.	3.0	2.0	1.3	2.0	2.0	1.3
			Delta			
Sikeston, Mo.	3.0	2.0	2.0	2.0	2.0	2.0
Wilson, Ark.	3.0	2.0	3.0	2.0	2.7	2.3
Marianna, Ark.	3.0	2.0	3.0	3.0	3.0	3.0
Coahoma, Miss.	2.7	1.0	2.0	2.3	3.0	1.3
Stoneville, Miss. (A)	2.0	1.0	2.3	2.0	2.3	2.0
Stoneville, Miss. (B)	3.0	1.0	2.7	2.3	3.0	2.0
St. Joseph, La.	1.3	1.0	1.0	2.0	1.3	1.0
			West			
Stuttgart, Ark.	2.7	2.3	3.0	2.0	3.0	3.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Fayetteville, Ark.	3.3	3.0	3.0	3.0	3.0	3.0
Bixby, Okla.	2.0	2.0	1.3	1.7	2.0	1.7
Milburn, Okla.	3.0	3.0	3.6	3.0	3.0	3.0
Chillicothe, Texas	2.0	3.0	2.0	2.0	2.0	2.0
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0

Table 38. (Continued)

Location	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100
			East Coast			
Warsaw, Va.	1.0	2.0	1.0	2.0	1.0	1.0
Accomac, Va.	2.0	1.7	2.0	2.0	2.0	2.0
Norfolk, Va.	2.7	3.0	2.7	2.7	2.3	2.7
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	1.0	1.0	1.0	1.0	2.3	1.0
Plymouth, N. C.	1.8	1.5	2.5	1.5	1.8	1.3
Willard, N. C.	1.3	1.2	1.5	1.0	1.2	1.0
Clayton, N. C.	1.0	1.0	1.0	1.2	1.0	1.0
			Southeast			
Tallassee, Ala.	1.7	2.0	1.7	2.3	2.3	1.0
Gainesville, Fla.	2.0	2.3	2.0	3.0	2.3	2.0
Marianna, Fla.	2.0	2.0	2.7	2.0	2.0	2.3
Walnut Hill, Fla.	2.3	3.0	2.3	3.0	2.7	2.5
Fairhope, Ala.	2.3	3.0	2.0	3.3	3.0	2.7
Baton Rouge, La.	1.3	1.7	1.0	1.3	2.0	1.3
			Upper and Central South			
Athens, Ga.	1.3	1.0	1.3	1.7	1.7	2.0
Experiment, Ga.	1.3	2.0	1.0	2.0	2.0	2.0
			Delta			
Sikeston, Mo.	2.0	2.0	2.0	2.0	2.0	2.0
Wilson, Ark.	2.3	3.0	2.7	2.7	2.0	2.0
Marianna, Ark.	3.0	3.0	3.0	3.0	2.3	2.0
Coahoma, Miss.	2.0	2.0	1.7	2.0	2.0	1.0
Stoneville, Miss. (A)	2.0	2.0	2.0	2.0	2.0	1.3
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	1.3	1.0
St. Joseph, La.	1.0	1.3	1.0	1.0	1.0	1.0
			West			
Stuttgart, Ark.	2.0	2.0	3.0	2.7	2.0	2.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Fayetteville, Ark.	3.3	3.3	2.7	3.3	3.0	3.0
Bixby, Okla.	1.0	2.0	1.3	2.0	1.7	1.0
Milburn, Okla.	3.0	3.0	3.0	3.0	2.0	3.0
Chillicothe, Texas	3.0	3.0	2.0	3.0	2.0	3.0
Lubbock, Texas	2.0	3.7	2.0	3.0	2.0	2.0

Table 39. Seed weight, in grams per 100 seeds, for the strains in Uniform Group VI, 1955

Location	Ogden	Lee	N51-1971	N51-2043	N51-2140	D51-4839
		East Coast				
Warsaw, Va.	15.6	13.7	16.0	16.3	15.4	14.7
Accomac, Va.	18.1	17.4	18.2	21.3	18.9	19.1
Norfolk, Va.	15.4	14.5	17.0	17.0	17.0	17.0
Petersburg, Va.	18.8	16.0	18.5	19.7	18.0	18.2
Holland, Va.	18.0	14.7	18.8	19.9	18.7	18.8
Plymouth, N. C.	14.2	12.8	15.6	16.2	15.2	13.7
Willard, N. C.	13.2	11.6	14.4	14.8	14.1	14.9
Clayton, N. C.	16.2	12.5	17.4	17.5	17.2	15.6
Hartsville, S. C.	16.7	14.3	17.7	18.3	17.0	16.0
Mean	16.2	14.2	17.1	17.9	16.8	16.4
		Southeast				
Tallassee, Ala.	15.2	14.2	16.6	16.4	16.7	14.6
Gainesville, Fla.	17.8	16.1	18.9	18.2	18.7	16.8
Marianna, Fla.	17.2	12.4	16.9	16.9	17.9	15.7
Walnut Hill, Fla.	14.9	12.0	15.2	15.1	14.8	13.0
Fairhope, Ala.	17.2	14.6	17.6	17.0	16.7	15.9
Baton Rouge, La.	14.9	12.1	15.6	16.8	14.4	13.3
Mean	16.2	13.6	16.1	16.3	15.3	14.1
		Upper and Central South				
Athens, Ga.	17.3	14.3	17.0	17.7	15.2	15.8
Experiment, Ga.	15.9	15.1	18.6	18.5	16.4	16.3
Mean	11.1	14.7	17.8	18.1	15.8	16.0
		Delta				
Wilson, Ark.	14.7	13.0	15.7	14.7	14.0	14.3
Marianna, Ark.	12.0	13.0	13.7	12.7	12.7	12.0
Coahoma, Miss.	14.4	14.7	15.7	15.7	16.0	13.9
Stoneville, Miss. (A)	15.3	14.1	15.4	15.6	16.0	13.2
Stoneville, Miss. (B)	13.5	13.0	14.2	14.5	14.2	12.5
St. Joseph, La.	13.2	12.3	13.7	14.1	13.2	13.4
Mean	13.3	13.4	14.7	14.6	14.4	13.2
		West				
Stuttgart, Ark.	13.0	13.7	14.0	16.0	15.0	14.7
Fayetteville, Ark.	13.7	14.0	13.3	13.3	13.0	13.7
Bixby, Okla.	16.9	14.6	16.8	18.5	16.6	16.3
Milburn, Okla.	13.1	12.0	14.2	13.1	12.8	13.3
Lubbock, Texas	18.3	14.1	17.4	17.9	16.7	17.1
Mean	15.0	13.7	15.1	15.8	14.8	15.0

Table 39. (Continued)

Location	D51-4863	D51-4871	D51-4888	D51-4891	D51-4977	D51-5100
			East Coast			
Warsaw, Va.	12.8	17.4	14.1	15.6	14.9	14.8
Accomac, Va.	20.0	19.2	19.7	19.5	18.7	19.8
Norfolk, Va.	17.1	18.0	16.4	18.1	15.7	14.8
Petersburg, Va.	16.6	21.5	17.8	18.7	16.2	16.3
Holland, Va.	17.5	19.9	18.1	19.1	16.3	15.7
Plymouth, N. C.	13.5	16.6	14.8	15.5	12.1	13.1
Willard, N. C.	12.6	14.8	13.7	13.9	11.5	11.0
Clayton, N. C.	12.5	18.3	16.0	15.7	13.8	14.3
Hartsville, S. C.	14.7	17.3	16.7	16.3	13.7	14.0
Mean	15.2	18.1	16.4	16.9	14.8	14.9
			Southeast			
Tallassee, Ala.	12.6	15.7	14.1	15.9	14.6	13.2
Gainesville, Fla.	15.2	18.1	17.3	18.8	14.6	14.7
Marianna, Fla.	13.9	15.9	17.8	16.3	13.9	14.4
Walnut Hill, Fla.	13.1	15.1	13.7	14.8	12.4	13.2
Fairhope, Ala.	13.6	18.1	16.2	17.6	14.3	14.3
Baton Rouge, La.	11.7	14.5	13.4	15.1	12.0	12.0
Mean	12.8	15.9	14.4	15.8	12.9	13.2
			Upper and Central South			
Athens, Ga.	15.5	17.0	17.2	17.0	14.8	15.7
Experiment, Ga.	13.9	17.7	15.0	18.2	14.9	15.8
Mean	14.7	17.3	16.1	17.6	14.8	15.7
			Delta			
Wilson, Ark.	13.3	17.7	16.0	16.7	12.7	12.0
Marianna, Ark.	11.0	14.7	12.7	13.0	11.0	10.7
Coahoma, Miss.	11.8	15.5	14.5	14.8	12.7	12.7
Stoneville, Miss. (A)	12.3	15.0	14.6	13.3	12.3	12.2
Stoneville, Miss. (B)	10.6	13.4	13.3	12.8	10.8	11.3
St. Joseph, La.	11.6	12.8	14.1	13.9	11.5	10.9
Mean	11.8	14.8	14.2	14.1	11.8	11.6
			West			
Stuttgart, Ark.	12.3	16.0	15.0	14.7	12.3	12.0
Fayetteville, Ark.	12.3	17.0	12.3	14.3	13.7	13.0
Bixby, Okla.	14.5	17.6	15.5	17.2	14.9	15.4
Milburn, Okla.	11.6	13.4	13.3	12.5	13.9	12.6
Lubbock, Texas	15.3	13.6	18.3	14.9	14.7	14.8
Mean	13.2	15.5	14.9	14.7	13.9	13.6

PRELIMINARY GROUP VI

1955

Thirty-two new strains along with Ogden and Lee were grown at 8 locations. Parentage of these lines is reported in table 40. Agronomic and chemical data are reported in tables 41 through 46.

Of the 32 new lines, 26 were resistant to bacterial pustule, 27 had a low target spot rating, and 20 were resistant to both diseases. Twenty-six of the lines were superior to Ogden in seed-holding. Seventeen of the lines were earlier than Ogden, which is an important consideration at the present time since Lee is somewhat late for production in the northern range of where Ogden has been grown.

Not any of the new lines yielded significantly more than Ogden or Lee as measured by the means for the 8 locations.

Among the better lines slightly earlier than Ogden were D53-1340, D53-1569, D53-1611, and N52-4342. D53-1340 is resistant to one or more races of downy mildew, although it did have a significantly lower oil content than Ogden with little increase in protein.

The better lines from this test will be repeated in a preliminary VI nursery in 1956 along with other promising new lines. The better lines will be advanced to the Uniform Group VI nursery in 1957.

Table 40. Parentage of strains in Preliminary Group VI, 1955

Strain	Parentage	Generation Composited
1. Ogden		
2. Lee	S-100 x CNS	F_6
3. V51-2	Wabash x Ogden	-
4. D49-2477	S-100 x CNS	F_6
5. D51-4969	Roanoke x N45-745	F_6
6. D52-810	Roanoke x Ogden (N48-1101)	F_7
7. D53-1242	D49-2525 x L6-5679	F_5
8. D53-1260	D49-2525 x L6-5679	F_5
9. D53-1279	D49-2525 x L6-5679	F_5
10. D53-1290	D632-15 x D49-2525	F_5
11. D53-1297	D632-15 x D49-2525	F_5
12. D53-1301	D632-15 x D49-2525	F_5
13. D53-1309	D632-15 x D49-2525	F_5
14. D53-1334	D632-15 x D49-2525	F_5
15. D53-1340	D632-15 x D49-2525	F_5
16. D53-1383	D49-2570 x L3-2010	F_5
17. D53-1566	N46-1703 x D49-2525	F_5
18. D53-1568	N46-1703 x D49-2525	F_5
19. D53-1569	N46-1703 x D49-2525	F_5
20. D53-1590	N46-1703 x D49-2525	F_5
21. D53-1601	N46-1703 x D49-2525	F_5
22. D53-1611	N46-1703 x D49-2525	F_5
23. N50-1953	Ogden x N45-745	F_5
24. N51-1403	N48-1248 x Adams	F_5
25. N51-1467	N48-1248 x Adams	F_5
26. N51-1675	N48-1248 x Perry	F_5
27. N51-1696	N48-1248 x Perry	F_5
28. N51-2078	Roanoke x Ogden (N48-1101)	F_6
29. N52-4342	Roanoke x N45-745 (N48-1831)	F_7
30. N52-4347	Roanoke x N45-745 (N48-1831)	F_7
31. N52-4349	Roanoke x N45-745 (N48-1831)	F_7
32. N52-4559	Roanoke x N45-745 (D49-661)	F_7
33. N52-4569	Roanoke x N45-745 (D49-733)	F_7
34. N52-4368	N45-745 x Preston	F_5
35. N52-4378	N45-745 x Preston	F_5
36. N52-4380	N45-745 x Preston	F_5

Table 41. General summary of the performance of strains grown in Preliminary Group VI, 1955

Strain	Seed Yield	Maturity Index	Height	Oil	Protein	Shattering	Bacterial Pustule	Target Spot
Ogden	30.0	10-13	32	20.7	40.6	3	2.5	2.0
Lee	28.5	+8	30	20.6	41.2	1	1.0	1.0
V51-2	25.1-	0	38	21.5+	39.8	3	2.5	3.0
D49-2477	29.0	+3	31	19.6-	43.0+	1	1.0	1.0
D51-4969	30.6	-2	37	20.0-	40.6	1	1.0	2.5
D52-810	30.0	0	30	21.7+	40.3	1	3.0	1.0
D53-1242	26.3-	-8	46	22.1+	39.1-	1	1.0	1.5
D53-1260	25.3-	-6	27	21.4+	40.3	1	1.0	1.5
D53-1279	25.8-	+1	32	20.1	41.9+	2	3.0	2.0
D53-1290	25.0-	-1	28	19.0-	44.0+	2	1.0	2.0
D53-1297	25.6-	-1	30	20.6	41.5	3	2.0	1.5
D53-1301	31.0	+6	30	20.6	41.8+	1	1.0	1.0
D53-1309	26.4-	-1	27	20.2	39.9	1	1.0	1.5
D53-1334	27.4	-2	29	20.0-	40.0	1	1.0	1.0
D53-1340	28.7	-2	31	19.9-	40.1	1	1.0	1.5
D53-1383	25.4-	-1	30	21.7+	38.9-	1	3.0	1.5
D53-1566	27.7	+7	35	20.5	41.8+	1	1.0	1.5
D53-1568	27.5	+7	34	20.4	41.6+	1	1.0	1.5
D53-1569	30.6	-2	31	20.8	41.5	1	1.0	2.0
D53-1590	27.4	+1	31	19.8-	41.0	1	1.0	1.5
D53-1601	25.8-	+4	28	20.0-	41.2	1	1.0	1.5
D53-1611	27.1	-4	25	20.5	40.3	1	1.0	2.0
N50-1953	28.8	+4	29	20.8	41.4	2	3.0	1.0
N51-1403	30.0	0	28	20.9	39.5-	2	1.0	2.0
N51-1467	28.2	+1	29	21.2	41.0	1	1.0	3.0
N51-1675	29.0	0	30	20.9	41.2	2	1.0	2.0
N51-1696	30.9	-3	30	20.9	40.9	2	2.5	2.0
N51-2078	27.5	+1	30	20.8	40.6	3	3.0	2.5
N52-4342	28.1	-1	34	20.2	40.7	1	1.0	1.0
N52-4347	30.4	-2	31	21.2	38.8-	1	1.0	2.5
N52-4349	30.5	-1	30	21.4+	40.1	3	1.0	3.0
N52-4559	30.0	-2	36	20.0-	41.3	3	1.0	3.5
N52-4569	30.2	-1	33	20.6	40.6	2	2.0	2.0
N52-4368	28.9	+4	28	21.2	41.2	3	1.0	1.0
N52-4378	28.7	+1	30	21.0	38.2-	2	1.0	1.0
N52-4380	26.9-	+8	29	20.9	39.1-	1	1.0	1.0
L.S.D. (5%)	3.0			0.7	1.0			
C.V.	15%			3%	2%			

Table 42. Seed yield, in bushels per acre, for the strains in Preliminary Group VI, 1955

Strain	Plymouth, N. C.	Clayton, N. C.	Quincy, Fla.	Walnut Hill, Fla.	Wilson, Ark.	Stoneville, Miss Loam	Stoneville, Miss Clay	Bixby, Okla.
Ogden	26.4	35.4	27.2	40.9	19.8	27.5	30.9	30.7
Lee	30.8	26.7-	29.6	34.9-	14.2	35.1	34.0	22.5
V51-2	26.3	29.8	21.4	32.9-	16.6	24.7	26.4	23.1
D49-2477	29.4	35.0	29.3	38.9	14.8	28.6	27.4	28.3
D51-4969	28.7	38.0	28.6	37.1	14.6	42.0+	34.3	20.8
D52-810	27.0	29.5-	28.2	38.6	18.4	32.4	35.0	30.2
D53-1242	22.5	31.8	31.2	34.4-	10.8-	24.9	35.0	19.7
D53-1260	22.8	29.7-	27.9	32.2-	5.2-	23.7	39.0	21.4
D53-1279	25.4	25.9-	29.0	34.0-	12.3-	22.9	35.3	21.7
D53-1290	25.8	27.9-	29.0	34.8-	8.4-	18.6	32.6	23.2
D53-1297	25.4	28.9-	23.8	33.7-	15.2	23.2	32.4	22.3
D53-1301	30.9	31.9	31.9	37.1	19.1	38.4	29.9	28.6
D53-1309	25.1	31.0	22.8	33.7-	15.2	18.5	32.4	32.8
D53-1334	22.1	31.8	31.5	36.3	9.8-	33.6	26.6	26.7
D53-1340	28.1	35.6	30.8	37.5	13.8	34.6	27.2	22.1
D53-1383	21.9	20.1-	-	32.5-	19.4	24.4	27.4	24.9
D53-1566	27.3	28.1-	30.8	38.9	17.2	31.6	29.2	18.4
D53-1568	23.4	25.9-	26.8	34.8-	19.6	33.0	33.8	22.8
D53-1569	28.1	33.9	30.0	35.9	16.8	35.9	39.8	23.9
D53-1590	29.9	32.8	29.7	40.5	15.3	24.2	25.8	20.8
D53-1601	23.0	24.1-	27.2	32.9	15.8	25.7	29.0	28.3
D53-1611	32.7+	33.2	22.6	39.4	8.7-	23.4	34.1	22.7
N50-1953	25.2	32.0	26.4	37.1	16.8	31.1	32.2	29.4
N51-1403	27.7	36.0	31.8	33.3-	12.8-	33.6	41.6	28.0
N51-1467	23.2	32.3	27.8	38.6	15.8	32.6	28.9	26.3
N51-1675	25.6	33.7	27.5	34.0-	11.0-	38.6	37.0	24.8
N51-1696	27.7	38.5	27.4	38.9	12.4-	42.3+	30.2	30.1
N51-2078	28.0	28.8-	27.8	35.5-	19.0	22.2	26.0	33.1
N52-4342	27.0	35.8	30.8	34.8-	14.2	39.0	22.6	20.3
N52-4347	26.7	39.1	34.8+	28.4-	18.0	39.2	32.6	24.0
N52-4349	31.2	36.9	30.8	39.2	9.9-	40.0	31.8	24.0
N52-4559	30.1	35.2	32.6+	35.2-	17.2	34.2	32.4	19.7
N52-4569	27.5	34.2	29.3	42.3	10.9-	36.7	39.1	21.6
N52-4368	28.6	33.3	30.0	41.9	11.8-	31.2	30.8	23.6
N52-4378	28.3	38.3	30.0	43.4	12.2-	25.8	28.4	22.8
N52-4380	25.2	33.8	30.8	34.4-	8.2-	32.2	26.1	24.1
L.S.D.(5%)	5.4	5.7	5.3	5.3	6.7	13.4	N.S.	11.1
C.V.	10%	9%	9%	7%	23%	22%	18%	22%

Table 43. Summary of the oil percentage for strains in Preliminary Group VI, 1955

Strain	Plymouth, N. C.	Clayton N.C.	Quincy, Fla.	Walnut Hill, Fla.	Wilson, Ark.	Stoneville, Miss.		Bixby, Okla.
						Loam	Clay	
Ogden	19.1	21.5	20.5	21.4	23.1	20.4	19.7	20.0
Lee	18.8	20.7	19.9	21.4	22.9	20.8	19.8	20.3
V51-2	19.9	21.5	21.5	23.0	22.5	21.5	20.7	21.2
D49-2477	17.6	19.5	19.5	20.7	21.3	20.3	18.2	19.9
D51-4969	17.5	19.4	20.4	21.5	22.2	20.3	18.4	20.5
D52-810	20.5	21.9	21.3	22.3	23.1	21.2	21.2	21.8
D53-1242	21.2	21.6	22.4	22.8	24.2	21.0	23.1	20.6
D53-1260	20.2	21.2	21.1	21.7	22.5	20.6	22.6	21.4
D53-1279	18.5	19.8	21.2	21.2	21.6	19.5	19.9	19.2
D53-1290	17.0	19.0	19.6	20.4	21.1	18.0	19.2	17.7
D53-1297	17.9	19.4	20.2	21.1	21.9	19.2	20.6	19.6
D53-1301	18.9	21.2	20.2	21.2	22.7	20.4	20.4	19.9
D53-1309	18.5	20.5	19.5	22.3	21.4	20.3	19.8	19.3
D53-1334	18.1	20.0	20.0	21.7	22.1	20.7	19.1	18.1
D53-1340	18.3	20.1	20.2	21.9	22.3	20.4	18.8	19.9
D53-1383	20.2	22.4	-	21.6	22.6	21.9	21.8	21.7
D53-1566	18.9	20.9	20.2	20.5	22.6	22.0	20.3	18.2
D53-1568	19.1	21.1	20.1	21.7	21.6	20.6	21.0	18.1
D53-1569	19.3	20.6	20.3	21.6	22.6	21.1	20.2	20.3
D53-1590	17.8	20.1	20.1	21.1	22.4	20.1	19.6	17.2
D53-1601	19.2	20.1	19.7	20.4	20.8	21.1	19.1	19.4
D53-1611	18.5	21.0	18.5	20.3	22.8	21.1	21.7	20.3
N50-1953	19.1	21.4	20.2	21.6	22.7	21.7	20.5	19.5
N51-1403	19.2	21.0	21.0	21.2	21.7	21.0	21.2	21.0
N51-1467	20.0	21.1	21.6	22.8	21.1	21.7	20.1	21.1
N51-1675	19.6	21.5	20.3	21.8	21.9	21.1	20.8	20.2
N51-1696	19.9	21.1	20.4	21.3	20.9	20.9	21.2	21.1
N51-2078	19.5	21.1	20.7	22.7	21.1	20.3	20.4	20.7
N52-4342	18.5	20.3	19.8	21.5	21.0	21.3	20.1	19.3
N52-4347	19.0	21.2	21.1	22.7	22.2	21.8	20.6	20.6
N52-4349	19.8	21.5	20.9	22.8	22.7	21.8	20.9	20.6
N52-4559	18.2	20.3	20.2	20.3	21.2	20.2	21.1	18.7
N52-4569	18.7	20.5	20.7	22.3	22.5	20.1	20.2	19.6
N52-4368	18.4	20.8	19.8	21.7	19.4	19.8	19.1	20.3
N52-4378	19.0	21.6	20.9	21.8	21.9	21.3	19.5	21.7
N52-4380	19.7	21.5	19.9	22.6	21.2	21.1	19.8	21.6
Mean	19.0	20.2	20.4	21.6	21.7	20.7	20.3	20.0

Table 44. Summary of the percentage protein for strains in Preliminary Group VI, 1955

Strain	Plymouth, N. C.	Clayton, N. C.	Quincy, Fla.	Walnut Hill, Fla.	Wilson, Ark.	Stoneville, Miss.		Bixby, Okla.
						Loam	Clay	
Ogden	42.3	39.1	41.9	40.9	37.1	41.4	41.8	39.9
Lee	43.3	39.7	43.8	41.5	38.5	41.4	42.5	38.6
V51-2	43.1	37.9	41.1	40.2	38.9	40.5	40.0	36.3
D49-2477	44.1	42.3	44.9	43.5	41.5	41.8	45.3	40.7
D51-4969	43.0	41.2	40.8	40.7	38.6	41.0	42.1	37.7
D52-810	41.7	39.2	42.1	40.5	38.6	40.9	40.5	38.9
D53-1242	42.1	39.0	38.7	40.4	36.7	39.9	38.1	38.1
D53-1260	41.2	40.0	42.3	42.3	38.5	41.2	39.7	37.1
D53-1279	42.9	43.0	41.5	41.6	38.6	42.2	42.7	42.8
D53-1290	44.7	43.7	45.2	44.9	41.1	47.2	45.0	40.2
D53-1297	43.8	40.3	43.2	43.1	39.0	43.3	41.1	38.1
D53-1301	43.7	41.0	43.3	42.6	38.7	42.2	43.5	39.3
D53-1309	40.6	38.6	43.2	40.9	37.1	40.5	40.9	37.5
D53-1334	40.5	39.6	42.8	41.5	37.5	39.7	39.9	37.3
D53-1340	41.6	39.5	42.0	41.3	38.1	40.9	41.8	35.7
D53-1383	39.1	35.7	-	40.1	39.2	39.8	39.7	36.3
D53-1566	43.4	40.9	43.3	43.0	39.3	41.4	41.6	41.6
D53-1568	43.3	40.3	42.9	42.0	38.3	41.2	42.4	42.6
D53-1569	42.9	41.5	43.1	38.8	38.5	40.9	41.5	40.9
D53-1590	42.5	41.5	42.2	40.9	37.0	42.2	41.4	40.1
D53-1601	42.2	40.9	41.8	41.9	37.4	42.6	43.2	40.2
D53-1611	42.3	38.9	42.6	41.5	38.3	40.9	39.8	38.4
N50-1953	42.0	40.7	42.0	43.0	37.5	42.2	42.9	40.5
N51-1403	41.7	39.5	39.4	39.4	38.8	40.7	40.6	36.2
N51-1467	41.9	40.2	42.5	42.6	39.3	41.0	42.1	38.7
N51-1675	43.9	40.2	42.5	42.5	38.3	42.5	41.4	38.0
N51-1696	43.0	41.1	42.2	42.2	38.4	41.4	41.5	37.4
N51-2078	42.8	40.0	41.8	40.9	38.2	41.3	41.1	38.7
N52-4342	42.7	40.0	42.5	41.1	38.6	40.8	41.2	38.4
N52-4347	41.7	38.1	39.7	38.6	36.7	38.8	40.7	36.3
N52-4349	41.5	38.9	42.2	40.0	37.8	41.1	41.3	37.8
N52-4559	43.3	42.2	41.8	43.9	36.7	42.9	41.3	38.5
N52-4569	42.4	39.5	42.1	42.4	35.5	42.0	41.5	39.5
N52-4368	42.5	40.5	42.1	40.9	41.0	42.3	43.5	36.9
N52-4378	37.9	37.8	40.0	38.7	35.9	39.6	40.8	34.5
N52-4380	41.2	37.9	38.6	40.8	36.1	40.4	41.3	36.1
Mean	42.3	40.0	42.0	41.4	38.2	41.4	41.6	38.5

Table 45. Summary of the height data for strains in Preliminary Group VI, 1955

Strain	Plymouth, N. C.	Clayton, N. C.	Quincy, Fla.	Walnut Hill, Fla.	Wilson, Ark.	Stoneville, Miss.		Bixby, Okla.
						Loam	Clay	
Ogden	44	33	17	25	33	34	35	33
Lee	39	32	19	23	33	32	29	35
V51-2	50	44	21	32	28	47	41	43
D49-2477	45	35	18	27	29	33	26	35
D51-4969	46	37	27	31	32	40	46	38
D52-810	37	27	19	23	29	36	34	32
D53-1242	59	49	28	45	31	57	53	44
D53-1260	35	31	15	22	22	35	26	27
D53-1279	41	32	22	26	27	35	32	39
D53-1290	39	32	20	24	25	31	25	31
D53-1297	42	31	20	24	27	33	28	38
D53-1301	39	29	18	23	33	31	27	36
D53-1309	37	31	15	21	27	31	26	26
D53-1334	38	31	15	22	27	32	30	36
D53-1340	40	34	17	25	30	32	32	36
D53-1383	45	31		21	26	32	28	30
D53-1566	48	33	22	30	31	38	39	40
D53-1568	43	35	19	31	34	38	37	38
D53-1569	42	34	18	25	30	35	35	28
D53-1590	42	31	18	22	29	34	32	36
D53-1601	37	30	13	23	29	32	29	30
D53-1611	39	28	12	18	21	27	28	27
N50-1953	38	32	14	26	28	28	29	35
N51-1403	38	27	19	22	26	32	28	34
N51-1467	39	31	22	24	30	29	28	31
N51-1675	39	33	19	26	22	44	29	30
N51-1696	39	31	18	25	30	34	29	34
N51-2078	38	31	18	24	31	37	34	30
N52-4342	46	33	22	27	30	43	34	38
N52-4347	38	31	20	26	31	37	33	30
N52-4349	38	32	16	23	29	33	31	36
N52-4559	46	37	22	26	34	42	37	41
N52-4569	46	38	18	26	29	38	39	32
N52-4368	33	29	17	23	30	29	29	33
N52-4378	39	35	21	25	24	37	32	30
N52-4380	34	31	22	25	25	36	32	28

Table 46. Seed quality scores for the strains in Preliminary Group VI, 1955

Strain	Plymouth, N. C.	Clayton, N. C.	Quincy, Fla.	Walnut Hill, Fla.	Wilson, Ark.	Stoneville, Miss.		Bixby, Okla.
						Loam	Clay	
Ogden	2.5	1.0	3.0	2.0	3.0	2.5	3.0	2.5
Lee	1.5	1.0	3.0	2.0	3.0	1.0	1.0	2.0
V51-2	3.2	1.0	3.0	2.0	3.0	2.5	3.5	2.5
D49-2477	1.7	1.0	3.0	2.0	3.0	2.0	1.5	2.0
D51-4969	1.5	1.0	2.0	2.0	2.5	1.5	1.0	1.5
D52-810	2.0	1.0	3.0	2.0	3.0	1.5	2.0	1.5
D53-1242	4.0	1.2	3.0	2.0	3.0	3.0	2.0	2.5
D53-1260	2.7	1.2	3.0	2.0	2.0	2.0	1.0	2.5
D53-1279	2.5	1.2	4.0	3.0	2.0	2.0	2.5	2.5
D53-1290	2.5	1.0	4.0	3.0	3.0	2.5	2.0	3.0
D53-1297	2.0	1.0	5.0	3.0	2.0	2.1	2.0	3.0
D53-1301	1.2	1.0	2.0	2.0	3.0	1.0	1.0	2.5
D53-1309	2.5	1.0	4.0	2.0	2.0	2.0	2.0	2.5
D53-1334	1.5	1.2	3.0	2.0	2.0	1.0	1.5	3.0
D53-1340	1.5	1.0	3.0	2.0	2.5	2.0	2.0	2.5
D53-1383	3.2	1.0	-	2.0	2.5	2.5	3.0	2.5
D53-1566	2.0	1.0	2.0	2.0	3.0	2.0	2.0	3.5
D53-1568	1.2	1.0	3.0	2.0	2.0	1.5	1.5	2.5
D53-1569	1.7	1.2	3.0	2.0	3.0	2.0	2.0	2.5
D53-1590	2.0	1.0	3.0	2.0	2.5	2.0	1.5	3.0
D53-1601	1.5	1.0	3.0	3.0	2.5	2.0	2.5	2.0
D53-1611	3.7	3.0	4.0	2.0	3.0	2.0	2.0	2.5
N50-1953	1.5	1.0	4.0	3.0	3.0	2.0	3.0	2.0
N51-1403	2.0	1.0	3.0	2.0	2.5	2.0	2.0	2.0
N51-1467	2.0	1.0	3.0	2.0	2.0	2.0	2.0	1.5
N51-1675	2.7	1.0	3.0	2.0	3.0	3.0	2.5	2.0
N51-1696	2.2	1.2	4.0	3.0	3.0	2.0	2.5	2.5
N51-2078	2.0	1.0	4.0	2.0	3.0	2.5	3.0	2.0
N52-4342	1.5	1.0	2.0	2.0	2.5	2.0	2.5	2.0
N52-4347	1.7	1.0	3.0	2.0	3.0	2.0	2.0	2.0
N52-4349	1.0	1.0	2.0	2.0	2.5	2.0	2.0	2.0
N52-4559	2.0	1.0	3.0	2.0	2.5	2.0	1.0	2.5
N52-4569	3.0	1.0	3.0	2.0	3.0	2.0	2.0	2.0
N52-4368	2.0	1.0	3.0	2.0	3.0	2.0	2.0	2.0
N52-4378	1.2	1.0	2.0	2.0	2.0	2.0	3.0	1.5
N52-4380	1.5	1.0	2.0	2.0	3.0	2.0	2.0	1.5

UNIFORM GROUP VII

1955

	Strain or Variety	Parentage	Generation Composited
1.	Jackson	Volstate (2) x Palmetto	F_4
2.	Roanoke	Selection from mixed seed lot	
3.	Lee	S-100 x CNS	F_6
4.	N50-2217	Volstate x Mamotan 6640	F_6
5.	N50-2542	Ogden x Biloxi	F_8
6.	N51-2186	Roanoke x N45-745	F_6
7.	N51-2220	Roanoke x N45-745	F_6
8.	N51-2638	N42-26 x N45-1004	F_6
9.	N51-3527	Volstate (2) x Palmetto	F_8
10.	D51-4877	Roanoke x N45-745	F_6
11.	D51-5052	Roanoke x N45-745	F_6
12.	D51-5091	Roanoke x N45-745	F_6

Thirty-three Group VII nurseries were planted. Results of 31 nurseries are summarized in tables 47 through 55. Yields from most of these tests were high enough to give good strain evaluation. In the Southeast, where strains of VII maturity are perhaps best adapted, the mean yield for 10 nurseries was 36.9 bushels per acre.

Group VII included the three named varieties Jackson, Roanoke, and Lee and 9 strains. The 1955 nurseries included the same strains as in 1954. These same strains will all be retested in 1956 to permit a three-year study of variety x year x location interaction.

Mean seed yield, oil content, protein content, maturity and height are reported in table 47 for each production area, along with two-year means for seed yield, oil and protein percentages. Ratings are also given for shattering, bacterial pustule, and target spot. All strains in this group hold their seed well when moisture is adequate to permit full maturity. Seven of the strains are resistant to bacterial pustule and nine were given low target spot ratings. N51-2638 appeared to be very susceptible to bacterial blight at Stoneville.

In the 1955 plantings, Lee yielded significantly higher than Jackson in the East Coast, Upper and Central, and Western production areas. Lee equalled Jackson in yield in the Southeast and Delta. For the two-year period, yield of Lee averages slightly higher than Jackson in all areas. However, the additional height of Jackson should make it better suited for combine harvesting in many areas of the Southeast.

The strain D51-4877 yielded significantly better than Jackson in all areas except the Southeast. D51-4877 is the shortest strain included in this group. D51-5091, the tallest strain, was lowest yielding in the East Coast area but was near the top in the Southeast. However, in the Southeast, its yield was no better than D51-4877, which averaged 12 inches shorter.

In 1954, the combined analysis of variance for yield for strains in the East Coast area showed a non-significant variety x location interaction, while in 1955 there was a significant variety x location interaction. There was a significant interaction in both years in the Southeast, while in the Delta the interaction was non-significant in each of the years. The combined analyses of variance showed no variety x location interaction for oil or protein in the Delta or Upper and Central areas. There was no interaction for protein content in the Southeast. There was a significant variety x location for both oil and protein content in the East Coast area and for oil content in the Southeast.

The strain N51-2638 equalled Jackson in seed yield in all areas except the East Coast. However, oil content was significantly lower in all areas both years, while protein content did not differ from that of Jackson.

The strain N51-3527, a sub-line of Jackson, has a two-year mean yield very similar to that of Jackson in each production area. Oil content was higher than that for Jackson in the East Coast and Southeast areas. Seed size of N51-3527 was larger than that of Jackson at most locations each year. The higher degree of homozygosity of N51-3527 does not appear to have affected its regional adaptation in relation to Jackson.

Table 47. General summary of the performance for strains in Uniform Group VII, 1955

	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
Seed Yield - 1955						
East	30.2	28.9	33.2+	29.4	29.3	35.5+
Southeast	36.7	34.7	37.1	36.4	35.6	38.3
Upper & Cen. South	24.3	25.0	29.8+	25.7	27.5	25.7
Delta	33.5	34.9	32.6	32.6	33.7	34.2
West	24.2	24.5	29.5+	26.0	26.9	27.6+
-1954-55						
East	27.2	27.2	30.9	26.4	26.0	30.9
Southeast	30.8	29.0	31.4	30.1	31.7	32.6
Upper & Cen. South	17.0	16.2	20.5	16.8	19.2	17.8
Delta	33.0	33.4	35.4	31.7	33.1	34.4
Oil - 1955						
East	20.3	20.8+	19.7-	19.7-	19.6-	20.6+
Southeast	22.4	22.9+	21.8-	21.9-	22.2	22.7+
Upper & Cen. South	20.9	20.6	20.6	20.8	20.5	20.1
Delta	21.2	21.2	20.6	19.9-	20.6	20.2-
Regional Mean	21.1	21.5	20.6	20.5	20.6	21.1
- 1954-55						
East	20.7	21.0	19.9	19.8	19.9	20.5
Southeast	22.7	22.8	21.9	21.9	22.2	22.6
Upper & Cen. South	21.9	21.1	20.9	21.0	21.0	20.7
Delta	21.9	21.8	21.1	20.5	21.1	20.9
Regional Mean	21.6	21.8	20.8	20.8	20.9	21.3
Protein - 1955						
East	41.0	40.4-	43.2+	40.8	43.2+	40.7
Southeast	39.5	39.1	42.0+	39.4	41.0+	38.5-
Upper & Cen. South	39.1	39.3	40.1	39.9	40.9	39.6
Delta	40.5	40.0	42.5+	40.4	41.7+	40.0
Regional Mean	40.5	39.8	42.4	40.2	42.1	39.8
- 1954-55						
East	41.5	41.2	43.7	41.7	43.8	41.9
Southeast	40.0	40.0	41.8	40.0	41.6	39.5
Upper & Cen. South	38.0	38.3	40.5	40.8	41.0	38.7
Delta	40.0	39.7	42.1	40.0	41.9	40.1
Regional Mean	40.6	40.4	42.5	40.8	42.5	40.6

Table 47. (Continued)

	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
Seed Yield - 1955						
East	30.1	28.7-	30.2	32.3+	32.2+	27.9-
Southeast	37.2	35.7	36.3	37.8	38.0	37.8
Upper & Cen. South	26.6	24.3	25.3	29.4+	24.7	24.5
Delta	32.3	33.3	32.7	38.6+	29.0-	31.2
West	26.3	24.9	25.4	31.4+	26.6	29.5+
- 1954-55						
East	27.8	26.8	27.7	30.2	29.4	23.9
Southeast	32.1	29.4	30.2	32.4	32.2	32.2
Upper & Cen. South	17.9	18.6	17.2	19.9	16.4	15.7
Delta	34.1	33.4	32.8	40.6	32.7	32.2
Oil - 1955						
East	20.3	19.6-	21.1+	20.0-	20.0-	19.6-
Southeast	23.4+	21.6-	23.5+	22.0-	22.9+	22.0-
Upper & Cen. South	21.9	19.8-	21.6	19.9	21.1	20.8
Delta	21.2	20.0-	21.4	19.7-	20.3-	19.9-
Regional Mean	21.5	20.3	21.9	20.5	21.0	20.5
- 1954-55						
East	20.5	19.7	21.4	20.2	20.3	19.3
Southeast	23.0	21.7	23.4	22.1	22.5	21.7
Upper & Cen. South	22.0	20.7	22.0	21.0	20.8	21.0
Delta	21.6	20.4	22.0	20.5	21.0	20.7
Regional Mean	21.6	20.6	22.2	20.9	21.2	20.6
Protein - 1955						
East	41.4+	41.3	40.8	41.4+	41.6+	41.1
Southeast	38.4-	39.7	38.9-	39.0-	38.5-	38.9-
Upper & Cen. South	37.5	40.2	38.9	39.7	39.5	38.8
Delta	40.5	40.2	40.6	40.5	41.0	41.0
Regional Mean	40.1	40.5	40.0	40.4	40.4	40.0
- 1954-55						
East	42.0	42.0	41.0	41.9	41.9	42.2
Southeast	39.4	40.3	39.4	39.7	39.2	39.6
Upper & Cen. South	37.9	39.6	39.1	38.8	39.7	38.4
Delta	40.4	40.5	40.2	40.1	40.5	39.9
Regional Mean	40.6	41.0	40.2	40.7	40.6	40.6

Table 47. (Continued)

	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
Maturity Index - 1955						
East	10-30	-3	-8	-2	-3	-7
Southeast	10-24	-2	-7	-3	-4	-6
Upper & Cen. South	10-28	-3	-12	-6	-4	-8
Delta	10-23	-2	-8	-3	-4	-6
Height - 1955						
East	46	46	35	46	36	32
Southeast	34	27	26	32	28	21
Upper & Cen. South	43	42	36	44	36	34
Delta	49	46	31	47	38	36
West	35	33	26	36	28	25
Shattering	1	1	1	2	1	1
Bacterial Pustule	3	3	1	3	3	1
Target Spot	1	2.5	1	1	2.5	1

Table 47. (Continued)

	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
Maturity Index - 1955						
East	-6	-6	-1	-6	-6	-5
Southeast	-7	-4	-1	-5	-8	-5
Upper & Cen. South	-8	-9	-4	-11	-10	-4
Delta	-5	-7	-1	-7	-7	-2
Height - 1955						
East	40	37	46	32	34	47
Southeast	30	28	32	22	23	34
Upper & Cen. South	40	38	42	32	33	47
Delta	43	39	46	35	35	41
West	32	30	34	24	25	41
Shattering	1	1	1	1	1	1
Bacterial Pustule	1	1	3	1	1	1
Target Spot	1.5	1.5	1.5	3	1	1

Table 48. Seed yield, in bushels per acre, for the strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186	N51-2220
			East Coast				
Accomac, Va.	13.5	14.2	27.1+	12.2	13.8	15.1	12.6
Norfolk, Va.	24.2	25.5	29.8+	23.7	21.1	32.4+	26.3
Petersburg, Va.	20.9	20.7	15.7-	23.9	19.0	20.2	20.9
Holland, Va.	32.2	35.3+	37.7+	34.4	32.1	40.8+	33.2
Plymouth, N. C.	26.4	25.4	34.6+	24.6	26.8	32.8+	28.6
Willard, N. C.	31.1	28.1	27.5	25.0-	26.4	35.6	28.0
Clayton, N. C.	28.8	28.0	26.5	28.5	30.5	35.7+	31.6
Florence, S. C.	37.0	30.3-	35.1	35.9	35.5	42.9+	33.8
Hartsville, S. C.	43.4	39.6	43.3	41.8	40.3	45.5	39.9
Mean	30.2	28.9	33.2+	29.4	29.3	35.5+	30.1
			Southeast				
Summerville, S. C.	40.4	37.3	39.8	37.1	36.6	41.8	37.8
Blackville, S. C.	41.8	35.4-	44.0	42.0	37.6	39.6	41.9
Tallassee, Ala.	28.1	36.6	37.0+	37.6+	27.7	40.2+	39.2+
Gainesville, Fla.	39.0	36.6	36.0	35.9	33.0	42.0	40.5
Marianna, Fla.	41.2	43.9	42.5	44.8	39.6	39.7	40.6
Quincy, Fla.	25.7	23.4	32.0	28.6	31.5	32.5	31.8
Jay, Florida	42.0	38.9	34.2	36.1	41.1	40.1	35.7
Walnut Hill, Fla.	39.6	38.1	36.8	38.8	36.3	41.1	39.8
Fairhope, Ala.	31.2	25.5	31.4	27.0	32.3	27.1	27.6
Baton Rouge, La.	38.0	30.9	37.9	36.3	40.6	39.2	37.2
Mean	36.7	34.7	37.1	36.4	35.6	38.3	37.2
			Upper and Central South				
Clemson, S. C.	21.0	21.6	26.2	20.5	27.7	28.1	27.0
Athens, Ga.	12.6	11.3	18.8	15.5	16.8	16.8	12.8
Experiment, Ga.	36.8	42.5	44.3	41.9	38.3	40.6	37.6
State College, Miss.	26.7	24.5	30.0	24.9	27.2	17.2	28.8
Mean	24.3	25.0	29.8+	25.7	27.5	25.7	26.6
			Delta				
Stoneville, Miss. (A)	40.5	42.0	32.4	39.8	41.6	40.9	33.8
Stoneville, Miss. (B)	37.8	37.1	37.1	31.7	33.9	36.6	36.0
St. Joseph, La.	22.4	25.8	28.5	26.2	25.4	25.0	27.2
Mean	33.5	34.9	32.6	32.6	33.7	34.2	32.3
			West				
Stuttgart, Ark.	29.7	28.9	36.0	31.7	36.1	31.9	31.4
Curtis, La.	31.9	25.9	39.6	34.7	31.3	37.4	25.5
Milburn, Okla.[1/]	1.4	1.6	6.6	4.5	6.4	4.6	5.4
Chillicothe, Texas	12.2	12.3	17.3	13.0	14.2	16.6	17.0
Lubbock, Texas	22.8	30.7	25.2	24.6	25.7	24.5	31.3
Mean	24.2	24.5	29.5+	26.0	26.9	27.6+	26.3

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

Table 48. (Continued)

Location	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091	L.S.D. (5%)	C.V.
			East Coast				
Accomac, Va.	14.9	12.7	12.4	14.9	11.1	6.2	25%
Norfolk, Va.	25.9	25.9	28.1+	32.8+	22.9	3.7	8%
Petersburg, Va.	16.3-	22.7	18.7	19.3	16.7-	4.1	7%
Holland, Va.	32.7	34.3	44.5+	36.7+	33.4	2.9	5%
Plymouth, N. C.	26.2	29.7+	25.8	28.9	20.8-	3.0	6%
Willard, N. C.	24.2-	29.6	26.6	31.7	26.8	5.8	12%
Clayton, N. C.	29.8	27.7	35.0+	29.8	29.9	3.9	8%
Florence, S. C.	33.7	32.3-	41.8+	37.2	31.9-	4.3	7%
Hartsville, S. C.	39.0	42.1	42.3	43.4	41.7	N.S.	8%
Mean	28.7-	30.2	32.3+	32.2+	27.9-	1.4	9%
			Southeast				
Summerville, S. C.	36.0	40.8	38.5	40.9	41.5	N.S.	9%
Blackville, S. C.	39.3	40.0	29.5-	39.8	42.3	4.3	6%
Tallassee, Ala.	29.9	31.9	44.4+	37.0+	39.5+	8.7	14%
Gainesville, Fla.	29.1	36.7	41.1	43.5	38.5	N.S.	13%
Marianna, Fla.	43.6	43.9	43.7	39.6	38.3	N.S.	12%
Quincy, Fla.	35.4	28.3	34.7	35.2	28.8	4.3	8%
Jay, Fla.	36.3	42.2	41.6	37.8	44.3	N.S.	12%
Walnut Hill, Fla.	41.4	37.8	44.9	42.4	38.1	N.S.	8%
Fairhope, Ala.	27.8	23.4	27.1	30.8	30.8	5.3	11%
Baton Rouge, La.	33.4	37.7	29.0	33.4	36.1	N.S.	13%
Mean	35.7	36.3	37.8	38.0	37.8	2.1	11%
			Upper and Central South				
Clemson, S. C.	23.4	23.5	29.3	25.4	23.9	N.S.	17%
Athens, Ga.	15.5	14.5	16.0	15.6	14.6	6.9	16%
Experiment, Ga.	33.9	37.8	43.9	34.0	37.6	N.S.	21%
State College, Miss.	24.6	25.2	28.2	23.7	22.0	N.S.	21%
Mean	24.3	25.3	29.4+	24.7	24.5	3.5	17%
			Delta				
Stoneville, Miss. (A)	35.5	38.6	48.7	34.7	36.1	N.S.	14%
Stoneville, Miss. (B)	35.7	39.9	36.9	29.9	34.4	N.S.	11%
St. Joseph, La.	28.7	19.5	30.2	22.5	23.1	N.S.	15%
Mean	33.3	32.7	38.6+	29.0-	31.2	4.0	14%
			West				
Stuttgart, Ark.	29.1	30.2	38.2	31.9	32.5	4.7	9%
Curtis, La.	25.8	27.3	38.8	27.0	38.9	9.4	17%
Milburn, Okla.[1/]	7.7	2.2	6.3	7.0	1.6		
Chillicothe, Texas	16.3	12.8	17.2	19.4	15.2	4.1	16%
Lubbock, Texas	28.2	31.3	31.3	31.4	28.5	N.S.	15%
Mean	24.9	25.4	31.4+	26.6	29.5+	3.2	15%

Table 49. Summary of the oil percentage for strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
		East Coast				
Accomac, Va.	19.4	20.2	19.0	18.1	18.5	19.2
Norfolk, Va.	18.9	19.3	18.4	17.8-	17.2-	19.1
Petersburg, Va.	19.9	20.8+	19.5	19.8	19.2-	20.6+
Holland, Va.	19.5	20.4+	18.8-	18.2-	18.3-	20.3+
Plymouth, N. C.	20.7	20.8	19.7	19.6	19.6	20.4
Willard, N. C.	21.0	20.9	19.8-	20.2-	19.8-	20.8
Clayton, N. C.	20.9	21.2	19.9-	20.7	20.8	21.4
Florence, S. C.	20.9	21.4	20.6	21.1	21.0	21.3
Hartsville, S. C.	21.8	22.7+	21.6	21.9	22.1	22.4+
Mean	20.3	20.8+	19.7-	19.7-	19.6-	20.6+
		Southeast				
Summerville, S. C.	22.7	22.9	21.8-	22.1	21.2-	22.3
Tallassee, Ala.	22.1	22.4	21.3-	21.5	21.9	21.8
Gainesville, Fla.	22.3	23.3+	22.1	22.6	22.7	23.1+
Walnut Hill, Fla.	21.6	22.9+	21.7	21.3	21.1	22.6+
Fairhope, Ala.	23.0	23.1	22.9	22.4	23.4	24.2+
Baton Rouge, La.	22.7	22.7	21.4-	22.0	22.5	22.1
Mean	22.4	22.9+	21.8-	21.9-	22.2	22.7+
		Upper and Central South				
Clemson, S. C.	19.2	18.1	18.7	18.8	18.4	18.4
Experiment, Ga.	22.6	23.1	22.5	22.8	22.6	21.8
Mean	20.9	20.6	20.6	20.8	20.5	20.1
		Delta				
Stoneville, Miss. (A)	22.3	22.0	21.1-	20.8-	21.0-	21.1-
Stoneville, Miss. (B)	22.0	22.6	21.9	21.1-	21.8	21.7
St. Joseph, La.	19.4	19.0	18.8	18.0-	19.0	17.8-
Mean	21.2	21.2	20.6	19.9-	20.6	20.2-

Table 49. (Continued)

Location	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091	L.S.D. (5%)
			East Coast				
Accomac, Va.	18.7	19.0	19.4	19.7	19.5	19.1	N.S.
Norfolk, Va.	18.0-	17.9-	19.3	18.3	17.5-	17.4-	0.6
Petersburg, Va.	20.0	19.4-	21.3+	20.1	20.0	19.6	0.5
Holland, Va.	18.7-	19.0-	20.4+	19.3	18.6-	18.6-	0.4
Plymouth, N. C.	21.0	20.0	21.2	19.2	19.7	19.4	N.S.
Willard, N. C.	20.6	20.0-	22.1+	18.6-	20.1-	20.1-	0.6
Clayton, N. C.	21.0	20.2-	21.8+	20.9	20.1-	20.0-	0.7
Florence, S. C.	21.5	19.9-	21.6+	21.1	21.5	20.5	0.7
Hartsville, S. C.	22.9+	20.9-	22.5+	22.4+	22.6+	21.5	0.4
Mean	20.3	19.6-	21.1+	20.0-	20.0-	19.6-	0.2
			Southeast				
Summerville, S. C.	23.1	21.5-	23.7+	21.6-	22.7	22.0-	0.7
Tallassee, Ala.	22.8+	21.6	23.1+	21.5	22.2	21.9	0.7
Gainesville, Fla.	23.5+	21.8	23.5+	21.9	23.4+	21.9	0.7
Walnut Hill, Fla.	23.2+	21.4	23.0+	22.7+	22.6+	21.6	0.8
Fairhope, Ala.	24.5+	22.1-	24.3+	23.1	24.1+	22.9	0.8
Baton Rouge, La.	23.1	21.0-	23.4	21.0-	22.4	21.5-	0.9
Mean	23.4+	21.6-	23.5+	22.0-	22.9+	22.0-	0.3
			Upper and Central South				
Clemson, S. C.	20.8	17.7	19.4	17.3	19.5	19.5	N.S.
Experiment, Ga.	23.0	21.8	23.7+	22.4	22.6	22.0	1.1
Mean	21.9	19.8-	21.6	19.9	21.1	20.8	1.1
			Delta				
Stoneville, Miss. (A)	22.2	20.7-	22.1	20.9-	21.7	21.1-	1.0
Stoneville, Miss. (B)	22.6	21.4	22.8	20.5-	21.2	20.8-	0.9
St. Joseph, La.	19.1	18.0-	19.2	17.6-	17.9-	17.7-	1.0
Mean	21.2	20.0-	21.4	19.7-	20.3-	19.9-	0.7

Table 50. Summary of the protein percentage for the strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
		East Coast				
Accomac, Va.	39.9	39.5	42.5+	40.8	41.6+	41.3
Norfolk, Va.	41.5	41.9	44.9+	42.7	45.9+	42.4
Petersburg, Va.	40.9	40.8	43.4+	41.0	42.9+	40.5
Holland, Va.	43.2	41.8-	44.9+	42.7	46.9+	43.0
Plymouth, N. C.	42.2	41.7	44.5+	41.8	44.0+	41.1
Willard, N. C.	41.0	40.7	43.0+	40.6	43.0+	40.6
Clayton, N. C.	41.1	40.7	43.6+	39.1-	42.3+	40.3-
Florence, S. C.	40.2	39.3	41.9+	39.3	41.5+	39.2
Hartsville, S. C.	39.1	37.6-	40.3+	39.3	40.3+	37.9-
Mean	41.0	40.4-	43.2+	40.8	43.2+	40.7
		Southeast				
Summerville, S. C.	37.5	38.2	41.5+	38.0	41.3+	38.1
Tallassee, Ala.	40.6	40.0	41.9+	39.5	40.8	39.1-
Gainesville, Fla.	39.3	37.9	41.9+	38.6	40.2	38.6
Walnut Hill, Fla.	39.7	39.7	43.0+	40.9+	42.5+	38.9
Fairhope, Ala.	40.4	40.2	41.7+	40.2	39.9	37.9-
Baton Rouge, La.	39.3	38.6	41.8+	39.1	40.9+	38.6
Mean	39.5	39.1	42.0+	39.4	41.0+	38.5-
		Upper and Central South				
Clemson, S. C.	40.4	40.6	42.1	42.3	42.3	40.8
Experiment, Ga.	37.8	37.9	38.0	37.5	39.5	38.4
Mean	39.1	39.3	40.1	39.9	40.9	39.6
		Delta				
Stoneville, Miss. (A)	39.9	28.6	42.5	39.2	41.6	39.1
Stoneville, Miss. (B)	40.1	39.4	40.9	39.9	41.3	38.9
St. Joseph, La.	41.5	41.7	44.0+	42.0	43.7+	42.2
Mean	40.5	40.0	42.5+	40.4	41.7	40.0

Table 50. (Continued)

Location	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091	L.S.D. (5%)
			East Coast				
Accomac, Va.	40.9	41.4	40.0	40.0	40.5	40.1	1.7
Norfolk, Va.	43.8+	42.1	42.4	43.2+	44.5+	43.0+	1.5
Petersburg, Va.	41.7	41.5	40.9	42.0+	40.7	40.7	1.1
Holland, Va.	44.8+	42.9	42.1-	43.1	44.4+	43.4	1.0
Plymouth, N. C.	41.1	40.7-	41.9	42.8	42.9	41.9	1.3
Willard, N. C.	41.1	39.6-	40.7	42.0	41.5	41.1	1.1
Clayton, N. C.	41.6	41.3	40.1-	39.4-	41.8	41.0	0.8
Florence, S. C.	39.9	41.0	40.0	40.5	39.8	40.3	1.1
Hartsville, S. C.	38.3-	40.9+	38.9	39.4	38.1-	38.6	0.7
Mean	41.4+	41.3	40.8	41.4+	41.6+	41.1	0.4
			Southeast				
Summerville, S. C.	38.0	40.5+	38.1	38.8+	38.2	38.2	1.0
Tallassee, Ala.	39.0-	40.0	40.4	40.0	38.9-	39.4	1.3
Gainesville, Fla.	38.0	39.6	38.1	37.9	38.0	39.1	1.5
Walnut Hill, Fla.	39.4	40.0	39.6	38.4-	38.7-	39.6	0.9
Fairhope, Ala.	37.7-	38.7-	39.2-	38.8-	37.9-	38.3-	1.2
Baton Rouge, La.	38.4	39.5	37.9-	40.0	39.3	39.0	1.3
Mean	38.4-	39.7	38.9-	39.0-	38.5-	38.9-	0.5
			Upper and Central South				
Clemson, S. C.	39.9	40.6	40.7	42.7	41.8	40.3	N.S.
Experiment, Ga.	37.5	39.8	37.1	36.6	37.2	37.3	N.S.
Mean	37.5	40.2	38.9	39.7	39.5	38.8	N.S.
			Delta				
Stoneville, Miss. (A)	39.4	40.0	39.7	39.2	39.8	39.5	1.3
Stoneville, Miss. (B)	39.9	39.0	39.5	40.8	40.4	40.2	1.1
St. Joseph, La.	42.4	41.7	42.4	41.5	42.8	43.3+	1.6
Mean	40.5	40.2	40.6	40.5	41.0	41.0	0.7

Table 51. Relative maturity data, days earlier (+) or later (-) than Jackson, for the strains in Uniform Group VII, 1955

Location	Date Planted	Jackson Matured	Roanoke	Lee	N50-2217	N50-2542
			East Coast			
Petersburg, Va.		11-10	-3	-9	-3	-3
Holland, Va.[1/]		F	11-5	-6	F	F
Plymouth, N. C.	5-2	10-30	-4	-7	-2	-2
Willard, N. C.	5-3	10-29	-3	-5	-1	-1
Clayton, N. C.	5-6	11-1	-2	-7	0	-1
Florence, S. C.	5-17	10-31	-6	-12	-5	-6
Hartsville, S. C.	6-15	10-31	-2	-7	-2	-4
Mean			-3	-8	-2	-3
			Southeast			
Tallassee, Ala.	5-27	10-30	-3	-3	-8	-9
Gainesville, Fla.	6-13	10-27	-1	-7	-2	-4
Marianna, Fla.	6-27	10-20	-2	-6	-2	-3
Quincy, Fla.	7-6	10-24	0	-11	-9	-11
Jay, Fla.	6-13	10-20	0	-10	0	0
Walnut Hill, Fla.	6-14	10-17	-5	-5	-4	-3
Fairhope, Ala.	6-17	10-28	0	-8	0	0
Baton Rouge, La.	5-23	10-24	-3	-4	-2	-3
Mean			-2	-7	-3	-4
			Upper and Central South			
Clemson, S. C.	5-18	10-28	-6	-9	-6	+1
Athens, Ga.	5-5	10-27	-5	-17	-11	-7
Experiment, Ga.	5-20	10-27	-2	-13	-7	-13
State College, Miss.	5-28	10-31	0	-7	0	+2
Mean			-3	-12	-6	-4
			Delta			
Stoneville, Miss. (A)	5-11	10-25	-1	-10	-5	-5
Stoneville, Miss. (B)	5-3	10-16	0	-5	-3	-11
St. Joseph, La.	5-18	10-27	-4	-8	-2	-4
Mean			-2	-8	-3	-4
			West			
Curtis, La.	5-16	10-26	-3	-6	-3	-4
Milburn, Okla.	5-5	11-11	-1	-1	-1	-1
Lubbock, Texas[1/]	6-20	F	F	10-25	F	F
Mean			-2	-3	-2	-2

1/Not included in the mean.

Table 51. (Continued)

Location	N51-2186	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
			East Coast				
Petersburg, Va.	-5	-6	-5	-3	-5	-5	-4
Holland, Va.[1/]	-3	-2	-3	F	F	-1	F
Plymouth, N. C.	-9	-7	-9	0	-9	-7	-8
Willard, N. C.	-4	-3	-4	-1	-4	-3	-3
Clayton, N. C.	-4	-5	-5	0	-4	-5	-3
Florence, S. C.	-12	-12	-11	-2	-11	-10	-9
Hartsville, S. C.	-5	-5	-3	-1	-4	-5	-2
Mean	-7	-6	-6	-1	-6	-6	-5
			Southeast				
Tallassee, Ala.	-2	-12	-2	-5	-9	-13	-6
Gainesville, Fla.	-8	-6	-5	-2	-5	-8	-3
Marianna, Fla.	-5	-5	-1	-1	-3	-6	-3
Quincy, Fla.	-11	-14	-9	0	-4	-11	-11
Jay, Fla.	0	0	0	0	0	0	0
Walnut Hill, Fla.	-10	-8	-7	+2	-7	-8	-5
Fairhope, Ala.	-8	-8	-8	0	-8	-8	-7
Baton Rouge, La.	-5	-4	-2	0	-6	-7	-2
Mean	-6	-7	-4	-1	-5	-8	-5
			Upper and Central South				
Clemson, S. C.	-7	-4	-6	-5	-11	-6	-4
Athens, Ga.	-5	-9	-16	-5	-12	-13	-6
Experiment, Ga.	-13	-14	-5	0	-14	-14	-3
State College, Miss.	-9	-6	-9	-6	-7	-6	0
Mean	-8	-8	-9	-4	-11	-10	-4
			Delta				
Stoneville, Miss. (A)	-7	-6	-9	-1	-8	-7	-1
Stoneville, Miss. (B)	-4	-5	-7	0	-7	-5	0
St. Joseph, La.	-7	-4	-5	-2	-7	-9	-4
Mean	-6	-5	-7	-1	-7	-7	-2
			West				
Curtis, La.	-6	-4	-3	0	-6	-7	-2
Milburn, Okla.	0	-1	-1	-1	-1	0	-1
Lubbock, Texas[1/]	F	F	F	F	F	F	F
Mean	-3	-2	-2	0	-3	-3	-2

Table 52. Summary of the height data for strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
			East Coast			
Accomac, Va.	47	52	34	44	32	32
Petersburg, Va.	57	54	40	53	44	39
Holland, Va.	51	51	39	54	38	34
Plymouth, N. C.	47	49	41	48	36	33
Willard, N. C.	45	40	31	48	34	33
Clayton, N. C.	39	40	32	41	31	28
Florence, S. C.	46	43	32	44	36	32
Hartsville, S. C.	40	37	32	37	34	28
Mean	46	46	35	46	36	32
			Southeast			
Summerville, S. C.	44	42	40	46	39	32
Blackville, S. C.	30	27	23	30	25	19
Tallassee, Ala.	47	39	37	46	39	35
Gainesville, Fla.	28	21	19	25	20	17
Marianna, Fla.	34	28	26	35	27	20
Quincy, Fla.	25	15	19	18	21	15
Jay, Fla.	37	25	25	35	29	20
Walnut Hill, Fla.	34	28	26	34	32	24
Fairhope, Ala.	18	10	14	15	17	9
Baton Rouge, La.	38	38	35	39	28	22
Mean	34	27	26	32	28	21
			Upper and Central South			
Clemson, S. C.	48	48	37	46	35	36
Athens, Ga.	39	40	35	43	32	32
Experiment, Ga.	43	38	35	42	40	34
Mean	43	42	36	44	36	34
			Delta			
Stoneville, Miss. (A)	45	45	29	46	38	35
Stoneville, Miss. (B)	46	45	30	46	35	36
St. Joseph, La.	55	49	34	50	42	37
Mean	49	46	31	47	38	36
			West			
Stuttgart, Ark.	43	42	30	41	34	32
Curtis, La.	36	30	28	37	24	22
Milburn, Okla.	39	34	27	40	33	29
Chillicothe, Texas	27	28	23	28	23	18
Lubbock, Texas	32	32	27	35	25	23
Mean	35	33	25	36	28	25

Table 52. (Continued)

Location	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
		East Coast				
Accomac, Va.	39	33	44	32	31	49
Petersburg, Va.	39	38	52	38	39	45
Holland, Va.	46	47	51	33	35	60
Plymouth, N. C.	46	41	48	36	36	54
Willard, N. C.	38	36	43	32	37	42
Clayton, N. C.	36	31	44	29	29	45
Florence, S. C.	42	38	44	32	32	43
Hartsville, S. C.	36	35	38	26	29	39
Mean	40	37	46	32	34	47
		Southeast				
Summerville, S. C.	39	45	44	30	34	45
Blackville, S. C.	28	28	29	17	20	33
Tallassee, Ala.	40	39	43	39	37	41
Gainesville, Fla.	25	20	23	17	19	29
Marianna, Fla.	35	31	35	20	25	36
Quincy, Fla.	22	19	22	14	17	24
Jay, Fla.	31	25	36	23	25	33
Walnut Hill, Fla.	30	31	32	26	24	35
Fairhope, Ala.	16	13	15	9	11	21
Baton Rouge, La.	34	31	38	30	21	38
Mean	30	28	32	22	23	34
		Upper and Central South				
Clemson, S. C.	45	42	47	34	36	52
Athens, Ga.	35	34	41	28	29	45
Experiment, Ga.	39	37	39	35	34	43
Mean	40	38	42	32	33	47
		Delta				
Stoneville, Miss. (A)	41	41	45	34	35	51
Stoneville, Miss. (B)	39	36	44	33	33	54
St. Joseph, La.	49	39	50	38	37	59
Mean	43	39	46	35	35	41
		West				
Stuttgart, Ark.	40	36	41	30	31	53
Curtis, La.	29	27	29	25	21	40
Milburn, Okla.	35	32	37	27	29	42
Chillicothe, Texas	24	25	28	18	18	32
Lubbock, Texas	34	30	34	21	24	38
Mean	32	30	34	24	25	41

Table 53. Summary of the lodging scores for strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
		East Coast				
Accomac, Va.	3.0	3.0	2.7	3.0	3.0	3.0
Norfolk, Va.	2.0	3.0	2.0	3.0	2.0	2.0
Petersburg, Va.	2.3	2.7	2.0	3.3	2.3	3.0
Holland, Va.	4.0	3.0	3.0	4.0	3.3	3.0
Plymouth, N. C.	3.0	3.8	3.0	3.3	3.7	3.5
Willard, N. C.	3.2	3.5	2.8	3.2	3.2	3.8
Clayton, N. C.	1.2	2.8	2.0	2.2	1.3	1.7
Florence, S. C.	2.3	3.3	2.0	2.8	2.3	2.2
Hartsville, S. C.	1.3	2.0	2.0	1.0	1.0	1.3
		Southeast				
Summerville, S. C.	1.3	1.8	1.7	2.2	1.0	1.5
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Tallassee, Ala.	1.0	2.3	1.7	2.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	2.3	2.0	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.3	1.3	1.7	1.0	1.0	1.3
Walnut Hill, Fla.	1.0	2.0	2.0	1.0	1.0	1.0
Baton Rouge, La.	1.7	2.0	2.0	2.0	1.0	1.0
		Upper and Central South				
Clemson, S. C.	2.2	3.2	2.3	2.7	1.2	3.0
Athens, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	2.0	2.3	1.3	1.7	1.0	1.7
State College, Miss.	1.0	3.0	2.0	1.0	1.0	1.0
		Delta				
Stoneville, Miss. (A)	2.7	2.3	1.0	2.3	1.0	2.7
Stoneville, Miss. (B)	2.3	2.7	1.7	2.7	2.0	3.7
St. Joseph, La.	2.0	3.3	1.7	3.3	2.3	2.3
		West				
Stuttgart, Ark.	1.3	2.0	1.3	2.3	2.3	2.3
Curtis, La.	2.0	2.0	2.0	3.0	2.0	2.0
Milburn, Okla.	1.0	2.3	1.0	1.6	1.3	1.0
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	2.0	1.0

Table 53. (Continued)

Location	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
		East Coast				
Accomac, Va.	3.3	3.0	3.3	3.0	3.0	3.0
Norfolk, Va.	2.0	3.0	2.0	2.0	2.0	2.0
Petersburg, Va.	1.3	2.7	1.3	1.7	2.0	3.3
Holland, Va.	2.7	4.0	2.7	2.0	3.0	3.3
Plymouth, N. C.	2.8	3.8	3.0	2.8	3.2	3.3
Willard, N. C.	2.7	2.8	2.8	2.7	3.2	3.8
Clayton, N. C.	1.3	2.2	1.0	1.0	1.0	3.3
Florence, S. C.	2.0	2.5	2.2	1.8	1.5	2.8
Hartsville, S. C.	1.0	2.3	1.7	1.0	1.0	2.3
		Southeast				
Summerville, S. C.	1.7	2.2	1.3	1.0	1.0	2.0
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Tallassee, Ala.	1.0	2.3	1.3	1.0	1.0	2.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	2.3	1.0	1.0	1.0	2.3
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Jay, Fla.	1.0	1.3	1.0	1.0	1.7	1.3
Walnut Hill, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	1.7	2.0	1.0	1.0	2.0
		Upper and Central South				
Clemson, S. C.	1.7	2.2	1.7	1.5	1.0	3.0
Athens, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	1.7	2.3	2.7	1.3	1.0	3.3
State College, Miss.	1.0	1.0	1.0	1.0	1.0	3.0
		Delta				
Stoneville, Miss. (A)	2.3	1.3	2.0	1.3	1.7	3.0
Stoneville, Miss. (B)	2.3	2.7	2.0	1.0	1.3	3.0
St. Joseph, La.	2.0	3.3	1.3	1.0	1.3	2.7
		West				
Stuttgart, Ark.	2.0	1.7	1.3	1.7	1.3	2.7
Curtis, La.	2.0	2.0	2.0	2.0	1.0	3.0
Milburn, Okla.	1.0	1.6	1.3	1.0	1.0	1.6
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	2.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 54. Seed quality scores for the strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
		East Coast				
Accomac, Va.	2.0	2.0	1.0	2.3	2.0	2.0
Norfolk, Va.	2.0	2.7	2.3	3.0	4.0	2.3
Petersburg, Va.	1.0	1.3	1.0	1.3	1.5	1.0
Holland, Va.	1.0	1.0	1.0	3.0	3.7	1.0
Plymouth, N. C.	1.2	1.0	1.7	2.5	3.0	1.5
Willard, N. C.	1.0	1.2	1.2	2.2	1.8	1.5
Clayton, N. C.	1.0	1.0	1.0	1.0	1.0	1.0
Florence, S. C.	1.0	1.3	1.0	1.2	1.5	1.2
		Southeast				
Summerville, S. C.	1.2	1.7	1.7	1.7	2.3	1.7
Blackville, S. C.	1.2	1.7	1.3	2.8	1.5	1.5
Tallassee, Ala.	1.7	1.3	1.0	3.0	1.0	1.0
Gainesville, Fla.	2.3	2.0	1.7	3.3	2.0	2.3
Walnut Hill, Fla.	3.0	2.7	2.0	3.0	2.7	2.0
Fairhope, Ala.	1.3	2.0	1.0	4.0	2.0	2.7
Baton Rouge, La.	2.0	1.0	1.3	2.0	1.0	1.0
		Upper and Central South				
Clemson, S. C.	1.8	1.7	1.2	3.0	1.8	1.7
Athens, Ga.	1.7	2.0	1.3	1.7	1.7	1.7
Experiment, Ga.	2.7	2.7	1.7	3.0	1.7	1.7
		Delta				
Stoneville, Miss. (A)	2.0	2.0	2.0	2.3	2.0	2.0
Stoneville, Miss. (B)	1.3	1.7	1.0	2.0	2.0	2.0
Louise, Miss.	3.0	2.7	2.3	2.7	3.0	3.0
St. Joseph, La.	2.0	1.0	1.0	1.3	1.0	1.0
		West				
Stuttgart, Ark.	2.0	2.0	2.0	2.0	2.0	2.0
Curtis, La.	2.0	2.0	1.0	1.0	1.0	1.0
Milburn, Okla.	3.0	2.6	2.3	3.0	1.0	3.0
Chillicothe, Texas	1.0	2.0	2.0	3.0	3.0	2.0
Lubbock, Texas	3.0	2.0	2.0	3.0	2.0	2.0

Table 54. (Continued)

Location	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
		East Coast				
Accomac, Va.	2.3	2.3	2.0	2.0	2.3	2.0
Norfolk, Va.	3.0	3.0	2.0	2.0	2.0	2.0
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.3	2.0	1.3	2.7	1.7	1.7
Plymouth, N. C.	1.8	1.5	1.0	1.8	1.5	1.5
Willard, N. C.	1.5	1.3	1.2	1.0	1.2	1.3
Clayton, N. C.	1.0	1.0	1.0	1.0	1.0	1.0
Florence, S. C.	1.0	1.2	1.0	1.2	1.0	1.0
		Southeast				
Summerville, S. C.	3.2	2.2	1.5	2.5	1.0	1.8
Blackville, S. C.	1.7	1.8	1.7	2.3	1.6	1.5
Tallassee, Ala.	1.0	1.3	2.0	2.0	1.0	1.0
Gainesville, Fla.	2.3	2.3	2.0	2.3	2.0	2.0
Walnut Hill, Fla.	2.7	2.7	3.0	2.3	2.7	3.0
Fairhope, Ala.	2.0	2.3	2.3	3.0	2.3	3.0
Baton Rouge, La.	1.0	2.0	2.3	1.0	1.0	2.0
		Upper and Central South				
Clemson, S. C.	1.5	2.3	2.2	1.2	2.3	1.7
Athens, Ga.	2.3	2.0	2.0	1.7	2.0	2.0
Experiment, Ga.	2.0	2.3	2.7	1.3	2.0	1.7
		Delta				
Stoneville, Miss. (A)	2.0	2.0	2.0	2.0	2.0	2.0
Stoneville, Miss. (B)	2.0	1.7	1.3	2.0	2.0	1.0
Louise, Miss.	2.7	2.7	2.3	3.0	3.0	2.7
St. Joseph, La.	1.3	1.0	1.7	1.0	1.3	1.0
		West				
Stuttgart, Ark.	2.0	2.0	2.0	2.0	2.0	2.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0
Milburn, Okla.	2.3	2.3	3.0	2.6	2.3	3.0
Chillicothe, Texas	2.0	2.0	3.0	2.0	2.0	2.0
Lubbock, Texas	2.0	2.0	3.0	2.0	2.0	3.0

Table 55. Seed weight, in grams per 100 seeds, for the strains in Uniform Group VII, 1955

Location	Jackson	Roanoke	Lee	N50-2217	N50-2542	N51-2186
			East Coast			
Accomac, Va.	17.7	17.3	15.9	19.7	18.5	17.7
Norfolk, Va.	17.3	18.2	15.7	18.0	16.8	19.0
Petersburg, Va.	20.9	20.7	15.7	23.9	19.0	20.2
Holland, Va.	17.3	17.5	14.1	19.7	18.6	18.9
Plymouth, N. C.	14.7	14.2	12.3	15.8	14.3	14.0
Willard, N. C.	13.3	13.4	11.5	16.2	13.8	13.5
Clayton, N. C.	15.6	15.5	12.8	19.0	16.7	16.1
Florence, S. C.	16.0	15.7	13.7	19.0	16.5	15.3
Hartsville, S. C.	16.7	17.3	15.0	21.0	18.0	15.7
Mean	16.6	16.6	14.1	19.1	16.9	16.7
			Southeast			
Summerville, S. C.	15.6	15.5	14.2	18.8	17.2	13.6
Tallassee, Ala.	16.8	18.2	13.2	18.5	17.7	14.8
Gainesville, Fla.	16.1	16.6	16.7	20.4	18.3	16.6
Walnut Hill, Fla.	15.2	16.6	13.4	18.1	18.0	13.4
Fairhope, Ala.	15.9	16.8	13.9	23.0	17.7	15.8
Baton Rouge, La.	14.5	15.0	13.2	19.7	17.2	13.0
Mean	15.7	16.4	14.1	19.7	17.7	14.5
			Upper and Central South			
Clemson, S. C.	11.4	10.8	9.4	11.8	16.0	10.5
Athens, Ga.	16.3	16.0	13.3	16.3	18.3	17.0
Experiment, Ga.	18.6	19.5	16.7	20.9	19.0	15.9
Mean	15.4	15.4	13.1	16.3	17.8	14.5
			Delta			
Stoneville, Miss. (A)	15.1	17.0	14.4	18.2	16.4	14.0
Stoneville, Miss. (B)	13.2	14.8	12.9	15.8	14.1	12.5
St. Joseph, La.	10.4	11.2	9.4	11.4	11.8	9.4
Mean	12.9	14.3	12.2	15.1	14.1	12.0
			West			
Stuttgart, Ark.	16.0	16.3	15.0	18.0	17.6	15.6
Milburn, Okla.	11.4	11.9	11.4	13.2	17.0	12.7
Lubbock, Texas	17.0	18.0	15.0	19.0	19.0	18.0
Mean	14.8	15.4	13.8	16.7	17.9	15.4

Table 55. (Continued)

Location	N51-2220	N51-2638	N51-3527	D51-4877	D51-5052	D51-5091
		East Coast				
Accomac, Va.	18.4	16.8	19.3	18.6	18.8	17.5
Norfolk, Va.	17.2	13.2	19.0	15.9	16.3	13.7
Petersburg, Va.	20.9	16.3	22.7	18.7	19.3	16.7
Holland, Va.	18.7	13.4	18.8	18.0	17.8	15.5
Plymouth, N. C.	14.6	11.4	16.2	13.0	14.3	10.7
Willard, N. C.	13.7	10.3	14.2	10.6	13.7	11.4
Clayton, N. C.	17.9	13.6	17.5	15.0	16.1	14.4
Florence, S. C.	16.2	14.1	17.5	15.6	16.1	13.1
Hartsville, S. C.	16.7	16.0	18.7	16.0	16.0	15.0
Mean	17.1	13.9	18.2	15.7	16.5	14.2
		Southeast				
Summerville, S. C.	15.7	14.6	17.0	14.3	16.0	14.4
Tallassee, Ala.	16.2	12.5	18.7	15.2	15.1	15.1
Gainesville, Fla.	17.2	15.0	17.9	16.3	16.7	14.1
Walnut Hill, Fla.	14.5	13.7	16.8	14.0	14.3	12.1
Fairhope, Ala.	15.1	13.6	17.7	15.1	14.9	13.1
Baton Rouge, La.	14.1	11.9	15.5	13.1	12.8	12.0
Mean	16.5	13.6	17.2	14.7	15.0	13.5
		Upper and Central South				
Clemson, S. C.	12.0	9.6	12.2	9.2	11.5	12.9
Athens, Ga.	15.3	13.3	17.7	15.3	17.0	14.3
Experiment, Ga.	18.0	15.0	20.2	15.6	17.3	16.8
Mean	15.1	12.6	16.7	13.4	15.3	14.7
		Delta				
Stoneville, Miss. (A)	16.1	12.3	16.8	14.6	14.6	12.0
Stoneville, Miss. (B)	13.7	11.4	14.3	11.7	12.4	10.8
St. Joseph, La.	11.0	8.7	9.8	9.5	9.7	9.4
Mean	13.6	10.8	13.6	11.9	12.2	10.7
		West				
Stuttgart, Ark.	17.3	14.3	17.0	16.0	15.0	13.0
Milburn, Okla.	14.1	11.9	12.1	13.1	12.7	11.5
Lubbock, Texas	17.0	14.0	17.0	17.0	17.0	16.0
Mean	16.1	13.4	15.4	15.4	14.9	13.5

PRELIMINARY GROUP VII

1955

Preliminary VII nurseries were grown at eight locations. Twenty-nine strains were grown along with Jackson, Roanoke, Tarheel Black, CNS 4, J.E.W. 24, and bulk F_3 populations of the two crosses Roanoke x D49-2491 and Jackson x D49-2491. Tarheel Black, an old variety out of production for many years, was retested since earlier tests had demonstrated the high degree of resistance of this variety to target spot. Parentage of each of the strains is reported in table 56. Agronomic and chemical data are summarized in tables 57 through 62.

Twenty-three of the strains tested were resistant to bacterial pustule, but only ten strains were resistant to both bacterial pustule and target spot. Three of these strains, N51-2607, N51-2619, and N51-2622, all selections from the cross N42-26 x N45-1004 appeared to be very susceptible to bacterial blight at Stoneville. Pod and stem blight caused killing in N51-1933, N51-1957, N51-2180 and N51-3002 in the nursery grown on Sharkey Clay soil at Stoneville.

The bulk F_3 populations of Roanoke x D49-2491 and Jackson x D49-2491 yielded well at all locations but averaged no better than Jackson for the eight locations.

N52-3908, the highest ranking strain for yield, was also outstanding for other characteristics. Its field appearance was also excellent. Other top ranking strains were N51-2764, D52-834 and D53-1664.

Four strains, N51-1933, N51-1956, N51-2180 and N51-3185, had significantly higher oil content than Jackson. Two of these, N51-1933 and N51-1956, were significantly lower than Jackson in protein but N51-2180 and N51-3185 did not differ significantly from Jackson. N51-2302 equalled Jackson in oil content and had significantly higher protein. All other strains having higher protein were lower in oil than Jackson. The composition of N51-2302 and N51-3185 illustrates the possibility of increasing either oil or protein without realizing a reduction in the other product.

Table 56. Parentage of strains in Preliminary Group VII, 1955

	Strain	Parentage	Generation Composited
1.	Jackson		
2.	Roanoke		
3.	N48-4046	Missoy x Ogden (N44-774)	F_7
4.	N51-1933	Volstate (2) x Palmetto (N47-3545)	F_8
5.	N51-1956	Volstate (2) x Palmetto (N47-3545)	F_8
6.	N51-1957	Volstate (2) x Palmetto (N47-3545)	F_8
7.	N51-2137	Roanoke x N45-745 (N48-1219)	F_6
8.	N51-2180	Roanoke x N45-745 (N48-1574)	F_6
9.	N51-2302	Roanoke x N45-745 (N48-2048)	F_6
10.	N51-2607	N42-26 x N45-1004 (N48-4177)	F_6
11.	N51-2619	N42-26 x N45-1004 (N48-4177)	F_6
12.	N51-2622	N42-26 x N45-1004 (N48-4177)	F_6
13.	N51-2719	Roanoke x N45-1128 (N48-223)	F_5
14.	N51-2764	Roanoke x N45-1128 (N48-223)	F_5
15.	N51-2944	Ogden x N45-745 (D49-1548)	F_5
16.	N51-3002	Roanoke x N45-1128 (N49-17)	F_5
17.	N51-3020	Roanoke x N45-1128 (N49-127)	F_5
18.	N51-3120	Roanoke x N45-1128 (N49-463)	F_5
19.	N51-3162	Roanoke x N45-1128 (N49-683)	F_5
20.	N51-3185	Roanoke x N45-1128 (N49-773)	F_5
21.	N51-3263	Roanoke x N45-1004 (N49-1073)	F_5
22.	N51-3308	Roanoke x N45-1004 (N49-1164)	F_5
23.	N51-3465	Roanoke x N45-1128 (N49-958)	F_5
24.	N51-3506	Volstate (2) x Palmetto (Jackson)	F_8
25.	N52-3907	Roanoke x N45-745 (N48-1574)	F_7
26.	N52-3908	Roanoke x N45-745 (N48-1574)	F_7
27.	D51-4838	Roanoke x N45-745 (N48-1217)	F_6
28.	D51-5025	Roanoke x N45-745 (D49-1066)	F_6
29.	D51-5034	Roanoke x N45-745 (N48-1289)	F_6
30.	D52-834	Roanoke x N45-745 (D49-537)	F_7
31.	D53-1664	N46-1703 x D49-2525	F_5
32.	Roanoke x D49-2491		Bulk F_3
33.	Jackson x D49-2491		Bulk F_3
34.	Tarheel Black		
35.	CNS 4	Selection from CNS	
36.	J.E.W. 24	Selection from CNS	

N45-745 is a pustule resistant selection from Ogden x CNS.
N45-1004 is a pustule resistant selection from Volstate x CNS.
N45-1128 is a pustule resistant selection from Volstate x CNS.
N46-1703 is a selection from Volstate x Ogden
D49-2525 is a pustule resistant selection from S100 x CNS.

Table 57. General summary of the performance of strains grown in Preliminary Group VII, 1955

Strain	Seed Yield	Maturity Index	Height	Percent Oil	Percent Protein	Shattering	Bac. Pustule	Target Spot
Jackson	31.8	10-25	40	21.8	40.8	1	3.0	1.0
Roanoke	26.6-	-2	32	21.8	40.1	1	3.0	2.5
N48-4046	28.3-	-5	37	20.1-	42.8+	1	3.0	1.5
N51-1933	30.4	-1	36	22.6+	39.1-	2	3.5	3.0
N51-1956	31.1	-4	35	22.8+	39.2-	1	3.0	2.5
N51-1957	28.1-	-2	35	22.2	40.0	1	3.0	3.5
N51-2137	31.2	-4	30	21.7	40.8	2	1.0	2.5
N51-2180	28.5-	-4	34	22.6+	40.2	1	1.0	3.5
N51-2302	29.4	-4	28	21.8	42.1+	1	1.0	3.0
N51-2607	33.7	-6	34	21.0	40.6	2	1.0	1.0
N51-2619	29.0	-5	34	20.5-	41.1	1	1.0	1.5
N51-2622	30.6	-9	29	20.4-	42.0+	2	1.0	1.5
N51-2719	29.6	-7	33	21.0	41.3	2	1.0	3.0
N51-2764	29.3	-5	34	21.8	40.3	1	1.0	1.5
N51-2944	29.2	-7	30	20.9-	41.7	2	2.0	1.5
N51-3002	27.3-	-6	29	21.9	40.4	1	1.0	1.0
N51-3020	30.9	-4	33	21.8	41.0	1	1.0	3.5
N51-3120	32.3	-3	34	21.7	40.0	1	1.0	3.0
N51-3162	32.6	-4	33	21.6	40.1	1	1.5	3.5
N51-3185	32.8	-2	33	22.6+	40.6	1	1.0	4.0
N51-3263	26.9-	-2	36	21.8	41.1	1	1.0	3.0
N51-3308	30.7	-4	38	22.1	40.8	1	1.0	3.5
N51-3465	31.1	-5	33	21.3	40.2	1	1.0	3.5
N51-3506	32.1	0	37	22.4	39.4-	1	2.5	1.0
N52-3907	26.8-	-5	36	21.5	42.0	2	1.5	3.5
N52-3908	34.1	-5	31	21.4	41.6	1	1.0	1.0
D51-4838	29.1	-7	25	20.5-	41.8+	1	1.0	1.5
D51-5025	31.6	-6	29	22.3	40.7	2	1.0	1.0
D51-5034	30.9	-6	27	22.0	40.1	1	1.0	2.5
D52-834	33.3	-8	36	20.6-	42.1+	1	1.0	1.5
D53-1664	30.3	-5	33	20.7-	42.0+	1	1.0	1.0
Roanoke x D49-2491	31.9	-2	Seg.	21.5	41.7	1	Seg.	-
Jackson x D49-2491	31.5	-1	Seg.	21.7	41.0	1	Seg.	-
Tarheel Black	27.4-	-3	34	20.1-	43.7+	2	4.0	1.0
CNS 4	28.2	-1	31	17.8-	44.9+	1	1.0	2.0
J.E.W. 24	22.9-	0	48	18.3-	45.6+	1	1.0	2.0
L.S.D. (5%)	3.3			0.8	1.0			
C.V.	16%			4%	2%			

Table 58. Seed yield, in bushels per acre, for the strains in Preliminary Group VII, 1955

Strain	Willard, N.C.	Clayton, N. C.	Talla-see, Ala.	Gaines-ville, Fla.	Quincy, Fla.	Walnut Hill, Fla.	Stoneville, Miss.	
							Loam	Clay
Jackson	28.0	30.2	35.1	34.6	26.4	40.5	29.9	30.0
Roanoke	22.5-	30.1	34.7	17.0	19.8	37.1	29.8	22.0
N48-4046	23.8	32.1	35.5	18.9	26.1	29.9-	35.2	24.8
N51-1933	26.8	32.3	40.4	26.1	28.6	36.7	31.0	21.6
N51-1956	24.9	29.6	37.4	31.3	29.3	34.8	34.4	27.3
N51-1957	25.2	34.1	40.2	19.7	26.7	37.1	24.4	17.6-
N51-2137	28.7	37.1+	45.1+	22.9	19.0	35.9	24.4	36.4
N51-2180	23.4-	33.7	40.8	27.3	21.3	31.0-	27.0	23.6
N51-2302	22.5-	34.6+	37.2	18.9	29.7	33.2-	31.2	27.9
N51-2607	26.9	35.5+	35.8	25.8	33.0	41.6	36.7	33.9
N51-2619	22.6-	26.8	34.4	26.5	28.9	32.5-	32.0	27.7
N51-2622	27.6	32.5	43.4	14.4	30.4	39.7	31.2	25.4
N51-2719	27.3	38.0+	39.4	21.5	26.0	34.0	16.3	34.0
N51-2764	24.8	32.1	47.6+	18.1	23.4	32.2-	32.1	23.6
N51-2944	24.4	29.0	34.5	26.1	27.5	35.6	28.6	27.9
N51-3002	23.5-	31.6	40.6	16.7	22.7	35.2	23.7	20.6
N51-3020	24.3	32.6	44.9+	22.7	20.5	31.8-	36.2	34.4
N51-3120	24.5	30.3	40.4	20.5	30.1	37.9	40.9	33.8
N51-3162	27.1	32.8	38.4	24.8	26.0	37.8	41.6	31.8
N51-3185	25.0	36.4+	44.7+	27.5	24.6	38.2	34.0	31.4
N51-3263	25.7	30.8	34.0	18.8	28.6	31.8-	26.4	19.2
N51-3308	21.1-	28.1	40.4	25.0	29.0	30.3-	38.7	32.5
N51-3465	21.4-	35.7+	40.2	20.9	25.3	32.2-	36.1	37.2
N51-3506	26.1	29.3	37.6	29.2	23.4	41.2	36.9	32.8
N52-3907	23.4-	31.8	44.4+	17.5	28.9	34.4	16.0	17.8-
N52-3908	25.4	31.5	42.6	37.4	28.9	40.8	32.4	34.0
D51-4838	21.5-	30.9	43.6	25.9	30.7	36.3	18.6	25.1
D51-5025	24.1	33.5	41.5	24.2	32.2	36.3	35.8	25.2
D51-5034	26.6	36.8+	43.8	22.6	30.0	37.1	22.8	27.4
D52-834	27.6	35.4+	47.0+	25.6	28.2	37.8	37.2	27.8
D53-1664	22.8-	33.0	41.5	24.2	26.7	33.7-	31.0	29.6
Roanoke x D49-2491	25.3	30.9	45.1+	29.5	24.2	37.4	28.3	34.5
Jackson x D49-2491	25.9	28.7	42.4	23.4	29.3	38.2	34.4	28.3
Tarheel Black	19.4-	25.4	37.9	27.0	26.1	32.1-	24.2	26.8
CNS 4	20.5-	33.8	36.6	29.7	24.6	36.7	24.6	18.9
J.E.W. 24	20.2-	28.0	26.6	29.4	22.0	30.3-	18.2	8.2-
L.S.D. (5%)	4.2	4.1	9.0	N.S.	N.S.	6.7	N.S.	11.5
C.V.	8%	6%	11%	25%	14%	9%	26%	21%

Table 59. Summary of the oil percentage for strains in Preliminary Group VII, 1955

Strain	Willard, N.C.	Clayton, N.C.	Talla-ssee, Ala.	Gaines-ville, Fla.	Quincy, Fla.	Walnut Hill, Fla.	Stoneville, Miss.	
							Loam	Clay
Jackson	21.0	20.9	22.3	22.6	21.5	23.0	21.7	21.7
Roanoke	21.7	21.3	21.3	23.6	21.3	21.8	22.0	21.5
N48-4046	20.0	19.0	21.4	21.5	19.0	19.5	20.2	20.3
N51-1933	22.2	22.0	22.8	23.1	21.8	23.9	22.0	22.6
N51-1956	22.6	22.2	23.1	23.9	22.2	23.3	21.4	23.3
N51-1957	21.8	21.7	22.5	23.2	21.6	23.0	21.0	22.7
N51-2137	21.3	21.4	22.5	23.8	20.7	22.1	20.4	21.2
N51-2180	22.7	21.0	23.5	24.4	21.6	23.8	21.5	22.5
N51-2302	21.9	21.0	22.8	22.2	21.3	21.8	21.8	21.2
N51-2607	21.9	19.9	22.2	22.1	20.2	20.9	20.3	20.8
N51-2619	20.4	18.2	21.9	22.1	19.6	20.0	20.4	21.2
N51-2622	21.0	19.3	21.2	21.6	19.7	20.8	20.4	19.6
N51-2719	21.4	20.8	21.6	23.1	20.1	21.4	19.0	20.8
N51-2764	21.7	20.5	22.5	23.0	20.9	21.6	23.2	20.8
N51-2944	20.6	18.9	21.6	22.2	20.6	21.5	21.2	20.3
N51-3002	21.4	21.2	22.1	23.0	21.1	22.5	22.1	21.6
N51-3020	21.7	20.9	22.9	22.4	20.4	21.9	22.5	21.9
N51-3120	21.5	20.9	22.5	22.8	21.1	21.5	22.0	21.4
N51-3162	22.3	20.2	22.3	23.3	21.0	21.5	21.4	20.9
N51-3185	22.6	21.8	23.4	23.7	21.3	22.4	23.2	22.3
N51-3263	21.9	21.0	22.0	22.9	21.4	22.6	22.0	20.5
N51-3308	21.7	20.9	22.3	22.9	21.8	22.2	22.1	22.8
N51-3465	21.7	21.0	22.0	22.8	19.7	21.4	20.6	21.4
N51-3506	22.8	21.0	22.6	24.1	21.4	22.0	22.5	22.7
N52-3907	21.0	21.3	22.4	23.5	21.2	21.4	20.0	21.4
N52-3908	21.0	20.5	22.3	23.0	20.6	22.8	20.6	20.8
D51-4838	20.7	20.0	21.7	22.1	20.4	20.7	19.3	19.4
D51-5025	22.0	20.8	22.9	24.1	21.6	22.4	22.6	21.9
D51-5034	21.5	21.1	22.9	23.4	20.9	22.5	22.6	21.2
D52-834	19.4	19.2	21.2	22.2	19.9	21.0	21.1	20.7
D53-1664	20.5	20.3	21.3	21.2	19.8	20.7	20.6	20.9
Roanoke x D49-2491	21.3	20.7	22.5	22.5	20.6	21.5	21.4	21.7
Jackson x D49-2491	21.8	20.5	22.3	22.8	21.5	21.4	22.2	21.2
Tarheel Black	19.1	18.2	21.4	21.7	19.0	19.7	20.3	21.3
CNS 4	17.3	17.6	19.4	18.2	15.6	18.7	17.8	18.0
J.E.W. 24	17.3	17.6	20.3	18.8	16.9	18.5	19.2	18.0
Mean	21.2	20.4	22.1	22.6	20.5	21.6	21.2	21.2

Table 60. Summary of the protein percentage for the strains in Preliminary Group VII, 1955

Strain	Willard, N. C.	Clayton, N.C.	Talla-ssee, Ala.	Gaines-ville, Fla.	Quincy, Fla.	Walnut Hill, Fla.	Stoneville, Miss.	
							Loam	Clay
Jackson	39.8	41.2	40.2	40.4	44.1	40.7	40.4	39.3
Roanoke	38.8	39.9	41.6	38.6	43.6	39.5	38.8	39.9
N48-4046	42.1	42.6	41.0	43.7	44.1	44.3	42.5	41.7
N51-1933	37.4	39.8	37.6	39.8	42.4	38.3	38.8	38.4
N51-1956	38.8	39.4	39.4	39.0	42.5	38.9	38.7	37.2
N51-1957	39.2	40.0	39.8	39.8	41.7	39.7	40.4	39.2
N51-2137	39.3	40.6	39.8	39.3	44.4	41.0	41.1	40.6
N51-2180	38.4	41.7	38.5	38.6	43.4	40.2	40.7	40.0
N51-2302	40.9	41.8	41.5	43.5	44.3	40.7	40.9	43.0
N51-2607	38.4	41.0	39.2	41.2	43.9	40.2	40.7	40.4
N51-2619	39.2	41.3	41.6	39.5	44.2	42.1	40.8	39.8
N51-2622	39.4	42.9	42.0	42.5	44.6	41.5	42.2	40.7
N51-2719	38.9	40.0	41.7	40.6	44.6	41.5	40.7	42.1
N51-2764	38.1	39.6	40.2	39.9	45.2	40.4	39.1	39.9
N51-2944	40.2	41.9	40.2	42.4	44.5	40.8	42.2	41.6
N51-3002	38.0	38.5	40.9	39.7	45.0	41.3	40.6	39.2
N51-3020	39.1	39.9	41.5	40.3	45.3	41.3	40.3	40.6
N51-3120	39.0	39.7	39.5	39.6	43.4	39.7	38.5	40.5
N51-3162	38.0	39.5	40.5	39.2	44.1	39.6	38.8	40.7
N51-3185	38.5	40.1	40.5	40.0	44.5	40.5	39.8	40.8
N51-3263	39.8	39.0	40.9	40.6	45.0	41.6	40.1	41.8
N51-3308	39.4	41.0	41.1	40.8	44.2	40.5	40.1	39.4
N51-3465	37.6	38.9	40.4	40.6	44.5	39.6	40.5	39.6
N51-3506	37.5	40.6	39.6	39.4	42.1	38.9	39.0	38.1
N52-3907	40.5	41.3	40.3	40.7	45.6	41.3	44.0	42.2
N52-3908	41.5	42.2	40.9	41.4	44.0	40.5	40.6	41.4
D51-4838	40.0	42.0	40.2	41.2	44.4	39.8	43.6	43.6
D51-5025	41.5	41.0	39.5	40.2	43.6	38.9	40.0	40.9
D51-5034	39.6	41.7	38.7	38.5	43.7	39.4	39.2	39.9
D52-834	42.7	41.9	42.2	41.2	44.0	41.3	41.2	42.3
D53-1664	40.2	39.7	40.1	43.5	45.4	43.1	42.3	42.0
Roanoke x D49-2491	42.4	41.3	40.5	40.9	45.0	42.4	41.4	39.9
Jackson x D49-2491	39.3	41.0	41.0	40.6	43.0	41.1	41.0	41.0
Tarheel Black	44.3	44.5	42.7	43.7	44.7	44.4	42.9	42.2
CNS 4	46.1	45.4	43.9	46.8	46.6	45.7	44.5	39.9
J.E.W. 24	46.0	44.7	43.6	47.3	47.6	45.7	43.0	46.7
Mean	40.0	41.0	40.6	41.0	44.2	41.0	40.8	40.7

Table 61. Summary of the height data for strains in Preliminary Group VII, 1955

Strain	Willard, N.C.	Clayton, N. C.	Talla-ssee, Ala.	Gaines-ville, Fla.	Quincy, Fla.	Walnut Hill, Fla.	Stoneville, Miss.	
							Loam	Clay
Jackson	44	45	44	26	24	36	52	48
Roanoke	35	39	38	13	17	29	46	42
N48-4046	42	42	41	19	24	37	46	45
N51-1933	41	41	44	18	23	29	46	45
N51-1956	39	44	45	19	20	32	42	41
N51-1957	43	40	42	14	18	30	48	46
N51-2137	37	36	38	13	14	31	34	39
N51-2180	36	42	39	14	20	29	48	43
N51-2302	26	35	38	12	17	26	37	34
N51-2607	40	38	42	19	25	28	40	41
N51-2619	38	34	46	19	25	33	44	34
N51-2622	32	39	46	13	20	29	35	37
N51-2719	37	40	39	16	15	31	41	47
N51-2764	42	41	39	15	20	29	42	42
N51-2944	30	36	41	13	20	31	34	36
N51-3002	34	35	37	11	18	27	37	35
N51-3020	33	40	38	18	19	28	42	46
N51-3120	40	37	42	15	22	30	41	45
N51-3162	35	36	39	14	19	34	44	41
N51-3185	37	37	38	16	17	30	44	45
N51-3263	42	41	38	17	24	30	48	46
N51-3308	43	47	43	19	24	35	47	48
N51-3465	33	42	39	14	18	28	43	46
N51-3506	43	43	39	22	23	33	47	48
N52-3907	39	43	40	15	21	32	46	49
N52-3908	31	34	38	18	21	25	40	39
D51-4838	23	29	34	10	16	26	29	33
D51-5025	31	37	36	13	19	24	36	36
D51-5034	26	35	37	12	18	25	34	31
D52-834	38	38	38	19	25	31	48	48
D53-1664	30	40	41	16	22	29	38	44
Roanoke x D49-2491	35	37	39	18	19	32	42	Seg.
Jackson x D49-2491	45	43	48	19	27	34	42	Seg.
Tarheel Black	40	35	44	19	25	32	43	44
CNS 4	31	27	39	21	25	32	36	34
J.E.W. 24	42	58	51	36	40	46	60	51

Table 62. Summary of the seed quality scores for strains in Preliminary Group VII, 1955

Strain	Willard, N.C.	Clayton N.C.	Talla-ssee, Ala.	Gaines-ville, Fla.	Quincy, Fla.	Walnut Hill, Fla.	Stoneville, Miss.	
							Loam	Clay
Jackson	1.0	1.0	1.5	2.0	3.0	2.0	2.0	1.5
Roanoke	1.0	1.0	1.0	2.0	3.0	3.0	2.0	2.0
N48-4046	1.0	1.0	1.0	2.5	4.0	2.0	2.0	2.0
N51-1933	1.0	1.0	3.0	2.5	4.0	3.0	2.0	3.0
N51-1956	1.0	1.0	3.0	2.0	4.0	3.0	2.0	2.0
N51-1957	1.5	1.2	3.0	3.0	4.0	3.0	2.0	2.5
N51-2137	1.0	1.0	2.0	1.5	4.0	2.0	2.5	2.0
N51-2180	1.5	1.0	2.0	2.5	4.0	3.0	3.0	2.5
N51-2302	1.0	1.0	1.0	2.5	3.0	3.0	2.0	2.0
N51-2607	1.2	1.0	2.5	2.0	2.0	2.0	2.0	2.0
N51-2619	1.0	1.0	2.0	1.0	2.0	2.0	2.0	1.0
N51-2622	2.0	1.0	2.5	2.5	3.0	2.0	2.0	2.0
N51-2719	1.0	1.0	2.5	2.0	3.0	2.0	3.0	3.0
N51-2764	1.0	1.0	2.0	1.5	3.0	2.0	2.0	2.5
N51-2944	1.2	1.0	1.0	1.5	3.0	3.0	2.0	2.5
N51-3002	1.0	1.0	1.5	2.0	3.0	2.0	2.0	2.5
N51-3020	1.0	1.0	2.0	2.0	3.0	2.0	2.0	2.0
N51-3120	1.0	1.0	2.0	2.0	3.0	3.0	2.0	1.5
N51-3162	1.5	1.5	2.0	2.0	2.0	3.0	2.0	2.0
N51-3185	1.0	1.0	2.5	2.0	3.0	3.0	2.0	2.0
N51-3263	1.0	1.0	2.0	2.5	4.0	3.0	2.0	2.5
N51-3308	1.0	1.5	2.0	2.0	3.0	3.0	2.0	2.0
N51-3465	1.0	1.0	2.0	2.5	3.0	2.0	2.0	2.0
N51-3506	1.0	1.0	1.0	2.0	4.0	3.0	2.0	2.0
N52-3907	1.5	1.2	2.0	2.5	4.0	4.0	2.5	2.5
N52-3908	1.0	1.0	1.5	1.5	3.0	3.0	2.0	2.0
D51-4838	1.0	1.0	1.5	1.0	2.0	2.0	2.5	1.5
D51-5025	1.2	1.0	1.0	2.0	3.0	3.0	2.0	2.0
D51-5034	1.0	1.0	1.5	1.5	3.0	2.0	2.0	2.0
D52-834	1.0	1.0	1.0	1.0	2.0	2.0	2.0	1.5
D53-1664	1.5	1.0	1.5	2.0	4.0	3.0	2.0	2.0
Roanoke x D49-2491	1.0	1.0	1.0	2.0	3.0	3.0	2.0	1.5
Jackson x D49-2491	1.0	1.0	1.5	1.0	3.0	3.0	2.0	1.5
Tarheel Black	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.0
CNS 4	1.0	1.0	4.0	1.0	3.0	2.0	2.0	2.0
J.E.W. 24	1.2	1.0	4.5	2.0	4.0	2.0	2.3	3.5

UNIFORM GROUP VIII

1955

	Strain or Variety	Parentage
1.	Improved Pelican	Tanloxi x P.I. 60,406
2.	J.E.W. 45	Sel, from mixed seed lot
3.	Majos 51-12	Tokio x Yelredo
4.	Yelnanda 52-135	Nanda x Yelredo
5.	Jackson	Volstate (2) x Palmetto
6.	Yellow Gatan	Selection from Gatan
7.	La 49-1-4	Pelican #2 x Ogden
8.	La 49-2-4	Creole x Ogden
9.	La 49-11-6	Pelican #2 x Volstate
10.	La 51-7-4	Roanoke x P.C. 31,592
11.	La 51-34-5	P.C. 31,592 x Acadian
12.	Biloxi	

Thirteen Group VIII nurseries were planted. Results of 11 of these locations are summarized in tables 63 through 70.

Group VIII included the named varieties Improved Pelican, J.E.W. 45, Yellow Gatan, and Biloxi; two strains from the Coker Pedigreed Seed Company, Hartsville, South Carolina; and five strains from the Louisiana Agricultural Experiment Station. Jackson, which is of VII maturity, was included to obtain a more accurate comparison with strains of VII maturity.

All named varieties averaged significantly lower in yield than Jackson in both production areas. Of the new strains tested, La 49-1-4 yielded significantly more than Jackson in the Southeast. Its two-year average yield is also slightly above that of Jackson. Oil content is slightly lower, while protein content is somewhat higher.

Not any of the strains now grown in Group VIII carry resistance to bacterial pustule. Nine of the strains were given low ratings for target spot.

The variety Biloxi was included for re-evaluation, since this variety has a higher protein content than other commonly grown varieties. In the 1955 comparisons the average composition for Jackson and Biloxi were: oil, 22.0 and 19.2 per cent; protein, 40.5 and 46.7 percent, respectively.

At current prices for oil and meal - 10.9 cents per pound for oil and 6.35 cents per pound for protein, the higher protein content for Biloxi gives it a value of $2.68 per bushel as compared to $2.63 for Jackson. Biloxi ranked at, or near, the bottom in seed yield at all locations.

The "hay type" variety, Yellow Gatan, is the smallest seeded variety in the group. Although seed size is less than half that for Biloxi, seed yield was very similar. Yellow Gatan is low in oil and only moderately higher in protein. The value of the oil and protein in Gatan would be worth $2.47.

Table 63. General summary of the performance of the strains in Uniform Group VIII, 1955

	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan
Seed Yield - 1955						
Southeast	26.4-	29.9-	31.1-	30.8-	36.0	25.9-
Delta	23.2-	22.8-	27.1-	23.8-	35.2	20.4-
- 1954-55						
Southeast	23.9	24.9	-	-	30.0	22.0
Delta	25.9	24.0	-	-	35.5	25.0
Oil Content - 1955	20.4	20.2	19.8	19.3	22.0	17.8
- 1954-55	20.7	20.5	-	-	22.3	18.4
Protein Content - 1955	42.9	42.4	40.7	44.6	40.5	43.2
- 1954-1955	42.7	41.8	-	-	40.5	42.4
Maturity Index	11-2	-7	+1	-4	-5	-3
Height	60	43	38	47	40	50
Bacterial Pustule	4	3	4	3	3.5	4
Target Spot	2	1.5	1	4	1	2

Table 63. (Continued)

	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
Seed Yield - 1955						
Southeast	38.5+	32.4-	37.0	26.8-	30.8-	23.6-
Delta	36.5	28.9-	33.9	23.2-	28.6-	20.5-
-1954-55						
Southeast	31.2	27.0	30.7	23.0	26.6	-
Delta	37.6	30.7	37.6	24.2	26.9	-
Oil Content - 1955	20.7	22.0	21.8	20.8	21.5	19.2
- 1954-55	20.4	22.4	22.2	21.1	21.8	-
Protein Content - 1955	42.8	41.8	40.2	41.7	40.6	46.7
- 1954 - 55	42.1	41.5	39.7	42.0	40.6	-
Maturity Index	-3	-8	-8	-1	-2	-5
Height	41	41	42	48	42	58
Bacterial Pustule	3.5	3	3	3.5	3	4
Target Spot	1	1	1	2.5	2.5	1

Table 64. Yield, in bushels per acre, for the strains in Uniform Group VIII, 1955

Location	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan	La. 49-1-4
			Southeast				
Hartsville, S. C.	31.1-	38.7-	33.0-	38.2-	43.7	33.1-	42.4
Experiment, Ga.	31.8	28.3	34.0	27.9	31.1	30.7	41.8
Tallassee, Ala.	21.9-	32.0	31.4	33.1	34.2	27.7-	41.6
Gainesville, Fla.	24.1	34.9-	23.1	32.9-	42.0	24.7-	41.7
Quincy, Fla.	20.0-	22.0-	23.2-	24.7	28.8	23.5-	28.1
Jay, Fla.	34.6	32.9-	45.5	34.4	40.5	27.5-	38.0
Walnut Hill, Fla.	19.9-	30.0	29.7	30.0	31.2	23.7-	37.6
Baton Rouge, La.	28.0-	20.1-	29.2-	25.4-	36.7	16.4-	36.5
Mean	26.4-	29.9-	31.1-	30.8-	36.0	25.9-	38.5+
			Delta				
Stoneville, Miss. (A)	25.0-	20.2-	29.2-	25.9-	38.3	26.1-	33.2
St. Joseph, La.	29.8-	20.3-	32.3	18.4-	41.5	22.2-	44.9
Curtis, La.	14.8-	27.8	19.7	27.0	25.9	12.7-	31.3
Mean	23.2-	22.8-	27.1-	23.8-	35.2	20.4-	36.5

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

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

Table 64. (Continued)

Location	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi	L.S.D. (5%)	C.V.
			Southeast				
Hartsville, S. C.	35.1-	39.7	31.3-	36.9-	23.5-	4.6	8%
Experiment, Ga.	33.9	38.2	29.2	27.2	23.5	N.S.	21%
Tallassee, Ala.	34.5	45.7	24.6-	29.6	22.0-	6.8	13%
Gainesville, Fla.	36.7	36.2	27.6-	30.7-	26.6-	6.2	10%
Quincy, Fla.	29.8	26.6	24.7	27.1	22.5-	4.2	10%
Jay, Fla.	29.4-	36.1	38.6	34.6	28.7-	7.4	13%
Walnut Hill, Fla.	27.5	35.8	18.6-	28.0	21.2-	6.5	14%
Baton Rouge, La.	32.0	37.5+	20.1-	32.0	20.6-	7.1	15%
Mean	32.4-	37.0	26.8-	30.8-	23.6-	2.4	14%
			Delta				
Stoneville, Miss. (A)	33.5	34.3	24.6-	27.6-	23.9-	6.2	13%
St. Joseph, La.	23.9-	40.5	25.6-	33.7	22.6-	9.7	19%
Curtis, La.	29.2	26.9	19.5	24.5	15.1-	8.1	21%
Mean	28.9-	33.9	23.2-	28.6-	20.5-	4.5	18%

Table 65. Chemical composition for the strains in Uniform Group VIII, 1955

Location	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan
			OIL PERCENTAGE			
Hartsville, S. C.	19.8	19.2	18.9	20.2	21.4	18.0
Gainesville, Fla.	17.9	19.8	19.1	19.5	22.2	18.0
Tallassee, Ala.	21.4	21.7	20.4	21.3	21.8	17.5
Walnut Hill, Fla.	19.8	19.2	18.9	18.1	22.2	17.5
Baton Rouge, La.	20.6	20.6	21.3	20.2	22.5	17.4
Stoneville, Miss.	21.4	20.4	20.2	19.2	21.8	18.1
St. Joseph, La.	21.7	20.3	19.6	16.8	22.0	17.9
Mean	20.4	20.2	19.8	19.3	22.0	17.8
			PROTEIN PERCENTAGE			
Hartsville, S. C.	42.8	41.2	40.3	44.0	40.4	42.0
Gainesville, Fla.	46.3	45.7	43.7	44.8	41.2	44.7
Tallassee, Ala.	39.5	40.6	40.2	42.4	41.5	42.4
Walnut Hill, Fla.	44.5	42.8	41.4	45.1	40.8	44.1
Baton Rouge, La.	43.4	42.9	39.3	45.5	39.6	43.2
Stoneville, Miss.	40.8	41.2	40.5	44.3	40.1	43.2
St. Joseph, La.	43.1	42.8	39.6	46.4	40.1	43.0
Mean	42.9	42.4	40.7	44.6	40.5	43.2

Table 65. (Continued)

Location	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
			OIL PERCENTAGE			
Hartsville, S. C.	21.2	21.8	21.6	19.8	21.2	18.5
Gainesville, Fla.	20.0	22.9	22.4	19.8	21.5	19.5
Tallassee, Ala.	21.5	22.3	22.2	21.4	21.8	19.0
Walnut Hill, Fla.	19.7	21.6	21.4	19.9	20.3	17.0
Baton Rouge, La.	21.1	22.9	22.0	21.4	22.1	20.0
Stoneville, Miss.	21.3	22.0	22.0	21.4	21.8	20.0
St. Joseph, La.	20.3	20.8	20.7	22.0	21.8	20.7
Mean	20.7	22.0	21.8	20.8	21.5	19.2
			PROTEIN PERCENTAGE			
Hartsville, S. C.	41.7	41.5	40.4	41.5	39.9	47.9
Gainesville, Fla.	44.7	43.0	41.2	45.4	41.7	47.8
Tallassee, Ala.	41.4	41.5	41.0	38.8	39.4	44.5
Walnut Hill, Fla.	44.7	42.8	40.4	43.0	41.4	47.6
Baton Rouge, La.	43.1	40.8	39.1	41.6	40.7	47.8
Stoneville, Miss.	41.6	41.4	39.0	40.8	40.2	46.0
St. Joseph, La.	42.8	41.9	40.5	41.0	40.6	45.5
Mean	42.8	41.8	40.2	41.7	40.6	46.7

Table 66. Relative maturity data, days earlier (+) or later (-) than Improved Pelican, for the strains in Uniform Group VIII, 1955

Location	Date Planted	Improved Pelican Matured	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan
			Southeast				
Hartsville, S. C.	6-15	11-9	-7	+2	-5	-8	-6
Experiment, Ga.	5-20	11-4	-2	+2	+1	+1	+1
Tallassee, Ala.	5-27	10-31	-4	-1	0	-4	-2
Gainesville, Fla.	6-13	10-30	-6	+5	+2	-4	+3
Quincy, Fla.	7-6	10-25	-3	+3	-3	0	-3
Jay, Fla.	6-13	10-27	0	0	0	+9	0
Walnut Hill, Fla.	6-15	11-8	-13	-9	-9	-20	-4
Baton Rouge, La.	5-23	11-1	-13	+2	-11	-7	-6
Mean			-6	+1	-3	-4	-2
			Delta				
Stoneville, Miss.(A)[1/]	5-11	F	10-28	F	0	-3	0
St. Joseph, La.	5-18	11-3	-12	+2	-9	-9	-6
Curtis, La.	5-16	11-3	-10	+3	-8	-8	-7
Mean			-11	+2	-8	-8	-6

1/Not included in the mean.

Table 66. (Continued)

Location	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
			Southeast			
Hartsville, S. C.	-7	-11	-12	0	-2	-3
Experiment, Ga.	-1	-3	-1	+1	0	-2
Tallassee, Ala.	-1	-9	-5	-3	0	-3
Gainesville, Fla.	-7	-9	-6	+2	+1	-4
Quincy, Fla.	0	-12	-3	0	-3	0
Jay, Fla.	+9	+9	0	0	0	0
Walnut Hill, Fla.	-6	-1	-14	+1	-1	-7
Baton Rouge, La.	-6	-16	-11	-1	-2	-11
Mean	-2	-7	-7	0	-1	-4
			Delta			
Stoneville, Miss. (A)[1/]	F	-2	-2	F	F	F
St. Joseph, La.	-9	-19	-9	-4	-6	-11
Curtis, La.	-8	-15	-12	-3	-5	-5
Mean	-8	-17	-10	-3	-5	-8

Table 67. Summary of the height data for strains in Uniform Group VIII, 1955

Location	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan
			Southeast			
Hartsville, S. C.	57	40	37	44	41	40
Experiment, Ga.	57	45	39	47	38	41
Tallassee, Ala.	73	48	46	54	45	59
Gainesville, Fla.	53	42	35	41	28	45
Quincy, Fla.	39	24	28	28	26	32
Jay, Fla.	46	38	32	38	37	47
Walnut Hill, Fla.	51	38	36	42	36	35
Baton Rouge, La.	68	48	36	48	42	60
Mean	56	40	36	43	37	45
			Delta			
Stoneville, Miss. (A)	60	46	40	60	48	56
St. Joseph, La.	67	49	46	56	57	70
Curtis, La.	66	62	43	53	39	66
Mean	64	52	43	56	48	64

Table 67. (Continued)

Location	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
			Southeast			
Hartsville, S. C.	42	41	40	48	44	48
Experiment, Ga.	41	43	45	51	40	51
Tallassee, Ala.	49	47	45	58	51	59
Gainesville, Fla.	31	27	28	41	30	51
Quincy, Fla.	29	28	22	32	26	38
Jay, Fla.	38	35	37	43	39	47
Walnut Hill, Fla.	35	38	37	40	43	38
Baton Rouge, La.	40	40	48	54	45	63
Mean	38	37	38	46	40	49
			Delta			
Stoneville, Miss. (A)	46	52	54	58	50	66
St. Joseph, La.	53	57	57	54	48	68
Curtis, La.	32	39	43	51	43	60
Mean	44	49	51	54	47	65

Table 68. Lodging scores for the strains in Uniform Group VIII, 1955

Location	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan
			Southeast			
Hartsville, S. C.	3.0	2.0	3.0	2.0	1.0	4.0
Experiment, Ga.	3.0	2.0	3.0	2.0	2.0	4.0
Tallassee, Ala.	4.0	2.7	3.7	2.7	1.0	4.7
Gainesville, Fla.	2.0	1.3	2.0	1.0	1.0	3.0
Quincy, Fla.	2.0	1.0	2.0	2.0	1.0	1.0
Jay, Fla.	2.0	2.0	3.0	2.0	1.0	3.0
Walnut Hill, Fla.	3.0	1.0	4.0	3.0	1.0	5.0
Baton Rouge, La.	4.0	3.0	3.0	3.0	3.0	5.0
			Delta			
Stoneville, Miss. (A)	5.0	4.0	4.0	3.0	2.0	5.0
St. Joseph, La.	4.0	4.0	4.0	3.3	3.0	5.0
Curtis, La.	4.0	3.0	3.0	3.0	2.0	4.0

Table 68. (Continued)

Location	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
			Southeast			
Hartsville, S. C.	2.0	1.0	2.0	3.0	3.0	3.0
Experiment, Ga.	3.0	2.0	3.0	2.0	3.0	2.0
Tallassee, Ala.	3.0	2.7	3.0	4.0	1.0	3.3
Gainesville, Fla.	1.0	1.0	1.3	1.7	1.0	2.0
Quincy, Fla.	1.0	1.0	1.0	2.0	1.0	2.0
Jay, Fla.	1.3	1.0	1.0	2.0	1.3	2.0
Walnut Hill, Fla.	2.0	2.0	2.0	2.0	2.0	2.0
Baton Rouge, La.	2.0	2.0	3.0	2.0	3.0	3.0
			Delta			
Stoneville, Miss. (A)	4.0	3.0	3.0	5.0	3.0	3.0
St. Joseph, La.	3.3	3.7	2.7	3.0	2.7	3.7
Curtis, La.	2.0	2.0	3.0	3.0	2.0	3.0

Table 69. Seed quality scores for the strains in Uniform Group VIII, 1955

Location	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-135	Jackson	Yellow Gatan
			Southeast			
Experiment, Ga.	1.0	1.0	2.0	2.0	2.0	1.0
Tallassee, Ala.	1.0	1.0	1.0	1.0	2.0	1.0
Gainesville, Fla.	2.7	2.0	3.3	2.0	2.3	3.0
Walnut Hill, Fla.	3.0	3.0	3.0	4.0	3.0	3.0
Baton Rouge, La.	1.0	2.0	1.0	1.0	2.0	1.0
			Delta			
Stoneville, Miss. (A)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	2.0	1.0
Curtis, La.	1.0	1.0	1.0	1.0	2.0	1.0

Table 69. (Continued)

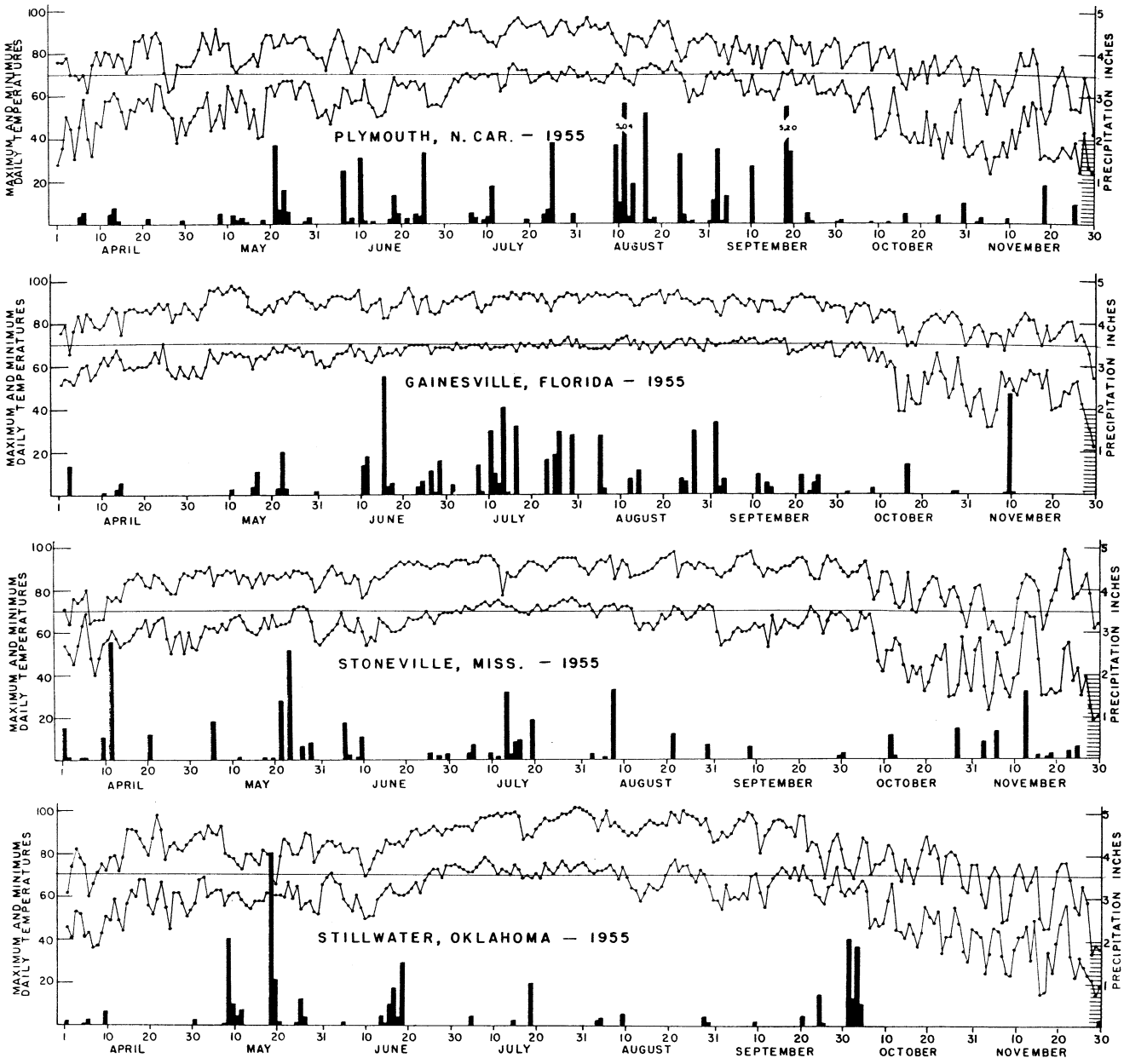
Location	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
			Southeast			
Experiment, Ga.	1.0	2.0	2.0	2.0	3.0	2.0
Tallassee, Ala.	1.0	2.0	2.0	1.0	1.0	1.0
Gainesville, Fla.	2.0	2.3	2.7	2.7	2.7	2.3
Walnut Hill, Fla.	3.0	3.0	3.0	3.0	3.0	3.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	2.0	1.0
			Delta			
Stoneville, Miss. (A)	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	1.0	1.0	2.0	1.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	2.0

Table 70. Seed weight, in grams per 100 seeds, for the strains in Uniform Group VIII, 1955

Location	Improved Pelican	J.E.W. 45	Majos 51-12	Yelnanda 52-13	Jackson	Yellow Gatan
			Southeast			
Hartsville, S. C.	13.0	22.0	20.0	22.0	17.0	10.0
Experiment, Ga.	14.3	20.6	21.7	20.6	21.0	11.8
Tallassee, Ala.	12.3	20.5	19.3	17.8	17.7	10.1
Gainesville, Fla.	11.8	19.4	14.3	18.4	15.3	11.4
Walnut Hill, Fla.	14.6	19.3	17.7	15.8	14.5	11.9
Baton Rouge, La.	11.1	14.7	19.1	15.9	15.0	8.5
Mean	12.8	19.4	18.7	18.4	16.8	10.6
			Delta			
Stoneville, Miss. (A)	11.5	17.2	15.5	19.9	15.4	10.8
St. Joseph, La.	12.0	16.1	19.2	13.9	14.6	9.7
Mean	11.8	16.6	17.4	16.9	15.0	10.3

Table 70. (Continued)

Location	La. 49-1-4	La. 49-2-4	La. 49-11-6	La. 51-7-4	La. 51-34-5	Biloxi
			Southeast			
Hartsville, S. C.	17.0	17.0	18.0	18.0	23.0	23.0
Experiment, Ga.	19.5	18.4	19.1	19.7	25.1	26.4
Tallassee, Ala.	17.3	18.7	19.9	14.6	21.7	25.9
Gainesville, Fla.	14.4	16.3	17.3	14.2	20.4	24.7
Walnut Hill, Fla.	16.0	16.4	16.8	17.6	18.2	19.9
Baton Rouge, La.	13.6	14.5	19.5	13.3	24.9	20.0
Mean	16.3	16.9	18.4	16.2	22.2	24.2
			Delta			
Stoneville, Miss. (A)	15.2	15.0	14.9	15.0	20.4	25.5
St. Joseph, La.	15.6	12.0	13.8	12.6	20.5	23.5
Mean	15.4	13.5	14.4	13.8	20.4	24.5


PLYMOUTH, N. CAR. — 1955
GAINESVILLE, FLORIDA — 1955
STONEVILLE, MISS. — 1955
STILLWATER, OKLAHOMA — 1955
MAXIMUM AND MINIMUM DAILY TEMPERATURES
PRECIPITATION INCHES
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER