U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1953 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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1953
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Introduction

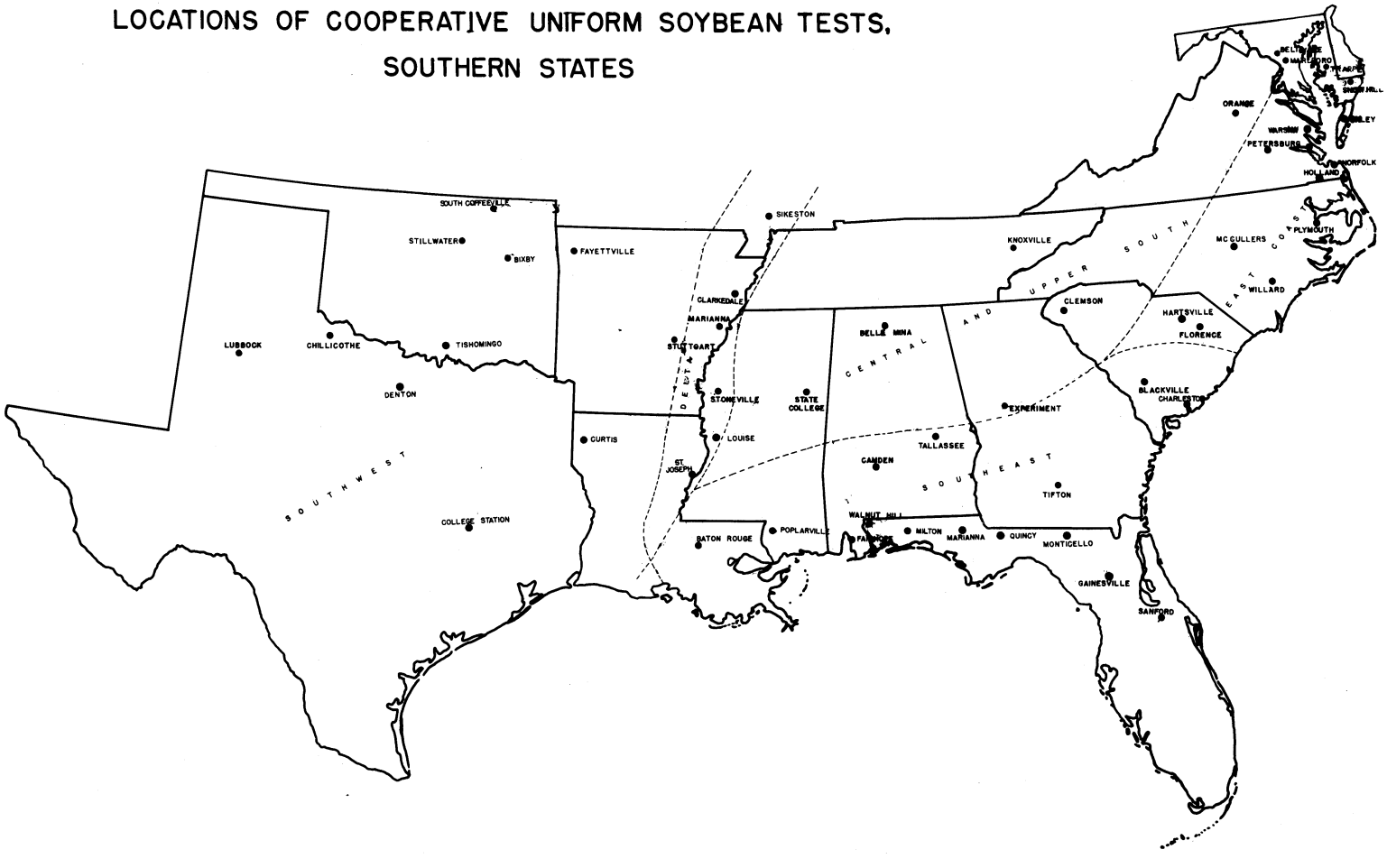
The program of the U. S. Regional Soybean Laboratory has been directed toward the development of improved strains of soybeans and the obtaining of fundamental information necessary to the efficient breeding of strains to meet specific needs. In the Southern Region, fundamental studies and breeding programs are conducted at the two centers, Stoneville, Mississippi, and Raleigh, North Carolina. After promising new strains are developed at these breeding centers, they are advanced to the uniform regional tests, conducted in cooperation with the 12 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 tests 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 of the Delta, and Oklahoma and Texas. In the Southwest area, most of the potential soybean-growing areas are on the alluvial river valley soils. 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



As a further aid in interpreting varietal responses, rainfall data is reported for many of the locations where nurseries were grown. Since much of the summer rainfall is from local showers, rainfall data is included only from locations where records were taken reasonably close to the nurseries. Daily minimum and maximum temperatures are reported for the representative locations for the various production areas.

The 1953 season was characterized by extremes in moisture. Through much of the central south, May was extremely wet and planting was delayed until late May and early June. The wet period followed by a long drouth period contributed to poor seed bed preparation which resulted in poor stands. For this reason, accuracy of several of the yield comparisons were seriously reduced. Late summer drouth reduced yield in much of the area. However, on the heavy clay soil at Stoneville, soybeans again demonstrated their ability to get a high percentage of their moisture requirements from the soil water.

LOCATION OF COOPERATIVE NURSERIES

Location	Cooperator	Uniform Groups IV	V	VI	VII	VIII	Soil Type	Fertilizer[4]
		East Coast						
Beltsville, Md.	Plant Industry Sta.	1	1				Riverdale silt loam	0-42-42
Marlboro, Md.	Marlboro Tobacco Farm	1	1	1				20-60-60
Trappe, Md.	Willis Farms, Inc.	1	1	1			Sassafras sandy loam	none
Snow Hill, Md.	Hance Cherrix	1	1	1			Keyport silt loam	none
Warsaw, Va.	Eastern Virginia Research Sta.	1	1	1			Sassafras sandy loam	none
Onley, Va.	Virginia Truck Expt. Sta.		1	1	1		Woodstown sandy loam	0-42-42
Petersburg, Va.	Virginia State College Field Sta.		1	1	1		Norfolk fine sandy loam	0-42-42
Norfolk, Va.	Virginia Truck Experiment Sta.		1	1	1		Woodstown sandy loam	0-42-42
Holland, Va.	Tidewater Field Sta.		1	1	1		Klej loamy fine sand	8-48-48
Plymouth, N. C.	Tidewater Branch Sta.		1	1[1]	1		Bladen fine sandy loam	0-40-80
Willard, N. C.	Lower Coastal Plain Expt. Sta.			1[1]	1[2]		Norfolk sandy loam	0-40-80
McCullers, N. C.	N. C. Agric. Expt. Sta.			1[1]	1[2]		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	25-50-25
		Southeast						
Blackville, S. C.	Edisto Expt. Sta.				1		Ruston sandy loam	12-48-48
Charleston, S. C.	S. C. Truck Expt. Sta.				1		Dupont very fine sandy loam	30-60-30[5]
Tallassee, Ala.	Alabama Agric. Expt. Sta.			1	1[2]		Cahaba fine sandy loam	0-50-30
Camden, Ala.	Lower Coastal Plain Substa.			1	1		Norfolk sandy loam	20-50-35
Tifton, Ga.	Georgia Coastal Plain Expt. Sta.				1	1	Tifton Pebbly loam	0-40-80
Sanford, Fla.	Central Fla. Expt. Sta.			1	1	1		
Gainesville, Fla.	Fla. Agric. Expt. Sta.			1	1	1	Lakeland fine sandy loam	0-40-40
Monticello, Fla.	N. Fla. Expt. Sta. (Mobile Unit #1)			1	1		Ruston fine sandy loam	24-60-42
Quincy, Fla.	N. Fla. Expt. Sta.			1	1	1	Tifton sandy loam	20-50-35
Marianna, Fla.	Mobile Unit #3			1	1		Ruston sandy loam	24-60-42
Milton, Fla.	West Fla. Expt. Sta.			1	1	1	Red Bay sandy loam	20-85-70
Walnut Hill, Fla.	N. Fla. Expt. Sta. (Mobile Unit #2)			1[1]	1	1	Tifton fine sandy loam	24-60-42
Fairhope, Ala.	Gulf Coast Substa.			1	1[2]		Orangeburg fine sandy loam	20-50-35
Poplarville, Miss.	S. Miss. Branch Sta.				1[2]		Orangeburg fine sandy loam	0-40-80
Baton Rouge, La.	La. Agric. Expt. Sta.			1	1	1	Olivier silt loam	15-60-60

Location	Cooperator	IV	V	VI	VII	VIII	Soil Type	Fertilizer[4]
		Upper and Central South						
Orange, Va.	Piedmont Field Sta.	1					Davidson clay	50-100-100
Knoxville, Tenn.	Tenn. Agric. Expt. Sta.	1	1	1				
Belle Mina, Ala.	Tenn. Valley Substa.		1	1			Decatur sandy loam	0-36-0
Clemson, S. C.	S. C. Agric. Expt. Sta.				1		Lloyd sandy loam	18-45-27
Experiment, Ga.	Ga. Agric. Expt. Sta.		1	1	1	1	Cecil clay loam	20-60-60
State College, Miss.	Miss. Agric. Expt. Sta.		1	1	1		Verona fine sandy loam	none
		Delta						
Sikeston, Mo.	Mo. Agric. Expt. Sta.	1	1	1			Lintonia sandy loam	0-60-60
Clarkedale, Ark.	Delta Substa.	1	1	1			Sharkey clay	none
Marianna, Ark.	Cotton Branch Sta.	1	1	1			Richland silt loam	none
Stoneville, Miss.(A)	Delta Br. Expt. Sta.		1	1[1]	1[2]	1[3]	Bosket fine sandy loam	none
Stoneville, Miss.(B)	Delta Br. Expt. Sta.	1	1	1[1]	[2]		Sharkey clay	none
Louise, Miss.	L. S. Stoner			1[1]	1[2]		Dundee silt loam	none
St. Joseph, La.	N. E. La. Expt. Sta.		1	1	1	1[3]	Sarpy clay loam	none
		West						
Stuttgart, Ark.	Rice Branch Expt. Sta.		1	1	1		Crowley silt loam	none
Curtis, La.	Red River Valley Expt. Sta.		1	1	1	1[3]	Miller very fine sandy loam	none
Fayetteville, Ark.	Ark. Agric. Expt. Sta.	1	1	1			Bolivar silt loam	none
South Coffeeville, Okla.	Paul O. Schultz	1	1				Verdigris silt loam	none
Bixby, Okla.	Okla. Veg. Research Sta.		1	1[1]			Yahola very fine sandy loam	32-40-0
Stillwater, Okla.	Okla. Agric. Expt. Sta.	1	1	1			Vanoss very fine sandy loam	
Tishomingo, Okla.	Murray State Jr. College			1	1		Ochlocknee-Iuka	none
Denton, Texas	Texas Substa. No. 6	1	1	1			San Saba clay	none
Chillicothe, Texas	Texas Substa. No. 12		1	1	1		Abilene loam	none
Lubbock, Texas	Texas Substa. No. 8		1	1	1		Richfield fine sandy loam	none

1/Preliminary VI nursery grown.
2/Preliminary VII nursery grown
3/Preliminary VIII nursery grown
4/Fertilizer applied converted to pounds of N, P_2O_5, K_2O, for example, 400 pounds of 2-12-12 equals 8-48-48.
5/Fertilizer applied to vegetables.

METHODS

The uniform nurseries are planted in 4-row plots with three replications, or in 3-row plots with four replications. All seed is packeted at Stoneville, Mississippi, for planting 19-foot rows. Where 4-row plots are grown, a 16-foot section from each of the two center rows is usually harvested. Where 3-row plots are grown, a 16-foot section is harvested from the center row. 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 planting rates 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 0 to 5 as follows:

0 - No shattering
1 - 1 - 5% shattered
2 - 6 - 10% shattered
3 - 11 - 24% shattered
4 - 25 - 50% shattered
5 - Over 50% shattered

Chemical composition - percent protein, percent oil, and iodine number of the oil is determined on each strain from representative locations in each production area. Percentage composition of the seed is expressed on a dry basis (moisture free). All chemical analyses are made at Urbana, Illinois.

Seed weight from each strain is determined on a composite from all replications at a location and is recorded as weight in grams of 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 areas.

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 showing a coefficient of variability greater than 25% were not included in calculating averages.

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.

UNIFORM GROUP IV

1953

Strain or Variety	Source or Originating Agency	Origin
Perry	Purdue A.E.S. & U.S.R.S.L.	Sel. from Patoka x L7-1355
Wabash	Purdue A.E.S. & U.S.R.S.L.	Sel. from Dunfield x Mansoy
Clark	Ill. A.E.S. & U.S.R.S.L.	Sel. from Lincoln (2) x Richland
L6-5679	Ill. A.E.S. & U.S.R.S.L.	Sel. from Lincoln x Richland
S7-270	Mo. A.E.S. & U.S.R.S.L.	Sel. from Chief/Macoupin x Chief
S7-5236	Mo. A.E.S. & U.S.R.S.L.	Sel. from Lincoln x S-100
C985	Purdue A.E.S. & U.S.R.S.L.	Sel. from Lincoln x Ogden
L8-10780	Ill. A.E.S. & U.S.R.S.L.	Sel. from Lincoln (2) x C171
P.I. 103,419	Introduction from Manchuria	
S1-441	Mo. A.E.S. & U.S.R.S.L.	Sel. from Lincoln (2) x Ogden

Fifteen Group IV nurseries were planted in the Southern Region. Results of 11 of these nurseries are summarized in tables 1 through 10.

Group IV included the three named varieties, Perry, Wabash, and Clark. Clark, which was included for the first time, was 1 to 2 days earlier than Wabash and averaged higher in seed yield in all production areas. Oil content of Wabash and Clark is very similar. Clark has heavier foliage than Wabash and, consequently, gives better ground cover during the growing season. Clark also appeared to be superior to Wabash in seed holding. In relation to Perry, Clark averaged 5 to 10 days earlier, was equal, or slightly superior in seed production, had a slightly higher oil content, was superior in seed holding, and gave better ground cover. On the basis of one year testing, Clark appears to have promise as an early variety for the northern part of the southern region.

L6-5679 has now been tested for five years. It is comparable to Perry in maturity but has more vigorous growth, gives more complete ground coverage, and holds its seed better. Five-year data is available from Warsaw, Virginia; Sikeston, Missouri; and Stoneville, Mississippi. For these three locations, the mean yield of Perry and L6-5679 is similar, but L6-5679 has a 0.7 percent lower oil content. Four-year yield and oil data for the varieties Perry, Wabash, L6-5679, S7-270, and S7-5236 is given in table 10. As an average of the five locations, none of the strains shows any superiority over Perry. However, at Stoneville, L6-5679 has averaged 5 bushels more per acre than Perry.

The two strains C985 and L8-10780 have been included for a three-year period. A three-year summary for seed yield and oil content is given in table 9. C985 gives better ground coverage than Perry but shatters badly. Its three-year yield average is 1.2 bushels higher than Perry. Like L6-5679, C985 has averaged 6 bushels per acre higher than Perry at Stoneville. L8-10780 has not been superior to Perry in performance.

Two strains, P.I. 103,419 and S1-441 were included for the first time. Both shatter more than is acceptable for satisfactory production. P.I. 103,419 is inferior to present lines in Group IV. S1-441 yielded very well, has high oil content, and gives good ground cover.

Table 1. Yield, in bushels per acre, for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	Clark	L6-5679	S7-270	S7-5236
			East Coast			
Beltsville, Md.	40.9	39.5	42.4	37.8	41.6	39.8
Marlboro, Md.	37.8	29.0-	33.1	29.9	37.7	36.4
Trappe, Md.	34.2	32.9	32.9	29.9-	32.7	33.7
Snow Hill, Md.	26.9	26.4	31.4	27.8	25.9	27.0
Warsaw, Va.	22.4	19.7	22.7	22.1	21.8	23.4
Mean	32.4	29.5	32.5	29.5	31.9	32.1
			Upper and Central South			
Orange, Va.	24.0	20.0-	22.8	23.1	21.0-	22.2
			Delta			
Sikeston, Mo.	11.3	11.0	10.9	9.6	8.0	10.6
Marianna, Ark.	26.7	22.4	28.5	26.7	32.8+	30.3
Stoneville, Miss. (B)	40.9	42.4	42.1	47.0+	47.8+	38.6
Mean	26.3	25.3	27.2	27.8	29.5	26.5
			West			
Fayetteville, Ark.	9.9	5.1	9.7	14.4+	13.1	12.2
South Coffeeville, Okla.	22.2	18.6	24.8	22.8	22.3	25.5
Perkins, Okla.	20.2	24.1	23.8	17.5	20.1	25.0
Mean	17.4	15.9	19.2	18.2	18.5	20.9

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

Table 1. (Continued)

Location	C985	L8-10780	P.I. 103,419	S1-441	L.S.D. (5%)	C.V.
			East Coast			
Beltsville, Md.	41.8	39.2	35.6-	40.8	4.0	7%
Marlboro, Md.	33.2	31.9	31.5	33.1	8.4	18%
Trappe, Md.	36.2	32.1	26.1-	39.4+	4.0	9%
Snow Hill, Md.	28.9	--	--	35.4+	5.6	13%
Warsaw, Va.	22.7	22.0	22.6	24.1	N.S.	10%
Mean	32.6	31.3	28.9	34.6		
			Upper and Central South			
Orange, Va.	24.8	21.6-	--	23.2	2.2	9%
			Delta			
Sikeston, Mo.	10.6	9.5	8.7	9.9	2.1	13%
Marianna, Ark.	27.9	28.8	--	25.0	4.4	9%
Stoneville, Miss. (B)	44.8	42.2	32.5	44.0	6.1	8%
Mean	27.8	26.8	--	26.3		
			West			
Fayetteville, Ark.	13.7+	9.3	--	15.0	3.8	19%
South Coffeeville, Okla.	27.2+	23.1	16.9-	25.2	4.9	13%
Perkins, Okla.	21.0	20.4	16.2	16.1	5.9	17%
Mean	20.6	17.6	--	18.8		

Table 2: Chemical composition of the strains in Uniform Group IV, 1953

Location	Perry	Wabash	Clark	L6-5679	S7-270
		OIL PERCENTAGE			
Warsaw, Va.	22.1	22.8	22.6	20.2	21.5
Orange, Va.	24.2	24.3	25.3	25.5	23.5
Marianna, Ark.	24.2	24.7	24.1	24.6	23.5
Stoneville, Miss.	23.9	24.5	24.8	22.8	23.2
South Coffeeville, Okla.	22.3	22.0	22.3	21.7	21.5
Mean	23.3	23.7	23.8	23.0	22.6
		PROTEIN PERCENTAGE			
Warsaw, Va.	40.5	39.9	41.1	38.3	40.7
Orange, Va.	35.1	35.8	34.9	30.4	35.0
Marianna, Ark.	36.1	35.9	36.4	33.8	35.1
Stoneville, Miss.	38.3	35.8	36.6	36.5	36.3
South Coffeeville, Okla.	40.5	38.8	39.7	38.3	38.0
Mean	38.1	37.2	37.7	35.5	37.0

Table 2: (Continued)

Location	S7-5236	C985	L8-10780	P.I. 103,419	S1-441
			OIL PERCENTAGE		
Warsaw, Va.	21.1	23.1	22.0	20.1	22.6
Orange, Va.	23.7	25.7	25.5	--	23.8
Marianna, Ark.	23.0	24.5	25.1	--	25.0
Stoneville, Miss.	22.0	22.7	22.0	21.5	23.6
South Coffeeville, Okla.	21.3	23.8	22.8	19.1	23.0
Mean	22.2	24.0	23.5	20.2	23.6
			PROTEIN PERCENTAGE		
Warsaw, Va.	40.7	40.3	40.1	42.0	40.2
Orange, Va.	33.1	33.8	34.1	--	36.4
Marianna, Ark.	35.5	35.4	35.7	--	35.4
Stoneville, Miss.	39.2	37.8	39.9	39.6	36.9
South Coffeeville, Okla.	39.2	38.3	39.0	42.3	38.1
Mean	37.5	37.1	37.8	41.3	37.4

Table 3: Relative maturity data, days earlier (-) or later (+) than Perry, for the strains in Uniform Group IV, 1953

Location	Date Planted	Perry	Wabash	Clark	L6-5679	S7-270
		East Coast				
Beltsville, Md.	6-5	10-16	-3	-10	+4	+2
Marlboro, Md.	6-3	10-2	-5	-6	+2	+5
Trappe, Md.	5-25	10-2	-7	-10	-2	+4
Snow Hill, Md.	6-4	10-1	-5	-8	+1	+1
Warsaw, Va.	6-4	9-30	-5	-1	+1	+3
Mean			-5	-7	+1	+3
		Upper and Central South				
Orange, Va.	5-23	9-19	-10	-7	+4	+4
		Delta				
Sikeston, Mo.	6-2	9-18	-3	-2	+3	+1
Marianna, Ark.	5-28	9-13	-8	-6	-3	+4
Stoneville, Miss. (B)	5-23	9-23	-7	-6	+2	+4
Mean			-6	-5	+1	+3
		West				
Fayetteville, Ark.	5-22	9-28	-18	0	+2	0
South Coffeeville, Okla.	5-22	9-20	-10	-10	+1	+1
Perkins, Okla.	5-20	9-16	-2	-2	+2	0
Mean			-10	-4	+2	0

Table 3: (Continued)

Location	S7-5236	C985	L8-10780	P.I. 103,419	S1-441
		East Coast			
Beltsville, Md.	0	+3	+1	+6	+2
Marlboro, Md.	+2	+4	+2	+4	+6
Trappe, Md.	-1	+2	+1	+6	+2
Snow Hill, Md.	-1	+3	-1	--	+1
Warsaw, Va.	+3	+9	+1	+6	+5
Mean	0	+4	+1	+5	+3
		Upper and Central South			
Orange, Va.	+5	+4	0	--	+6
		Delta			
Sikeston, Mo.	+2	+3	+2	+6	+3
Marianna, Ark.	+5	+4	+4	--	+5
Stoneville, Miss. (B)	+5	+2	+3	-5	0
Mean	+4	+3	+3	0	+3
		West			
Fayetteville, Ark.	+2	0	+1	--	+1
South Coffeeville, Okla.	0	0	+1	0	-1
Perkins, Okla.	+1	+1	+2	+7	+3
Mean	+1	0	+1	+3	+1

Table 4: Height data for strains in Uniform Group IV, 1953

Location	Perry	Wabash	Clark	L6-5679	S7-270
		East Coast			
Beltsville, Md.	45	52	44	54	56
Marlboro, Md.	45	44	42	46	60
Trappe, Md.	41	45	40	47	54
Snow Hill, Md.	42	44	39	53	60
Warsaw, Va.	28	28	28	23	35
Mean	40	43	39	45	53
		Upper and Central South			
Orange, Va.	32	35	32	36	40
		Delta			
Sikeston, Mo.	29	32	29	30	33
Marianna, Ark.	39	45	45	42	55
Stoneville, Miss.	31	39	37	37	38
Mean	33	39	37	36	42
		West			
Fayetteville, Ark.	18	18	20	23	23
South Coffeeville, Okla.	40	41	41	44	48
Perkins, Okla.	36	41	37	43	47
Mean	31	33	33	37	39

Table 4: (Continued)

Location	S7-5236	C985	I8-10780	P.I. 103,419	S1-441
		East Coast			
Beltsville, Md.	48	48	50	62	53
Marlboro, Md.	48	46	46	57	48
Trappe, Md.	42	42	44	54	44
Snow Hill, Md.	38	42	37	--	43
Warsaw, Va.	34	34	34	39	34
Mean	42	42	42	53	44
		Upper and Central South			
Orange, Va.	34	37	37	--	35
		Delta			
Sikeston, Mo.	30	29	33	36	30
Marianna, Ark.	51	47	44	--	46
Stoneville, Miss.	28	31	31	42	37
Mean	36	36	36	39	38
		West			
Fayetteville, Ark.	19	23	23	--	24
South Coffeeville, Okla.	43	42	45	49	42
Perkins, Okla.	41	40	45	43	40
Mean	34	35	38	46	35

Table 5: Lodging scores for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	Clark	L6-5679	S7-270
		East Coast			
Beltsville, Md.	3.0	5.0	4.0	5.0	5.0
Marlboro, Md.	2.0	4.0	2.0	2.0	3.0
Trappe, Md.	2.0	3.0	2.0	2.0	3.0
Snow Hill, Md.	3.0	4.0	4.0	3.0	4.0
Warsaw, Va.	1.0	1.2	1.0	1.4	2.0
		Delta			
Sikeston, Mo.	1.1	1.1	1.1	1.0	1.2
Marianna, Ark.	1.0	1.0	1.0	2.0	2.0
Stoneville, Miss. (B)	1.6	2.0	1.6	1.3	2.0
		West			
Fayetteville, Ark.	1.0	1.0	1.0	1.0	1.0
South Coffeeville, Okla.	1.3	1.3	2.7	1.7	2.7
Perkins, Okla.	1.0	1.0	1.3	1.0	2.0

Table 5: (Continued)

Location	S7-5236	C985	I8-10780	P.I. 103,419	S1-441
		East Coast			
Beltsville, Md.	4.0	3.0	4.0	5.0	4.0
Marlboro, Md.	2.0	1.0	1.0	4.0	3.0
Trappe, Md.	2.0	2.0	2.0	4.0	1.0
Snow Hill, Md.	3.0	3.0	3.0	--	3.0
Warsaw, Va.	1.1	1.5	1.1	2.4	1.5
		Delta			
Sikeston, Mo.	1.0	1.1	1.1	1.2	1.1
Marianna, Ark.	2.0	2.0	2.0	--	2.0
Stoneville, Miss. (B)	1.6	2.0	1.6	3.0	2.0
		West			
Fayetteville, Ark.	1.0	1.0	1.0	--	1.0
South Coffeeville, Okla.	2.0	2.0	2.0	2.3	1.7
Perkins, Okla.	1.3	1.7	2.0	2.7	1.3

Table 6: Seed quality scores for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	Clark	I6-5679	S7-270
		East Coast			
Beltsville, Md.	1.0	1.0	1.0	1.0	2.0
Marlboro, Md.	1.0	2.0	2.0	1.0	1.0
Trappe, Md.	2.0	2.0	1.0	2.0	2.0
Snow Hill, Md.	2.0	2.0	3.0	3.0	2.0
Warsaw, Va.	1.0	1.0	2.0	1.0	1.0
		Upper and Central South			
Orange, Va.	1.0	2.0	1.0	1.0	1.0
		Delta			
Sikeston, Mo.	3.0	2.0	3.0	2.0	2.0
Marianna, Ark.	3.0	3.0	3.0	3.0	3.0
Stoneville, Miss. (B)	3.0	3.0	2.3	2.3	2.3
		West			
Fayetteville, Ark.	4.0	3.0	3.0	3.0	3.0
South Coffeeville, Okla.	2.3	2.0	1.0	2.0	2.0
Perkins, Okla.	2.3	2.0	2.0	2.0	2.0

Table 6: (Continued)

Location	S7-5236	C985	L8-10780	P.I. 103,419	S1-441
		East Coast			
Beltsville, Md.	1.0	1.0	1.0	3.0	1.0
Marlboro, Md.	1.0	1.0	2.0	3.0	1.0
Trappe, Md.	2.0	2.0	2.0	3.0	1.0
Snow Hill, Md.	2.0	1.0	3.0	--	1.0
Warsaw, Va.	1.0	2.0	1.0	2.0	1.0
		Upper and Central South			
Orange, Va.	1.0	1.0	3.0	--	2.0
		Delta			
Sikeston, Mo.	2.0	2.0	2.0	1.0	2.0
Marianna, Ark.	3.0	3.0	3.0	--	3.0
Stoneville, Miss. (B)	3.0	2.0	3.5	3.0	2.3
		West			
Fayetteville, Ark.	3.0	4.0	4.0	--	3.0
South Coffeeville, Okla.	1.3	1.0	1.7	2.0	1.3
Perkins, Okla.	2.7	2.3	3.0	2.0	2.7

Table 7: Seed weight, in grams per 100 seeds, for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	Clark	L6-5679	S7-270
		East Coast			
Beltsville, Md.	17.7	14.4	17.3	14.8	14.5
Marlboro, Md.	17.3	14.5	16.5	14.5	14.9
Trappe, Md.	18.0	15.3	16.3	14.1	15.5
Snow Hill, Md.	15.7	14.8	17.9	14.4	13.9
Warsaw, Va.	16.0	13.5	15.5	14.5	14.5
Mean	16.9	14.5	16.7	14.5	14.7
		Upper and Central South			
Orange, Va.	16.5	14.0	14.5	14.0	13.0
		Delta			
Sikeston, Mo.	11.7	10.7	11.9	11.4	10.7
Marianna, Ark.	14.5	12.5	14.0	13.0	12.0
Stoneville, Miss.	14.6	14.0	15.8	13.9	13.5
Mean	13.6	12.4	13.9	12.8	12.1
		West			
Fayetteville, Ark.	16.5	13.0	16.5	15.5	13.0
South Coffeeville, Okla.	16.7	14.0	14.1	15.0	14.1
Perkins, Okla.	13.0	13.1	13.1	12.1	11.2
Mean	15.4	13.4	14.6	14.2	12.8

Table 7: (Continued)

Location	S7-5236	C985	L8-10780	P.I. 103,419	S1-441
		East Coast			
Beltsville, Md.	16.1	17.1	17.9	24.1	17.7
Marlboro, Md.	14.9	17.3	17.2	22.8	18.9
Trappe, Md.	14.7	17.3	17.1	24.6	18.7
Snow Hill, Md.	15.1	16.7	15.6	--	17.1
Warsaw, Va.	15.0	17.0	16.0	21.0	16.0
Mean	15.2	17.1	16.8	23.1	17.7
		Upper and Central South			
Orange, Va.	15.0	16.0	16.5	--	17.0
		Delta			
Sikeston, Mo.	12.1	13.2	12.4	19.8	13.5
Marianna, Ark.	13.5	13.0	14.5	--	13.5
Stoneville, Miss.	15.8	15.3	18.7	20.6	14.4
Mean	13.8	13.8	15.2	20.2	13.8
		West			
Fayetteville, Ark.	15.5	15.5	17.0	--	16.0
South Coffeeville, Okla.	15.8	16.1	17.4	22.2	16.0
Perkins, Okla.	12.5	12.8	14.1	19.2	13.2
Mean	14.6	14.8	16.2	20.7	15.1

Table 8: Two-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	L6-5679	S7-270	S7-5236	C985	L8-10780
			YIELD				
Trappe, Md.	37.0	32.9	32.1	34.3	33.9	34.9	33.8
Warsaw, Va.	27.4	23.0	25.0	26.2	26.3	27.2	25.5
Orange, Va.	29.4	24.2	29.8	26.2	28.0	29.7	28.1
Sikeston, Mo.	17.2	17.0	16.4	14.0	16.0	14.2	15.0
Marianna, Ark.	20.2	19.4	20.5	24.2	23.2	15.8	21.1
Stoneville, Miss.	33.3	36.4	42.8	42.3	37.0	42.0	37.3
Fayetteville, Ark.	10.7	6.9	12.9	12.2	11.6	12.9	10.2
Mean	25.0	22.8	25.6	25.6	25.1	25.2	24.5
			OIL PERCENTAGE				
Warsaw, Va.	22.5	22.5	21.2	21.8	21.5	23.2	22.4
Marianna, Ark.1/	23.1	23.2	22.9	22.2	22.6	23.0	23.8
Stoneville, Miss.	23.8	24.5	22.9	23.2	22.2	23.1	22.8
Mean	23.1	23.4	22.3	22.4	22.1	23.1	23.0

1/1952 data for Clarkedale, Arkansas

Table 9: Three-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	L6-5679	S7-270	S7-5236	C985	L8-10780
			YIELD				
Warsaw, Va.	27.5	23.8	25.9	26.7	26.4	28.5	25.8
Sikeston, Mo.	18.8	17.8	16.9	16.4	16.3	17.0	17.1
Marianna, Ark.	17.7	17.1	18.8	20.7	20.1	20.0	20.0
Stoneville, Miss.	26.8	28.6	32.9	32.1	28.8	32.8	29.1
Fayetteville, Ark.	14.2	11.2	15.2	12.0	11.4	12.6	10.4
Mean	21.0	19.7	21.9	21.6	20.6	22.2	20.5
			OIL PERCENTAGE				
Warsaw, Va.	22.6	22.8	21.5	21.8	21.3	22.8	22.9
Clarkedale, Ark.1/	23.0	23.3	22.5	21.7	22.1	22.4	23.4
Stoneville, Miss.	23.2	23.7	22.5	22.8	21.9	22.5	22.5
Mean	22.9	23.3	22.2	22.1	21.8	22.6	22.9

1/1953 data for Marianna, Arkansas.

Table 10: Four-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group IV, 1953

Location	Perry	Wabash	L6-5679	S7-270	S7-5236
			YIELD		
Warsaw, Va.	27.2	23.0	25.9	25.9	24.8
Sikeston, Mo.	23.3	20.2	21.6	20.7	20.3
Marianna, Ark.	24.8	17.5	21.1	21.1	20.0
Stoneville, Miss.	31.5	31.1	36.6	32.9	31.8
Fayetteville, Ark.	18.7	14.6	21.4	19.6	20.7
Mean	25.1	21.3	25.3	24.0	23.5
			OIL PERCENTAGE		
Warsaw, Va.	22.5	22.6	21.3	21.8	21.4
Sikeston, Mo.1/	22.6	23.1	21.9	21.6	20.9
Stoneville, Miss.	23.2	23.5	22.6	22.5	21.8
Mean	22.8	23.1	21.9	22.0	21.4

1/1953 data are from Marianna, Arkansas.

UNIFORM GROUP V

1953

Strain or Variety	Source or Originating Agency	Origin
Dorman	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Dunfield x Arksoy
S-100	Missouri A.E.S.	Sel. from rogue in Illini
Dortchsoy 67	Robert L. Dortch Seed Co. Scott, Ark.	Sel. from Macoupin x Ogden
D517-4	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Arksoy x Patoka
D623-33	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Dunfield x Arksoy
D632-15	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Haberlandt x Dunfield
D49-247	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Dunfield x Tenn. Non-pop
D50-204	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from N46-191 x N45-745
Luthy	Farmer selection from Eastern Shore of Maryland	

Thirty Group V nurseries were planted. Results from 24 nurseries are summarized in tables 11 through 20. Poor stands were obtained in several of the tests planted in the Delta area and yields are somewhat variable. Yields were reduced in several of the nurseries by summer drouths. At locations such as Petersburg and Norfolk, Virginia, late season rains benefitted strains of VI maturity and the later-maturing lines in Group V.

In 1953, S-100 yielded extremely well in relation to Dorman. However, at Stoneville where S-100 yielded significantly more than Dorman, it was necessary to cut the S-100 plots and allow them to cure for a week because of green stems and retention of leaves. This condition would have seriously curtailed combining operations. Dorman stems were uniformily dry at maturity. Other advantages of Dorman over S-100 are higher oil content, more complete ground coverage during the growing season, better seed quality, and better seed holding.

The three strains, D517-4, D623-33, and D632-15, have been tested for four years. A four-year summary of the seed yield and oil content of these lines in relation to Dorman and S-100 is reported in table 20. Not any of these lines have given a consistently superior performance over Dorman.

Dortchsoy 67 and D49-247 have been tested for three years. In relation to Dorman, Dortchsoy 67 has averaged approximately 5 days later in maturity and is more subject to shattering. Yield and oil content are very comparable. Dortchsoy 67 has a higher three-year average than Dorman in

the Delta section largely because of a yield advantage at St. Joseph, Louisiana. D49-247 has not been consistently superior to Dorman in any way.

The two strains Luthy and D50-204 have been included in this nursery for two years. Luthy is very subject to shattering. Its two-year average yield is below that for Dorman in all production areas. Oil content is also below that for Dorman. D50-204 stands better than the other strains in Group V and carries resistance to bacterial pustule, wildfire, and one or more races of mildew. However, its oil content has averaged very nearly the same as S-100. D50-204 has value only as a parent in the breeding program.

Table 11. Yield, in bushels per acre, for the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch-soy 67	D517-4	D623-33	D632-15
			East Coast			
Beltsville, Md.	27.0	38.2+	27.6	37.4+	38.2+	31.6+
Marlboro, Md.	24.7	31.0+	25.6	31.0+	24.0	24.7
Trappe, Md.	27.1	30.7	28.8	31.8+	29.8	33.8+
Snow Hill, Md.	33.2	31.3	38.3	33.1	25.2-	28.4
Warsaw, Va.	25.3	24.2	25.0	24.6	22.5	22.5
Accomac, Va.	21.8	24.8	29.0+	25.1	25.4	24.5
Norfolk, Va.	20.9	24.8	24.2	25.1+	22.7	21.5
Petersburg, Va.	10.6	8.8	17.2+	8.0	10.4	5.6-
Holland, Va.	34.3	18.1-	26.1-	25.6-	24.1-	24.7-
Plymouth, N. C.	32.1	27.0	35.2	27.2	22.1-	23.2-
Mean	25.7	25.9	27.7	26.9	24.4	24.0
			Upper and Central South			
Belle Mina, Ala.	15.4	20.0+	15.8	18.9	21.6+	10.9-
Experiment, Ga.	14.5	15.0	15.0	16.8	15.7	15.5
State College, Miss.	28.6	32.4	34.5+	28.8	25.1	22.9-
Mean	19.5	22.5	21.8	21.5	20.8	16.4
			Delta			
Sikeston, Mo.	10.6	12.6	12.0	11.4	11.5	10.5
Clarkedale, Ark.	17.8	24.8	20.8	23.7	24.5	15.0
Marianna, Ark.	10.7	25.8+	21.5+	16.9	20.5+	14.7
Stoneville, Miss. (B)	39.9	46.5+	42.8	37.1	43.0	43.2
St. Joseph, La.	40.0	47.6	47.6	40.4	31.1	40.4
Mean	23.8	31.5	28.9	25.9	26.1	24.8
			West			
Curtis, La.	34.2	31.1	34.5	32.7	30.6	34.2
Fayetteville, Ark.	13.7	14.6	15.2	11.6	12.8	12.4
South Coffeeville, Okla.	18.0	21.8	24.0	20.3	21.5	20.3
Bixby, Okla.	10.6	12.2	11.0	16.7+	7.5	13.4
Perkins, Okla.	18.7	16.7	17.3	16.0	12.8-	12.2-
Lubbock, Texas	14.1	12.1	14.5	13.2	17.6	12.3
Mean	18.2	18.1	19.4	18.4	17.1	17.5

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

Table 11: (Continued)

Location	D49-247	D50-204	Luthy	L.S.D. (5%)	C.V.
		East Coast			
Beltsville, Md.	37.6+	20.4-	24.4	4.3	9%
Marlboro, Md.	27.1	23.5	22.9	5.2	14%
Trappe, Md.	30.9	27.4	29.8	4.4	10%
Snow Hill, Md.	24.9-	38.6	33.6	7.8	17%
Warsaw, Va.	21.7	22.4	25.3	N.S.	10%
Accomac, Va.	21.2	21.5	29.9+	3.8	11%
Norfolk, Va.	21.2	27.2+	26.6+	4.1	9%
Petersburg, Va.	11.1	23.2+	12.5	2.8	16%
Holland, Va.	20.2-	28.0-	25.9-	5.3	15%
Plymouth, N. C.	29.3	34.4	31.0	5.1	11%
Mean	24.5	26.7	26.2		
		Upper and Central South			
Belle Mina, Ala.	16.9	15.9	12.7	3.6	13%
Experiment, Ga.	17.7	19.6	13.4	N.S.	18%
State College, Miss.	30.6	28.8	20.4-	4.6	11%
Mean	21.7	21.4	15.5		
		Delta			
Sikeston, Mo.	10.3	3.9	5.8	2.6	18%
Clarkedale, Ark.	14.8	27.4	18.3		
Marianna, Ark.	19.7+	25.1+	19.7+	7.7	23%
Stoneville, Miss. (B)	40.7	44.9	32.1-	5.6	8%
St. Joseph, La.	41.2	31.5	29.5	9.9	15%
Mean	25.3	26.6	21.1		
		West			
Curtis, La.	31.1	32.2	18.9		
Fayetteville, Ark.	13.3	8.7	6.2	2.4	12%
South Coffeeville, Okla.	17.6	22.6	13.1	4.3	12%
Bixby, Okla.	8.6	13.4	9.2	5.3	27%
Perkins, Okla.	15.3	17.0	10.4-	3.6	14%
Lubbock, Texas	9.9	14.5	3.7-	4.4	21%
Mean	16.0	18.1	10.3		

Table 12: Chemical composition of the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33
		OIL PERCENTAGE			
Trappe, Md.	22.6	22.1	22.5	21.1	23.2
Warsaw, Va.	21.8	19.1	21.7	21.2	21.4
Plymouth, N. C.	21.0	19.4	21.6	20.5	22.0
Belle Mina, Ala.	20.0	19.0	19.9	20.7	22.2
Marianna, Ark.	23.9	22.8	23.6	22.4	24.2
Stoneville, Miss.	22.6	21.3	23.0	21.2	22.9
Bixby, Okla.	17.6	16.2	19.2	17.8	17.8
Mean	21.4	20.0	21.6	20.7	22.0
		PROTEIN PERCENTAGE			
Trappe, Md.	33.1	35.7	33.3	37.6	33.7
Warsaw, Va.	38.7	42.6	39.3	44.1	42.3
Plymouth, N. C.	37.3	40.8	38.3	40.9	39.4
Belle Mina, Ala.	43.1	45.9	39.6	42.9	39.8
Marianna, Ark.	36.0	36.6	35.1	38.4	36.4
Stoneville, Miss.	36.0	39.5	37.2	41.9	37.7
Bixby, Okla.	43.8	43.0	41.2	47.0	43.0
Mean	38.3	40.6	37.7	41.8	38.9

Table 12: (Continued)

Location	D632-15	D49-247	D50-204	Luthy
		OIL PERCENTAGE		
Trappe, Md.	21.7	22.1	19.9	20.5
Warsaw, Va.	21.2	21.8	19.2	19.4
Plymouth, N. C.	21.3	20.9	19.4	20.5
Belle Mina, Ala.	21.1	21.1	20.7	19.3
Marianna, Ark.	25.0	24.4	22.0	22.5
Stoneville, Miss.	22.1	22.2	20.0	21.4
Bixby, Okla.	18.2	18.6	17.4	16.6
Mean	21.5	21.6	19.8	20.0
		PROTEIN PERCENTAGE		
Trappe, Md.	33.3	36.3	37.0	35.6
Warsaw, Va.	38.0	40.9	42.6	41.2
Plymouth, N. C.	37.4	37.8	43.7	40.9
Belle Mina, Ala.	39.4	39.4	41.1	42.5
Marianna, Ark.	34.9	35.7	39.5	38.4
Stoneville, Miss.	35.7	37.6	41.9	38.4
Bixby, Okla.	43.3	46.0	47.5	45.9
Mean	37.4	39.1	41.9	40.4

Table 13: Relative maturity data, days earlier (-) or later (+) than Dorman, for the strains in Uniform Group V, 1953

Location	Date Planted	Dorman Matured	S-100	Dortch. 67	D517-4
		East Coast			
Beltsville, Md.	6-5	11-2	-10	-3	-7
Marlboro, Md.	6-2	10-20	-9	+1	-8
Trappe, Md.	5-25	10-11	-7	+3	-6
Snow Hill, Md.	6-4	10-18	-14	+1	-10
Warsaw, Va.	6-4	10-12	-5	0	-3
Holland, Va.	4-29	10-7	-6	+5	-7
Plymouth, N. C.	5-4	10-1	-8	+4	-11
Mean			-8	+2	-7
		Upper and Central South			
Belle Mina, Ala.	6-10	10-6	+3	+6	0
Experiment, Ga.	5-13	9-3	+1	+5	-4
State College, Miss.	5-21	9-14	+2	+4	-4
Mean			+2	+5	-3
		Delta			
Sikeston, Mo.	6-2	10-3	-1	+2	-2
Clarkedale, Ark.	6-27	10-10	+6	+6	-1
Marianna, Ark.	5-28	9-21	+7	+5	-5
Stoneville, Miss. (B)	6-6	10-3	+2	+2	+2
St. Joseph, La.	5-28	9-9	+3	-2	-2
Mean			+1	+3	-2
		West			
Curtis, La.	6-10	9-25	+5	-2	-3
Fayetteville, Ark.	5-22	9-29	0	+3	-1
South Coffeeville, Okla.	5-22	10-1	+2	+4	-9
Bixby, Okla.	5-2	9-14	+2	+15	0
Perkins, Okla.	5-19	9-25	+2	+3	+2
Lubbock, Texas	6-15	10-15	+5	+5	0
Mean			+3	+6	-2

Table 13: (Continued)

Location	D623-33	D632-15	D49-247	D50-204	Luthy
		East Coast			
Beltsville, Md.	-14	-6	-21	+5	+2
Marlboro, Md.	-12	-2	-14	+6	+4
Trappe, Md.	-8	-4	-9	+9	+6
Snow Hill, Md.	-16	-12	-16	+4	+4
Warsaw, Va.	-3	0	-4	-2	+3
Holland, Va.	-5	-5	-10	-1	-4
Plymouth, N. C.	-11	-8	-11	-3	0
Mean	-10	-5	-12	+3	+2
		Upper and Central South			
Belle Mina, Ala.	0	+1	0	+10	-1
Experiment, Ga.	-3	0	-3	+6	+3
State College, Miss.	+1	-4	+2	+6	+1
Mean	-1	-1	0	+7	+1
		Delta			
Sikeston, Mo.	+1	-1	+1	+10	+2
Clarkedale, Ark.	+6	+6	-5	+6	-5
Marianna, Ark.	+2	-1	+5	+7	+7
Stoneville, Miss.	-2	-1	+2	+3	+2
St. Joseph, La.	0	-2	+1	+3	+7
Mean	+1	0	+1	+10	+2
		West			
Curtis, La.	+10	-3	-2	0	-5
Fayetteville, Ark.	0	-1	0	+10	+1
South Coffeeville, Okla.	-1	+2	+2	+3	-5
Bixby, Okla.	+4	0	+15	+20	+1
Perkins, Okla.	+2	+2	+3	+2	+3
Lubbock, Texas	0	0	0	0	0
Mean	+2	0	+3	+6	-1

Table 14. Height data for strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33
		East Coast			
Beltsville, Md.	56	56	52	56	56
Marlboro, Md.	47	48	46	48	52
Trappe, Md.	40	50	42	42	53
Snow Hill, Md.	45	53	46	47	55
Warsaw, Va.	35	41	35	37	42
Accomac, Va.	15	35	28	27	36
Norfolk, Va.	26	37	40	33	41
Petersburg, Va.	34	31	30	31	34
Holland, Va.	33	43	32	37	46
Plymouth, N. C.	48	53	46	45	53
Mean	38	45	40	40	47
		Upper and Central South			
Belle Mina, Ala.	37	45	37	37	45
Experiment, Ga.	22	29	23	33	35
Mean	30	37	30	35	40
		Delta			
Sikeston, Mo.	37	37	32	31	37
Clarkedale, Ark.	34	47	37	31	43
Marianna, Ark.	32	54	36	43	50
Stoneville, Miss. (B)	22	44	29	30	45
St. Joseph, La.	32	54	37	41	47
Mean	31	47	34	35	44
		West			
Curtis, La.	22	35	25	36	35
Fayetteville, Ark.	25	28	20	25	26
South Coffeeville, Okla.	34	48	37	39	49
Bixby, Okla.	25	46	34	39	49
Perkins, Okla.	26	45	34	38	44
Lubbock, Texas	13	18	16	15	17
Mean	24	37	28	32	37

Table 14: (Continued)

Location	D632-15	D49-247	D50-204	Luthy
		East Coast		
Beltsville, Md.	58	52	46	52
Marlboro, Md.	52	42	46	44
Trappe, Md.	48	44	42	40
Snow Hill, Md.	46	46	50	42
Warsaw, Va.	37	36	35	32
Accomac, Va.	34	34	34	35
Norfolk, Va.	48	35	33	38
Petersburg, Va.	34	29	31	32
Holland, Va.	39	32	31	30
Plymouth, N. C.	54	47	44	36
Mean	45	40	39	38
		Upper and Central South		
Belle Mina, Ala.	41	42	36	34
Experiment, Ga.	28	31	23	21
Mean	34	36	30	28
		Delta		
Sikeston, Mo.	39	34	33	33
Clarkedale, Ark.	42	37	36	33
Marianna, Ark.	45	46	30	29
Stoneville, Miss. (B)	32	41	30	28
St. Joseph, La.	38	47	32	32
Mean	39	41	32	31
		West		
Curtis, La.	33	30	26	28
Fayetteville, Ark.	29	28	24	25
South Coffeeville, Okla.	45	41	41	32
Bixby, Okla.	38	40	32	27
Perkins, Okla.	38	41	34	28
Lubbock, Texas	16	18	12	15
Mean	33	33	28	26

Table 15: Lodging scores for the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33
		East Coast			
Beltsville, Md.	5.0	5.0	5.0	4.0	4.0
Marlboro, Md.	4.0	3.0	4.0	3.0	4.0
Trappe, Md.	3.0	2.0	2.0	2.0	3.0
Snow Hill, Md.	5.0	3.0	4.0	3.0	4.0
Warsaw, Va.	3.5	1.9	2.5	2.2	3.4
Accomac, Va.	2.0	2.0	2.5	2.0	3.0
Norfolk, Va.	3.0	3.5	5.0	3.5	3.0
Petersburg, Va.	2.0	1.0	1.0	1.0	2.0
Holland, Va.	2.0	3.3	2.8	2.5	2.3
Plymouth, N. C.	4.0	3.5	3.0	3.0	4.5
		Upper and Central South			
Belle Mina, Ala.	1.6	1.3	2.0	1.3	2.7
Experiment, Ga.	1.0	1.0	1.0	1.0	1.0
State College, Miss.	1.0	2.0	1.0	4.0	4.0
		Delta			
Sikeston, Mo.	2.6	1.1	1.1	1.2	1.3
Clarkedale, Ark.	2.0	2.0	2.0	1.0	2.0
Marianna, Ark.	3.0	2.0	3.0	2.0	3.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	2.3
St. Joseph, La.	1.0	2.0	1.0	1.0	2.0
		West			
Curtis, La.	1.0	2.0	1.0	1.0	2.0
Fayetteville, Ark.	2.0	1.0	1.0	1.0	1.0
South Coffeeville, Okla.	2.0	2.0	2.0	3.0	3.0
Bixby, Okla.	1.0	2.0	1.0	2.0	3.3
Perkins, Okla.	1.7	1.7	2.0	1.3	2.7
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0

Table 15: (Continued)

Location	D632-15	D49-247	D50-204	Luthy
		East Coast		
Beltsville, Md.	5.0	4.0	4.0	5.0
Marlboro, Md.	4.0	2.0	3.0	4.0
Trappe, Md.	3.0	1.0	2.0	3.0
Snow Hill, Md.	4.0	3.0	4.0	4.0
Warsaw, Va.	4.5	1.1	2.1	3.9
Accomac, Va.	3.5	2.0	2.5	3.0
Norfolk, Va.	5.0	4.0	3.0	4.0
Petersburg, Va.	2.2	1.0	1.0	1.8
Holland, Va.	4.3	1.0	1.5	1.8
Plymouth, N. C.	4.0	2.0	3.0	4.0
		Upper and Central South		
Belle Mina, Ala.	1.7	1.0	1.7	1.7
Experiment, Ga.	1.0	1.0	1.0	1.0
State College, Miss.	2.0	2.0	1.0	1.0
		Delta		
Sikeston, Mo.	1.8	1.0	1.2	1.9
Clarkedale, Ark.	3.0	1.0	3.0	2.0
Marianna, Ark.	2.0	2.0	2.0	2.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0
St. Joseph, La.	2.0	1.0	1.0	1.0
		West		
Curtis, La.	2.0	1.0	1.0	1.0
Fayetteville, Ark.	2.0	1.0	1.0	1.0
South Coffeeville, Okla.	3.0	1.7	1.7	2.0
Bixby, Okla.	2.0	1.0	1.0	1.0
Perkins, Okla.	2.7	1.7	2.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0

Table 16: Seed quality scores for the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33
		East Coast			
Beltsville, Md.	2.0	2.0	3.0	3.0	2.0
Marlboro, Md.	2.0	2.0	2.0	2.0	2.0
Trappe, Md.	2.0	3.0	2.0	2.0	2.0
Snow Hill, Md.	2.0	3.0	2.0	3.0	3.0
Warsaw, Va.	1.0	1.0	1.0	1.0	1.0
Accomac, Va.	2.0	2.8	2.0	2.0	2.0
Petersburg, Va.	2.0	3.0	2.0	4.0	2.0
Holland, Va.	1.0	4.0	1.0	3.0	1.0
Plymouth, N. C.	3.0	3.0	2.5	3.0	2.0
		Delta			
Sikeston, Mo.	2.0	2.0	3.0	2.0	1.0
Marianna, Ark.	2.0	3.0	3.0	2.0	3.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	1.3
St. Joseph, La.	1.0	2.0	1.0	2.0	2.0
		West			
Curtis, La.	1.0	2.0	1.0	2.0	1.0
Fayetteville, Ark.	3.0	3.0	2.0	3.0	2.0
South Coffeeville, Okla.	1.0	2.0	2.3	2.0	1.3
Bixby, Okla.	2.0	2.7	3.7	2.7	2.0
Perkins, Okla.	2.0	2.0	3.3	2.3	2.3
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0

Table 16: (Continued).

Location	D632-15	D49-247	D50-204	Luthy
		East Coast		
Beltsville, Md.	1.0	1.0	2.0	2.0
Marlboro, Md.	1.0	1.0	2.0	2.0
Trappe, Md.	1.0	1.0	1.0	2.0
Snow Hill, Md.	1.0	2.0	2.0	2.0
Warsaw, Va.	1.0	1.0	--	2.0
Accomac, Va.	3.0	2.0	3.0	2.0
Petersburg, Va.	2.0	2.0	1.0	1.0
Holland, Va.	1.0	2.0	3.0	1.0
Plymouth, N. C.	2.0	2.5	3.5	3.0
		Delta		
Sikeston, Mo.	2.0	1.0	2.0	2.0
Marianna, Ark.	3.0	3.0	3.0	3.0
Stoneville, Miss. (B)	2.0	2.0	2.3	2.3
St. Joseph, La.	2.0	1.0	2.0	3.0
		West		
Curtis, La.	2.0	1.0	1.0	2.0
Fayetteville, Ark.	2.0	2.0	3.0	3.0
South Coffeeville, Okla.	1.3	1.7	1.7	2.0
Bixby, Okla.	1.3	4.0	3.7	2.7
Perkins, Okla.	1.7	1.3	2.3	1.7
Lubbock, Texas	1.0	1.0	1.0	1.0

Table 17: Seed weight, in grams per 100 seeds, for the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33
		East Coast			
Beltsville, Md.	12.3	15.0	11.3	19.2	14.1
Marlboro, Md.	13.7	15.5	12.9	20.5	15.4
Trappe, Md.	13.5	13.5	12.9	19.3	14.1
Snow Hill, Md.	13.9	14.6	13.3	19.3	13.8
Warsaw, Va.	14.6	14.2	15.4	17.9	14.8
Petersburg, Va.	15.5	15.0	17.5	20.5	14.9
Holland, Va.	15.2	14.6	11.6	18.2	15.0
Plymouth, N. C.	12.4	13.9	11.4	15.4	12.8
Mean	13.9	14.5	13.3	18.8	14.4
		Delta			
Sikeston, Mo.	13.0	13.2	10.9	15.1	13.6
Marianna, Ark.	11.5	13.5	11.5	13.5	11.5
Stoneville, Miss.	13.5	15.1	13.5	16.8	13.8
Mean	12.7	13.9	12.0	15.1	13.0
		West			
Fayetteville, Ark.	12.5	14.0	11.5	15.5	12.5
South Coffeeville, Okla.	12.8	15.9	12.5	19.0	13.7
Bixby, Okla.	8.4	9.0	9.5	11.3	9.0
Perkins, Okla.	11.6	12.8	11.1	15.7	13.0
Lubbock, Texas	11.0	11.5	12.0	12.5	11.0
Mean	11.3	12.6	11.3	14.8	11.8

Table 17: (Continued)

Location	D632-15	D49-247	D50-204	Luthy
		East Coast		
Beltsville, Md.	10.6	15.5	11.1	15.3
Marlboro, Md.	12.7	16.5	12.4	16.6
Trappe, Md.	11.9	14.7	14.5	17.9
Snow Hill, Md.	12.5	14.6	16.7	19.6
Warsaw, Va.	12.8	15.5	15.1	18.2
Petersburg, Va.	12.6	16.8	16.6	17.7
Holland, Va.	13.0	15.6	15.2	15.8
Plymouth, N. C.	10.5	13.4	15.1	14.9
Mean	12.1	15.3	14.6	17.0
		Delta		
Sikeston, Mo.	11.0	13.6	12.9	13.3
Marianna, Ark.	10.5	12.0	11.5	13.0
Stoneville, Miss.	11.5	14.4	13.6	16.1
Mean	11.0	13.3	12.7	14.1
		West		
Fayetteville, Ark.	11.0	13.5	12.5	13.0
South Coffeeville, Okla.	13.0	16.2	14.6	15.6
Bixby, Okla.	6.0	12.5	12.9	9.8
Perkins, Okla.	10.0	14.6	12.6	13.0
Lubbock, Texas	10.0	9.5	10.5	10.0
Mean	10.0	13.3	12.6	12.3

Table 18: Two-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33
		YIELD			
		East Coast			
Trappe, Md.[1]	30.9	30.7	30.0	31.2	29.0
Warsaw, Va.	28.2	26.6	29.0	26.8	26.0
Norfolk, Va.	28.4	25.2	29.2	29.7	26.0
Petersburg, Va.	22.3	19.8	26.0	20.1	20.4
Holland, Va.	33.4	24.4	29.3	28.9	26.8
Plymouth, N. C.	30.2	22.4	31.7	26.4	25.4
Mean	28.9	24.8	29.2	27.2	25.6
		Upper and Central South			
Belle Mina, Ala.	19.2	20.1	19.0	18.3	20.8
Experiment, Ga.	12.9	12.2	13.9	12.2	12.4
State College, Miss.	17.5	20.4	23.1	18.2	18.0
Mean	16.5	17.6	18.7	16.2	17.1
		Delta			
Sikeston, Mo.	16.0	16.6	17.3	14.6	14.0
Clarkedale, Ark.	12.2	16.0	15.2	14.4	16.9
Marianna, Ark.	12.8	17.4	16.0	14.4	17.4
Stoneville, Miss.	43.8	45.0	42.8	39.2	37.5
St. Joseph, La.	41.0	43.9	49.8	40.0	36.0
Mean	25.2	27.8	28.2	24.5	24.4
		West			
Curtis, La.	35.0	32.8	34.2	29.3	29.7
Fayetteville, Ark.	14.6	16.5	15.1	13.8	14.4
Bixby, Okla.	11.0	10.2	8.0	13.0	5.6
Lubbock, Texas	14.8	14.4	16.4	11.4	17.2
Mean	18.8	18.5	18.4	16.9	16.7
		OIL PERCENTAGE			
Warsaw, Va.	22.2	19.8	22.0	21.4	21.8
Marianna, Ark.[2]	22.8	21.0	22.6	21.4	22.8
Stoneville, Miss.	23.1	21.7	22.6	21.0	22.6
Mean[3]	21.8	19.9	21.7	20.7	21.8

1/1952 data used from Linkwood, Md.
2/1952 data from Sikeston, Mo.
3/Average of 6 locations in 1952 and 7 locations in 1953.

Table 18: (Continued)

Location	D632-15	D49-247	D50-204	Luthy
		YIELD		
		East Coast		
Trappe, Md.[1]	--	30.2	--	29.4
Warsaw, Va.	25.8	25.6	27.0	28.2
Norfolk, Va.	23.7	23.0	29.8	27.4
Petersburg, Va.	18.2	19.1	27.0	23.1
Holland, Va.	27.3	25.8	33.6	28.2
Plymouth, N. C.	22.3	28.5	30.6	26.2
Mean	23.5	25.4	29.6	27.1
		Upper and Central South		
Belle Mina, Ala.	14.2	19.5	19.4	14.3
Experiment, Ga.	12.9	13.8	15.7	11.4
State College, Miss.	15.8	19.2	18.8	14.8
Mean	14.3	17.5	18.0	13.5
		Delta		
Sikeston, Mo.	13.1	15.2	12.4	10.7
Clarkedale, Ark.	11.4	9.6	18.4	10.2
Marianna, Ark.	12.7	17.8	20.8	16.6
Stoneville, Miss.	41.2	39.8	--	29.4
St. Joseph, La.	39.6	43.4	38.0	32.8
Mean	23.6	25.2	22.4	19.9
		West		
Curtis, Ia.	31.5	31.2	30.2	21.0
Fayetteville, Ark.	12.4	14.1	7.6	10.4
Bixby, Okla.	9.8	8.0	--	6.8
Lubbock, Texas	16.0	9.7	16.2	6.4
Mean	17.4	15.8	18.0	11.2
		OIL PERCENTAGE		
Warsaw, Va.	21.4	21.6	19.4	20.0
Marianna, Ark.[2]	23.7	22.3	21.1	20.9
Stoneville, Miss.	22.5	22.1	20.0	21.2
Mean[3]	21.7	21.4	19.8	20.1

Table 19: Three-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group V, 1953

Location	Dorman	S-100	Dortch. 67	D517-4	D623-33	D632-15	D49-247
			YIELD				
			East Coast				
Warsaw, Va.	27.3	27.4	26.6	27.7	25.1	24.6	24.6
Petersburg, Va.	24.7	23.9	27.9	24.7	24.8	22.1	22.4
Holland, Va.	34.6	27.4	28.6	31.3	18.3	28.6	30.3
Plymouth, N. C.	30.1	21.9	31.7	26.0	22.9	21.9	29.0
Mean	29.2	25.2	28.7	27.4	22.8	24.3	26.6
			Upper and Central South				
Belle Mina, Ala.	16.7	18.0	16.7	16.7	17.9	12.5	16.2
Experiment, Ga.	13.1	12.7	14.8	12.7	11.9	12.3	13.6
State College, Miss.	18.1	22.7	23.0	18.9	17.8	16.7	20.6
Mean	16.0	17.8	18.2	16.1	15.9	13.8	16.8
			Delta				
Sikeston, Mo.	15.3	17.7	18.8	16.2	14.3	14.2	14.4
Marianna, Ark.	13.0	16.4	15.0	14.6	11.5	12.7	16.6
Stoneville, Miss.	40.0	41.1	38.1	36.5	34.6	37.6	36.9
St. Joseph, La.	38.7	38.8	46.3	37.9	33.7	35.9	40.7
Mean	26.8	28.5	29.6	26.3	23.5	25.1	27.2
			West				
Curtis, La.	32.4	30.4	31.8	27.2	27.9	28.6	31.7
Fayetteville, Ark.	16.0	17.0	16.3	15.5	14.8	12.8	14.8
Bixby, Okla.	12.6	12.6	11.9	13.0	8.6	11.5	11.0
Lubbock, Texas	15.6	14.7	17.1	13.2	17.0	15.6	11.3
Mean	19.2	18.7	19.3	17.2	17.1	17.1	17.2
			OIL PERCENTAGE				
Warsaw, Va.	21.5	19.5	21.4	21.1	21.6	21.0	21.2
Sikeston, Mo.	22.6	20.6	22.5	21.1	23.0	23.5	21.9
Stoneville, Miss.	23.1	21.0	22.2	21.3	22.9	22.4	21.9
Mean 1/	21.6	19.7	21.5	20.7	21.9	21.7	21.3

1/Mean of 8 locations in 1951, 6 locations in 1952, and 7 locations in 1953.

Table 20: Four-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group V, 1953

Location	Dorman	S-100	D517-4	D623-33	D632-15
		YIELD			
		East Coast			
Warsaw, Va.	27.6	26.6	27.7	24.5	24.4
Petersburg, Va.	29.3	27.0	29.2	28.4	24.9
Holland, Va.	36.9	31.5	35.3	29.4	30.9
Plymouth, N. C.	31.2	24.1	27.6	25.2	24.3
Mean	31.3	27.3	30.0	26.9	26.1
		Upper and Central South			
Experiment, Ga.	16.3	15.1	16.1	15.6	16.3
State College, Miss.	21.8	25.7	23.1	21.8	19.8
Mean	19.0	20.4	19.6	18.7	18.0
		Delta			
Sikeston, Mo.	18.9	22.1	21.5	19.1	19.0
Clarkedale, Ark.	14.9	17.4	16.2	15.6	13.1
Marianna, Ark.	16.2	16.9	16.3	16.1	14.8
Stoneville, Miss. (B)	43.1	41.4	39.4	36.6	40.2
St. Joseph, La.	35.6	36.7	35.6	32.3	34.0
Mean	25.7	26.9	25.8	23.9	24.2
		West			
Curtis, La.	32.3	32.3	27.8	30.5	28.7
Fayetteville, Ark.	22.1	20.8	19.9	18.0	17.4
Bixby, Okla.	20.7	19.2	19.0	8.9	18.1
Lubbock, Texas	12.9	17.3	15.5	19.4	18.1
Mean	22.0	22.4	20.6	19.2	20.6
		OIL PERCENTAGE			
Warsaw, Va.	21.4	19.4	21.1	21.6	21.2
Sikeston, Mo.	22.1	20.0	20.8	22.6	22.8
Stoneville, Miss.	23.0	21.0	21.4	22.8	21.7
Mean 1/	21.7	19.7	20.7	22.0	21.6

1/Average of 8 locations in 1950 and 1951, 6 locations in 1952, and 7 locations in 1953.

UNIFORM GROUP VI

1953

Strain or Variety	Source or Originating Agency	Origin
Ogden	Tenn. A.E.S.	Sel. from Tokio x P.I. 54610
D49-2491	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from N46-2566 (S-100 x CNS)
D49-2524	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from N46-2566 (S-100 x CNS)
N48-886	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x Ogden
N48-1101	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x Ogden
N48-1515	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
N48-1831	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
N48-2087	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D49-854	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D51-4871	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D51-4888	Delta Br. A.E.S. & U.S.R.S.L.	Subline from N48-1831
N51-2043	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x Ogden

Forty-four Group VI nurseries were planted. Results are summarized for 34 nurseries in tables 21 through 31. The precision of several of these tests was reduced by failure to obtain good stands and by a summer drouth. Group VI varieties have been producing excellent yields in the Southeast, but in general average 12 to 16 inches shorter than in the East Coast, or Delta sections. Except for the taller types, such as D51-4871, Group VII strains make more satisfactory growth for combining in the Southeastern area.

Six strains, D49-2524, N48-886, N48-1101, N48-1515, N48-1831, and N48-2087, have been tested for three years. Tables 30 and 31 summarize the 3-year yield and oil content data. Over the 3-year period, D49-2524 has a higher average seed yield at all locations, excepting Sikeston, Missouri; St. Joseph, Louisiana; and Lubbock, Texas. In 1952, D49-2524 was injured more by an early frost at Sikeston and Lubbock than was Ogden. D49-2524 averages approximately 5 days later than Ogden under conditions where Ogden matures normally. Under drouth conditions, this difference is inclined to be greater as Ogden maturity is hastened more than is that of D49-2524. D49-2524 is resistant to the diseases bacterial pustule, wildfire, frogeye, purple seed stain, and has a high degree of tolerance to the root knot nematode. It has a low susceptible reaction to the target spot disease, as has Ogden. D49-2524 is superior to Ogden in seed holding and seed quality. Growth characteristics are very similar to Ogden. Seed stocks of this strain are being increased in Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, and Arkansas. It will be named and publicized in the summer of 1954.

Of the other strains tested for three years, all have given good performance. N48-1831, which has averaged slightly earlier than Ogden over the 3-year period, has been one of the top-performing lines. This past season a subline of N48-1831, D51-4888, was grown in the Group VI nurseries. There was little difference in the performance of the two lines.

The two lines D49-2491 and D49-854 have been grown for two years. Both have given excellent performance. D49-2491 is a sister line to D49-2524 which it resembles very closely. D49-2491 is resistant to at least one race of mildew to which D49-2524 is susceptible. D49-854 has a higher yield average in the Southeast, Upper and Central South, and Delta areas for the two-year period. It holds its seed better than Ogden but not as well as is desired.

The three strains, D51-4871, D51-4888, and N51-2043, were grown for the first time. D51-4871, a tall line included primarily for the Southeast, had the lowest mean yield in the East Coast section where it lodged appreciably, and had the highest mean yield in the Southeast. D51-4888, a subline of N48-1831, gave a very satisfactory performance in all areas. Both D51-4888 and N51-2043 are slightly earlier than Ogden.

Table 21: Yield, in bushels per acre, for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515	N48-1831
			East Coast				
Marlboro, Md.	25.8	27.6	28.9	29.5	28.0	23.4	28.7
Trappe, Md.	35.0	32.9	34.8	36.8	37.3	32.7	35.6
Snow Hill, Md.	34.8	34.5	34.5	34.1	41.4+	34.3	37.2
Warsaw, Va.	23.5	24.6	24.7	24.7	22.4	21.3	24.4
Accomac, Va.	28.7	27.5	29.6	31.2	30.2	31.5	33.0+
Norfolk, Va.	32.7	34.2	34.8	37.2	31.8	28.7	32.7
Petersburg, Va.	29.1	31.2	28.3	26.8	27.2	30.5	28.5
Holland, Va.	30.9	32.7	26.6	36.3	27.8	20.4-	29.6
Plymouth, N. C.	35.9	38.2	38.8	36.1	37.3	35.5	40.7
Willard, N. C.	34.6	38.7	38.9	34.2	35.5	31.9	34.7
McCullers, N. C.	15.4	17.8	17.9	17.7	15.2	16.2	14.8
Mean	29.7	30.9	30.7	31.3	30.4	27.8	30.9
			Southeast				
Tallassee, Ala.	44.0	43.3	44.7	43.8	50.2	45.9	41.9
Camden, Ala.	7.3	16.7+	15.3+	7.5	9.7+	11.6+	9.4+
Gainesville, Fla.	27.2	33.9	24.6	28.0	30.6	36.8	26.5
Monticello, Fla.	42.4	43.4	41.4	45.1	44.4	37.6-	41.8
Marianna, Fla.	16.8	15.6	17.5	20.9	17.5	15.2	18.9
Quincy, Fla.	25.2	20.7-	24.7	24.7	22.7	20.9-	26.2
Milton, Fla.	21.8	20.6	20.4	22.2	21.3	21.1	23.5
Walnut Hill, Fla.	31.0	30.3	29.1	31.5	31.0	28.4	31.3
Baton Rouge, La.	30.1	32.2	28.5	33.4	31.4	29.3	29.0
Mean	27.3	26.5	27.4	28.6	28.8	27.4	27.6
			Upper and Central South				
Belle Mina, Ala.	19.1	23.7+	16.5	22.3+	20.5	23.8+	21.6
Experiment, Ga.	20.1	25.1	22.4	27.3	22.9	25.0	24.6
State College, Miss.	23.1	25.0	23.6	29.5+	26.5	20.3	27.6
Mean	20.8	24.6	20.8	26.4	23.3	23.0	24.6
			Delta				
Sikeston, Mo.	8.6	6.3	8.9	9.1	10.5	3.8	9.6
Marianna, Ark.	17.4	23.7	25.3	25.1	20.6	26.7	23.5
Stoneville, Miss. (B)	42.4	46.7	43.9	46.8	39.1	40.8	45.2
Louise, Miss.	29.3	29.1	26.5	32.2	32.8	21.4-	29.6
St. Joseph, La.	40.8	31.5	43.2	43.2	42.0	36.7	45.2
Mean	27.7	27.5	29.6	31.3	29.0	25.9	30.6
			West				
Curtis, La.	37.1	35.5	33.2	36.8	34.2	25.9	42.0
Fayetteville, Ark.	13.0	7.3-	7.0-	15.7	11.5	7.8-	14.6
Bixby, Okla.	27.4	23.5	19.9	30.4	28.4	19.3	30.5
Tishomingo, Okla.	45.4	40.6-	38.4-	45.2	42.5	34.1-	45.8
Lubbock, Texas	19.1	19.4	17.4	18.0	16.1	15.4	18.7
Mean	28.4	25.3	23.2	29.2	26.5	20.5	30.3

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

Table 21: (Continued)

Location	N48-2087	D49-854	D51-4871	D51-4888	N51-2043	L.S.D. (5%)	C.V.
			East Coast				
Marlboro, Md.	24.0	24.8	21.2-	28.4	27.8	4.0	10%
Trappe, Md.	33.0	35.6	29.6	35.0	37.1	N.S.	9%
Snow Hill, Md.	36.8	31.0	28.4-	31.8	36.9	4.9	10%
Warsaw, Va.	20.7-	23.9	21.6	26.2+	22.6	2.7	8%
Accomac, Va.	31.5	31.8	23.0-	31.2	31.8	3.8	9%
Norfolk, Va.	29.3	30.8	21.2-	36.9	29.6	6.7	15%
Petersburg, Va.	26.7	32.1	28.2	25.1	25.1	N.S.	16%
Holland, Va.	25.6	29.8	27.1	32.8	31.0	7.7	18%
Plymouth, N. C.	37.4	39.2	39.6	40.6	39.8	4.8	9%
Willard, N. C.	33.9	38.9	32.9	34.5	36.1	N.S.	7%
McCullers, N. C.	16.7	16.0	15.2	15.3	13.3	N.S.	13%
Mean	28.7	30.4	26.2	30.7	30.1		
			Southeast				
Tallassee, Ala.	46.1	41.0	49.0	46.3	43.5	N.S.	10%
Camden, Ala.	11.8+	12.4+	10.8+	9.9+	9.7+	1.3	21%
Gainesville, Fla.	31.3	28.4	28.2	22.9	17.9	10.3	22%
Monticello, Fla.	48.4+	45.3	42.1	46.4	44.6	4.2	6%
Marianna, Fla.	19.0	21.2	20.3	19.4	18.7	N.S.	15%
Quincy, Fla.	23.2	25.0	26.5	24.4	22.7	2.7	7%
Milton, Fla.	25.5	22.6	26.2	23.8	23.2	N.S.	10%
Walnut Hill, Fla.	27.0	29.8	28.6	29.6	31.5	N.S.	8%
Baton Rouge, La.	31.4	32.2	32.9	32.4	31.4	N.S.	12%
Mean	29.3	28.6	29.4	28.3	27.0		
			Upper and Central South				
Belle Mina, Ala.	22.9+	22.8+	18.1	19.0	17.7	3.2	9%
Experiment, Ga.	23.7	22.2	26.9	28.4	29.1	N.S.	18%
State College, Miss.	28.1+	25.4	22.9	24.5	28.0+	4.5	12%
Mean	24.9	23.5	22.6	24.0	24.9		
			Delta				
Sikeston, Mo.	9.4	10.6	5.4	10.3	10.9	2.8	23%
Marianna, Ark.	18.8	22.4	24.0	23.7	24.0	N.S.	24%
Stoneville, Miss. (B)	41.3	44.3	42.6	40.8	45.0	N.S.	17%
Louise, Miss.	31.5	36.5+	31.3	33.4+	35.8+	4.1	8%
St. Joseph, La.	44.8	42.8	37.9	39.2	44.8	N.S.	18%
Mean	29.2	31.3	28.2	29.5	32.1		
			West				
Curtis, La.	35.8	39.4	34.7	49.0	38.4		
Fayetteville, Ark.	12.9	11.8	8.9	15.1	14.2	4.7	24%
Bixby, Okla.	23.8	26.6	19.3	28.2	25.7	6.4	15%
Tishomingo, Okla.	41.3	43.3	39.5-	43.7	43.4	4.3	6%
Lubbock, Texas	16.0	18.3	14.7	16.3	14.9	N.S.	18%
Mean	26.0	27.9	23.4	30.5	27.3		

Table 22: Chemical composition of the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515
		OIL PERCENTAGE				
Warsaw, Va.	21.2	20.3	19.9	20.3	20.4	20.1
Plymouth, N. C.	20.9	20.2	20.8	22.1	20.9	21.4
Willard, N. C.	22.0	22.8	21.9	22.4	22.5	23.0
Walnut Hill, Fla.	21.2	20.4	20.2	21.5	22.0	20.4
Baton Rouge, La.	23.0	23.9	24.0	23.0	23.6	24.1
Marianna, Ark.	23.5	24.0	24.0	24.0	23.8	24.1
Stoneville, Miss.	22.0	23.1	22.8	22.9	23.9	23.4
St. Joseph, La.	21.0	20.8	21.6	22.1	22.6	21.5
Bixby, Okla.	20.3	20.6	19.3	20.8	22.2	19.6
Tishomingo, Okla.	23.1	23.4	23.4	24.0	24.1	23.3
Mean	21.8	22.0	21.8	22.3	22.6	22.1
		PROTEIN PERCENTAGE				
Warsaw, Va.	41.6	40.7	40.6	39.5	41.9	41.0
Plymouth, N. C.	39.8	40.5	41.2	39.4	39.5	40.0
Willard, N. C.	39.9	39.5	38.9	38.7	39.3	38.9
Walnut Hill, Fla.	40.0	41.5	41.9	41.0	39.6	41.6
Baton Rouge, La.	38.7	36.7	38.0	37.1	39.3	36.7
Marianna, Ark.	35.8	36.1	36.1	36.1	36.0	34.9
Stoneville, Miss.	39.3	38.9	39.5	38.5	38.9	37.9
St. Joseph, La.	39.9	40.2	39.4	39.3	39.1	40.3
Bixby, Okla.	42.4	43.3	44.0	41.1	42.3	42.7
Tishomingo, Okla.	36.8	35.7	34.3	34.8	35.8	37.1
Mean	39.4	39.3	39.4	38.6	39.2	39.1

Table 22: (Continued)

Location	N48-1831	N48-2087	D49-854	D51-4871	D51-4888	N51-2043
			OIL PERCENTAGE			
Warsaw, Va.	21.3	20.5	19.9	19.6	21.7	20.3
Plymouth, N. C.	21.0	20.5	20.7	21.2	21.4	21.8
Willard, N. C.	23.0	22.0	22.3	22.8	22.7	22.7
Walnut Hill, Fla.	22.6	20.2	21.4	20.2	21.9	21.7
Baton Rouge, La.	24.7	23.1	22.2	24.0	24.4	23.6
Marianna, Ark.	23.8	23.6	23.0	23.1	24.4	23.9
Stoneville, Miss.	23.3	21.2	21.8	22.8	22.5	23.2
St. Joseph, La.	22.0	22.2	22.3	22.0	21.1	21.5
Bixby, Okla.	21.2	21.0	19.9	20.6	21.2	21.1
Tishomingo, Okla.	24.8	23.8	22.5	23.9	24.3	24.4
Mean	22.8	21.8	21.6	22.0	22.6	22.4
			PROTEIN PERCENTAGE			
Warsaw, Va.	40.0	40.2	40.4	38.2	39.9	40.4
Plymouth, N. C.	40.0	40.9	41.5	40.3	40.3	40.6
Willard, N. C.	35.0	39.4	38.8	39.4	39.0	39.1
Walnut Hill, Fla.	41.1	40.0	42.0	41.1	40.6	40.7
Baton Rouge, La.	37.3	39.7	37.8	37.2	37.0	38.4
Marianna, Ark.	34.8	36.2	36.1	34.7	35.1	35.4
Stoneville, Miss.	37.6	38.2	38.5	37.5	38.1	38.6
St. Joseph, La.	39.3	40.2	40.9	37.8	39.9	39.6
Bixby, Okla.	41.9	42.1	43.2	42.3	42.4	41.9
Tishomingo, Okla.	33.6	35.3	35.0	32.3	33.5	35.7
Mean	38.1	39.2	39.4	38.1	38.6	39.0

Table 23: Maturity data, days (+) or later (-) than Ogden, for the strains in Uniform Group VI, 1953

Location	Date Planted	Ogden Matured	D49-2491	D49-2524	N48-886	N48-1101
		East Coast				
Marlboro, Md.	5-22	10-31	-3	-2	+1	+2
Trappe, Md.	5-25	F	F	F	F	F
Snow Hill, Md.	6-4	F	F	F	F	F
Warsaw, Va.	6-4	11-1	0	+3	0	0
Holland, Va.	4-30	10-29	+7	+9	+1	-2
Plymouth, N. C.	5-4	10-16	+5	+6	-4	+4
Willard, N. C.	5-11	10-10	+8	+10	0	0
McCullers, N. C.	5-15	10-23	+3	+4	-1	+3
Hartsville, S. C.	6-13	10-20	+5	+6	+3	+8
Mean			+4	+4	0	+1
		Southeast				
Tallassee, Ala.	5-28	10-5	+12	+14	+1	+8
Camden, Ala.	6-23	10-9	+10	+9	0	0
Gainesville, Fla.	6-13	10-19	+7	+7	0	+1
Marianna, Fla.	6-12	10-2	+10	+12	-3	+1
Quincy, Fla.	6-9	10-1	+2	+7	0	+2
Walnut Hill, Fla.	6-17	10-7	+3	+2	+3	+4
Baton Rouge, La.	6-9	10-8	0	+1	-1	+5
Mean			+6	+7	0	+3
		Upper and Central South				
Belle Mina, Ala.	6-10	10-20	0	+2	0	+3
Experiment, Ga.	5-13	9-28	+6	+7	0	0
State College, Miss.	5-21	10-3	+9	+6	+1	+2
Mean			+5	+5	0	+2
		Delta				
Marianna, Ark.	5-28	10-10	+6	+7	+1	+6
Stoneville, Miss. (B)	6-6	10-16	+5	+5	-1	0
Louise, Miss.	5-25	10-2	+6	+6	0	-1
St. Joseph, La.	5-28	10-1	+7	+9	-6	-3
Mean			+6	+7	-1	0
		West				
Curtis, La.	6-10	10-15	+2	+7	0	0
Fayetteville, Ark.	5-22	10-17	F	F	-1	+1
Bixby, Okla.	5-2	10-6	+4	+4	+4	+1
Tishomingo, Okla.	5-9	10-12	+3	+4	0	+1
Lubbock, Texas	6-15	10-27	+5	+5	0	0
Mean			+3	+4	0	0

F - Frosted.

Table 23: (Continued)

Location	N48-1515	N48-1831	N48-2087	D49-854	D51-4871	D51-4888	N51-2043
			East Coast				
Marlboro, Md.	+1	-3	+1	+7	+12	-5	-4
Trappe, Md.	F	F	F	F	F	F	F
Snow Hill, Md.	F	F	F	F	F	F	F
Warsaw, Va.	+5	+2	+2	+5	+5	+2	0
Holland, Va.	+8	-1	0	+2	+5	+2	-3
Plymouth, N. C.	+6	0	+4	+2	+6	-6	-2
Willard, N. C.	+10	+4	+2	+2	+10	0	0
McCullers, N. C.	+4	-1	+1	+3	+3	+1	+1
Hartsville, S. C.	+8	+4	+3	+3	+6	+3	+5
Mean	+6	0	+1	+4	+7	-1	-1
			Southeast				
Tallassee, Ala.	+14	+2	+9	+5	+14	+2	+2
Camden, Ala.	+9	+4	+6	+5	+10	+6	0
Gainesville, Fla.	+7	+2	+7	+2	+7	0	+1
Marianna, Fla.	+11	-4	-1	-2	+5	-5	-5
Quincy, Fla.	+7	+2	+4	+2	+2	+2	+2
Walnut Hill, Fla.	+5	-3	-4	+2	+6	-4	+2
Baton Rouge, La.	+2	+2	+3	-1	+2	0	-1
Mean	+8	+1	+3	+2	+7	0	0
			Upper and Central South				
Belle Mina, Ala.	+7	-1	+5	+5	+11	0	0
Experiment, Ga.	+8	-5	0	+1	+4	-7	-4
State College, Miss.	+9	+1	+4	+4	+5	0	+2
Mean	+8	-2	+3	+3	+7	-2	-1
			Delta				
Marianna, Ark.	+9	0	+4	+1	+9	-3	0
Stoneville, Miss. (B)	+7	-2	0	0	+1	-2	-2
Louise, Miss.	+5	-4	+1	0	+2	-1	-1
St. Joseph, La.	+1	+1	-3	0	0	-11	-11
Mean	+5	-1	0	0	+3	-4	-3
			West				
Curtis, La.	+8	-1	+2	-12	+2	+4	+3
Fayetteville, Ark.	F	-5	+1	F	F	-5	-2
Bixby, Okla.	+9	+1	+7	+4	+9	0	-1
Tishomingo, Okla.	+5	0	0	+2	+3	-1	0
Lubbock, Texas	+5	0	0	0	0	0	0
Mean	+5	-1	+2	-2	+2	0	-1

Table 24: Height data for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515
		East Coast				
Marlboro, Md.	46	44	44	44	46	48
Trappe, Md.	40	42	38	42	42	49
Snow Hill, Md.	38	45	45	45	40	46
Warsaw, Va.	34	32	34	34	35	37
Accomac, Va.	27	27	31	29	36	33
Norfolk, Va.	34	28	26	32	38	41
Petersburg, Va.	32	31	30	35	34	40
Holland, Va.	36	28	27	37	34	42
Plymouth, N. C.	45	38	37	44	47	48
Willard, N. C.	48	41	39	42	47	54
McCullers, N. C.	39	36	38	42	42	46
Hartsville, S. C.	18	20	20	20	16	22
Mean	38	36	35	39	40	44
		Southeast				
Tallassee, Ala.	35	33	32	30	36	39
Camden, Ala.	19	24	22	19	21	26
Gainesville, Fla.	17	17	17	17	15	23
Monticello, Fla.	27	23	20	23	20	35
Marianna, Fla.	26	28	29	23	28	32
Quincy, Fla.	22	21	22	20	22	24
Milton, Fla.	32	27	27	27	28	35
Walnut Hill, Fla.	28	30	26	28	29	35
Baton Rouge, La.	27	28	28	23	27	30
Mean	26	26	25	23	25	31
		Upper and Central South				
Belle Mina, Ala.	34	35	33	33	34	40
Experiment, Ga.	32	30	36	26	29	37
Mean	33	32	34	30	32	38
		Delta				
Sikeston, Mo.	39	39	39	34	38	42
Marianna, Ark.	36	37	38	36	37	41
Stoneville, Miss. (B)	30	32	29	30	34	37
Louise, Miss.	35	36	35	36	36	47
St. Joseph, La.	34	34	34	35	34	40
Mean	35	36	35	34	36	41
		West				
Curtis, La.	30	30	28	23	28	33
Fayetteville, Ark.	22	21	21	24	20	27
Bixby, Okla.	38	34	34	36	38	50
Tishomingo, Okla.	31	30	30	30	30	37
Lubbock, Texas	18	21	20	19	13	26
Mean	28	27	27	26	26	35

Table 24: (Continued)

Location	N48-1831	N48-2087	D49-854	D51-4871	D51-4888	N51-2043
		East Coast				
Marlboro, Md.	45	52	41	50	42	43
Trappe, Md.	38	53	45	54	40	43
Snow Hill, Md.	36	45	35	48	40	42
Warsaw, Va.	34	36	35	34	33	34
Accomac, Va.	31	27	31	35	31	21
Norfolk, Va.	31	31	37	66	31	36
Petersburg, Va.	33	42	30	40	31	31
Holland, Va.	36	48	32	46	28	33
Plymouth, N. C.	45	45	38	48	42	42
Willard, N. C.	43	52	40	54	41	44
McCullers, N. C.	42	50	36	52	40	40
Hartsville, S. C.	21	26	18	26	19	20
Mean	38	44	36	48	36	37
		Southeast				
Tallassee, Ala.	31	40	31	40	31	28
Camden, Ala.	19	29	22	32	19	20
Gainesville, Fla.	16	21	15	17	15	14
Monticello, Fla.	22	25	30	22	26	21
Marianna, Fla.	27	38	29	41	25	26
Quincy, Fla.	20	25	20	28	18	21
Milton, Fla.	28	35	28	36	23	27
Walnut Hill, Fla.	28	34	24	34	26	26
Baton Rouge, La.	23	30	20	34	20	24
Mean	24	31	24	32	22	23
		Upper and Central South				
Belle Mina, Ala.	34	43	33	44	33	35
Experiment, Ga.	26	33	30	40	31	28
Mean	30	38	32	42	32	32
		Delta				
Sikeston, Mo.	39	47	31	44	31	36
Marianna, Ark.	37	44	36	52	34	37
Stoneville, Miss.	30	37	26	41	28	33
Louise, Miss.	35	46	35	45	33	35
St. Joseph, La.	37	40	36	48	34	35
Mean	36	43	33	46	32	35
		West				
Curtis, La.	24	34	24	35	25	30
Fayetteville, Ark.	25	27	19	25	22	25
Bixby, Okla.	36	52	36	53	32	35
Tishomingo, Okla.	33	37	31	44	31	29
Lubbock, Texas	20	20	21	24	18	22
Mean	28	34	26	36	26	28

Table 25: Lodging scores for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515
		East Coast				
Marlboro, Md.	3.0	4.0	3.0	3.0	3.0	4.0
Trappe, Md.	2.0	3.0	3.0	4.0	3.0	2.0
Snow Hill, Md.	3.0	4.0	3.0	3.0	2.0	3.0
Warsaw, Va.	1.0	1.8	2.6	1.0	1.0	1.6
Accomac, Va.	3.0	2.5	2.5	3.0	3.0	2.0
Norfolk, Va.	3.0	3.0	3.0	3.0	3.0	3.0
Petersburg, Va.	1.0	2.0	1.5	1.0	1.0	2.0
Holland, Va.	2.0	1.0	1.0	2.0	2.0	1.0
Plymouth, N. C.	3.0	3.0	3.5	3.0	3.0	3.5
Willard, N. C.	2.0	2.0	2.0	3.0	2.5	3.0
McCullers, N. C.	2.0	2.5	2.5	1.5	1.5	3.0
		Southeast				
Tallassee, Ala.	2.3	3.7	3.3	1.7	2.3	3.3
Camden, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Monticello, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.0	1.5	1.0	1.0	1.7
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	2.0	2.0	1.0	1.0	2.0
		Upper and Central South				
Belle Mina, Ala.	1.3	2.3	3.3	1.7	1.3	3.3
Experiment, Ga.	1.0	1.0	2.0	1.0	1.0	2.0
State College, Miss.	1.0	1.0	1.0	1.0	1.0	1.0
		Delta				
Sikeston, Mo.	1.4	2.2	2.5	1.2	1.3	1.6
Marianna, Ark.	1.0	2.0	2.0	2.0	2.0	3.0
Stoneville, Miss. (B)	2.0	1.6	2.0	1.3	2.0	1.6
Louise, Miss.	2.3	3.0	2.3	2.3	3.0	3.3
St. Joseph, La.	1.0	1.0	2.0	1.0	1.0	1.0
		West				
Curtis, La.	1.0	1.0	2.0	1.0	1.0	2.0
Fayetteville, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	1.7	3.0	1.7	2.7	1.3	1.7
Tishomingo, Okla.	1.0	2.0	2.0	1.3	1.0	2.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 25: (Continued)

Location	N48-1831	N48-2087	D49-854	D51-4871	D51-4888	N51-2043
		East Coast				
Marlboro, Md.	3.0	3.0	3.0	3.0	3.0	3.0
Trappe, Md.	3.0	2.0	3.0	2.0	2.0	2.0
Snow Hill, Md.	2.0	2.0	3.0	2.0	3.0	3.0
Warsaw, Va.	1.0	1.2	1.0	1.0	1.0	1.2
Accomac, Va.	3.0	2.0	2.0	2.5	3.5	3.5
Norfolk, Va.	3.5	3.0	3.0	3.0	3.0	3.5
Petersburg, Va.	2.0	2.0	1.2	2.5	1.2	1.0
Holland, Va.	1.0	2.0	1.0	1.0	1.0	1.0
Plymouth, N. C.	3.5	4.0	4.0	3.0	3.0	3.0
Willard, N. C.	3.0	3.0	3.0	3.5	3.0	3.0
McCullers, N. C.	1.5	3.0	1.5	2.0	2.0	2.5
		Southeast				
Tallassee, Ala.	2.0	2.0	2.0	3.0	2.0	1.3
Camden, Ala.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Monticello, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.3	1.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	1.0	1.0	1.0	3.0	1.0	2.0
		Upper and Central South				
Belle Mina, Ala.	2.0	2.3	2.0	2.3	2.3	2.0
Experiment, Ga.	1.0	1.0	2.0	2.0	1.0	1.0
State College, Miss.	1.0	1.0	1.0	1.0	1.0	1.0
		Delta				
Sikeston, Mo.	1.6	1.7	1.2	1.6	1.2	1.3
Marianna, Ark.	2.0	3.0	2.0	3.0	1.0	2.0
Stoneville, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
Louise, Miss.	2.7	3.0	2.0	2.3	2.3	2.3
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
		West				
Curtis, La.	1.0	1.0	1.0	2.0	1.0	2.0
Fayetteville, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Bixby, Okla.	4.0	1.7	2.3	1.3	2.3	1.0
Tishomingo, Okla.	1.3	1.7	1.0	2.0	1.0	1.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 26: Seed quality scores for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515
		East Coast				
Marlboro, Md.	1.0	1.0	1.0	1.0	1.0	1.0
Trappe, Md.	1.0	1.0	1.0	2.0	2.0	1.0
Snow Hill, Md.	2.0	1.0	1.0	1.0	2.0	2.0
Warsaw, Va.	1.0	1.0	1.0	1.0	1.0	2.0
Accomac, Va.	2.0	3.0	2.8	2.0	2.0	2.8
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	2.0	1.0	1.0	2.0	2.0	1.0
Plymouth, N. C.	3.0	1.5	1.5	2.0	3.0	2.5
Willard, N. C.	3.0	1.5	1.5	2.0	2.5	2.0
McCullers, N. C.	3.0	1.5	1.5	3.0	3.5	1.5
		Southeast				
Tallassee, Ala.	2.0	2.0	2.0	2.0	2.0	2.0
Gainesville, Fla.	3.0	2.0	1.0	3.0	3.0	3.0
Monticello, Fla.	2.0	1.0	1.0	2.0	2.0	1.0
Walnut Hill, Fla.	2.0	2.0	2.0	3.0	2.0	3.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	2.0	1.0
		Delta				
Sikeston, Mo.	2.0	2.0	2.0	2.0	2.0	2.0
Marianna, Ark.	3.0	2.0	3.0	3.0	3.0	3.0
Stoneville, Miss. (B)	1.6	1.0	1.3	1.6	2.0	2.0
Louise, Miss.	2.0	2.0	1.7	1.7	2.0	3.0
St. Joseph, La.	1.0	1.0	1.0	1.0	1.0	1.0
		West				
Curtis, La.	1.0	1.0	1.0	1.0	1.0	3.0
Fayetteville, Ark.	3.0	3.0	3.0	3.0	3.0	3.0
Bixby, Okla.	2.0	1.7	1.3	2.7	3.0	3.0
Tishomingo, Okla.	1.0	1.0	1.3	1.7	1.0	1.7
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0

Table 26: (Continued)

Location	N48-1831	N48-2087	D49-854	D51-4871	D51-4888	N51-2043
			East Coast			
Marlboro, Md.	1.0	1.0	1.0	1.0	1.0	1.0
Trappe, Md.	1.0	1.0	1.0	1.0	1.0	2.0
Snow Hill, Md.	2.0	1.0	2.0	2.0	2.0	2.0
Warsaw, Va.	1.0	1.0	2.0	1.0	1.0	2.0
Accomac, Va.	2.0	2.0	2.0	2.0	2.8	2.0
Petersburg, Va.	1.0	2.0	1.0	2.0	2.0	2.0
Holland, Va.	1.0	2.0	1.0	1.0	1.0	1.0
Plymouth, N. C.	2.5	2.5	2.5	2.5	2.0	2.5
Willard, N. C.	2.0	2.5	2.5	2.5	2.5	2.5
McCullers, N. C.	3.0	2.5	3.0	2.5	3.5	3.0
			Southeast			
Tallassee, Ala.	2.0	2.0	2.0	2.0	2.0	2.0
Gainesville, Fla.	3.0	3.0	1.0	2.0	2.0	1.0
Monticello, Fla.	1.0	2.0	1.0	1.0	1.0	2.0
Walnut Hill, Fla.	2.0	3.0	2.0	3.0	3.0	2.0
Baton Rouge, La.	1.0	2.0	1.0	1.0	1.0	1.0
			Delta			
Sikeston, Mo.	2.0	2.0	2.0	1.0	1.0	1.0
Marianna, Ark.	3.0	3.0	3.0	3.0	3.0	3.0
Stoneville, Miss. (B)	2.0	2.0	2.0	2.0	1.6	1.6
Louise, Miss.	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	1.0	2.0	1.0	1.0	1.0
			West			
Curtis, La.	1.0	1.0	2.0	1.0	1.0	1.0
Fayetteville, Ark.	3.0	3.0	3.0	3.0	3.0	3.0
Bixby, Okla.	2.3	3.0	2.7	2.7	2.3	2.0
Tishomingo, Okla.	1.0	1.0	1.3	1.3	1.0	1.0
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0

Table 27: Seed weight, in grams per 100 seeds, for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515
			East Coast			
Marlboro, Md.	14.9	11.0	11.9	15.9	16.3	13.1
Trappe, Md.	16.7	12.9	13.9	16.9	17.6	16.9
Snow Hill, Md.	17.3	13.9	13.2	16.1	18.5	16.7
Warsaw, Va.	16.5	13.8	13.5	16.8	17.9	15.9
Petersburg, Va.	19.5	14.0	16.0	20.0	21.5	18.5
Holland, Va.	15.3	15.2	14.4	15.8	16.4	15.4
Plymouth, N. C.	16.6	14.0	13.8	15.5	17.4	18.6
Willard, N. C.	15.6	13.3	13.5	15.0	17.2	16.2
McCullers, N. C.	18.3	15.1	14.3	17.8	19.2	17.1
Mean	16.7	13.7	13.8	16.6	18.0	16.5
			Southeast			
Tallassee, Ala.	17.2	13.9	14.5	17.0	19.5	18.5
Gainesville, Fla.	16.6	14.0	13.6	16.1	17.8	18.1
Monticello, Fla.	19.0	18.0	19.0	18.0	20.0	19.0
Quincy, Fla.	13.2	12.0	11.0	13.4	14.0	13.3
Milton, Fla.	13.0	11.0	11.7	11.3	14.7	13.5
Walnut Hill, Fla.	15.2	13.2	12.3	15.4	18.2	16.2
Mean	15.7	13.7	13.7	15.2	17.4	16.4
			Delta			
Sikeston, Mo.	14.1	12.2	12.5	14.5	15.2	15.5
Marianna, Ark.	13.5	11.5	12.0	13.0	14.0	14.5
Stoneville, Miss. (B)	15.2	12.5	13.6	15.2	16.8	15.7
Louise, Miss.	12.1	10.3	10.1	11.8	13.6	12.1
Mean	13.7	11.6	12.0	13.6	14.9	14.4
			West			
Fayetteville, Ark.	15.5	15.5	14.5	14.0	15.0	15.5
Bixby, Okla.	14.8	12.6	12.7	14.1	15.5	15.6
Tishomingo, Okla.	15.1	12.6	13.2	15.0	16.6	15.9
Lubbock, Texas	14.0	12.5	12.0	14.0	14.5	13.0
Mean	14.8	13.3	13.1	14.3	15.4	15.0

Table 27: (Continued)

Location	N48-1831	N48-2087	D49-854	D51-4871	D51-4888	N51-2043
			East Coast			
Marlboro, Md.	14.7	13.9	14.1	12.5	15.3	15.9
Trappe, Md.	15.8	15.9	17.1	17.0	15.7	18.3
Snow Hill, Md.	15.4	16.9	17.3	15.5	18.9	16.4
Warsaw, Va.	15.5	15.8	17.8	16.2	16.2	17.8
Petersburg, Va.	19.5	18.0	19.5	18.0	20.5	21.5
Holland, Va.	16.0	16.4	18.0	16.6	16.2	17.4
Plymouth, N. C.	15.4	15.8	16.2	17.6	16.0	17.1
Willard, N. C.	15.5	15.0	16.2	16.7	15.6	16.4
McCullers, N. C.	15.4	15.6	17.3	16.8	18.5	18.3
Mean	15.9	15.9	17.0	16.3	17.0	17.7
			Southeast			
Tallassee, Ala.	16.1	17.2	17.7	18.9	17.3	18.7
Gainesville, Fla.	15.9	18.3	16.4	18.0	15.1	15.0
Monticello, Fla.	22.0	18.0	20.0	19.0	18.0	19.0
Quincy, Fla.	14.0	13.6	13.2	14.5	14.2	13.6
Milton, Fla.	12.7	13.5	13.3	14.7	13.5	13.7
Walnut Hill, Fla.	14.8	14.7	15.3	16.1	16.2	17.4
Mean	15.9	15.9	16.0	16.9	15.7	16.2
			Delta			
Sikeston, Mo.	13.0	13.7	16.1	15.4	15.1	14.1
Marianna, Ark.	13.0	13.5	15.0	14.0	12.0	14.0
Stoneville, Miss.	14.6	14.9	16.9	15.6	15.4	14.3
Louise, Miss.	11.9	11.8	13.8	11.9	12.4	15.3
Mean	13.1	13.5	15.4	14.2	13.7	14.4
			West			
Fayetteville, Ark.	14.5	14.5	16.5	16.5	16.0	16.0
Bixby, Okla.	14.0	15.8	16.4	15.8	14.7	14.8
Tishomingo, Okla.	14.0	15.1	15.8	15.6	14.6	15.3
Lubbock, Texas	14.0	13.5	13.0	14.0	14.0	14.5
Mean	14.1	14.7	15.4	15.5	14.8	15.1

Table 28: Two-year average yield, in bushels per acre, for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101
		East Coast			
Warsaw, Va.	29.4	28.9	30.6	29.9	27.4
Accomac, Va.	25.6	27.8	28.4	27.0	29.0
Norfolk, Va.	35.6	33.1	36.3	36.8	27.7
Holland, Va.	30.2	31.4	31.4	33.1	28.4
Plymouth, N. C.	34.6	40.2	38.4	36.0	35.2
Willard, N. C.	33.2	--	36.3	31.1	29.9
McCullers, N. C.	27.8	28.6	29.4	26.8	25.8
Mean	30.9	31.7	33.0	31.5	29.0
		Southeast			
Tallassee, Ala.	36.9	40.0	42.7	40.0	45.0
Monticello, Fla.	35.8	37.6	38.8	41.6	37.6
Marianna, Fla.	24.2	24.0	26.8	28.2	27.0
Quincy, Fla.	24.3	27.8	28.4	24.6	25.4
Walnut Hill, Fla.	31.8	34.0	34.2	32.9	31.0
Baton Rouge, La.	31.2	33.2	30.7	35.2	31.8
Mean	30.7	32.8	33.6	33.8	33.0
		Upper and Central South			
Belle Mina, Ala.	24.6	24.4	22.5	27.9	25.0
Experiment, Ga.	21.0	26.2	27.7	26.0	22.4
State College, Miss.	19.2	19.4	18.4	22.3	20.6
Mean	21.6	23.3	22.9	25.4	22.7
		Delta			
Sikeston, Mo.	11.9	7.8	10.1	13.0	13.3
Marianna, Ark.	15.4	17.2	23.8	25.6	20.3
Stoneville, Miss.	42.1	47.6	45.2	43.3	41.0
Louise, Miss.	20.5	26.0	24.3	22.8	23.5
St. Joseph, La.	47.4	38.8	44.4	50.3	44.4
Mean	27.5	27.5	29.6	31.0	28.5
		West			
Curtis, La.	36.0	36.7	35.6	34.2	32.2
Fayetteville, Ark.	11.1	7.0	9.0	12.9	12.4
Lubbock, Texas	19.1	19.2	16.4	19.6	18.4
Mean	22.1	21.0	20.3	22.2	21.0

Table 28: (Continued)

Location	N48-1515	N48-1831	N48-2087	D49-854
		East Coast		
Warsaw, Va.	25.4	28.8	26.3	28.5
Accomac, Va.	29.5	27.4	25.6	29.2
Norfolk, Va.	29.0	38.8	28.2	27.2
Holland, Va.	23.4	31.9	26.9	30.2
Plymouth, N. C.	35.7	41.0	34.0	37.3
Willard, N. C.	29.2	33.2	30.9	35.7
McCullers, N. C.	25.6	26.8	26.6	26.4
Mean	28.3	32.6	28.4	30.6
		Southeast		
Tallassee, Ala.	42.4	37.4	41.9	43.0
Monticello, Fla.	34.4	35.2	38.8	38.9
Marianna, Fla.	23.3	25.4	29.6	28.6
Quincy, Fla.	23.8	26.4	26.8	26.0
Walnut Hill, Fla.	30.2	33.9	28.2	31.2
Baton Rouge, La.	30.0	31.4	32.3	36.2
Mean	30.7	31.6	32.9	34.0
		Upper and Central South		
Belle Mina, Ala.	25.4	25.8	24.6	28.4
Experiment, Ga.	25.4	23.4	24.9	24.0
State College, Miss.	17.2	19.2	20.6	21.5
Mean	22.7	22.8	23.4	24.6
		Delta		
Sikeston, Mo.	6.6	14.0	12.4	13.2
Marianna, Ark.	20.2	23.2	17.6	24.3
Stoneville, Miss.	41.2	42.7	42.0	46.0
Louise, Miss.	16.7	20.6	21.8	29.1
St. Joseph, La.	41.3	50.6	45.4	47.5
Mean	25.2	30.2	27.8	32.0
		West		
Curtis, La.	28.2	38.2	32.7	36.0
Fayetteville, Ark.	7.4	13.2	12.8	13.2
Lubbock, Texas	17.2	19.7	17.2	15.9
Mean	17.6	23.7	20.9	21.7

Table 29: Two-year average of the oil percentage for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2491	D49-2524	N48-886	N48-1101	N48-1515	N48-1831	N48-2087	D49-854
Warsaw, Va.	20.6	20.4	20.2	20.8	21.2	20.5	21.3	21.2	20.7
Plymouth, N. C.	20.8	20.1	20.4	21.2	21.1	21.0	20.9	20.6	20.4
McCullers, N. C.	21.2	21.7	21.0	21.5	21.8	22.0	21.8	20.9	21.2
Walnut Hill, Fla.	21.6	22.0	21.2	22.4	22.0	22.0	22.9	21.2	22.0
Baton Rouge, La.	22.4	23.8	24.0	22.8	23.2	24.4	24.0	22.8	22.3
Stoneville, Miss.	21.3	22.4	22.4	22.4	22.8	22.5	22.5	21.2	21.6
St. Joseph, La.1/	21.2	21.4	21.8	22.0	22.0	22.1	22.4	21.8	22.2
Marianna, Ark.2/	22.6	23.0	22.9	23.4	23.1	23.0	23.5	22.9	22.8
Tishomingo, Okla.3/	22.1	22.8	22.9	22.8	23.0	23.0	23.3	22.6	22.5
Mean	21.5	22.0	21.9	22.1	22.2	22.3	22.5	21.7	21.7

1/Data from McCullers, N. C., in 1952; from Willard, N. C., 1953.

2/Data from Clarkedale, Ark., in 1952; Marianna, Ark., in 1953.

3/Data from Curtis, La., in 1952; from Tishomingo, Okla., in 1953.

Table 30: Three-year average yield, in bushels per acre, for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2524	N48-886	N48-1101	N48-1515	N48-1831	N48-2087
			East Coast				
Warsaw, Va.	26.2	26.9	27.4	24.8	22.6	26.0	24.8
Petersburg, Va.	30.9	32.1	30.1	29.5	28.6	32.2	28.4
Holland, Va.	33.4	33.2	36.4	30.6	27.2	34.4	30.1
Plymouth, N. C.	33.9	39.0	35.5	34.4	32.9	37.6	34.6
Willard, N. C.	37.1	40.4	36.6	34.6	31.6	38.0	35.7
McCullers, N. C.	26.6	28.9	26.8	24.9	24.9	24.9	24.9
Mean	31.4	33.4	32.1	29.8	28.0	32.2	29.8
			Southeast				
Tallassee, Ala.	30.3	40.1	34.6	39.0	39.4	33.2	35.1
Marianna, Fla.	20.1	21.3	23.1	22.9	19.5	21.9	24.3
Quincy, Fla.	28.5	34.0	29.8	29.5	29.9	31.8	31.3
Walnut Hill, Fla.	31.6	34.6	32.9	31.9	30.5	33.7	29.0
Baton Rouge, La.	26.4	26.6	29.7	25.7	27.2	27.5	27.5
Mean	27.4	31.3	30.0	29.8	29.3	29.6	29.4
			Upper and Central South				
Experiment, Ga.	18.0	23.4	20.5	19.0	21.9	19.2	21.0
Belle Mina, Ala.	20.4	21.8	24.1	22.0	24.6	22.3	21.8
State College, Miss.	18.9	20.7	21.0	20.4	18.6	20.1	20.6
Mean	19.1	22.0	21.9	20.5	21.7	20.5	21.1
			Delta				
Sikeston, Mo.	19.3	15.8	17.9	18.3	11.8	17.3	15.9
Stoneville, Miss.	39.9	42.4	38.7	34.4	38.1	38.9	36.1
Louise, Miss.	28.0	31.0	20.3	30.1	24.3	27.6	28.9
St. Joseph, La.	46.5	41.8	46.3	38.5	40.6	45.3	42.3
Mean	33.4	32.8	30.8	30.3	28.7	32.3	30.8
			West				
Curtis, La.	36.2	39.3	31.6	32.5	32.2	39.0	32.7
Fayetteville, Ark.	14.5	16.1	15.6	16.1	11.9	16.6	14.8
Lubbock, Texas	17.4	16.7	19.6	18.7	16.3	19.6	16.7
Mean	22.7	24.0	22.3	22.4	20.1	25.1	21.4

Table 31: Three-year average of the oil percentage for the strains in Uniform Group VI, 1953

Location	Ogden	D49-2524	N48-886	N48-1101	N48-1515	N48-1831	N48-2087
Warsaw, Va.	20.5	20.1	20.6	21.1	20.5	20.9	21.0
Plymouth, N. C.	20.3	20.2	20.9	21.0	20.7	20.4	20.4
McCullers, N. C. 1/	20.8	20.8	21.0	21.5	21.7	20.7	20.5
Walnut Hill, Fla.	21.8	21.7	22.2	22.3	22.3	22.9	21.4
Baton Rouge, La.	22.5	23.5	22.7	23.1	24.2	23.8	23.0
Marianna, Ark. 2/	22.1	22.4	22.8	22.9	22.5	23.1	22.4
Stoneville, Miss.	21.6	21.9	22.0	22.6	22.5	22.6	21.3
Tishomingo, Okla. 3/	21.5	22.0	22.3	22.6	22.5	22.7	22.1
Mean	21.4	21.6	21.8	22.1	22.1	22.1	21.5

1/Data from McCullers, N. C., 1951 and 1952; Willard, N. C., in 1953.

2/Data from Sikeston, Mo., 1951; Clarkedale, Ark., 1952; Marianna, Ark., 1953.

3/Data from Stuttgart, Ark., 1951; Curtis, Okla., 1952; Tishomingo, Okla., 1953.

PRELIMINARY GROUP VI

1953

Thirty-four new strains, along with Ogden and D49-2524, were planted at seven locations in 1953. Parentage of these lines is reported in table 32. No emergence was obtained from a planting 75 miles north of Stoneville. Stands were too irregular for yield evaluation on the sandy loam soil at Stoneville, Mississippi. However, this planting was utilized for evaluation of height, maturity, and seed holding. Yield data are reported for four locations, Plymouth and Willard, North Carolina; Walnut Hill, Florida; and Stoneville, Mississippi, in table 33. Oil percentages are reported from three locations in table 34, while table 35 gives a general summary of performance.

Yield differences were non-significant in three of the four plantings. At Walnut Hill, 28 lines yielded significantly less than Ogden. Differences among means for the four locations were non-significant. Four lines had a significantly higher mean oil content than Ogden. Only one line had a significantly lower oil percentage than Ogden. Twelve lines equalled D49-2524 in rating for seed holding. Several of the lines have a good combination of desired qualities which include high seed yield, high oil content, resistance to shattering, and a high degree of resistance to the major leaf diseases. The top performing strains of this test will replace some of the lines now included in Group VI.

Table 32: Parentage of the strains in Preliminary VI, 1953

Strain	Parent line	Generation composited	Parentage
Ogden			
D49-2524	N46-2566	F_6	S-100 x CNS
D51-325	D49-610	F_6	Roanoke x N45-745
D51-327	N48-1394	F_6	Roanoke x N45-745
D51-4811	N48-1101	F_6	Roanoke x Ogden
D51-4835	N48-1151	F_6	Roanoke x Ogden
D51-4839	N48-1217	F_6	Roanoke x Ogden
D51-4859	N48-1368	F_6	Roanoke x N45-745
D51-4860	N48-1368	F_6	Roanoke x N45-745
D51-4863	N48-1394	F_6	Roanoke x N45-745
D51-4891	N48-1905	F_6	Roanoke x N45-745
D51-4897	N48-2087	F_6	Roanoke x N45-745
D51-4933	D49-620	F_6	Roanoke x N45-745
D51-4943	D49-661	F_6	Roanoke x N45-745
D51-4946	D49-665	F_6	Roanoke x N45-745
D51-4969	D49-720	F_6	Roanoke x N45-745
D51-4977	D49-757	F_6	Roanoke x N45-745
D51-4988	D49-798	F_6	Roanoke x N45-745
D51-4991	D49-833	F_6	Roanoke x N45-745
D51-5003	D49-854	F_6	Roanoke x N45-745
D51-5100	D49-659	F_6	Roanoke x N45-745
D51-5427	N45-1497	F_9	Ralsoy x Ogden
N51-1696	--	F_4	N48-1248 x Perry
N51-1971	N48-1842	F_6	Roanoke x Ogden
N51-1989	N48-885	F_6	Roanoke x Ogden
N51-2007	N48-886	F_6	Roanoke x Ogden
N51-2027	N48-902	F_6	Roanoke x Ogden
N51-2079	N48-1101	F_6	Roanoke x Ogden
N51-2087	N48-1151	F_6	Roanoke x Ogden
N51-2101	N48-1167	F_6	Roanoke x Ogden
N51-2140	N48-1219	F_6	Roanoke x N45-745
N51-2141	N48-1570	F_6	Roanoke x N45-745
N51-2199	N48-1835	F_6	Roanoke x N45-745
N51-3346	N49-2606	F_6	Roanoke x N45-745
N49-2491	N46-2566	F_6	S-100 x CNS
N49-2299	N45-1497	F_7	Ralsoy x Ogden

Table 33: Yield, in bushels per acre, for the strains in Preliminary Group VI, 1953

Strain	Plymouth, N. C.	Willard, N. C.	Walnut Hill, Fla.	Stoneville, Miss.	Mean
Ogden	37.3	41.3	32.6	34.4	36.4
D49-2524	38.4	38.4	27.9	38.8	34.9
D51-325	39.3	38.0	26.8	33.0	34.6
D51-327	32.3	37.8	27.6	33.4	32.3
D51-4811	35.0	37.6	25.8	39.8	35.0
D51-4835	34.9	30.8	27.6	36.7	32.5
D51-4839	33.0	36.8	28.6	31.8	32.8
D51-4859	35.3	36.8	25.4	30.5	32.1
D51-4860	35.8	36.1	28.3	31.6	32.6
D51-4863	35.1	31.7	32.2	35.9	34.3
D51-4891	35.8	35.8	25.8	32.9	32.8
D51-4897	39.2	33.3	26.5	34.6	33.6
D51-4933	33.7	30.7	25.8	37.9	32.2
D51-4943	34.4	38.0	30.1	36.8	34.3
D51-4946	35.6	42.0	29.7	32.8	35.1
D51-4969	38.1	36.3	27.6	33.5	33.2
D51-4977	33.8	38.9	27.2	37.6	34.0
D51-4988	34.5	32.0	26.5	30.6	31.1
D51-4991	29.7	32.6	27.9	28.6	29.4
D51-5003	39.1	39.8	26.8	35.5	35.6
D51-5100	38.4	35.4	25.0	38.8	34.8
D51-5427	33.3	29.4	25.4	32.8	30.7
N51-1696	37.3	33.0	29.4	32.6	33.1
N51-1971	38.4	39.2	28.3	41.8	36.9
N51-1989	34.7	33.6	31.6	28.4	32.2
N51-2007	37.6	30.7	31.2	34.5	33.5
N51-2027	33.4	39.8	27.6	40.8	35.4
N51-2079	36.8	36.5	27.6	31.7	33.0
N51-2087	31.0	32.6	27.2	33.1	31.4
N51-2101	36.8	31.0	30.4	41.3	34.4
N51-2140	38.1	38.2	25.8	40.2	35.6
N51-2141	32.4	42.3	26.2	35.5	33.8
N51-2199	36.9	41.1	34.0	29.9	35.8
N51-3346	37.0	29.4	25.8	31.0	31.0
N49-2491	33.2	35.0	24.8	43.4	33.9
N49-2299	34.6	32.4	26.8	35.6	33.1
L.S.D. (5%)	N.S.	N.S.	3.1	N.S.	N.S.
C.V.	9%	17%	8%	15%	12%

Table 34: Oil percentage of the strains in Preliminary Group VI, 1953

Strain	Plymouth, N. C.	Walnut Hill, Fla.	Stoneville, Miss.	Mean
Ogden	20.9	21.4	22.4	21.6
D49-2524	21.2	20.4	23.0	21.5
D51-325	20.7	21.5	22.6	21.6
D51-327	20.7	21.4	22.1	21.4
D51-4811	21.4	22.0	21.7	21.7
D51-4835	22.4	22.7	22.8	22.6+
D51-4839	21.3	22.5	21.1	21.6
D51-4859	21.4	21.3	21.8	21.5
D51-4860	20.2	20.4	21.6	20.7
D51-4863	21.2	21.7	22.1	21.7
D51-4891	21.2	21.5	22.2	21.6
D51-4897	21.5	21.6	21.2	21.4
D51-4933	21.8	21.9	21.8	21.8
D51-4943	20.0	21.4	22.3	21.2
D51-4946	20.3	20.1	20.8	20.4-
D51-4969	19.8	21.4	21.1	20.8
D51-4977	20.7	21.7	23.0	21.8
D51-4988	20.7	21.0	22.2	21.3
D51-4991	21.0	20.8	22.0	21.3
D51-5003	20.6	20.3	22.0	21.0
D51-5100	20.3	21.5	22.8	21.5
D51-5427	21.2	21.3	22.0	21.5
N51-1696	21.7	21.6	21.4	21.6
N51-1971	22.0	22.0	23.2	22.5
N51-1989	22.4	22.4	23.0	22.6+
N51-2007	21.6	22.4	23.1	22.4
N51-2027	21.5	22.7	23.5	22.6+
N51-2079	21.9	21.9	23.0	22.3
N51-2087	21.7	22.2	22.1	22.0
N51-2101	21.9	22.3	22.7	22.3
N51-2140	21.7	21.9	22.6	22.1
N51-2141	20.7	20.4	22.4	21.2
N51-2199	22.5	22.3	22.9	22.6+
N51-3346	21.2	20.4	22.2	21.3
N49-2491	21.0	19.6	22.2	20.9
N49-2299	22.2	22.1	22.3	22.2
L.S.D. (5%)				1.0
C.V.				2%

Table 35: General summary of performance of strains grown in Preliminary Group VI, 1953

Strain	Seed Yield	% Oil	Av. Matur.	Height (In.)	Shattering	Bacterial Pustule	Target Spot
Ogden	36.4	21.6	10-14	36	3.0	S	2.0
D49-2524	34.9	21.5	+6	34	1.0	R	1.5
D51-325	34.6	21.6	-3	40	1.0	R	3.0
D51-327	32.3	21.4	0	29	1.0	R	3.5
D51-4811	35.0	21.7	+3	33	1.0	S	1.5
D51-4835	32.5	22.6	-1	38	2.0	S	1.0
D51-4839	32.8	21.6	-2	29	2.0	R	1.0
D51-4859	32.1	21.5	-2	29	2.0	R	3.0
D51-4860	32.6	20.7	-1	37	1.0	R	1.5
D51-4863	34.3	21.7	-2	28	1.0	R	2.0
D51-4891	32.8	21.6	+1	42	1.0	R	1.5
D51-4897	33.6	21.4	+1	36	2.0	R	1.0
D51-4933	32.2	21.8	-3	33	2.0	R	3.0
D51-4943	34.3	21.2	-3	37	3.0	R	2.5
D51-4946	35.1	20.4	-1	28	3.0	R	1.5
D51-4969	33.2	20.8	-2	41	1.0	R	2.0
D51-4977	34.0	21.8	-1	43	1.0	R	2.0
D51-4988	31.1	21.3	0	43	2.0	R	1.0
D51-4991	29.4	21.3	-1	32	2.0	R	3.0
D51-5003	35.6	21.0	+1	30	2.0	R	1.5
D51-5100	34.8	21.5	-1	40	1.0	R	1.0
D51-5427	30.7	21.5	+4	37	1.0	S	1.5
N51-1696	33.1	21.6	-2	31	2.0	R	1.0
N51-1971	36.9	22.5	+3	40	2.0	S	1.5
N51-1989	32.2	22.6	+1	36	3.0	S	2.0
N51-2007	33.5	22.4	-3	35	3.0	S	3.0
N51-2027	35.4	22.6	-1	34	3.0	S	3.0
N51-2079	33.0	22.3	0	38	3.0	S	3.0
N51-2087	31.4	22.0	-1	30	3.0	S	2.5
N51-2101	34.4	22.3	+2	39	3.0	S	3.0
N51-2140	35.6	22.1	+1	39	3.0	R	3.0
N51-2141	33.8	21.2	+5	42	1.0	R	3.5
N51-2199	35.8	22.6	+1	31	4.0	R	2.0
N51-3346	31.0	21.3	-1	38	3.0	R	1.5
N49-2491	33.9	20.9	+5	34	1.0	R	1.5
N49-2299	33.1	22.2	0	39	2.0	S	2.0

UNIFORM GROUP VII

1953

Strain or Variety	Source or Originating Agency	Parentage
Jackson	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Volstate (2) x Palmetto
Roanoke	N. Car. A.E.S. & U.S.R.S.L.	Sel. from mixed seed lot
Dortchsoy 31	Robert L. Dortch Seed Co. Scott, Ark.	Sel. from Ogden
N48-1574	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
N48-1867	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D49-533	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D49-588	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D49-772	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
D49-2524	Delta Br. A.E.S. & U.S.R.S.L.	Sel. from N46-2566 (S-100 x CNS)
D51-5052	Delta Br. A.E.S. & U.S.R.S.L.	Subline of N48-1867
N51-2186	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x N45-745
N51-2220	N. Car. A.E.S. & U.S.R.S.L.	Subline of N48-1867

Thirty-five Group VII nurseries were planted. Results from 29 nurseries are summarized in tables 36 through 48. Poor stands and drouth contributed toward low yields and poor precision in several of the nurseries.

In the East Coast and Delta areas, Group VII strains will usually be grown to supplement acreage planted to a Group VI variety. However, in the Southeast, Group VII strains appear to be well adapted, and a variety of this maturity should be the main crop variety.

The strain N47-3479, which has been tested for the past 4 years, has been named Jackson. Seed will be available to seed producers in Virginia, North Carolina, South Carolina, Georgia, Alabama, Florida, and Mississippi for 1954 planting. Table 47 reports the 4-year average yield and oil content of Jackson in comparison with Roanoke and Dortchsoy 31. Jackson has a higher yield average than either of the older varieties in each of the production areas. Jackson averages 4 to 6 inches taller than Roanoke. This added height is advantageous in the Southeast where plantings frequently follow oats or lupines.

Dortchsoy 31 has been tested for 6 years. Table 48 gives the 6-year yield and oil percentage data from Dortchsoy 31 and Roanoke. In the East Coast area where Dortchsoy 31 stands better than Roanoke because of its shorter growth, there is little difference in seed yield. However, in all other production areas Roanoke has a higher yield average. This difference is greatest in the Delta section where the leaf disease target spot has

reduced yields of Dortchsoy 31 appreciably in several of the years. Dortchsoy 31 has averaged 1.1 percent lower in oil content than Roanoke.

Two strains, N48-1574 and N48-1867, have been grown for 3 years. Yield of N48-1574 has been very similar to that of Roanoke in all areas and oil content has been slightly lower. N48-1867 has the highest average yield of the strains tested in the East Coast section. The higher yield in this area can very likely be attributed to better standing ability.

Four strains, D49-533, D49-588, D49-772, and D49-2524, have been included for two years. D49-2524 is included as a tie-in variety for Group VI and VII, has yielded somewhat more than Jackson in the East Coast, Delta and Western tests, but slightly less than Jackson in the Southeast. D49-533, D49-588, and D49-772 have not been superior to Roanoke or Jackson in any of the production areas.

Three strains, D51-5052, N51-2186, and N51-2220, were grown only in 1953. D51-5052 and N51-2220 are sublines of N48-1867, which are somewhat different in growth type. N51-2220 averages 4 to 8 inches taller than D51-5052. Both strains yielded well and equalled Roanoke in oil content. They are slightly earlier than Roanoke. N51-2186 yielded well but has a lower oil content than the other two strains.

Table 36: Yield, in bushels per acre, for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867	D49-533	D49-588
			East Coast				
Accomac, Va.	25.4	28.4	25.7	29.9	27.5	26.6	19.4-
Norfolk, Va.	36.0	32.4	32.7	36.0	30.6	29.6	37.5
Petersburg, Va.	21.4	16.0-	22.8	20.8	22.6	19.5	21.0
Holland, Va.	35.9	22.2	29.7	27.0	34.3	28.2	24.7
Plymouth, N. C.	36.1	32.1	29.2	31.3	31.9	30.4	28.9
Willard, N. C.	37.6	32.8	37.3	37.0	38.7	34.3	33.4
McCullers, N. C.	20.2	18.7	18.7	20.8	17.1	16.3	22.3
Florence, S. C.	26.4	25.7	27.0	25.0	26.8	22.2	22.5
Mean	29.9	26.0	27.9	28.5	28.7	25.9	26.2
			Southeast				
Blackville, S. C.	22.5	17.0-	22.9	19.3	20.9	16.9-	20.3
Charleston, S. C.	35.5	31.4	30.8	27.3	38.6	37.9	30.5
Tallassee, Ala.	47.0	48.6	48.8	42.1	45.4	39.4	45.6
Camden, Ala.	12.6	11.3	14.2	15.3	15.0	14.0	11.0
Tifton, Ga.	14.3	15.1	8.5	14.7	12.8	16.4	24.8
Gainesville, Fla.	31.5	29.6	29.8	36.1	33.2	32.5	35.6
Monticello, Fla.	49.7	39.9-	40.9-	46.1	44.6-	47.4	48.4
Marianna, Fla.	23.6	17.7-	22.8	21.8	24.5	17.5-	16.0-
Quincy, Fla.	21.2	25.7	24.2	22.7	23.7	20.7	22.5
Milton, Fla.	24.0	25.5	24.1	23.6	24.7	20.9	22.4
Walnut Hill, Fla.	24.3	23.4	27.0	24.1	28.6	24.8	22.2
Baton Rouge, La.	29.0	31.6	26.4	28.0	23.9	25.2	25.2
Mean	27.9	26.4	26.7	26.8	28.0	26.1	27.0
			Upper and Central South				
Clemson, S. C.	24.9	24.4	21.0	25.4	22.6	24.7	21.8
Experiment, Ga.	27.6	24.3	19.2	26.5	22.2	27.7	28.0
State College, Miss.	20.1	21.0	23.6	21.2	21.6	18.2	19.1
Mean	24.2	23.2	21.3	24.4	22.1	23.5	23.0
			Delta				
Stoneville, Miss. (A)	42.0	38.8	37.1	28.5-	31.7	27.4-	30.5
Louise, Miss.	24.2	21.7	21.9	20.0	24.5	24.1	18.9-
St. Joseph, La.	34.3	35.5	41.2	40.0	34.7	28.7	27.5
Mean	33.5	32.0	33.4	29.5	30.3	26.7	25.6
			West				
Curtis, La.	32.4	29.8	29.6	34.2	31.6	28.3	17.9
Tishomingo, Okla.	31.7	20.7-	36.3	35.5	43.3+	37.6	30.2
Lubbock, Texas	16.0	16.0	16.7	14.6	12.7	14.8	14.5
Mean	26.7	22.2	27.5	28.1	29.2	26.9	20.9

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

Table 36: (Continued)

Location	D49-772	D49-2524	D51-5052	N51-2186	N51-2220	L.S.D. (5%)	C.V.
			East Coast				
Accomac, Va.	26.0	26.9	27.5	31.2+	27.5	5.0	13%
Norfolk, Va.	32.1	35.1	33.6	34.8	33.9	N.S.	12%
Petersburg, Va.	19.1	24.2	25.4	23.5	24.2	5.2	16%
Holland, Va.	29.8	30.5	31.5	34.1	33.1	N.S.	21%
Plymouth, N. C.	30.6	36.4	35.7	33.6	36.5	4.4	9%
Willard, N. C.	35.9	39.5	35.5	39.8	37.7	4.0	6%
McCullers, N. C.	19.6	20.4	19.3	21.0	17.6	3.6	13%
Florence, S. C.	25.9	25.8	25.0	26.4	27.1	N.S.	11%
Mean	27.4	29.8	29.2	30.6	29.7		
			Southeast				
Blackville, S. C.	21.5	18.1-	22.9	22.6	22.8	2.6	7%
Charleston, S. C.	34.1	32.3	42.0	41.3	36.5	10.0	17%
Tallassee, Ala.	43.8	46.1	40.8	46.3	44.5	N.S.	10%
Camden, Ala.	14.5	12.1	17.5	14.8	16.1	N.S.	24%
Tifton, Ga.	13.0	10.2	16.0	15.5	21.6	5.5	22%
Gainesville, Fla.	41.1	33.2	37.1	34.9	33.9	5.4	9%
Monticello, Fla.	52.2	46.9	48.1	51.0	52.5	4.9	6%
Marianna, Fla.	21.7	17.2-	23.6	13.2-	21.5	4.4	13%
Quincy, Fla.	23.2	25.5+	19.7	22.4	22.7	3.0	8%
Milton, Fla.	22.4	21.0	24.8	26.8	24.5	N.S.	9%
Walnut Hill, Fla.	24.1	27.5	29.4	31.3+	27.9	5.3	12%
Baton Rouge, La.	22.3	25.4	28.0	28.0	25.4	N.S.	13%
Mean	27.8	26.3	29.1	29.0	29.1		
			Upper and Central South				
Clemson, S. C.	26.6	22.2	22.3	25.2	23.9	4.5	11%
Experiment, Ga.	29.7	16.0	27.7	26.7	24.2	N.S.	22%
State College, Miss.	19.6	22.9	16.1	22.0	22.0	N.S.	14%
Mean	25.3	20.4	22.0	24.6	23.4		
			Delta				
Stoneville, Miss. (A)	31.8	44.5	32.1	27.6-	38.5	11.0	19%
Louise, Miss.	19.6	26.3	27.5	22.4	21.7	4.4	12%
St. Joseph, La.	42.8	33.1	33.9	41.2	35.5	N.S.	17%
Mean	31.4	34.6	31.2	30.4	31.9		
			West				
Curtis, La.	21.5	32.7	22.3	32.2	31.1		
Tishomingo, Okla.	40.9+	46.3+	43.2+	44.3+	43.6+	7.2	11%
Lubbock, Texas	15.9	16.9	15.4	18.7	16.2	N.S.	16%
Mean	26.1	32.0	27.0	31.7	30.3		

Table 37: Chemical composition of the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867	D49-533
			OIL PERCENTAGE			
Petersburg, Va.	19.5	18.5	18.0	18.7	18.6	18.8
Willard, N. C.	21.7	21.9	19.8	21.1	21.0	20.9
Florence, S. C.	20.9	21.9	20.9	20.7	20.8	20.6
Quincy, Fla.	21.4	21.8	20.4	20.7	21.3	20.4
Walnut Hill, Fla.	19.0	20.5	19.3	20.3	20.6	21.5
Tallassee, Ala.	21.1	21.6	21.5	21.4	20.7	20.8
Baton Rouge, La.	22.4	23.4	21.5	21.7	21.8	23.5
Clemson, S. C.	21.3	22.7	22.4	22.5	21.5	21.4
Stoneville, Miss.	21.5	21.8	21.2	21.0	22.0	21.6
Tishomingo, Okla.	23.2	21.0	21.4	20.6	21.0	21.6
Mean	21.2	21.5	20.6	20.9	20.9	21.1
			PROTEIN PERCENTAGE			
Petersburg, Va.	41.1	40.9	43.8	42.9	42.2	40.3
Willard, N. C.	39.4	39.1	40.2	39.5	39.0	40.2
Florence, S. C.	40.5	37.8	39.5	40.4	39.8	39.7
Quincy, Fla.	42.2	40.3	41.0	41.2	40.0	42.5
Walnut Hill, Fla.	40.9	39.5	41.1	41.1	40.1	39.5
Tallassee, Ala.	38.8	38.3	37.4	39.7	40.3	38.9
Baton Rouge, La.	37.5	39.0	38.6	39.2	37.7	38.3
Clemson, S. C.	37.5	36.7	36.8	38.1	37.0	38.1
Stoneville, Miss.	40.4	39.1	41.3	40.9	39.8	41.8
Tishomingo, Okla.	37.2	37.5	38.6	40.2	39.0	38.3
Mean	39.6	38.8	39.8	40.3	39.5	39.8

Table 37: (Continued)

Location	D49-588	D49-772	D49-2524	D51-5052	N51-2186	N51-2220
			OIL PERCENTAGE			
Petersburg, Va.	18.1	17.7	19.1	19.2	18.9	18.8
Willard, N. C.	21.4	20.6	21.8	22.5	21.8	22.0
Florence, S. C.	20.0	20.1	20.7	21.0	19.2	21.6
Quincy, Fla.	19.8	18.6	21.2	20.4	20.2	20.6
Walnut Hill, Fla.	20.3	19.5	20.9	22.1	21.0	21.6
Tallassee, Ala.	21.7	20.9	21.9	22.3	21.7	22.1
Baton Rouge, La.	22.9	22.2	22.1	23.5	23.5	22.5
Clemson, S. C.	20.8	19.8	22.7	21.5	22.7	22.2
Stoneville, Miss.	21.1	21.5	21.5	21.2	20.7	22.6
Tishomingo, Okla.	21.6	20.5	22.5	21.5	21.5	21.2
Mean	20.8	20.1	21.4	21.5	21.1	21.5
			PROTEIN PERCENTAGE			
Petersburg, Va.	41.9	41.2	42.6	38.9	41.1	41.7
Willard, N. C.	39.8	40.1	40.4	38.6	38.3	37.4
Florence, S. C.	41.5	41.0	40.4	39.5	38.8	38.0
Quincy, Fla.	40.9	44.0	39.5	39.9	41.4	39.7
Walnut Hill, Fla.	42.0	41.2	41.5	38.5	40.2	39.5
Tallassee, Ala.	39.9	39.7	39.9	39.7	39.7	38.8
Baton Rouge, La.	38.3	41.3	39.8	36.9	36.5	37.9
Clemson, S. C.	39.3	38.0	36.2	36.9	36.6	35.8
Stoneville, Miss.	42.0	40.1	41.0	40.6	40.8	38.6
Tishomingo, Okla.	39.3	36.4	38.7	37.9	38.2	38.1
Mean	40.5	40.3	40.0	38.7	39.2	38.6

Table 38: Relative maturity data, days earlier (-) or later (+) than Jackson for the strains in Uniform Group VII, 1953

Location	Date Planted	Jackson Matured	Roanoke	Dortch. 31	N48-1574	N48-1867
		EAST COAST				
Holland, Va.	4-30	11-13	-4	-2	-3	-8
Plymouth, N. C.	5-4	10-28	-4	-6	-5	-6
Willard, N. C.	5-11	10-31	-4	-5	-6	-6
McCullers, N. C.	5-13	10-30	-1	0	-3	-3
Florence, S. C.	5-18	10-28	-2	-5	-4	-3
Hartsville, S. C.	6-13	11-2	0	-2	-5	-6
Mean			-3	-4	-4	-5
		Southeast				
Charleston, S. C.	6-17	11-17	-3	-10	-4	-7
Tallassee, Ala.	5-28	11-1	0	-6	-5	-16
Camden, Ala.	6-23	10-27	-5	-6	-3	-6
Tifton, Ga.	6-10	10-26	-4	0	-3	-12
Gainesville, Fla.	6-13	11-2	0	-8	-5	-7
Monticello, Fla.	6-20	10-20	0	0	0	0
Marianna, Fla.	6-12	10-26	-6	-8	-6	-8
Quincy, Fla.	6-9	10-24	-5	-14	-17	-14
Baton Rouge, La.	6-9	10-15	0	-2	-5	-2
Mean			-3	-7	-6	-9
		Upper and Central South				
Clemson, S. C.	5-15	10-30	-4	-11	-1	-7
Experiment, Ga.	5-13	10-20	0	-3	-2	-6
State College, Miss.	5-21	10-19	-1	-7	-4	-4
Mean			-2	-7	-2	-6
		Delta				
Stoneville, Miss. (A)	5-27	10-25	-2	-4	-2	-3
Louise, Miss.	5-25	10-13	-1	-1	-1	-1
St. Joseph, La.	5-28	10-14	+3	-2	+1	0
Mean			0	-2	-1	-1
		West				
Curtis, La.	6-10	10-23	0	-2	0	+1
Tishomingo, Okla.	5-9	10-20	-4	0	-1	-4
Lubbock, Texas	6-15	10-27	0	0	0	-5
Mean			-1	-1	0	-3

Table 38: (Continued)

Location	D49-533	D49-588	D49-772	D49-2524	D51-5052	N51-2186	N51-2220
			EAST COAST				
Holland, Va.	-6	-4	-4	-6	0	-4	-8
Plymouth, N. C.	-6	-6	-4	-7	-7	-8	-7
Willard, N. C.	-4	-3	-4	-9	-6	-4	-4
McCullers, N. C.	-1	-2	0	-10	0	-3	-1
Florence, S. C.	-4	-3	-4	-7	-4	-4	-4
Hartsville, S. C.	-6	-5	-4	-7	-7	-6	-8
Mean	-4	-4	-4	-8	-3	-5	-5
			Southeast				
Charleston, S. C.	-8	-2	-3	-8	-18	-15	-12
Tallassee, Ala.	-15	-7	-5	-8	-10	-9	-6
Camden, Ala.	-3	0	-3	-3	-5	-4	-6
Tifton, Ga.	-8	-12	-8	-4	-4	-8	-4
Gainesville, Fla.	-6	-5	-6	-6	-7	-7	-7
Monticello, Fla.	0	0	0	0	0	0	0
Marianna, Fla.	-6	-4	-4	-10	-7	-11	-8
Quincy, Fla.	-17	-9	-5	-5	-14	-17	-17
Baton Rouge, La.	-1	-5	-4	-6	-1	-5	-5
Mean	-8	-6	-5	-6	-9	-10	-8
			Upper and Central South				
Clemson, S. C.	-8	+5	+1	-10	-11	-10	-3
Experiment, Ga.	-5	-5	0	-3	-6	-4	-4
State College, Miss.	-1	+3	+3	-7	-4	-9	-1
Mean	-5	+1	+1	-7	-7	-8	-3
			Delta				
Stoneville, Miss.	-4	-2	-3	-7	-4	-4	-3
Louise, Miss.	-1	-1	-1	-5	-1	-1	-1
St. Joseph, La.	0	-3	-2	-4	-2	-2	0
Mean	-2	-2	-2	-5	-2	-2	-1
			West				
Curtis, La.	-2	0	-12	+7	+3	+ 3	+3
Tishomingo, Okla.	-4	-2	-2	-3	-5	-4	-3
Lubbock, Texas	0	0	+5	+5	-5	-5	+5
Mean	-2	-1	-3	+3	-2	-2	+2

Table 39: Height data for strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867	D49-533
			EAST COAST			
Accomac, Va.	43	36	39	23	23	36
Norfolk, Va.	42	24	34	27	26	36
Petersburg, Va.	42	38	27	38	32	38
Holland, Va.	50	49	36	42	39	51
Plymouth, N. C.	53	49	41	50	50	43
Willard, N. C.	53	51	38	49	49	49
McCullers, N. C.	44	42	34	48	40	46
Florence, S. C.	46	39	26	44	44	49
Hartsville, S. C.	24	26	17	28	28	34
Mean	47	41	34	40	38	44
			Southeast			
Blackville, S. C.	25	23	17	24	22	25
Charleston, S. C.	43	42	29	42	39	39
Tallassee, Ala.	43	38	36	42	42	44
Camden, S. C.	30	26	19	31	24	25
Tifton, Ga.	26	21	13	22	14	24
Gainesville, Fla.	21	19	11	19	17	19
Monticello, Fla.	30	27	18	28	27	27
Marianna, Fla.	33	30	20	31	26	32
Quincy, Fla.	22	23	14	26	21	25
Milton, Fla.	36	34	24	36	28	35
Walnut Hill, Fla.	35	28	22	33	31	34
Baton Rouge, La.	34	30	16	32	23	26
Mean	32	28	20	30	26	30
			Upper and Central South			
Clemson, S. C.	46	45	35	45	45	44
Experiment, Ga.	45	39	22	31	31	42
Mean	46	42	28	38	38	43
			Delta			
Stoneville, Miss. (A)	45	42	35	43	40	41
Louise, Miss.	47	47	38	48	46	47
St. Joseph, La.	32	34	32	40	32	44
Mean	41	41	35	44	39	44
			West			
Curtis, La.	37	29	19	35	28	35
Tishomingo, Okla.	41	39	31	39	38	40
Lubbock, Texas	23	22	20	22	27	24
Mean	34	30	23	32	31	33

Table 39: (Continued)

Location	D49-588	D49-772	D49-2524	D51-5052	N51-2186	N51-2220
			EAST COAST			
Accomac, Va.	41	42	31	39	31	41
Norfolk, Va.	38	44	46	26	23	34
Petersburg, Va.	38	42	27	26	23	34
Holland, Va.	52	45	26	28	36	42
Plymouth, N. C.	54	51	36	38	40	46
Willard, N. C.	55	53	37	35	37	50
McCullers, N. C.	54	46	36	36	36	42
Florence, S. C.	52	48	38	28	31	34
Hartsville, S. C.	30	28	22	23	21	26
Mean	48	46	35	32	32	40
			Southeast			
Blackville, S. C.	26	24	20	19	20	21
Charleston, S. C.	43	42	32	30	32	38
Tallassee, Ala.	48	44	31	32	33	37
Camden, S. C.	29	27	21	21	19	26
Tifton, Ga.	27	22	14	14	14	20
Gainesville, Fla.	24	23	17	14	14	17
Monticello, Fla.	34	26	24	18	22	26
Marianna, Fla.	38	33	28	21	22	25
Quincy, Fla.	32	23	19	13	16	22
Milton, Fla.	42	37	26	26	26	36
Walnut Hill, Fla.	34	34	25	25	24	29
Baton Rouge, La.	30	24	26	18	21	25
Mean	34	30	24	21	22	27
			Upper and Central South			
Clemson, S. C.	47	44	35	34	36	43
Experiment, Ga.	48	41	27	30	27	30
Mean	48	42	31	32	32	36
			Delta			
Stoneville, Miss. (A)	47	45	35	35	33	38
Louise, Miss.	51	46	36	41	39	47
St. Joseph, La.	38	36	34	32	44	38
Mean	45	42	35	36	39	41
			West			
Curtis, La.	29	29	28	25	26	31
Tishomingo, Okla.	47	41	29	33	33	36
Lubbock, Texas	21	33	22	16	14	18
Mean	32	34	26	25	24	28

Table 40: Lodging scores for the strains in Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867	D49-533
		East Coast				
Accomac, Va.	2.0	3.5	3.0	2.5	3.5	3.0
Norfolk, Va.	1.0	3.5	4.0	3.5	3.0	3.0
Petersburg, Va.	3.0	2.8	1.0	2.0	1.2	2.0
Holland, Va.	2.5	3.5	1.8	2.0	2.3	3.3
Plymouth, N. C.	4.0	4.0	3.0	2.5	3.0	3.0
Willard, N. C.	3.0	3.5	2.0	3.0	3.0	3.0
McCullers, N. C.	1.5	2.5	1.5	2.5	1.5	3.5
Florence, S. C.	1.0	1.5	1.0	1.5	1.5	2.0
		Southeast				
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Charleston, S. C.	1.5	1.8	1.0	1.7	1.0	1.0
Tallassee, Ala.	2.3	3.0	2.3	2.0	3.0	1.3
Camden, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Monticello, Fla.	1.0	2.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.0	1.3	1.0	1.0	1.3	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	2.0	1.0	2.0	1.0	1.0
		Upper and Central South				
Clemson, S. C.	2.7	2.5	1.0	2.5	2.2	3.2
Experiment, Ga.	1.0	2.0	1.0	1.0	1.0	1.0
State College, Miss.	1.0	2.0	1.0	1.0	1.0	1.0
		Delta				
Stoneville, Miss.	2.0	2.6	2.0	2.0	2.0	2.0
Louise, Miss.	2.7	3.3	2.3	3.0	2.7	2.7
St. Joseph, La.	3.0	2.0	1.0	1.0	2.0	3.0
		West				
Curtis, La.	3.0	2.0	1.0	2.0	2.0	2.0
Tishomingo, Okla.	2.0	4.0	1.0	2.0	1.7	2.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 40: (Continued)

Location	D49-588	D49-772	D49-2524	D51-5052	N51-2186	N51-2220
			East Coast			
Accomac, Va.	3.5	3.5	2.5	2.0	3.5	3.0
Norfolk, Va.	3.0	3.5	3.5	3.0	1.0	3.5
Petersburg, Va.	2.5	3.0	1.0	1.0	1.2	1.0
Holland, Va.	4.5	3.3	2.0	2.3	4.3	2.3
Plymouth, N. C.	4.5	5.0	2.5	3.0	4.5	3.0
Willard, N. C.	4.0	4.0	2.5	2.0	3.0	3.0
McCullers, N. C.	3.0	3.0	1.5	1.5	1.5	2.0
Florence, S. C.	1.5	1.5	2.0	1.0	1.0	1.0
			Southeast			
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Charleston, S. C.	2.0	2.5	1.0	1.0	1.0	1.5
Tallassee, Ala.	2.7	2.7	2.3	1.7	2.7	2.0
Camden, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Monticello, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Marianna, Fla.	1.8	2.0	3.0	1.0	1.0	1.0
Quincy, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	2.0	1.0	2.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	2.5	3.3	1.3	1.0	1.3	2.0
Experiment, Ga.	1.0	2.0	1.0	1.0	1.0	1.0
State College, Miss.	1.0	1.0	1.0	1.0	1.0	1.0
			Delta			
Stoneville, Miss. (A)	2.0	2.6	2.0	2.0	2.0	2.0
Louise, Miss.	3.0	3.3	2.7	2.0	3.7	2.7
St. Joseph, La.	3.0	2.0	1.0	1.0	1.0	1.0
			West			
Curtis, La.	2.0	2.0	2.0	1.0	1.0	1.0
Tishomingo, Okla.	2.7	3.0	1.3	1.0	1.7	2.0
Lubbock, Texas	1.0	1.0	1.0	1.0	1.0	1.0

Table 41: Seed quality scores for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867	D49-533
			East Coast			
Accomac, Va.	2.0	2.0	2.0	2.8	2.3	2.8
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	1.0	1.0	3.0	3.0	2.0	2.0
Plymouth, N. C.	2.0	2.0	2.5	2.5	2.5	3.0
Willard, N. C.	2.0	1.5	2.0	1.5	2.0	2.5
McCullers, N. C.	1.5	1.5	2.5	1.5	2.0	2.5
Florence, S. C.	1.5	1.0	1.5	1.0	1.0	2.0
			Southeast			
Blackville, S. C.	1.8	1.8	1.3	2.8	2.7	3.2
Charleston, S. C.	2.6	2.0	2.3	2.7	2.8	2.8
Tallassee, Ala.	2.0	2.0	2.0	2.0	2.0	2.0
Gainesville, Fla.	2.0	1.0	3.0	3.0	2.0	3.0
Monticello, Fla.	1.0	1.0	2.0	1.0	1.0	1.0
Walnut Hill, Fla.	3.0	2.0	2.0	3.0	2.0	2.0
Baton Rouge, La.	1.0	1.0	2.0	2.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	2.5	1.9	2.3	1.8	2.3	2.2
			Delta			
Stoneville, Miss. (A)	2.0	2.0	2.0	2.0	2.0	2.0
Louise, Miss.	1.7	2.0	2.0	3.0	2.0	2.7
St. Joseph, La.	1.0	2.0	1.0	1.0	1.0	2.0
			West			
Curtis, La.	1.0	1.0	1.0	2.0	1.0	2.0
Tishomingo, Okla.	1.7	3.0	1.0	1.7	1.0	2.3
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0

Table 41: (Continued)

Location	D49-588	D49-772	D49-2524	D51-5052	N51-2186	N51-2220
			East Coast			
Accomac, Va.	2.3	2.0	2.8	2.0	2.0	2.3
Petersburg, Va.	1.0	1.0	1.0	1.0	1.0	1.0
Holland, Va.	3.0	2.0	1.0	1.0	1.0	1.0
Plymouth, N. C.	3.0	3.0	2.5	3.0	3.5	3.0
Willard, N. C.	1.5	2.0	1.5	1.5	2.0	2.5
McCullers, N. C.	2.0	2.5	1.5	2.5	2.5	2.5
Florence, S. C.	1.5	1.5	1.0	1.5	1.0	1.5
			Southeast			
Blackville, S. C.	2.8	2.2	2.2	2.5	2.2	2.1
Charleston, S. C.	2.3	2.2	1.8	2.1	1.9	3.1
Tallassee, Ala.	2.0	2.0	2.0	2.0	2.0	2.0
Gainesville, Fla.	1.0	2.0	2.0	2.0	2.0	2.0
Monticello, Fla.	2.0	2.0	1.0	1.0	1.0	2.0
Walnut Hill, Fla.	3.0	2.0	1.0	2.0	2.0	2.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
			Upper and Central South			
Clemson, S. C.	1.8	1.3	1.2	1.8	1.7	1.0
			Delta			
Stoneville, Miss. (A)	2.0	2.0	1.0	2.0	2.0	2.0
Louise, Miss.	2.3	2.3	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	2.0	1.0	1.0	1.0	1.0
			West			
Curtis, La.	2.0	1.0	1.0	1.0	1.0	1.0
Tishomingo, Okla.	1.3	2.0	1.0	1.3	1.3	1.3
Lubbock, Texas	2.0	2.0	2.0	2.0	2.0	2.0

Table 42: Seed weight, in grams per 100 seeds, for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867	D49-533
			East Coast			
Petersburg, Va.	17.5	19.5	19.0	16.5	19.0	15.0
Holland, Va.	16.6	16.0	17.0	16.6	17.6	16.2
Plymouth, N. C.	15.9	15.7	14.4	15.7	14.5	14.7
Willard, N. C.	16.9	15.4	14.8	16.2	14.9	16.2
McCullers, N. C.	18.1	18.3	19.4	17.3	16.2	16.5
Florence, S. C.	14.2	13.4	14.5	13.1	13.1	12.5
Mean	16.5	16.4	16.5	15.9	15.9	15.2
			Southeast			
Blackville, S. C.	15.0	15.2	17.0	16.7	14.9	15.7
Charleston, S. C.	20.0	21.8	22.4	19.1	18.4	18.8
Tallassee, Ala.	16.7	17.5	15.0	17.6	16.7	15.7
Gainesville, Fla.	16.4	16.0	15.9	17.0	15.6	16.2
Monticello, Fla.	18.0	18.0	20.0	18.0	17.0	17.0
Quincy, Fla.	13.2	14.0	13.2	12.9	12.4	11.5
Milton, Fla.	15.1	13.6	14.0	12.5	12.3	11.6
Walnut Hill, Fla.	15.6	15.1	16.3	14.9	14.9	14.1
Mean	16.2	16.4	16.7	16.1	15.3	15.1
			Upper and Central South			
Clemson, S. C.	17.4	19.0	18.0	18.1	17.9	18.2
			Delta			
Stoneville, Miss. (A)	14.6	15.4	15.3	13.0	13.9	12.9
Louise, Miss.	11.5	10.4	10.3	10.9	10.6	11.5
Mean	13.0	12.9	12.8	11.9	12.2	12.2
			West			
Tishomingo, Okla.	15.2	14.5	15.0	15.7	15.6	15.3
Lubbock, Texas	14.5	14.5	14.5	15.0	14.0	14.0
Mean	14.8	14.5	14.8	15.4	14.8	14.6

Table 42: (Continued)

Location	D49-588	D49-772	D49-2524	D51-5052	N51-2186	N51-2220
			East Coast			
Petersburg, Va.	17.5	20.0	15.0	17.0	17.5	19.5
Holland, Va.	16.0	18.0	15.2	16.8	16.2	17.4
Plymouth, N. C.	14.4	16.4	14.3	15.3	14.2	15.2
Willard, N. C.	16.5	16.3	14.1	15.3	15.4	16.2
McCullers, N. C.	15.9	18.7	14.5	19.1	18.8	17.7
Florence, S. C.	14.5	15.7	12.2	12.9	11.4	13.5
Mean	15.8	17.5	14.2	16.1	15.6	16.6
			Southeast			
Blackville, S. C.	16.0	17.3	14.9	16.8	15.4	17.4
Charleston, S. C.	18.3	21.2	16.5	18.1	16.9	18.9
Tallassee, Ala.	16.5	17.4	15.5	16.0	14.9	16.4
Gainesville, Fla.	16.2	16.8	14.5	15.3	17.1	15.1
Monticello, Fla.	17.0	19.0	17.0	17.0	17.0	18.0
Quincy, Fla.	12.9	12.7	12.3	12.0	10.0	11.4
Milton, Fla.	14.1	13.8	10.6	11.6	11.9	13.4
Walnut Hill, Fla.	15.3	16.6	13.7	15.1	15.5	15.9
Mean	15.8	16.8	14.4	15.2	14.8	15.8
			Upper and Central South			
Clemson, S. C.	16.7	20.2	13.0	19.0	18.6	18.7
			Delta			
Stoneville, Miss.	13.1	15.9	12.9	11.9	14.4	14.0
Louise; Miss.	10.1	11.3	10.0	11.2	9.8	10.3
Mean	11.6	13.6	11.4	11.6	12.1	12.2
			West			
Tishomingo, Okla.	14.1	16.5	15.6	14.7	14.9	16.5
Lubbock, Texas	14.0	14.0	12.5	14.0	13.5	13.5
Mean	14.1	15.2	14.0	14.4	14.2	15.0

Table 43: Two-year average yields, in bushels per acre, for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867
		East Coast			
Accomac, Va.	25.3	27.4	26.3	29.8	28.9
Norfolk, Va.	29.0	23.8	24.7	28.1	26.7
Petersburg, Va.	25.4	23.2	25.2	22.8	27.4
Holland, Va.	29.2	21.6	25.5	25.4	30.7
Plymouth, N. C.	35.4	31.4	30.7	33.0	36.2
Willard, N. C.	34.5	29.3	35.6	34.3	35.0
McCullers, N. C.	26.4	27.2	27.8	27.6	28.0
Florence, S. C.	27.5	26.4	30.0	29.4	31.0
Mean	29.1	26.3	28.2	28.8	30.5
		Southeast			
Charleston, S. C.	30.3	22.6	24.3	23.2	30.4
Tallassee, Ala.	46.0	47.4	42.8	43.1	43.2
Tifton, Ga.	14.8	15.0	11.4	14.0	13.8
Gainesville, Fla.	36.2	36.3	27.9	37.4	35.4
Monticello, Fla.	45.4	39.3	36.3	40.4	38.8
Quincy, Fla.	27.5	30.2	27.8	26.8	27.9
Marianna, Fla.	30.8	27.0	27.3	28.2	29.4
Walnut Hill, Fla.	30.0	29.8	33.9	30.0	33.3
Baton Rouge, La.	36.4	31.6	30.0	30.6	29.2
Mean	33.0	31.0	29.1	30.4	31.3
		Upper and Central South			
Clemson, S. C.	24.6	25.5	23.4	26.0	24.4
Experiment, Ga.	27.9	26.8	21.9	27.4	26.2
State College, Miss.	21.2	22.1	23.7	21.6	20.2
Mean	24.6	24.8	23.0	25.0	23.6
		Delta			
Stoneville, Miss.	29.6	27.4	26.9	21.8	22.8
Louise, Miss.	21.1	19.1	20.9	18.8	21.4
St. Joseph, La.	40.2	43.6	43.2	44.6	41.2
Mean	30.3	30.0	30.3	28.4	28.5
		West			
Curtis, La.	25.9	25.6	24.4	28.5	26.7
Lubbock, Texas	15.1	14.9	17.2	14.4	13.9
Mean	20.5	20.2	20.8	21.5	20.3

Table 43: (Continued)

Location	D49-533	D49-588	D49-772	D49-2524
		East Coast		
Accomac, Va.	26.8	24.2	27.9	27.2
Norfolk, Va.	22.5	28.1	25.2	23.4
Petersburg, Va.	23.5	22.2	25.8	30.4
Holland, Va.	28.0	24.5	29.2	29.8
Plymouth, N. C.	30.8	32.9	32.4	38.1
Willard, N. C.	--	--	--	37.0
McCullers, N. C.	25.0	29.0	29.3	30.8
Florence, S. C.	23.2	24.9	29.1	30.4
Mean	25.7	26.5	28.4	30.9
		Southeast		
Charleston, S. C.	30.6	27.2	26.4	21.8
Tallassee, Ala.	39.0	40.6	43.8	39.4
Tifton, Ga.	14.2	21.0	14.0	15.6
Gainesville, Fla.	34.0	33.3	40.6	34.2
Monticello, Fla.	39.6	40.8	43.0	42.4
Quincy, Fla.	24.8	27.2	27.8	29.4
Marianna, Fla.	23.3	25.1	29.4	27.6
Walnut Hill, Fla.	29.1	28.9	29.7	34.4
Baton Rouge, La. 1/	31.7	31.4	29.6	29.7
Mean	29.6	30.6	31.6	30.5
		Upper and Central South		
Clemson, S. C.	24.6	24.8	29.2	25.4
Experiment, Ga.	26.2	30.0	28.4	22.6
State College, Miss.	17.4	19.6	20.0	26.7
Mean	22.7	24.8	25.9	24.9
		Delta		
Stoneville, Miss.	19.4	22.3	24.2	35.7
Louise, Miss.	17.6	17.6	18.2	25.4
St. Joseph, La.	34.8	36.2	45.0	39.4
Mean	23.9	25.4	29.1	33.5
		West		
Curtis, La.	27.4	22.7	19.4	31.4
Lubbock, Texas	14.9	11.4	12.8	16.1
Mean	21.2	17.1	16.1	23.8

Table 44: Two-year average of the oil percentage for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch-soy 31	N48-1574	N48-1867	D49-533	D49-588	D49-772	D49-2524
Petersburg, Va.	20.2	19.4	19.0	19.2	19.2	19.4	18.7	18.2	19.7
McCullers, N. C. 1/	21.0	21.4	19.8	20.6	20.6	20.5	20.4	19.9	21.0
Florence, S. C.	21.2	22.0	20.9	20.9	21.0	21.1	20.4	19.6	20.8
Quincy, Fla.	21.8	22.2	21.1	21.6	21.8	21.4	20.6	20.2	21.6
Walnut Hill, Fla.	20.6	22.0	20.6	21.6	21.2	22.0	21.6	21.3	21.7
Tallassee, Ala. 2/	21.8	22.0	21.6	22.0	22.0	22.0	21.7	21.6	21.8
Baton Rouge, La.	22.6	23.4	22.0	22.6	22.6	23.6	23.0	22.6	22.5
Clemson, S. C.	21.4	22.8	22.1	22.8	22.0	21.9	22.0	20.6	22.0
Stoneville, Miss.	21.3	21.2	20.5	20.6	21.0	20.8	20.8	20.0	20.9
Tishomingo, Okla. 3/	22.8	22.0	21.6	21.5	21.4	22.0	21.7	21.2	22.8
Mean	21.5	21.8	20.9	21.3	21.3	21.5	21.1	20.5	21.5

1/ 1952 data from McCullers, N. C., 1953 data from Willard, N. C.

2/ 1952 data from Fairhope, Ala., 1953 data from Tallassee, Ala.

3/ 1952 data from Curtis, La., 1953 data from Tishomingo, Okla.

Table 45: Three-year average yield in bushels per acre for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867
		East Coast			
Petersburg, Va.	23.9	32.0	26.4	24.8	29.7
Holland, Va.	32.1	25.8	25.7	28.5	33.0
Plymouth, N. C.	35.4	30.8	29.2	31.6	35.8
Willard, N. C.	37.8	34.7	36.0	36.7	36.5
McCullers, N. C.	26.7	26.5	28.3	27.1	28.2
Florence, S. C.	30.9	28.2	31.1	30.3	31.9
Mean	31.1	29.7	29.4	29.8	32.5
		Southeast			
Tallassee, Ala.	42.6	45.1	42.4	42.9	43.2
Tifton, Ga.	15.7	13.4	11.5	14.1	13.9
Monticello, Fla.	38.3	32.2	30.2	33.6	32.7
Marianna, Fla.	25.7	27.6	22.3	23.1	23.1
Walnut Hill, Fla.	32.4	30.9	33.7	32.6	34.9
Baton Rouge, La.	31.3	30.0	27.2	29.4	26.7
Mean	31.0	29.9	27.9	29.3	29.1
		Upper and Central South			
Clemson, S. C.	24.8	24.7	22.7	24.1	23.5
Experiment, Ga.	25.4	24.1	22.7	25.2	25.0
State College, Miss.	23.0	22.5	23.1	21.5	21.7
Mean	24.4	23.8	22.8	23.6	23.4
		Delta			
Stoneville, Miss.	31.6	28.1	27.4	26.8	25.6
Louise, Miss.	27.7	26.8	22.1	25.9	25.0
St. Joseph, La.	39.4	40.8	36.8	43.5	38.0
Mean	32.9	31.9	28.8	32.1	29.5
		West			
Curtis, La.	33.1	29.4	28.8	35.1	33.3
Lubbock, Texas	16.3	17.6	18.3	15.3	14.9
Mean	24.7	23.5	23.6	25.2	24.1

Table 46: Three-year average oil percentage for the strains in Uniform Group VII, 1953

Location	Jackson	Roanoke	Dortch. 31	N48-1574	N48-1867
Petersburg, Va.	20.4	19.8	19.4	19.5	19.7
McCullers, N. C. 1/	20.9	21.3	20.0	20.6	20.8
Florence, S. C.	21.3	21.9	20.8	21.0	21.0
Quincy, Fla.	22.3	22.3	21.2	22.0	22.0
Walnut Hill, Fla.	20.9	22.3	20.9	21.9	21.7
Fairhope, Ala. 2/	22.3	22.3	21.8	22.2	22.4
Baton Rouge, La.	22.8	23.3	21.9	22.7	22.5
Clemson, S. C.	21.5	22.4	21.5	22.1	21.2
Stoneville, Miss.	21.2	21.3	19.7	20.6	21.1
Tishomingo, Okla. 3/	22.2	21.9	21.0	21.2	21.3
Mean	21.6	21.9	20.8	21.4	21.4

1/1953 data from Willard, N. C.

2/1953 data from Tallassee, Ala.

3/1951 data from Stuttgart, Ark., 1952 data from Curtis, La.

Table 47: Four-year average yield, in bushels per acre, and oil percentage for the strains in Uniform Group VII, 1953

Location	YIELD			OIL PERCENTAGE		
	Jackson	Roanoke	Dortch. 31	Jackson	Roanoke	Dortch. 31
East Coast						
Petersburg, Va.	29.1	30.8	32.3	20.4	20.0	19.6
Holland, Va.	35.5	29.5	30.0			
Plymouth, N. C.	36.0	33.0	30.6			
Willard, N. C.	38.9	34.7	36.6			
McCullers, N. C.	30.0	29.4	31.8	20.8	21.3	20.0
Florence, S. C.	32.6	29.8	32.6	21.1	21.6	20.7
Mean	33.9	31.2	32.3			
Southeast						
Tallassee, Ala.	40.7	40.7	39.3	22.9	22.9	22.4
Tifton, Ga.	15.2	15.1	12.4			
Monticello, Fla.	33.7	28.7	28.3			
Marianna, Fla.	26.1	23.8	23.1			
Walnut Hill, Fla.	36.3	35.9	38.5	21.3	22.5	21.3
Baton Rouge, La.	29.4	28.1	26.1	22.9	23.2	22.0
Mean	30.2	28.7	27.9			
Upper and Central South						
Clemson, S. C.	25.9	25.5	23.4	21.3	22.3	21.4
Experiment, Ga.	25.8	24.6	23.9			
State College, Miss.	23.9	23.6	24.4			
Mean	25.2	24.6	23.9			
Delta						
Stoneville, Miss.	36.0	31.6	26.6	21.4	21.4	19.8
Louise, Miss.	33.3	30.9	24.6			
St. Joseph, La.	35.2	36.2	31.9			
Curtis, La.	34.7	32.0	30.1	22.0	21.8	20.7
Mean	34.8	32.7	28.3	21.6	21.9	20.9

Table 48: Six-year summary of yield, in bushels per acre, and oil percentage for the strains in Uniform Group VII, 1953

Location	YIELD		OIL PERCENTAGE	
	Roanoke	Dortchsoy 31	Roanoke	Dortchsoy 31
		East Coast		
Petersburg, Va.	33.7	35.1	20.2	19.7
Holland, Va.	33.7	35.0		
Plymouth, N. C.	32.3	29.3		
Willard, N. C.	34.7	34.4		
McCullers, N. C.	28.2	30.2	21.5	20.4
Florence, S. C.	31.6	32.8	21.9	20.7
Mean	32.4	32.8		
		Southeast		
Tallassee, Ala.	38.4	36.7	22.4	21.6
Tifton, Ga.	16.4	15.2		
Baton Rouge, La.	26.6	27.8	23.1	21.8
Mean	27.1	26.6		
		Upper and Central South		
Clemson, S. C.	26.7	24.5	22.0	21.0
State College, Miss.	25.8	24.4		
Mean	26.3	24.5		
		Delta		
Stoneville, Miss.	32.3	26.3	21.6	19.8
St. Joseph, La.	35.0	27.8		
Curtis, La.	29.2	28.5	21.5	20.4
Mean	32.2	27.5	21.8	20.7

PRELIMINARY GROUP VII

1953

Thirty-four new strains along with Roanoke and Jackson were planted at seven locations in 1953. Plantings at McNeil, Mississippi, and Stoneville, Mississippi, on a sandy loam soil were not harvested because of incomplete stands. However, general agronomic data were taken from these plantings. The parentage of the 34 lines is given in table 49; yield performance in table 50; oil percentage in table 51; and a general summary of their performance is given in table 52.

Yield data are variable because of drouth effects and differences needed for significance are large. Twenty-four of the lines carry resistance to bacterial pustule. Several of these also are highly resistant to target spot. Some of the better lines from this test will replace lines in Group VII for 1954.

Table 49: Parentage of the strains in Preliminary Group VII, 1953

Strain	Parent Line	Generation Composited	Parentage
Roanoke			
N47-3479	N46-2881	F_4	Volstate/Vol. x Palmetto
N50-2217	N47-2981	F_6	Volstate x Mamotan 6640
N50-2264	N47-2981	F_6	Volstate x Mamotan 6640
N50-2336	N45-3799	F_9	Ogden x Palmetto
N51-1881	N47-3545	F_8	Volstate/Vol. x Palmetto
N51-1949	N47-3545	F_8	Volstate/Vol. x Palmetto
N51-2180	N48-1574	F_6	Roanoke x N45-745
N51-2204	N48-1867	F_6	Roanoke x N45-745
N51-2242	N48-1581	F_6	Roanoke x N45-745
N51-2292	N48-2048	F_6	Roanoke x N45-745
N51-2453	N48-3379	F_6	N42-26 x N45-745
N51-2638	N48-4177	F_6	N42-26 x N45-1004
N51-2691	N48-4372	F_6	N42-26 x N45-1004
N49-1998	N46-1737	F_6	Volstate x Ogden
N51-3515	N47-3479	F_8	Volstate/Vol. x Palmetto
N51-3527	N47-3479	F_8	Volstate/Vol. x Palmetto
N50-2542	N45-2176	F_8	Ogden x Biloxi
D51-4838	N48-1217	F_6	Roanoke x N45-745
D51-4850	N48-1348	F_6	Roanoke x N45-745
D51-4877	N48-1597	F_6	Roanoke x N45-745
D51-4924	D49-537	F_6	Roanoke x N45-745
D51-5019	D49-1051	F_6	Roanoke x N45-745
D51-5025	D49-1066	F_6	Roanoke x N45-745
D51-5034	N48-1289	F_6	Roanoke x N45-745
D51-5036	N48-1515	F_6	Roanoke x N45-745
D51-5048	N48-1835	F_6	Roanoke x N45-745
D51-5067	D49-533	F_6	Roanoke x N45-745
D51-5080	D49-577	F_6	Roanoke x N45-745
D51-5089	D49-588	F_6	Roanoke x N45-745
D51-5108	D49-772	F_6	Roanoke x N45-745
D51-5181	D49-1766	F_5	Ogden x Tanner
D51-5091	D49-643	F_6	Roanoke x N45-745
D51-5044	N48-1574	F_6	Roanoke x N45-745
D51-5081	D49-586	F_6	Roanoke x N45-745
D51-5128	D49-931	F_6	Roanoke x N45-745

Table 50: Yield, in bushels per acre, for the strains grown in Preliminary Group VII, 1953

Strain	Stoneville, Miss.	Louise, Miss.	Tallassee, Ala.	Willard, N.C.	McCullers, N.C.	Mean
Roanoke	32.7	20.5	45.7	43.0	14.1	31.2
Jackson	37.8	20.9	49.8	37.4	18.9	33.0
N50-2217	30.7	22.4	47.4	36.5	17.3	30.9
N50-2264	32.4	21.9	47.8	28.7-	12.1-	28.6
N50-2336	33.8	20.6	38.8	24.8-	14.6	26.5
N51-1881	18.6	25.1	46.8	34.5	14.9	28.0
N51-1949	34.7	24.6	42.3	39.5	16.1	31.4
N51-2180	34.3	22.8	50.6	31.9-	16.1	31.1
N51-2204	35.3	25.6	42.3	40.0	18.5	32.3
N51-2242	34.2	26.5	37.5	28.1-	12.7-	27.8
N51-2292	29.6	19.8	45.4	41.1	16.0	30.4
N51-2453	35.4	20.4	37.8	34.5	21.6	29.9
N51-2638	23.4	22.0	43.0	36.8	17.4	28.5
N51-2691	32.4	23.0	42.6	30.7-	17.4	29.2
N49-1998	27.4	21.0	41.0	34.4	19.4	28.6
N51-3515	27.5	22.2	42.2	37.9	13.8	28.7
N51-3527	25.4	25.0	47.8	39.5	20.7	31.7
N50-2542	27.8	25.9	41.9	31.4-	18.3	29.1
D51-4838	29.8	22.7	37.8	39.5	18.4	29.6
D51-4850	24.4	13.2	37.1	33.2-	16.6	24.9
D51-4877	30.1	32.6+	39.6	48.8+	17.4	33.7
D51-4924	23.8	23.0	45.4	39.2	19.2	30.1
D51-5019	28.0	21.9	48.2	38.5	17.4	30.8
D51-5025	31.6	15.0	44.0	39.6	21.7	30.4
D51-5034	38.0	25.6	44.0	43.5	20.5	34.3
D51-5036	31.8	17.4	34.0	32.2-	16.7	26.4
D51-5048	22.5	22.4	37.2	48.5+	20.7	30.3
D51-5067	16.6	24.4	39.9	29.6-	19.1	25.9
D51-5080	31.3	20.2	41.6	34.2	18.7	29.2
D51-5089	30.2	19.0	47.1	39.3	20.2	31.2
D51-5108	27.8	19.7	47.4	31.1-	17.8	28.8
D51-5181	16.8	10.7	35.4	30.0-	16.9	22.0-
D51-5091	34.6	24.0	45.7	39.8	17.8	32.4
D51-5044	35.5	24.8	41.3	38.9	18.6	31.8
D51-5081	31.0	20.6	41.2	33.9	17.2	28.8
D51-5128	31.8	19.0	45.4	36.2	22.0	30.9
L.S.D. (5%)	N.S.	7.9	N.S.	9.3	5.5	8.8
C.V.	23%	18%	16%	13%	15%	15%

Table 51: Oil percentage of the strains grown in Preliminary Group VII, 1953

Strain	Stoneville, Miss.	Tallassee, Ala.	Willard, N.C.	Mean
Roanoke	22.8	22.5	21.4	22.2
Jackson	23.0	21.2	21.7	22.0
N40-2217	20.8	21.9	20.8	21.2
N50-2264	22.2	23.4	21.7	22.4
N50-2336	22.5	22.3	20.9	21.9
N51-1881	23.9	24.3	23.3	23.8
N51-1949	23.6	22.7	22.8	23.0
N51-2180	23.7	21.2	22.5	22.5
N51-2204	22.1	21.0	21.0	21.4
N51-2242	22.5	23.2	21.7	22.5
N51-2292	22.3	22.2	21.3	21.9
N51-2453	21.5	22.2	21.9	21.9
N51-2638	21.4	21.8	22.0	21.7
N51-2691	21.8	21.0	21.4	21.4
N49-1998	21.1	21.9	21.5	21.5
N51-3515	22.7	22.2	22.8	22.6
N51-3527	22.4	23.3	22.6	22.8
N50-2542	21.5	22.1	20.9	21.5
D51-4838	21.4	20.5	19.9	20.6
D51-4850	21.1	21.6	22.2	21.6
D51-4877	21.5	21.2	20.7	21.1
D51-4924	21.2	20.8	22.0	21.3
D51-5019	21.4	20.3	20.6	20.8
D51-5025	22.4	22.6	22.4	22.5
D51-5034	22.6	21.1	22.2	22.0
D51-5036	23.0	22.1	22.3	22.5
D51-5048	21.8	22.1	22.1	22.0
D51-5067	21.9	22.4	20.8	21.7
D51-5080	22.3	22.8	21.4	22.2
D51-5089	22.0	21.5	21.3	21.6
D51-5108	21.4	21.0	20.6	21.0
D51-5181	19.4	20.3	20.1	19.9
D51-5091	22.5	21.3	20.4	21.4
D51-5044	22.3	21.7	21.1	21.7
D51-5081	21.7	22.0	21.1	21.6
D51-5128	22.6	22.3	21.6	22.2
L.S.D. (5%)				0.9
C.V.				3%

Table 52: General summary of performance of strains grown in Preliminary Group VII, 1953

Strain	Seed Yield	% Oil	Matur. Index	Height	Shatter-ing	Bacterial Pustule	Target Spot	Leaf Cercospora
Roanoke	31.2	22.2	10-22	40	0.6	S	2.5	2.5
Jackson	33.0	22.0	+3	43	0.7	S	1.0	1.5
N50-2217	30.9	21.2	0	44	1.1	S	2.0	1.5
N50-2264	28.6	22.4	-13	35	3.0	S	3.0	4.0
N50-2336	26.5	21.9	-10	40	3.4	S	1.5	3.0
N51-1881	28.0	23.8	-1	42	1.7	S	2.5	2.5
N51-1949	31.4	23.0	-1	42	2.0	S	3.0	2.5
N51-2180	31.1	22.5	-1	40	1.5	R	2.5	2.0
N51-2204	32.3	21.4	-2	31	1.2	R	2.0	2.0
N51-2242	27.8	22.5	-14	35	3.5	R	3.5	4.0
N51-2292	30.4	21.9	-1	41	1.5	R	3.5	1.5
N51-2453	29.9	21.9	-2	33	2.0	R	2.0	2.5
N51-2638	28.5	21.7	-2	36	1.2	R	2.0	3.0
N51-2691	29.2	21.4	-2	41	1.5	R	2.0	2.5
N49-1998	28.6	21.5	-4	34	2.0	S	1.5	4.0
N51-3515	28.7	22.6	+1	42	1.2	S	1.0	1.0
N51-3527	31.7	22.8	+2	41	1.4	S	2.0	1.5
N50-2542	29.1	21.5	+2	35	1.2	S	2.5	2.0
D51-4838	29.6	20.6	-2	30	0.8	R	1.5	1.5
D51-4850	24.9	21.6	-2	39	3.0	R	1.0	2.5
D51-4877	33.7	21.1	-1	31	1.2	R	2.5	1.0
D51-4924	30.1	21.3	-3	40	1.0	R	2.0	2.5
D51-5019	30.8	20.8	-1	38	1.0	R	2.0	2.5
D51-5025	30.4	22.5	0	34	1.5	R	1.0	2.0
D51-5034	34.3	22.0	-3	32	2.5	R	4.0	1.5
D51-5036	26.4	22.5	0	41	1.6	R	1.5	1.5
D51-5048	30.3	22.0	-1	31	2.0	R	3.5	2.5
D51-5067	25.9	21.7	-2	42	1.0	R	1.0	2.0
D51-5080	29.2	22.2	-2	40	1.2	R	1.0	2.5
D51-5089	31.2	21.6	-1	48	2.5	R	1.5	2.5
D51-5108	28.8	21.0	-2	40	1.5	R	1.0	1.5
D51-5181	22.0	19.9	-6	37	4.5	S	-	3.5
D51-5091	32.4	21.4	+1	46	0.5	R	1.0	1.0
D51-5044	31.8	21.7	0	42	1.7	R	1.5	1.0
D51-5081	28.8	21.6	-1	34	1.6	R	2.5	2.0
D51-5128	30.9	22.2	0	44	1.5	R	2.0	1.0

UNIFORM GROUP VIII

1953

Strain or Variety	Source or Originating Agency	Origin
Improved Pelican	Louisiana A.E.S.	Sel. from Tanloxi x P.I. 60406
J.E.W. 45	J. E. Wannamaker St. Matthews, S. C.	Sel. from mixed seed lot
Majos	Coker Pedigreed Seed Co. Hartsville, S. C.	Sel. from Tokio x Yelredo
Mamotan 6640	Delta Branch A.E.S.	Sel. from Mammoth Yellow x Otootan
Mamotan 6680	Delta Branch A.E.S.	same
Woods Yellow #1	Farmer selection	Sel. from Woods Yellow
N46-2652	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Volstate x Palmetto
N47-3332	N. Car. A.E.S. & U.S.R.S.L.	same
Jackson	N. Car. A.E.S. & U.S.R.S.L.	Sel. from Volstate (2) x Palmetto
La. 49-89-6	Louisiana A.E.S.	Sel. from La. 40-242
La. 51-34-5	La. A.E.S. & U.S.R.S.L.	Sel. from F.C. 31592 x Acadian
La. 51-7-4	La. A.E.S. & U.S.R.S.L.	Sel. from Roanoke x F.C. 31592

Eleven Group VIII nurseries were planted. Results from nine of these nurseries are summarized in tables 53 through 61. Yields were reduced and maturity delayed in several of these nurseries by a severe infestation of the green stink bug, Nizara hilaris. This insect punctures the young seed in the pod and when there are a sufficient number of punctures, the seed fails to develop. Whenever a large percentage of the pods are destroyed, the plants retain their leaves and the stems remain green well past the time of normal maturity.

Yield level in most of these tests was too low to establish differences in performance of these strains. Jackson, included as a check in Groups VII and VIII had an average yield slightly above that for the three named varieties, Improved Pelican, J.E.W. 45, and Majos. Mamotan 6640 has the highest 3-year average yield, followed by Woods Yellow #1. Both of these strains are among the earliest in the test and were favored at several locations in 1952 by an early frost. Woods Yellow #1 is very susceptible to shattering. Of the strains tested for a two- or three-year period in addition to the three named varieties, only Mamotan 6640 appears to justify further testing.

The three varieties, Improved Pelican, J.E.W. 45, and Majos, have now been tested for five years. Five-year data is available for only four locations, Experiment, Georgia; Walnut Hill, Florida; Baton Rouge, Louisiana; and Curtis, Louisiana. In these tests, Improved Pelican has a distinct yield advantage in the Louisiana plantings, while J.E.W. 45 and Majos have yielded above Improved Pelican in the Georgia and Florida plantings.

Table 53: Yield data, in bushels per acre, for the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J. E. W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1
Experiment, Ga.	18.0	20.9	23.6	21.1	18.7	28.7+
Tifton, Ga.1/	4.0	2.2	16.0	3.8	7.2	4.8
Gainesville, Fla.	24.6	43.7+	23.2	30.8	28.9	32.4+
Quincy, Fla.	12.8	14.4	21.0+	21.8+	17.6	17.1
Milton, Fla.	15.1	24.7+	23.9+	24.2+	21.3+	22.8+
Walnut Hill, Fla.	15.3	20.1	19.3	19.1	18.6	23.6+
Baton Rouge, La.	28.3	23.9	26.4	23.9	23.1	24.1
Curtis, La.	23.9	19.7	29.8	34.7	23.9	31.1
Mean	19.7	23.9	23.9	25.1	21.7	25.9

1/Not included in mean. Pods severely damaged by green stink bugs.

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

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

Table 53: (Continued)

Location	N46-2652	N47-332	Jackson	La. 49-89-6	La. 51-5	La. 51-7-4	L.S.D. (5%)	C.V.
Experiment, Ga.	21.3	19.2	24.0	15.9	22.4	18.2	6.2	19%
Tifton, Ga.[1]	2.5	17.5	9.7	6.2	.8	4.6		
Gainesville, Fla.	30.1	25.4	26.8	22.0	34.3+	26.5	7.1	14%
Quincy, Fla.	15.4	17.7+	20.7+	12.9	21.4+	14.6	4.9	17%
Milton, Fla.	20.2+	22.8+	22.3+	13.5	24.7+	14.6	4.3	12%
Walnut Hill, Fla.	19.3	19.3	24.4+	10.5	18.9	7.6-	5.4	18%
Baton Rouge, La.	27.2	27.2	29.0	23.3	27.5	25.2	N.S.	16%
Curtis, La.	20.7	30.6	31.1	12.7	30.3	28.0		
Mean	22.0	23.2	25.5	15.8	25.6	19.2		

Table 54: Chemical composition of the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J.E.W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1
			OIL PERCENTAGE			
Experiment, Ga.	23.2	20.7	20.3	21.5	19.3	21.3
Quincy, Fla.	18.6	19.2	19.6	19.3	18.6	19.8
Walnut Hill, Fla.	19.8	18.2	18.0	16.8	17.0	18.9
Baton Rouge, La.	24.5	22.0	22.2	22.2	21.9	24.2
Mean	21.5	20.0	20.0	19.9	19.2	21.1
			PROTEIN PERCENTAGE			
Experiment, Ga.	34.2	38.2	37.6	37.2	40.2	38.7
Quincy, Fla.	42.6	43.2	40.4	43.3	43.7	41.4
Walnut Hill, Fla.	43.4	41.9	40.5	41.3	43.6	39.6
Baton Rouge, La.	37.2	38.3	36.9	37.5	38.7	37.0
Mean	39.4	40.4	38.8	39.8	41.6	39.2

Table 54: (Continued)

Location	N46-2652	N47-3332	Jackson	La. 49-89-6	La. 51--34-5	La. 51-7-4
			OIL PERCENTAGE			
Experiment, Ga.	21.2	21.4	22.9	20.4	21.5	22.6
Quincy, Fla.	19.1	20.0	21.2	18.3	21.0	19.6
Walnut Hill, Fla.	18.9	20.7	19.1	16.3	18.8	15.5
Baton Rouge, La.	21.9	23.0	22.7	21.4	23.2	23.8
Mean	20.3	21.3	19.7	19.1	21.1	20.4
			PROTEIN PERCENTAGE			
Experiment, Ga.	36.7	38.4	38.4	39.4	36.4	35.3
Quincy, Fla.	44.4	44.3	42.1	46.5	41.4	41.1
Walnut Hill, Fla.	42.1	40.9	40.7	46.0	40.7	41.5
Baton Rouge, La.	40.5	41.3	36.8	39.4	38.3	37.6
Mean	40.9	41.2	39.5	42.8	39.2	38.9

Table 55: Maturity data, days earlier (-) or later (+) than Improved Pelican for the strains in Uniform Group VIII, 1953

Location	Date Planted	Imp. Pelican Matured	J. E. W. 45	Majos	Mamotan 6640	Mamotan 6680
Hartsville, S. C.	6-13	11-14	-10	-1	-6	-11
Experiment, Ga.	5-13	11-2	+2	-2	-5	-2
Tifton, Ga.1/	6-10	12-8	-13	-13	0	-6
Gainesville, Fla.	6-13	11-9	-16	+1	-6	-8
Quincy, Fla.	6-9	10-26	0	0	0	0
Walnut Hill, Fla.	6-17	11-17	-5	-3	-6	-8
Baton Rouge, La.	6-9	10-28	-19	-1	-3	-17
Curtis, La.	6-10	11-3	-4	0	0	0
Mean			-8	-1	-4	-7

1/Not included in mean. Maturity delayed because of stink bug injury.

Table 55: (Continued)

Location	W. Yellow #1	N46-2652	N47-3332	Jackson	La. 49-89-6	La. 51 34-5	La. 51-7-4
Hartsville, S. C.	-6	-17	-16	-12	-5	-2	0
Experiment, Ga.	-4	-3	-6	-5	-3	-2	+1
Tifton, Ga.[1]	-6	0	-13	-13	-6	0	0
Gainesville, Fla.	-4	-11	-16	-15	+1	-7	-1
Quincy, Fla.	0	-7	-7	-2	0	0	0
Walnut Hill, Fla.	-9	-8	-10	-7	-6	-4	-7
Baton Rouge, La.	-16	-16	-18	-13	-4	-4	-3
Curtis, La.	0	-10	-5	-5	0	0	0
Mean	-6	-10	-11	-8	-2	-2	-1

Table 56: Height data for the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J. E. W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1
Hartsville, S. C.	34	26	23	19	30	24
Experiment, Ga.	59	45	40	34	47	37
Tifton, Ga.	49	24	32	22	36	24
Gainesville, Fla.	31	27	27	27	35	26
Quincy, Fla.	51	33	35	33	41	30
Milton, Fla.	53	36	34	33	45	33
Walnut Hill, Fla.	57	32	34	36	48	36
Baton Rouge, La.	65	27	32	27	35	28
Curtis, La.	64	30	33	37	42	36
Mean	51	31	32	30	40	30

Location	N46-2652	N47-3332	Jackson.	La. 49-89-6	La. 51-34-5	La. 51-7-4
Hartsville, S. C.	38	28	22	30	24	34
Experiment, Ga.	58	43	45	48	39	48
Tifton, Ga.	48	39	27	40	21	32
Gainesville, Fla.	33	34	22	35	27	32
Quincy, Fla.	42	43	29	46	32	44
Milton, Fla.	49	47	34	45	36	40
Walnut Hill, Fla.	41	46	34	51	37	43
Baton Rouge, La.	48	42	35	55	34	38
Curtis, La.	57	56	38	45	28	34
Mean	46	42	32	44	31	38

Table 57: Lodging scores for the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J. E. W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1
Hartsville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	2.0	3.0	1.0	1.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.0	1.0	1.0
Quincy, Fla.	3.0	1.0	1.0	1.0	1.0	1.0
Milton, Fla.	2.0	1.0	1.0	1.0	1.0	1.0
Baton Rouge, La.	3.0	2.0	3.0	2.0	2.0	1.0
Curtis, La.	4.0	2.0	3.0	2.0	2.0	1.0

Location	N46-2652	N47-3332	Jackson	La. 49-89-6	La. 51-34-5	La. 51-7-4
Hartsville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Experiment, Ga.	3.0	1.0	1.0	2.0	1.0	1.0
Gainesville, Fla.	1.0	1.0	1.0	1.3	1.0	1.7
Quincy, Fla.	2.0	1.0	1.0	1.0	1.0	2.0
Milton, Fla.	2.0	2.0	1.0	2.0	1.0	1.0
Baton Rouge, La.	3.0	3.0	1.0	3.0	2.0	2.0
Curtis, La.	3.0	3.0	2.0	3.0	2.0	2.0

Table 58: Seed quality scores for the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J. E. W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1
Experiment, Ga.	1.0	1.0	1.0	2.0	1.0	1.0
Gainesville, Fla.	3.0	2.0	2.0	2.0	2.0	2.0
Quincy, Fla.	5.0	2.0	3.0	3.0	4.0	3.0
Walnut Hill, Fla.	2.0	3.0	2.0	3.0	3.0	3.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
Curtis, La.	1.0	2.0	1.0	1.0	1.0	1.0

Location	N46-2652	N47-3332	Jackson	La. 49-89-6	La. 51-34-5	La. 51-7-4
Experiment, Ga.	1.0	2.0	1.0	2.0	1.0	1.0
Gainesville, Fla.	3.0	1.0	2.0	2.0	2.0	2.0
Quincy, Fla.	3.0	3.0	3.0	3.0	3.0	4.0
Walnut Hill, Fla.	2.0	2.0	3.0	3.0	3.0	4.0
Baton Rouge, La.	1.0	1.0	1.0	1.0	1.0	1.0
Curtis, La.	1.0	1.0	1.0	1.0	1.0	1.0

Table 59: Seed weight, in grams per 100 seeds, for the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J.E.W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1
Experiment, Ga.	11.7	21.4	22.6	20.0	15.0	21.6
Gainesville, Fla.	12.9	18.1	19.7	18.8	14.5	18.0
Quincy, Fla.	12.5	18.3	23.2	17.7	14.0	16.0
Milton, Fla.	10.9	18.3	18.6	17.4	14.4	15.2
Walnut Hill, Fla.	14.7	18.2	20.5	19.2	14.3	18.4
Mean	12.5	18.9	20.9	18.6	14.4	17.8

Location	N46-2652	N47-3332	Jackson	La. 49-89-6	La. 51-34-5	La. 51-7-4
Experiment, Ga.	15.2	13.9	19.1	15.7	23.6	15.5
Gainesville, Fla.	16.4	17.4	16.5	16.4	21.3	17.2
Quincy, Fla.	13.4	15.4	16.5	17.3	23.5	15.7
Milton, Fla.	13.2	14.7	12.8	15.7	19.8	14.8
Walnut Hill, Fla.	16.5	15.3	13.9	15.9	16.4	11.6
Mean	14.9	15.3	15.8	16.2	20.9	15.0

Table 60: Two-year average of yield, in bushels per acre, and oil percentage for the strains in Uniform Group VIII, 1953

Location	Improved Pelican	J. E. W. 45	Majos	Mamotan 6640	Mamotan 6680	W. Yellow #1	N46-2652	N47-3332
				YIELD				
Experiment, Ga.	21.3	25.3	24.8	24.0	20.7	30.0	23.3	23.2
Gainesville, Fla.	30.7	38.8	32.2	38.6	35.9	37.3	31.2	28.6
Quincy, Fla.	19.3	23.1	24.3	29.0	23.6	22.7	20.3	20.8
Walnut Hill, Fla.	22.3	26.8	27.2	28.3	26.3	29.7	26.6	26.9
Baton Rouge, La.	26.6	23.7	19.0	29.3	24.1	25.0	24.3	25.7
Curtis, La.	22.3	22.8	23.6	31.6	22.0	19,0	23.3	28.6
Mean	23.8	26.8	25.2	30.1	25.4	27.3	24.8	25.6
				OIL PERCENTAGE				
Experiment, Ga.1/	21.8	20.9	21.5	21.5	19.6	22.3	21.6	22.2
Quincy, Fla.	20.2	20.3	20.1	20.3	19.4	20.7	20.3	21.7
Walnut Hill, Fla.	19.7	18.9	18.6	19.1	17.8	19.6	20.2	21.3
Baton Rouge, La.	23.6	21.4	21.2	21.5	21,2	22.9	22.2	23.6
Mean	21.3	20.4	20.4	20.6	19.5	21.4	21.1	22.2

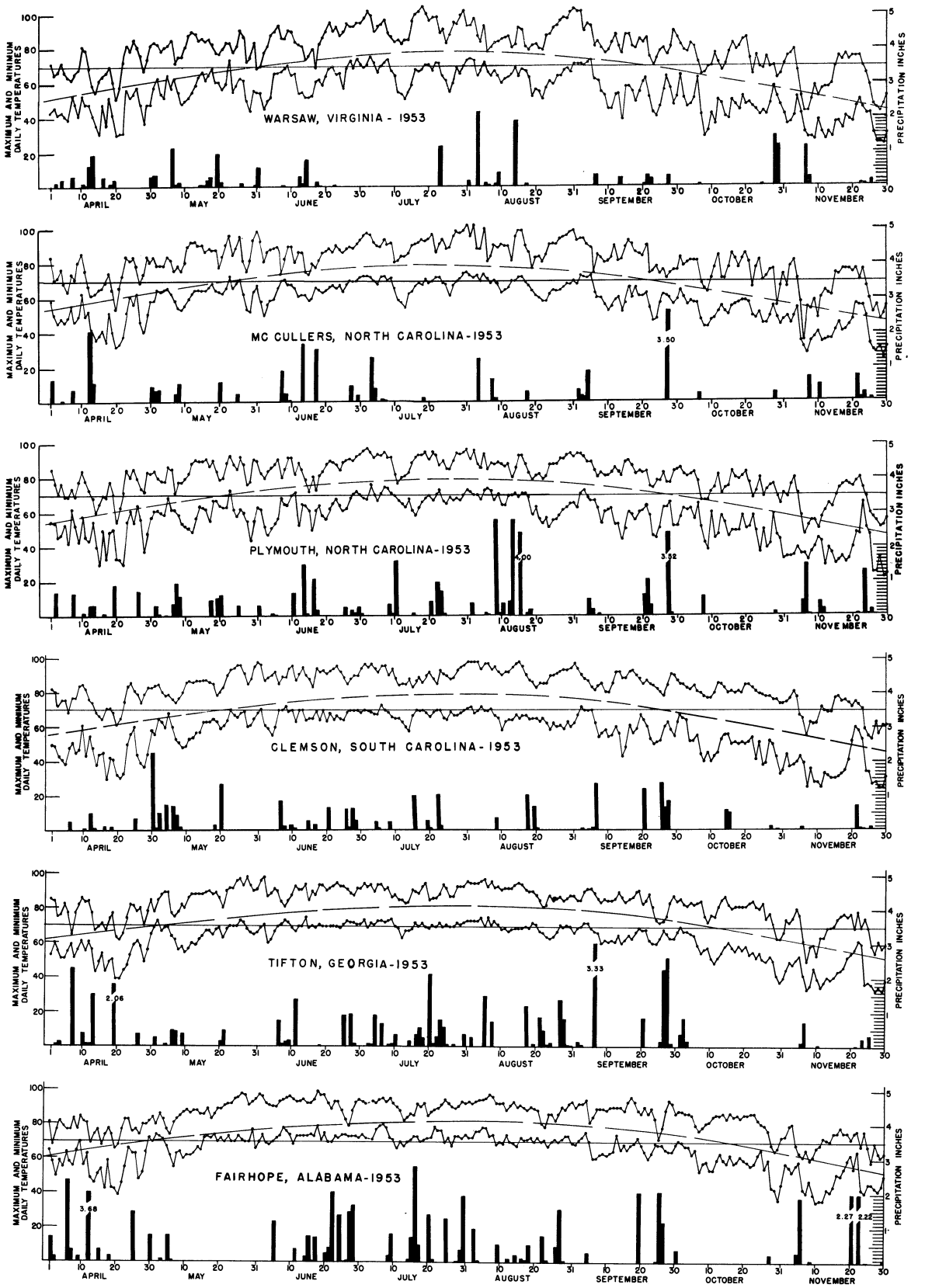
1/1952 data from Tifton, Georgia.

Table 61: Three-year and five-year averages of the yield, in bushels per acre, and oil percentage for the strains in Uniform Group VIII, 1953

Location	Three-Year Averages						
	Improved Pelican	J. E. W. 45	Majos	M'tan 6640	M'tan 6680	W. Yel. #1	N46-2652
			Yield				
Experiment, Ga.	19.9	23.7	24.0	22.9	17.0	28.0	20.9
Quincy, Fla.	21.1	27.2	25.8	--	25.1	25.8	22.9
Walnut Hill, Fla.	24.6	29.9	29.6	29.6	27.2	30.7	28.2
Baton Rouge, La.	28.4	25.4	21.9	29.3	25.6	26.2	25.9
Curtis, La.	27.5	25.8	24.6	32.3	25.3	23.7	26.6
Mean	24.3	26.4	25.2	28.5	24.0	26.9	24.9
			Oil Percentage				
Tifton, Ga.1/	21.4	21.2	21.6	21.4	19.3	22.3	21.4
Quincy, Fla.	20.5	20.3	20.3	--	19.3	20.9	20.0
Walnut Hill, Fla.	20.3	19.3	19.1	19.3	19.3	19.9	20.6
Baton Rouge, La.	23.0	21.3	21.4	21.6	21.2	22.9	22.1
Mean	21.3	20.5	20.6	20.8	19.8	21.5	21.0

1/1953 data from Experiment, Georgia

Location	Five-Year Averages		
	Improved Pelican	J. E. W. 45	Majos
	Yield		
Experiment, Ga.	19.9	25.5	24.7
Walnut Hill, Fla.	28.0	32.7	33.2
Baton Rouge, La.	29.3	25.0	23.7
Curtis, La.	27.8	23.8	21.4
Mean	26.3	26.8	25.8
	Oil Percentage		
Walnut Hill, Fla.	20.2	19.8	19.5
Baton Rouge, La.	22.6	21.2	22.1
Mean	21.4	20.5	20.8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PLYMOUTH, NORTH CAROLINA-1953
4.00
3.92
CLEMSON, SOUTH CAROLINA-1953
TIFTON, GEORGIA-1953
2.06
3.33
FAIRHOPE, ALABAMA-1953
3.68
2.27
2.22
MAXIMUM AND MINIMUM DAILY TEMPERATURES
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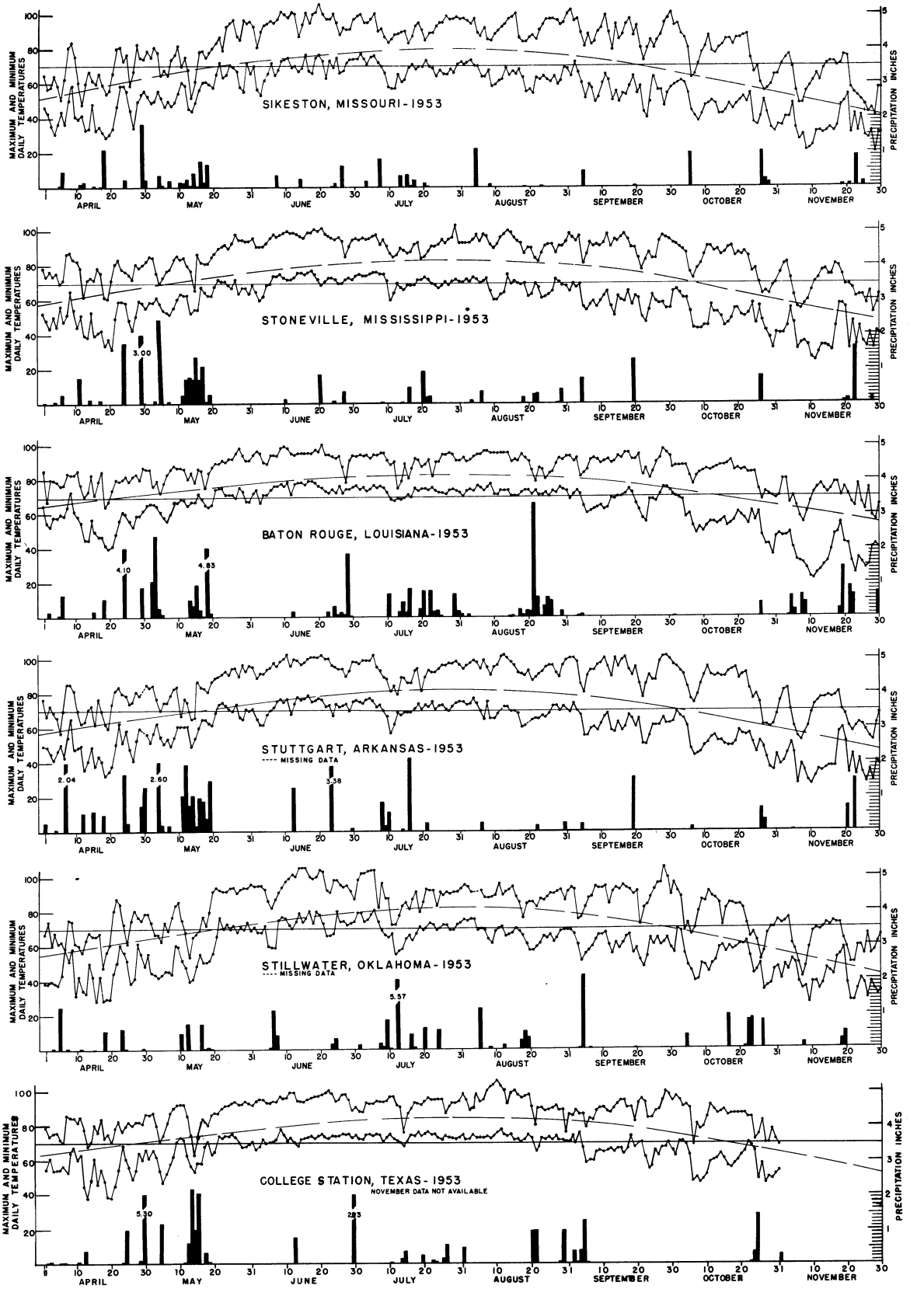
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER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STONEVILLE, MISSISSIPPI-1953
3.00
BATON ROUGE, LOUISIANA-1953
4.10
4.83
STUTTGART, ARKANSAS-1953
---- MISSING DATA
2.04
2.60
3.38
STILLWATER, OKLAHOMA-1953
---- MISSING DATA
5.57
COLLEGE STATION, TEXAS-1953
NOVEMBER DATA NOT AVAILABLE
5.30
2.83
MAXIMUM AND MINIMUM DAILY TEMPERATURES
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MAY
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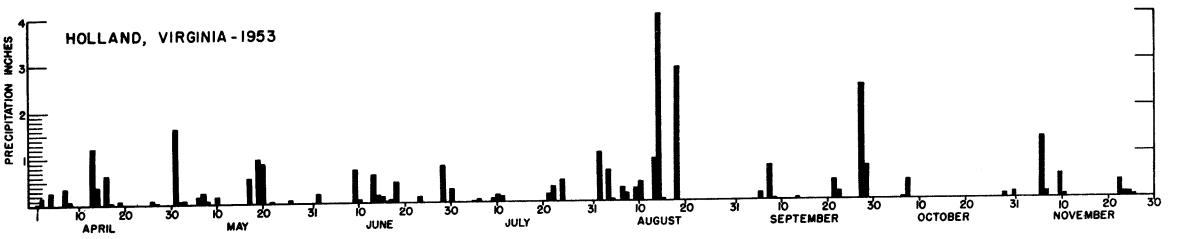
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER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MAY
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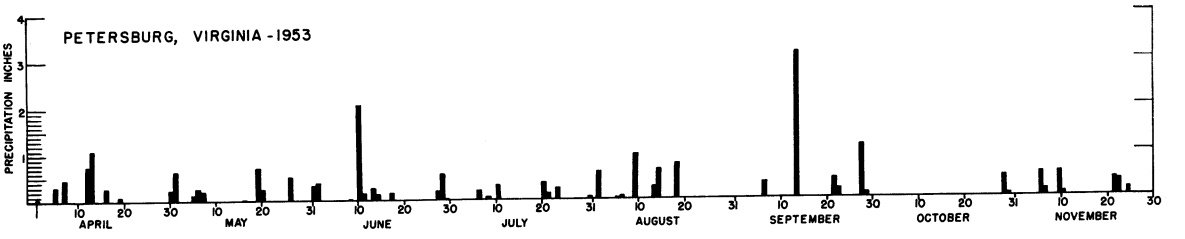
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


PETERSBURG, VIRGINIA - 1953
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JULY
AUGUST
SEPTEMBER
OCTOBER
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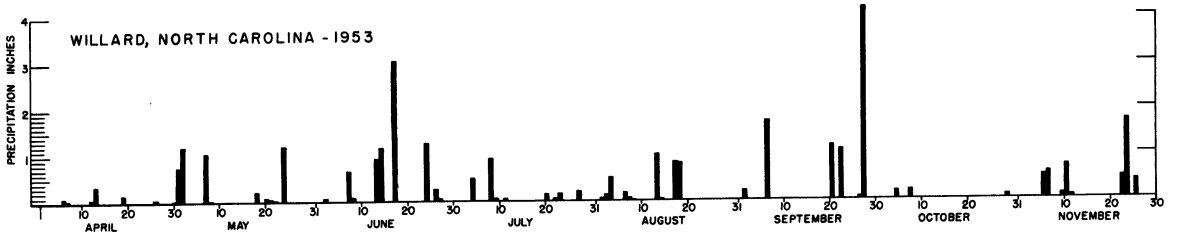
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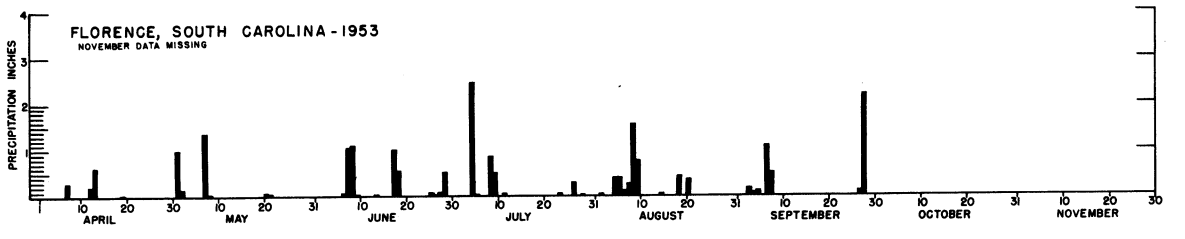
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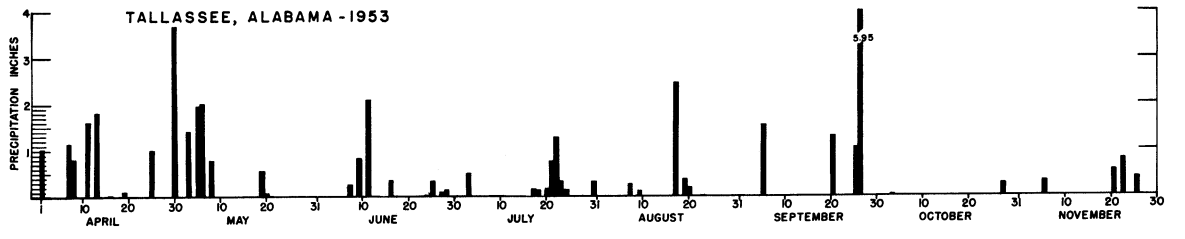
OCTOBER
NOVEMBER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AUGUST
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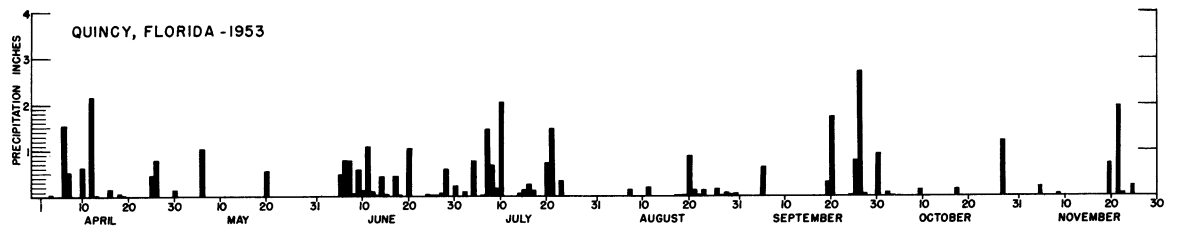
OCTOBER
NOVEMBER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JULY
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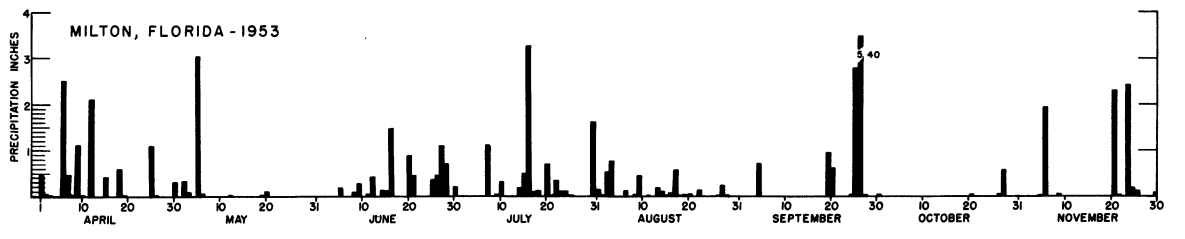
MILTON, FLORIDA - 1953
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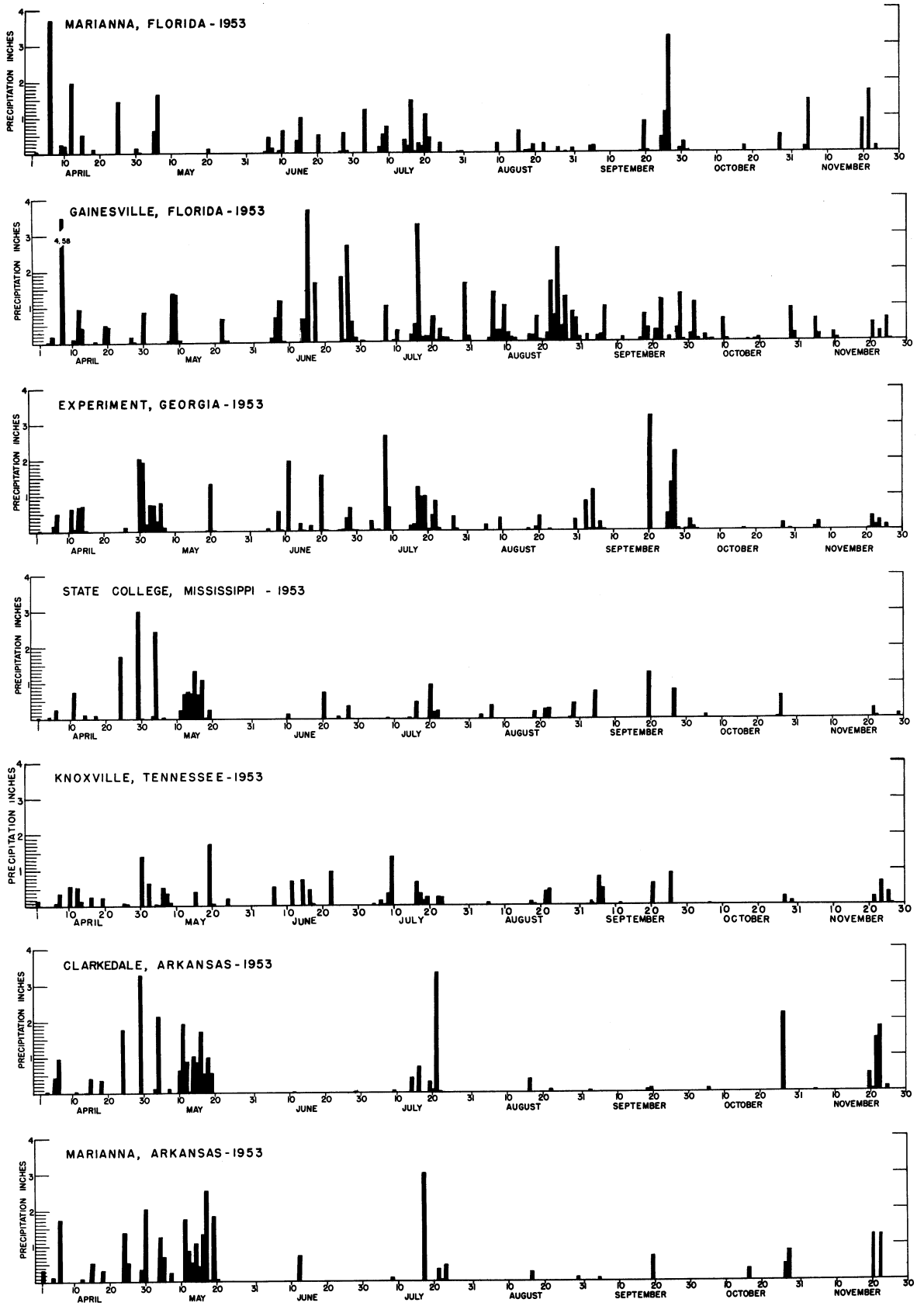
MARIANNA, FLORIDA - 1953
GAINESVILLE, FLORIDA - 1953
4.58
EXPERIMENT, GEORGIA - 1953
STATE COLLEGE, MISSISSIPPI - 1953
KNOXVILLE, TENNESSEE - 1953
CLARKEDALE, ARKANSAS - 1953
MARIANNA, ARKANSAS - 1953
PRECIPITATION INCHES
APRIL
MAY
JUNE
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AUGUST
SEPTEMBER
OCTOBER
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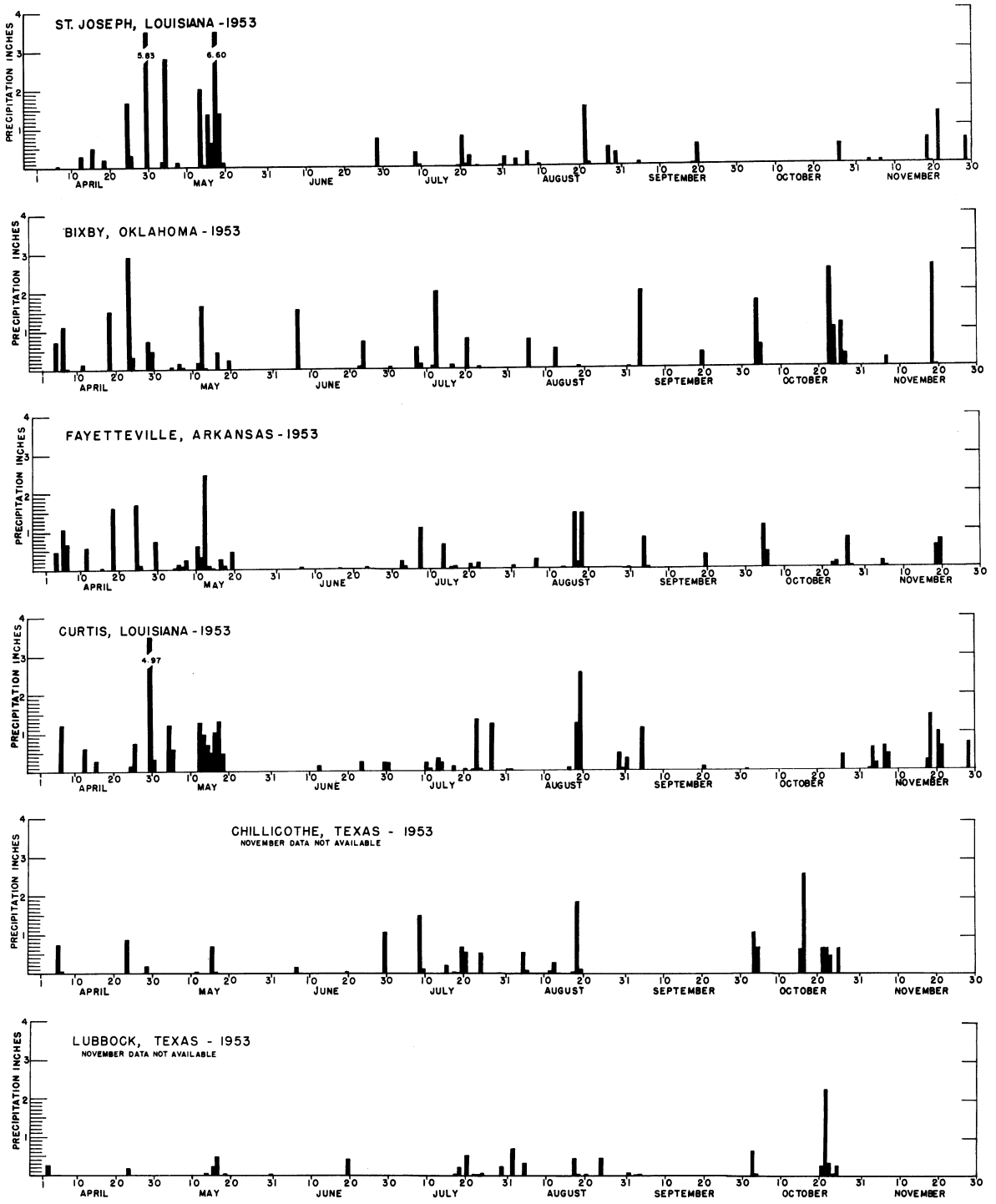
ST. JOSEPH, LOUISIANA - 1953
5.83
6.60
PRECIPITATION INCHES
BIXBY, OKLAHOMA - 1953
FAYETTEVILLE, ARKANSAS - 1953
CURTIS, LOUISIANA - 1953
4.97
CHILLICOTHE, TEXAS - 1953
NOVEMBER DATA NOT AVAILABLE
LUBBOCK, TEXAS - 1953
NOVEMBER DATA NOT AVAILABLE
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER