U. S. REGIONAL SOYBEAN LABORATORY
URBANA, ILLINOIS

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1947 PART II. SOUTHERN STATES

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF PLANT INDUSTRY
SOILS, AND AGRICULTURAL ENGINEERING,
DIVISION OF FORAGE CROPS AND DISEASES
COOPERATING WITH
STATE AGRICULTURAL EXPERIMENT STATIONS

MAY, 1948
RSLM 147

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS

PART II. SOUTHERN STATES[1/] [2/]

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1947
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Compiled by
Staff of the U. S. Regional Soybean Laboratory, Southern Section

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1/This annual report of activity at the Soybean Laboratory, as well as of that at the state stations with which the Laboratory cooperates, is a progress report and as such may contain statements which may or may not be verified by subsequent experiments. The fact that any statement has been made herein does not necessarily constitute publication. For this reason citation to particular statements in the Report should not be published unless permission has been granted previously by the Laboratory or the state station concerned.

2/The results of the program of cooperative soybean disease research, conducted by the Division of Forage Crops and Diseases, in the Southern States, is included in this report, since the two programs are closely integrated.

INTRODUCTION

The cooperative program of the U. S. Regional Soybean Laboratory was extended to include the Southern States in 1943. The chief objective of the work is directed toward the development of improved varieties of soybeans for industrial use. At the time the program was inaugurated in the South, there were very few varieties available to farmers of the region that met the requirements of a good oil-seed variety. In general, these varieties were of late maturity, a characteristic which limited the use of soybeans in certain crop sequences and rotations. Such late varieties also reduced the efficiency of harvesting operations, since the acreage per combine would of necessity be limited by adverse weather conditions usually prevailing in late fall and early winter over much of the South.

Varieties and new strains of soybeans are grouped according to maturity to form nine uniform soybean variety tests or groups. Groups 0 through IV include varieties adapted to the North Central States. A summary of the performance of these groups will be found in Part I of this report, which is published separately. Varieties and new strains adapted to the Southern States are included in Groups V, VI, VII, and VIII. The late-maturing Corn Belt varieties of Group IV, regrouped in part to form Group IV-S, appear promising and are being tested in the upper part of the southern region. Where adapted and at normal planting dates, the varieties of Group IV-S mature in late August and early September; Group V in late September; Group VI in early October; Group VII in late October; and Group VIII in early November. The maturity of the varieties within these groups are progressively later across the Upper South and earlier in the Lower South.

COOPERATING AGENCIES AND PERSONNEL
FOR THE
SOUTHERN STATES

Bureau of Plant Industry, Soils and Agricultural Engineering,
Division of Forage Crops and Diseases: William J. Morse, J. L. Cartter, Leonard Williams, Paul R. Henson, Robert B. Carr, C. R. Adair, Edgar E. Hartwig, George E. Ritchey, J. L. Stephens.

Alabama Agricultural Experiment Station
Agronomy Department: E. F. Schultz, Otto Brown, S. E. Gissendanner, Fred Stewart, J. K. Boseck.

Arkansas Agricultural Experiment Station,
Agronomy Department: R. P. Bartholemew, C. R. Adair, John L. Dameron, T. E. White, J. O. Dockins.

Florida Agricultural Experiment Station,
Agronomy Department: George E. Ritchey.

Georgia Agricultural Experiment Station,
Agronomy Department: U. R. Gore.

Louisiana Agricultural Experiment Station,
Agronomy Department: J. P. Gray.

Mississippi Agricultural Experiment Station,
Agronomy Department: J. F. O'Kelly.

North Carolina Agricultural Experiment Station,
Agronomy Department: E. E. Hartwig.

Oklahoma Agricultural Experiment Station,
Agronomy Department: Hi W. Staten, Virgil B. Hawk.

South Carolina Agricultural Experiment Station,
Agronomy Department: W. R. Paden.

Tennessee Agricultural Experiment Station,
Agronomy Department: O. H. Long, L. N. Skold.

Texas Agricultural Experiment Station,
Agronomy Department: V. E. Schember, J. R. Quinby, M. J. Norris, Jr., D. L. Jones, John Box.

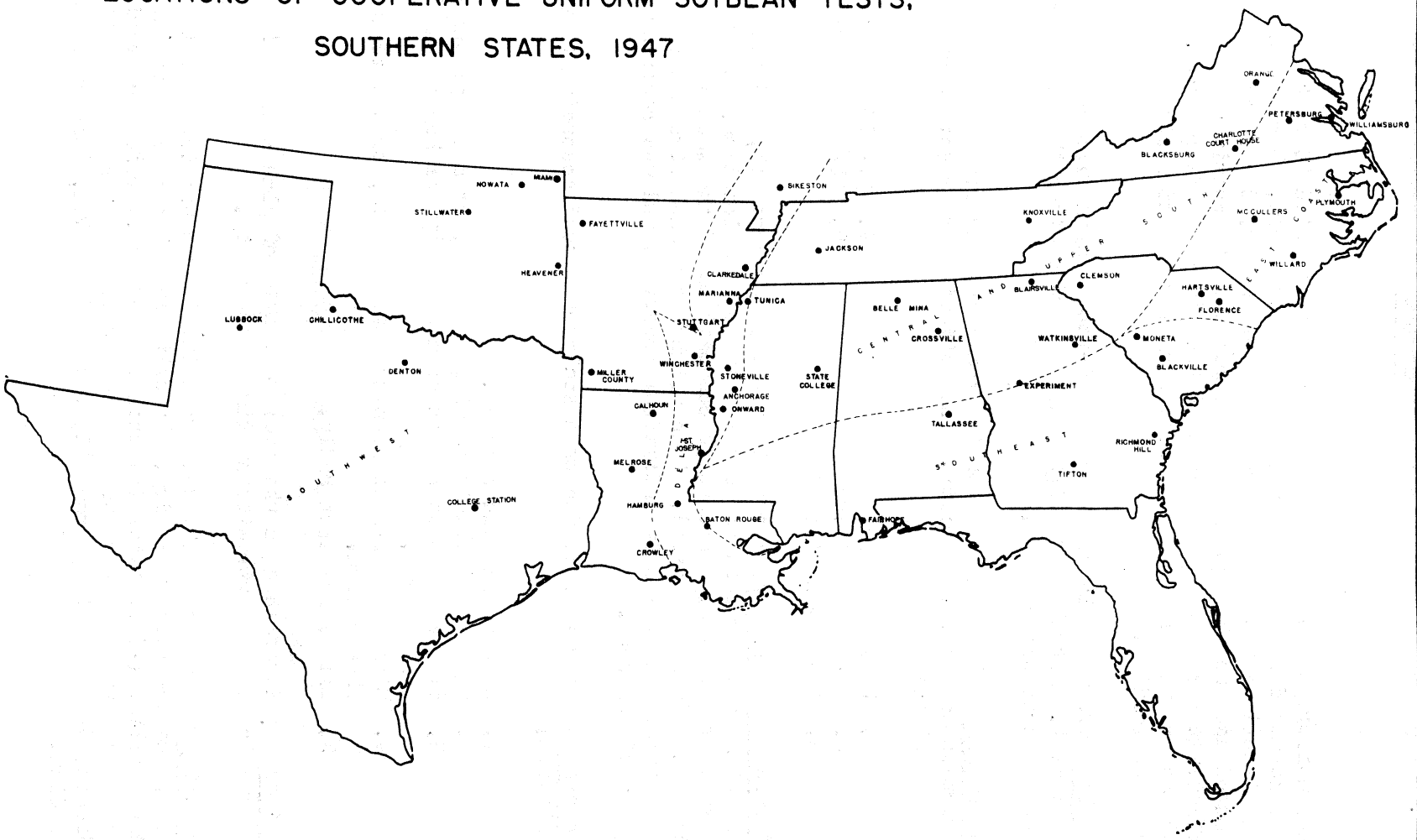
Virginia Agricultural Experiment Station,
Agronomy Department: M. H. McVickar, T. J. Smith.

LOCATION OF COOPERATIVE NURSERIES

Location	Cooperator	No. of Tests				
		IV-S	V	VI	VII	VIII
Belle Mina, Ala.	Tenn. Valley Substation		1	1	1	
Crossville, Ala.	Sand Mountain Substation			1	1	
Fairhope, Ala.	Gulf Coast Substation			1	1	1
Tallassee, Ala.	Ala. Agr. Exp. Sta.			1	1	1
Clarkedale, Ark.	Delta Substa., Cotton Br. Sta.	1	1	1	1	
Fayetteville, Ark.	Ark. Agr. Exp. Sta.	1	1	1		
Marianna, Ark.	Cotton Branch Sta.			1	1	1
Miller County, Ark.	Fruit & Truck Br. Station			1	1	1
Stuttgart, Ark.	Rice Branch Sta.	1	1	1	1	1
Desha County, Ark.	J. A. Newton			1	1	
Blairsville, Ga.	Ga. Mountain Br. Sta.			1	1	
Experiment, Ga.	Ga. Agr. Exp. Sta.			1	1	2
Richmond Hill, Ga.	Ford Farms				1	1
Tifton, Ga.	Ga. Coastal Plain Exp. Sta.				2	2
Watkinsville, Ga.	So. Piedmont Conserv. Exp. Sta.		1	1	1	
Rome, Ga.	Berry College			1	1	
Baton Rouge, La.	La. Agr. Exp. Sta.	1		1	1	1
Crowley, La.	J. M. Jenkins	1		1	1	1
Hamburg, La.	W. T. Nolan	1		1	1	1
Melrose, La.	J. H. Henry	1		1	1	1
Calhoun, La.	North Louisiana Exp. Sta.	1		1	1	1
St. Joseph, La.	Northeast La. Exp. Sta.	1	1	1	1	1
Beltsville, Md.	Div. Forage Crops & Diseases, U.S.D.A.	1				
Anchorage, Miss.	L. S. Stoner		1	1	1	
Dunleith, Miss.	F. C. Wagoner	1		1	1	
Onward, Miss.	James Hand, Jr.			1	1	
State College, Miss.	Miss. Agr. Exp. Sta.			1	2	
Stoneville, Miss.	Delta Branch Exp. Sta.	3	1	3	3	3
Tunica, Miss.	R. W. Owens	1	1	1	1	
Moorhead, Miss.	Edgar Hobbs	1		1	1	
Sikeston, Mo.	Mo. Agr. Exp. Sta.	1	1	1		
McCullers, N. C.	N. C. Agr. Exp. Sta.		1	1	1	
Plymouth, N. C.	Tidewater Agr. Exp. Sta.		1	1	1	
Willard, N. C.	Lower Coastal Plain Exp. Sta.			1	1	
Rocky Mount, N. C.	Upper Coastal Plain Exp. Sta.				1	

Location	Cooperator	IV-S	V	VI	VII	VIII
Coweta, Okla.	G. A. Childress		1	1		
Heavener, Okla.	Okla. Agr. Exp. Sta.			1	1	
Muskogee, Okla.	Ray Osborn			1	1	
Nowata, Okla.	J. O. Schultz, Jr.	1				
Stillwater, Okla.	Okla. Agr. Exp. Sta.	1	1	1		
Miami, Okla.	Leroy Davis		1	1		
Tishomingo, Okla.	Murray Junior College			1	1	
Blackville, S. C.	Edisto Agr. Exp. Sta.				2	1
Clemson, S. C.	S. C. Agr. Exp. Sta.				3	
Florence, S. C.	Pee Dee Agr. Exp. Sta.				2	1
Monetta, S. C.	Miss Bessie Johnson			1	1	1
Knoxville, Tenn.	Tenn. Agr. Exp. Sta.	1	1	1		
Jackson, Tenn.	West Tenn. Agr. Exp. Sta.	1	1	1		
Chillicothe, Texas	Texas Substa. #12		1	1	1	1
College Station, Texas	Texas Agr. Exp. Sta.				1	1
Denton, Texas	Texas Substa. #6	1	1	1		
Lubbock, Texas	Texas Substa. #8		1	1	1	1
Renner, Texas	Texas Research Foundation	1		1	1	
Blacksburg, Va.	Va. Agr. Exp. Sta.	1				
Charlotte, Va.	Virginia Field Station	1				
Holland, Va.	Tidewater Field Station	1			1	
Orange, Va.	Orange County Agr. Exp. Sta.	1				
Petersburg, Va.	Va. State College Field Sta.	1		1	1	
Williamsburg, Va.	James County Agr. Exp. Sta.	1			1	
Norfolk, Va.	Va. Truck Exp. Sta.	1			1	

LOCATIONS OF COOPERATIVE UNIFORM SOYBEAN TESTS, SOUTHERN STATES, 1947



METHODS

All uniform tests have been planted in replicated 20 foot row plots, using a randomized block design with four replications. Row widths at the different locations have varied from 36 to 42 inches, depending upon the width in common use and the equipment available for the cultivation of the crop. Plantings were made at the rate of 200 viable seeds per row. Satisfactory stands are usually obtained under normal soil and weather conditions at this rate of seeding.

Yields were taken by harvesting a 16-foot length from the midsection of each plot. Actual seed weights are recorded after the seed has dried to a uniform moisture content.

Shattering notes were taken on the remaining end plants of each row ten to fourteen days after maturity. The estimates are recorded on a scale of 1 to 5 as follows:

1. No shattering
2. 1 - 5% shattered
3. 6 - 10% shattered
4. 11 - 24% shattered
5. 25%, or over, shattered

Chemical composition, per cent protein, per cent oil, and iodine number of the oil, was determined on each strain at each location, except where yields were extremely low. Percentage composition of the seed is expressed on a dry basis (moisture free). Seed weight from each strain was determined on the variety composite by individual locations and was recorded as weight in grams of 100 seed.

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 was taken as the date when the leaves had dropped, the pods were ripe, and the stems were 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-S, Gibson; Group V, S100; Group VI, Ogden; Group VII, Volstate; and Group VIII, Acadian.

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

1. Very good	3. Fair	5. Very Poor
2. Good	4. Poor	

The factors considered in estimating seed quality were development of seed, wrinkling damage, and color for the variety.

Statistical analyses - all completed yield tests were analyzed by analyses of variance to determine differences required for significance. The coefficients of variability were high in many cases. While the differences required for significance are listed in the tables, some caution should be exercised in their use.

SUMMARY OF RESULTS

A wide range of soil types and climatic conditions occur in the Southern Region. Under such conditions, the mean response of a variety over the region as a whole, as measured by agronomic and chemical data, may be of little value. The region has been subdivided into five areas based on the major soil divisions and to a certain extent on climatic variations. The areas as outlined, Figure 2, are: (1) the East Coast, consisting of the coastal plain of Virginia, North Carolina, and the upper half of South Carolina; (2) the Southeast area, containing the coastal plain soils of lower South Carolina, Georgia, Florida, Alabama, and Mississippi; (3) the Upper and Central South extending from the Mississippi Delta area north and east to the Coastal Plain: (4) the Delta area, composed of the alluvial soils from the Mississippi River in the states of Tennessee, Arkansas, Mississippi, and Louisiana; (5) the West, or Southwest section, consisting of Texas and Oklahoma and the western half of Arkansas and Louisiana. It is realized that these somewhat arbitrary divisions are not all that can be desired, however, it is believed that a better concept of the adaptation of the varieties can be obtained from the agronomic and chemical means from within the respective areas than from an average of all locations.

UNIFORM TESTS, GROUP IV-S

The Uniform Test, Group IV-S, as grown in 1947, consisted of three named varieties and eight strains. Six new strains, C463, C464, C470, C508, CX1339-30, and CX2239-50, were included in Group IV-S in 1947. The reselected strain of S100 which is being certified for distribution to farmers was added to the group. The origin of these varieties and strains is as follows:

Variety or Strain	Source or Originating Agency	Origin
Gibson	Purdue Agr. Exp. Station	Sel. from Midwest x Dunfield
Patoka	Purdue Agr. Exp. Station	Sel. from P. I. 70218-2
C101	Purdue Agr. Exp. Station	Sel. from Dunfield x Manchu
C463	Purdue Agr.Exp.Sta. & U.S.R.S.L.	Sel. from Dunfield x Mansoy
C464	Purdue Agr.Exp.Sta. & U.S.R.S.L.	Sel. from Dunfield x Mansoy
C470	Purdue Agr. Exp.Sta. & U.S.R.S.L.	Sel. from rogue in P.I. 54592
C508	Purdue Agr.Exp.Sta. & U.S.R.S.L.	Sel. from Patoka x L7-1355
CX1339-30	Purdue Agr.Exp.Sta. & U.S.R.S.L.	Sel. from Dunfield x X143
CX2239-50	Purdue Agr.Exp.Sta. & U.S.R.S.L.	Sel. from C143 x X531
S100	Missouri Agr. Exp. Station	Rogue in Illini
S100 (Cert.)	Missouri Agr. Exp. Station	Reselected from S100

Thirty-one Uniform Tests of this maturity group were grown at 29 locations over the southern region in 1947. The agronomic and chemical data, including the two and four year averages for the varieties and strains of Group IV-S are shown in tables 1 to 11, inclusive.

S100 again led the other varieties and strains in yield per acre. There were no apparent differences between the reselected strain now being certified and released to farmers and the original seed stock of S100. The most serious fault of S100 is its relatively low oil content.

C101 continues to yield high in all except the East Coast area. However, this strain is lacking in seed quality and in lodging resistance, particularly so when the height of the strain is considered.

Of the new strains, C508 appeared promising in that it yielded well over much of the region and was superior to S100 in lodging resistance and oil content. The strain was lacking in seed quality and was short in the western half of the region. C470, C463, and C464 have yielded well above Patoka and Gibson, but have not ranked up with S100 over the region as a whole. All were superior to S100 in lodging resistance and percentage of oil. The two CX strains, 1339-30 and 2239-50, were quite variable and have been dropped from the 1948 tests until more uniform selections are available.

It should be recalled that in 1945, strains and varieties of Group IV maturity that had yielded well in the South in 1943-44 were regrouped to form Group IV-S. At that time it was expected that as new strains were developed in the South, the average maturity of the strains of Group IV-S would be a few days later than those of Group IV. The development of a number of strains, intermediate in maturity between Gibson, the standard of Group IV, and Ogden of Group VI, led to the formation of the new Uniform Test, Group V, in 1947. Hence, Group IV-S, as such, has been dropped in the 1948 plantings; and in areas where early varieties appear to be adapted, Groups IV and V are both to be grown.

Origin of S100

1934 - Single plant selected from a field of Illini in northeast Missouri by Lee Mumford.

1935 - Seed from the single plant grown.

1936 - Twelve rows 100 feet long grown.

1937 - Small field planted with seed harvested in 1936.

1938 - Sample sent by Mr. Mumford to Missouri Agricultural Experiment Station and grown for observation. It was found to be a natural hybrid and numerous plant selections were made.

1939 - Plant rows.

1940 - Yield test of the most promising plant rows selected in 1939.

1941 - Yield test of same material as tested in 1940.

1942 - Best strain entered into Uniform Group IV test. Numerous selections from strain made in Missouri.

1943 - Strain continued in uniform test. Plant rows of selections grown at Sikeston.

1944 - Twenty-four strains tested for yield in Missouri.

1945 - Six of the best strains in the yield test in 1944 selected and grown in 6-row plots.

1946 - The best strain of the six grown in 1945 was selected and increased to approximately 70 bushels.

1947 - The strain entered in the uniform test in 1942 was continued through 1947. Both this strain and the increased strain were included in the uniform test in 1947. Both yielded approximately the same. The 70 bushels harvested in 1946 were increased to approximately 1200 bushels and distributed for certified increase in 1948.

Table 1. Summary of the agronomic and chemical data for the strains of the Uniform Test, Group IV-S, 1947

Location	No. of Tests	Mean	S100 (Cert.)	S100	C508	C101	C470	C463	CX2339-50	C464	CX1339-30	Patoka	Gibson
						YIELD							
West	9	10.9	12.8	12.5	10.7	11.7	11.3	9.4	11.3	9.5	10.1	10.1	10.0
Delta	10	23.2	26.0	26.1	24.4	25.0	23.5	23.6	20.9	22.5	20.0	21.5	22.0
Upper & Central South	5	19.7	20.3	19.8	23.5	21.5	19.8	20.7	17.2	20.3	17.6	19.9	15.8
East Coast	5	27.7	32.6	32.2	29.1	26.0	25.5	28.1	28.9	26.9	29.8	23.2	22.7
Mean	25	19.0	21.4	21.2	20.2	19.6	18.7	18.6	18.3	18.3	17.9	17.4	16.6
						YIELD RANK							
West			1	2	6	3	4	11	4	10	7	7	9
Delta			2	1	4	3	6	5	10	7	11	9	8
Upper & Central South			4	7	1	2	7	3	10	4	9	6	11
East Coast			1	2	4	8	9	6	5	7	3	10	11
						LODGING							
West	9	1.2	1.4	1.3	1.0	1.1	1.1	1.2	1.4	1.3	1.3	1.3	1.3
Delta	9	1.6	1.7	1.7	1.4	1.9	1.9	1.5	1.3	1.6	1.4	1.4	1.9
Upper & Central South	5	2.2	2.9	2.8	1.9	2.3	2.4	2.1	1.9	2.0	2.0	2.1	2.4
East Coast	5	2.3	2.8	2.6	1.7	2.5	2.4	1.9	2.0	2.2	2.5	2.0	2.4
Mean	28	1.7	2.0	1.9	1.4	1.8	1.8	1.6	1.6	1.7	1.7	1.6	1.9
						MATURITY[1]							
West	9		+12.3	+11.2	+0.4	+2.7	+0.3	+0.7	+10.7	+2.6	+10.9	-0.1	0
Delta	9		+13.3	+13.0	-0.8	+0.6	-3.4	-2.1	+14.6	+2.3	+12.0	-2.3	0
Upper & Central South	5		+16.0	+16.2	+5.6	+5.0	+3.0	+3.2	+14.2	+7.8	+12.4	-0.8	0
East Coast	3		+8.3	+8.3	+4.0	+2.0	-5.0	-4.7	+9.7	+5.0	+7.3	-6.3	0
Mean	26		+12.9	+12.5	+1.4	+2.3	-1.1	-0.4	+12.6	+3.8	+11.2	-1.7	0
						HEIGHT							
West	10	25.3	29.1	29.2	22.2	24.5	24.1	25.2	25.0	24.6	27.1	21.9	23.9
Delta	10	34.6	41.0	41.2	29.4	33.3	33.9	34.9	33.9	34.6	36.6	28.0	33.1
Upper & Central South	5	37.4	41.8	41.4	34.2	37.8	38.6	36.4	36.2	36.8	40.6	32.2	35.4
East Coast	5	36.6	41.6	41.6	34.8	35.0	36.2	36.6	35.0	36.6	37.8	32.0	33.8
Mean	30	32.3	37.3	37.3	28.7	31.4	31.8	32.2	31.5	32.0	34.3	27.3	30.5
						SEED QUALITY							
West	10	3.7	3.1	3.1	4.2	4.2	3.3	4.2	3.4	4.1	3.7	3.8	3.9
Delta	8	2.6	2.3	2.1	2.9	3.0	2.2	2.9	2.3	3.4	2.6	2.6	2.6
Upper & Central South	3	2.1	2.4	2.7	1.9	1.9	1.9	1.5	2.8	1.4	2.5	1.7	2.2
East Coast	5	2.7	1.6	2.4	3.6	3.2	3.0	2.6	3.3	3.0	2.0	3.2	3.0
Mean	26	3.0	2.5	2.6	3.4	3.4	2.7	3.2	2.7	3.4	2.9	3.1	3.1

1/Days earlier (-) or later (+) than Gibson. Gibson required 119 days to mature.

Table 1: (Continued)

Location	No. of Tests	Mean	S100 (Cert.)	S100	C508	C101	C470	C463	CX2239-50	C464	CX1339-30	Patoka	Gibson
					SEED WEIGHT[2]								
West	4	14.0	14.1	13.7	15.2	15.5	12.4	12.7	14.1	13.2	14.9	15.3	12.8
Delta	8	12.5	12.3	12.0	13.3	13.2	11.5	11.9	12.3	12.1	13.7	13.4	11.8
Upper & Central South	4	15.1	14.1	14.1	16.7	15.8	13.3	14.5	15.8	15.0	15.8	16.2	14.8
East Coast	3	17.5	17.9	18.4	18.6	17.4	15.1	16.2	19.2	17.7	19.4	17.3	15.2
Mean	19	14.2	13.9	13.8	15.3	14.9	12.6	13.3	14.5	13.8	15.3	15.0	13.2
					PERCENTAGE OF PROTEIN								
West	7	42.9	44.3	44.0	42.5	41.7	41.2	42.1	43.7	42.7	43.7	44.2	42.2
Delta	10	41.1	42.4	42.3	40.4	39.6	39.6	39.6	43.4	40.4	41.9	42.2	39.9
Upper & Central South	4	41.2	42.3	42.5	40.1	41.1	39.8	39.7	43.2	41.3	41.9	40.9	40.8
East Coast	3	45.0	45.7	45.8	44.8	45.0	44.1	43.3	46.5	43.9	45.3	46.6	43.5
Mean	24		43.4	43.3	41.5	41.1	40.7	40.8	43.8	41.7	42.9	43.1	41.2
					PERCENTAGE OF OIL								
West	7	20.7	19.3	19.2	21.6	20.7	21.6	21.7	20.4	21.5	20.8	20.3	21.1
Delta	10	21.7	19.7	19.8	22.8	21.7	22.3	23.2	21.0	22.7	22.0	21.6	22.0
Upper & Central South	4	21.8	20.3	20.2	23.3	21.5	22.1	23.2	21.5	22.3	22.1	21.5	21.7
East Coast	3	21.3	19.3	19.4	22.6	21.1	21.8	22.8	20.9	22.2	21.3	20.3	22.3
Mean	24		19.6	19.6	22.5	21.3	22.0	22.7	20.9	22.2	21.6	21.0	21.7
					IODINE NUMBER OF OIL								
West	7	120.1	121.5	123.0	119.5	119.6	122.8	113.1	122.0	115.0	118.2	126.3	122.8
Delta	10	125.5	125.7	126.9	125.5	127.2	126.6	121.5	125.8	119.4	123.1	129.9	128.8
Upper & Central South	4	128.7	129.3	129.5	129.0	127.8	131.4	126.3	128.2	123.8	127.0	131.7	131.3
East Coast	3	128.1	128.5	129.6	128.9	123.4	130.6	124.5	128.5	121.9	128.4	132.3	132.2
Mean	24		125.4	126.5	124.8	124.6	126.8	120.2	125.4	119.2	123.0	129.5	127.9

[2]/Seed weight is expressed in grams per 100 seed.

Table 2: Summary of yield in bushels per acre for the strains of the Uniform Test, Group IV-S, 1947

Location	Date of Planting	Mean Yield	S100 (Cert.)	S100	C508	C101	C470	C463
			WEST					
Melrose, La.	4-22	16.7	22.6	18.0	12.7	19.6	13.0	11.0
Nowata, Okla.	5-29	15.7	18.9	19.6	16.8	15.8	17.8	16.3
Calhoun, La.	4-24	15.0	12.4	14.4	16.7	16.8	16.6	16.6
Stillwater, Okla.	5-10	11.6	16.6	16.2	11.4	10.0	11.2	10.4
Stuttgart, Ark.	5-27	10.7	12.0	11.9	10.7	12.0	10.1	8.4
Crowley, La.	4-29	9.3	11.2	11.5	10.1	12.4	11.8	5.7
Miami, Okla.	5-29	7.1	7.7	8.9	8.5	7.1	7.6	5.9
Fayetteville, Ark.		6.1	8.5	6.9	5.7	5.7	6.9	4.3
Denton, Texas	4-24	5.5	5.5	6.0	3.8	6.0	6.8	5.8
Renner, Texas[1]	4-10	-	-	-	-	9.7	16.8	11.8
Mean		10.9	12.8	12.5	10.7	11.7	11.3	9.4
			DELTA					
St. Joseph, La.	4-28	40.6	46.0	42.4	45.5	45.8	38.6	36.8
Stoneville, Miss.	4-22	34.2	33.8	34.6	35.4	36.4	37.5	37.7
Stoneville, Miss.	5-27	23.5	26.8	22.3	26.8	26.3	22.6	28.2
Stoneville, Miss.	6-17	15.9	22.3	22.4	12.1	19.4	15.8	17.3
Clarkedale, Ark.	5-28	24.1	28.2	26.4	25.0	25.3	26.8	24.1
Sikeston, Mo.	5-27	22.2	25.2	26.0	22.2	20.5	20.9	20.3
Moorhead, Miss.	5-26	19.8	16.7	22.4	21.6	21.0	21.3	20.8
Baton Rouge, La.	4-25	19.0	23.5	23.1	21.0	21.7	16.2	18.5
Tunica, Miss.	5-17	17.2	18.8	22.0	18.2	15.1	16.8	15.6
Dunleith, Miss.	5-27	15.7	18.9	19.2	16.1	18.6	18.1	16.7
Mean		23.2	26.0	26.1	24.4	25.0	23.5	23.6
			UPPER AND CENTRAL SOUTH					
Knoxville, Tenn.	4-22	24.8	26.8	26.0	30.0	23.6	21.0	22.9
Blacksburg, Va.	5-21	22.3	21.0	20.2	28.2	25.3	23.2	26.5
Orange, Va.	5-6	17.3	19.1	18.4	19.2	19.8	18.2	16.3
Jackson, Tenn.	4-21	15.7	17.4	17.9	16.3	16.9	16.2	15.2
Beltsville, Md.	6-6	18.4	17.4	16.6	23.9	21.8	20.6	22.4
Mean		19.7	20.3	19.8	23.5	21.5	19.8	20.7
			EAST COAST					
Petersburg, Va.	5-12	38.6	40.7	42.4	40.3	37.5	37.8	36.7
Holland, Va.	5-16	30.4	35.1	32.4	34.9	28.9	30.6	35.2
Norfolk, Va.	5-13	27.7	34.8	36.2	28.8	23.6	17.1	28.0
Charlotte C.H., Va.	5-23	21.1	25.7	24.9	20.4	20.7	21.9	19.5
Williamsburg, Va.	5-19	20.9	26.8	25.1	21.1	19.5	20.1	21.1
Mean		27.7	32.6	32.2	29.1	26.0	25.5	28.1

[1]/Not included in mean.

Table 2: (Continued)

Location	CX2239-50	C464	CX1339-50	Patoka	Gibson	Bu. Nec. Sig.(5%)	Coef. of Var.
			WEST				
Melrose, La.	26.8	10.3	20.8	17.2	11.6	5.6	23%
Nowata, Okla.	12.6	14.3	11.5	13.6	16.0	3.6	16%
Calhoun, La.	10.5	18.8	11.3	14.4	16.3	3.9	18%
Stillwater, Okla.	13.2	10.0	10.1	10.5	9.2	3.4	20%
Stuttgart, Ark.	12.0	9.3	11.8	9.5	9.6	2.4	15%
Crowley, La.	7.2	7.7	7.2	8.8	9.0	3.0	22%
Miami, Okla.	7.2	5.5	6.8	6.2	6.6	N.S.	21%
Fayetteville, Ark.	6.9	4.4	6.3	5.9	5.5	2.2	24%
Denton, Texas	5.5	5.1	5.2	4.6	6.1	N.S.	20%
Renner, Texas[1/]	-	11.8	5.3	12.1	15.8	-	
Mean	11.3	9.5	10.1	10.1	10.0		
			DELTA				
St. Joseph, La.	36.8	41.4	34.9	40.0	38.8	4.6	8%
Stoneville, Miss.	34.4	34.8	29.4	29.3	32.9	N.S.	14%
Stoneville, Miss.	21.2	26.6	14.1	19.9	24.1	5.4	16%
Stoneville, Miss.	12.1	11.3	16.7	12.8	13.1	N.S.	36%
Clarkedale, Ark.	17.3	22.3	23.5	22.2	24.5	N.S.	17%
Sikeston, Mo.	22.9	20.6	22.3	21.6	21.5	2.8	9%
Moorhead, Miss.	13.2	21.5	17.0	22.3	20.2	N.S.	16%
Baton Rouge, La.	16.8	14.9	19.3	17.7	15.8	5.0	18%
Tunica, Miss.	21.6	17.3	14.2	13.9	15.2	3.6	14%
Dunleith, Miss.	12.8	14.4	8.8	15.4	13.6	4.7	21%
Mean	20.9	22.5	20.0	21.5	22.0		
			UPPER AND CENTRAL SOUTH				
Knoxville, Tenn.	24.7	26.2	26.5	25.4	19.6	4.2	12%
Blacksburg, Va.	18.2	21.0	17.6	26.4	17.5	4.6	14%
Orange, Va.	14.6	18.2	14.9	17.3	13.9	3.5	14%
Jackson, Tenn.	16.3	13.1	15.8	12.6	14.9	3.2	14%
Beltsville, Md.	12.3	23.0	13.2	17.8	13.0	2.1	7%
Mean	17.2	20.3	17.6	19.9	15.8		
			EAST COAST				
Petersburg, Va.	40.3	37.9	40.3	37.3	33.1	4.5	8%
Holland, Va.	24.7	32.8	31.0	24.0	25.2	5.7	13%
Norfolk, Va.	35.3	27.6	37.3	16.9	19.2	6.0	15%
Charlotte C.H., Va.	20.5	17.9	20.8	18.7	21.0	4.0	13%
Williamsburg, Va.	23.8	18.5	19.8	19.1	15.2	2.1	7%
Mean	28.9	26.9	29.8	23.2	22.7		

Table 2a: Summary of yield rank for the strains of the Uniform Test, Group IV-S, for 1947

Location	S100 (Cert.)	S100	C508	C101	C470
		WEST			
Melrose, La.	2	5	8	4	7
Nowata, Okla.	2	1	4	7	3
Calhoun, La.	9	7	3	2	4
Stillwater, Okla.	1	2	4	9	5
Stuttgart, Ark.	1	4	6	1	7
Crowley, La.	4	3	5	1	2
Miami, Okla.	3	1	2	6	4
Fayetteville, Ark.	1	2	7	7	2
Denton, Texas	6	3	11	3	1
		DELTA			
St. Joseph, La.	1	4	3	2	8
Stoneville, Miss. 4/22	8	6	4	3	2
Stoneville, Miss. 5/27	2	7	2	5	8
Stoneville, Miss. 6/15	2	1	9	3	6
Clarkedale, Ark.	1	3	5	4	2
Sikeston, Mo.	2	1	5	11	8
Moorhead, Miss.	9	1	3	6	5
Baton Rouge, La.	1	2	4	3	9
Tunica, Miss.	3	1	4	9	6
Dunleith, Miss.	2	1	6	3	4
		UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	2	5	1	8	10
Blacksburg, Va.	6	8	1	4	5
Orange, Va.	3	4	2	1	5
Jackson, Tenn.	2	1	4	3	6
Beltsville, Md.	7	8	1	4	5
		EAST COAST			
Petersburg, Va.	2	1	3	8	7
Holland, Va.	2	5	3	8	7
Norfolk, Va.	4	2	5	8	10
Charlotte C. H., Va.	1	2	8	6	3
Williamsburg, Va.	1	2	4	8	6

Table 2a: (Continued)

Location	C463	CX2239-50	C464	CX1339-30	Patoka	Gibson
			WEST			
Melrose, La.	10	1	11	3	6	9
Nowata, Okla.	5	10	8	11	9	6
Calhoun, La.	4	11	1	10	7	6
Stillwater, Okla.	7	3	9	8	6	11
Stuttgart, Ark.	11	1	10	5	9	8
Crowley, La.	11	9	8	9	7	6
Miami, Okla.	10	5	11	7	9	8
Fayetteville, Ark.	11	2	10	5	6	9
Denton, Texas	5	6	8	9	10	2
			DELTA			
St. Joseph, La.	9	9	5	11	6	7
Stoneville, Miss. 4/22	1	7	5	10	11	9
Stoneville, Miss. 5/27	1	9	4	10	11	6
Stoneville, Miss. 6/15	4	9	11	5	8	7
Clarkedale, Ark.	7	11	9	8	10	6
Sikeston, Mo.	9	3	9	4	6	7
Moorhead, Miss.	7	11	4	10	2	8
Baton Rouge, La.	6	8	11	5	7	10
Tunica, Miss.	7	2	5	10	11	9
Dunleith, Miss.	5	10	8	11	7	8
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	9	7	4	3	6	11
Blacksburg, Va.	2	9	6	10	3	11
Orange, Va.	8	10	5	9	7	11
Jackson, Tenn.	8	4	10	7	11	9
Beltsville, Md.	3	11	2	9	6	10
			EAST COAST			
Petersburg, Va.	10	3	6	3	9	11
Holland, Va.	1	10	4	6	11	9
Norfolk, Va.	6	3	7	1	11	9
Charlotte C. H., Va.	9	7	11	5	10	4
Williamsburg, Va.	4	3	10	7	9	11

Table 3: Summary of the lodging data for the strains of the Uniform Test, Group IV-S, 1947

Location	Mean	S100 (Cert.)	S100	C508	C101	C470
			WEST			
Melrose, La.	1.0	1.0	1.0	1.0	1.0	1.0
Nowata, Okla.	1.7	2.0	3.0	1.0	2.0	2.0
Calhoun, La.	1.0	1.0	1.0	1.0	1.0	1.0
Stillwater, Okla.	1.6	1.0	1.0	1.0	1.0	1.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Miami, Okla.	1.5	2.0	1.5	1.0	1.0	1.0
Fayetteville, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Denton, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Renner, Texas	1.4	2.3	1.8	1.0	1.3	1.0
Mean	1.2	1.4	1.3	1.0	1.1	1.1
			DELTA			
St. Joseph, La.	1.6	2.0	2.0	1.0	2.0	2.0
Stoneville, Miss.	2.1	2.0	2.3	1.3	1.8	2.3
Stoneville, Miss.	2.0	2.3	2.3	1.8	2.8	2.0
Stoneville, Miss.	1.1	1.0	1.3	1.0	1.3	1.3
Clarkedale, Ark.	1.2	1.3	1.3	1.0	1.8	1.8
Sikeston, Mo.	1.1	1.0	1.3	1.0	1.5	1.5
Moorhead, Miss.	1.6	1.8	1.7	1.8	2.0	2.0
Baton Rouge, La.	2.0	2.0	2.0	2.0	2.0	2.0
Tunica, Miss.[1]	-	1.0	2.3	-	-	-
Dunleith, Miss.	1.7	1.5	1.5	2.0	2.3	2.0
Mean	1.6	1.7	1.7	1.4	1.9	1.9
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	2.9	3.0	3.0	3.0	3.0	3.0
Blacksburg, Va.	2.0	2.8	2.8	1.3	2.0	2.5
Orange, Va.	1.9	3.8	3.3	1.0	2.3	1.5
Jackson, Tenn.	1.2	2.0	2.0	1.0	1.0	1.0
Beltsville, Md.	3.1	3.0	3.0	3.0	3.0	4.0
Mean	2.2	2.9	2.8	1.9	2.3	2.4
			EAST COAST			
Petersburg, Va.	2.3	3.0	4.0	1.0	3.0	2.0
Holland, Va.	3.7	4.0	3.0	3.0	4.0	4.0
Norfolk, Va.	2.2	2.0	2.2	1.7	2.7	2.0
Charlotte C. H., Va.	1.9	3.0	2.0	1.0	2.0	3.0
Williamsburg, Va.	1.3	2.0	2.0	2.0	1.0	1.0
Mean	2.3	2.8	2.6	1.7	2.5	2.4

[1] Not included in mean.

Table 3: (Continued)

Location	C463	CX2239-50	C464	CX1339-30	Patoka	Gibson
			WEST			
Melrose, La.	1.0	1.0	1.0	1.0	1.0	1.0
Nowata, Okla.	2.0	1.0	2.0	1.0	2.0	2.0
Calhoun, La.	1.0	1.0	1.0	1.0	1.0	1.0
Stillwater, Okla.	1.0	3.0	2.0	2.0	3.0	2.0
Crowley, La.	1.0	1.0	1.0	1.0	1.0	1.0
Miami, Okla.	1.5	2.0	1.5	2.0	1.0	1.5
Fayetteville, Ark.	1.0	1.0	1.0	1.0	1.0	1.0
Denton, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Renner, Texas	1.0	2.0	1.0	2.0	1.0	1.0
Mean	1.2	1.4	1.3	1.3	1.3	1.3
			DELTA			
St. Joseph, La.	2.0	1.0	2.0	1.0	1.0	2.0
Stoneville, Miss.	1.8	2.3	2.0	2.3	1.5	3.0
Stoneville, Miss.	1.5	1.5	2.0	1.8	1.5	2.3
Stoneville, Miss.	1.3	1.0	1.0	1.3	1.0	1.0
Clarkedale, Ark.	1.0	1.0	1.0	1.0	1.0	1.7
Sikeston, Mo.	1.0	1.0	1.0	1.0	1.0	1.3
Moorhead, Miss.	1.3	1.0	1.8	1.0	1.8	1.8
Baton Rouge, La.	2.0	2.0	2.0	2.0	2.0	2.0
Tunica, Miss.[1]	-	1.0	-	1.3	-	-
Dunleith, Miss.	1.5	1.3	1.3	1.3	2.0	2.0
Mean	1.5	1.3	1.6	1.4	1.4	1.9
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	3.0	2.0	3.0	2.0	3.0	4.0
Blacksburg, Va.	2.3	1.8	1.8	2.0	1.3	2.3
Orange, Va.	1.0	1.5	1.3	2.0	1.5	1.8
Jackson, Tenn.	1.0	1.0	1.0	1.0	1.0	1.0
Beltsville, Md.	3.0	3.0	3.0	3.0	3.5	3.0
Mean	2.1	1.9	2.0	2.0	2.1	2.4
			EAST COAST			
Petersburg, Va.	1.0	3.0	3.0	3.0	1.0	1.0
Holland, Va.	4.0	3.0	4.0	4.0	4.0	4.0
Norfolk, Va.	1.5	2.0	1.2	2.7	2.2	4.0
Charlotte C. H., Va.	2.0	1.0	2.0	1.0	2.0	2.0
Williamsburg, Va.	1.0	1.0	1.0	2.0	1.0	1.0
Mean	1.9	2.0	2.2	2.5	2.0	2.4

Table 4: Summary of the maturity data, days earlier (-) or later (+) than Gibson, for the strains of the Uniform Test, Group IV-S, 1947

Location	S100 (Cert.)	S100	C508	C101	C470	C463	CX2239-50
			WEST				
Melrose, La.	+31	+28	-2	+4	-2	0	+27
Nowata, Okla.	+10	+6	-4	-2	-2	+6	+6
Calhoun, La.	+21	+18	-3	+1	-3	-3	+17
Stillwater, Okla.	+8	+8	+5	+5	+8	+14	+8
Stuttgart, Ark.	+4	+4	+4	+4	-2	-2	+5
Crowley, La.	+16	+16	+3	+13	+7	-5	+11
Miami, Okla.	+2	+2	-4	-4	-4	-4	+2
Fayetteville, Ark.	+1	+1	-1	0	-1	0	+1
Denton, Texas	+18	+18	+6	+3	+2	0	+19
Renner, Texas[1]	-	-	+6	+14	-5	+5	-
Mean	+12.3	+11.2	+0.4	+2.7	+0.3	+0.7	+10.7
			DELTA				
St. Joseph, La.	+9	+9	0	0	0	0	+9
Stoneville, Miss.	+11	+9	-1	-2	-2	-2	+17
Stoneville, Miss.	+6	+6	-2	-3	-3	-6	+8
Stoneville, Miss.	+7	+7	-4	+1	-7	+1	+8
Clarkedale, Ark.[1]	+3	0	0	0	0	0	0
Sikeston, Mo.	+14	+14	+1	+7	-1	-1	+14
Moorhead, Miss.	+13	+13	0	0	-7	-7	+12
Baton Rouge, La.	+19	+18	-1	+2	-11	-2	+20
Tunica, Miss.	+23	+22	0	0	0	0	+25
Dunleith, Miss.	+18	+18	0	0	0	0	+18
Mean	+13.3	+13.0	-0.8	+0.6	-3.4	-2.1	+14.6
			UPPER AND CENTRAL SOUTH				
Knoxville, Tenn.	+31	+32	+6	+8	0	+4	+13
Blacksburg, Va.	+10	+10	+5	+4	+4	+3	+16
Orange, Va.	+17	+17	+8	+8	+8	+8	+17
Jackson, Tenn.	+12	+12	+3	0	-3	-3	+17
Beltsville, Md.	+10	+10	+6	+5	+6	+4	+8
Mean	+16.0	+16.2	+5.6	+5.0	+3.0	+3.2	+14.2
			EAST COAST				
Petersburg, Va.	0	0	0	-7	-15	-15	0
Holland, Va.	+3	+3	-2	-1	0	+1	+7
Charlotte C. H., Va[1]	-6	-8	-10	-10	-10	-10	-8
Williamsburg, Va.	+22	+22	+14	+14	0	0	+22
Mean	+8.3	+8.3	+4.0	+2.0	-5.0	-4.7	+9.7
MEAN (26 tests)	+12.9	+12.5	+1.4	+2.3	-1.1	-0.4	+12.6

1/Not included in the mean.

Table 4: (Continued)

Location	C464	CX1339-30	Patoka	Gibson[2]	Gibson Planted	Gibson Matured	Days to Maturity
			WEST				
Melrose, La.	0	+27	0	0	4-22	8-5	105
Nowata, Okla.	+4	+12	+6	0	5-29	9-30	124
Calhoun, La.	-1	+21	0	0	4-24	8-15	113
Stillwater, Okla.	+8	+5	0	0	5-10	9-20	133
Stuttgart, Ark.	+5	+5	+4	0	5-27	9-18	114
Crowley, La.	+3	+11	-5	0	4-29	8-25	118
Miami, Okla.	0	+2	-7	0	5-29	10-8	132
Fayetteville, Ark.	+2	+2	0	0	May	10-5	
Denton, Texas	+2	+13	+1	0	4-24	8-18	116
Renner, Texas[1]	+8	-	-2	0	4-10	8-9	121
Mean	+2.6	+10.9	-0.1	0			119.6
			DELTA				
St. Joseph, La.	0	+9	0	0	4-28	8-26	120
Stoneville, Miss.	+5	+8	-4	0	4-22	8-27	127
Stoneville, Miss.	+3	+7	-6	0	5-27	9-16	112
Stoneville, Miss.	+5	+7	-3	0	6-17	9-29	104
Clarkedale, Ark.[1]	0	0	0	0	5-28	9-28	123
Sikeston, Mo.	+4	+13	-1	0	5-27	9-16	112
Moorhead, Miss.	0	+9	-7	0	5-26	9-18	115
Baton Rouge, La.	-2	+15	0	0	4-25	8-5	102
Tunica, Miss.	0	+21	0	0	5-17	9-3	109
Dunleith, Miss.	+6	+19	0	0	5-27	9-12	108
Mean	+2.3	+12.0	-2.3	0			112.1
			UPPER AND CENTRAL SOUTH				
Knoxville, Tenn.	+12	+14	-1	0	4-22		
Blacksburg, Va.	+6	+11	-2	0	5-21	9-28	130
Orange, Va.	+8	+17	0	0		9-15	
Jackson, Tenn.	+8	+12	-3	0	4-21	9-10	143
Beltsville, Md.	+5	+8	+2	0			
Mean	+7.8	+12.4	-0.8	0			136.5
			EAST COAST				
Petersburg, Va.	0	0	-15	0	5-12	10-3	144
Holland, Va.	+1	+2	-4	0	5-16	7-8	
Charlotte C. H., Va.[1]	+14	-12	+1	0	5-23	9-20	120
Williamsburg, Va.	+14	+20	0	0	5-19	9-16	120
Mean	+5.0	+7.3	-6.3	0			128.0
MEAN (26 tests)	+3.8	+11.2	-1.7	0			119.2

2/Gibson required 119 days to mature.

Table 5: Summary of the height data for the strains of the Uniform Test, Group IV-S, 1947

Location	Mean	S100 (Cert.)	S100	C508	C101	C470
			WEST			
Melrose, La.	33	38	40	28	38	28
Nowata, Okla.	36	43	42	31	33	35
Calhoun, La.	23	25	26	20	25	22
Stillwater, Okla.	38	45	44	30	36	36
Stuttgart, Ark.	18	20	19	16	20	17
Crowley, La.	17	20	19	17	20	16
Miami, Okla.	25	28	28	24	25	24
Fayetteville, Ark.	14	15	15	12	14	15
Denton, Texas	26	28	28	26	21	29
Renner, Texas	23	29	31	18	23	19
Mean	25.3	29.1	29.2	22.2	24.5	24.1
			DELTA			
St. Joseph, La.	35	39	40	31	36	36
Stoneville, Miss.	37	43	47	31	30	35
Stoneville, Miss.	39	46	44	35	38	38
Stoneville, Miss.	29	37	38	21	28	28
Clarkedale, Ark.	37	44	42	31	35	37
Sikeston, Mo.	37	44	44	33	38	35
Moorhead, Miss.	31	37	38	26	30	29
Baton Rouge, La.	33	40	42	29	30	29
Tunica, Miss.	35	39	39	29	34	38
Dunleith, Miss.	33	41	38	28	34	34
Mean	34.6	41.0	41.2	39.4	33.3	33.9
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	38	40	41	34	35	39
Blacksburg, Va.	38	44	45	36	36	41
Orange, Va.	36	42	38	35	40	38
Jackson, Tenn.	31	37	37	23	31	29
Beltsville, Md.	44	46	46	43	47	46
Mean	37.4	41.8	41.4	34.2	37.8	38.6
			EAST COAST			
Petersburg, Va.	39	45	45	40	37	36
Holland, Va.	39	43	42	36	38	40
Norfolk, Va.	40	45	47	38	36	40
Charlotte C.H., Va.	29	35	34	26	28	29
Williamsburg, Va.	36	40	40	34	36	36
Mean	36.6	41.6	41.6	34.8	35.0	36.2

Table 5: (Continued)

Location	C463	CX2239-50	C464	CX1339-30	Patoka	Gibson
			WEST			
Melrose, La.	36	38	30	35	27	29
Nowata, Okla.	36	35	35	35	38	35
Calhoun, La.	22	20	22	24	19	22
Stillwater, Okla.	38	39	37	41	32	36
Stuttgart, Ark.	16	20	16	22	16	16
Crowley, La.	16	15	17	16	14	18
Miami, Okla.	24	24	25	25	22	23
Fayetteville, Ark.	14	14	14	16	14	14
Denton, Texas	26	24	28	27	19	24
Renner, Texas	24	21	22	30	18	22
Mean	25.2	25.0	24.6	27.1	21.9	23.9
			DELTA			
St. Joseph, La.	37	30	37	33	34	35
Stoneville, Miss.	36	42	37	45	27	35
Stoneville, Miss.	40	36	41	40	33	38
Stoneville, Miss.	30	29	27	31	20	27
Clarkedale, Ark.	36	34	38	40	29	36
Sikeston, Mo.	36	36	36	38	32	35
Moorhead, Miss.	32	30	33	31	26	29
Baton Rouge, La.	36	36	30	39	25	27
Tunica, Miss.	33	36	34	37	28	34
Dunleith, Miss.	33	30	33	32	26	35
Mean	34.9	33.9	34.6	36.6	28.0	33.9
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	36	40	36	41	36	36
Blacksburg, Va.	40	36	37	39	32	36
Orange, Va.	34	32	34	39	34	33
Jackson, Tenn.	28	32	33	39	20	27
Beltsville, Md.	44	41	44	45	39	45
Mean	36.4	36.2	36.8	40.6	32.2	35.4
			EAST COAST			
Petersburg, Va.	39	34	42	40	36	34
Holland, Va.	41	40	40	42	36	35
Norfolk, Va.	41	38	39	42	31	39
Charlotte C. H., Va.	27	27	28	27	24	28
Williamsburg, Va.	35	36	34	38	33	33
Mean	36.6	35.0	36.6	37.8	32.0	33.8

Table 6: Summary of the seed quality data for the strains of the Uniform Test, Group IV-S, 1947

Location	Mean	S100 (Cert.)	S100	C508	C101	C470
			WEST			
Melrose, La.	3.5	3.0	3.0	3.0	4.0	4.0
Nowata, Okla.	4.3	4.0	4.0	5.0	5.0	3.0
Calhoun, La.	3.5	3.0	3.0	4.0	4.0	3.0
Stillwater, Okla.	4.1	3.0	3.0	5.0	5.0	4.0
Stuttgart, Ark.	3.5	3.0	3.0	3.8	3.5	3.3
Crowley, La.	4.4	3.0	3.0	4.0	5.0	4.0
Miami, Okla.	4.1	3.0	3.0	5.0	5.0	3.0
Fayetteville, Ark.	2.9	1.8	2.3	4.0	3.0	2.8
Denton, Texas	3.6	3.0	3.0	5.0	4.0	3.0
Renner, Texas	3.4	4.0	3.8	3.5	3.5	2.5
Mean	3.7	3.1	3.1	4.2	4.2	3.3
			DELTA			
St. Joseph, La.	1.4	1.0	1.0	1.0	2.0	1.0
Stoneville, Miss.(1)	2.1	1.8	1.5	2.3	2.4	1.8
Stoneville, Miss.(2)	2.8	2.3	2.3	2.0	2.8	2.1
Stoneville, Miss.(3)	3.0	2.3	2.4	4.3	2.8	3.0
Clarkedale, Ark.	3.2	2.8	2.8	3.8	3.3	3.0
Sikeston, Mo.	2.2	1.0	1.0	4.3	3.5	1.8
Moorhead, Miss.	3.1	3.7	3.3	2.5	3.9	2.0
Baton Rouge, La. 1/	1.3	-	1.0	1.0	1.0	1.0
Tunica, Miss. 1/	3.4	3.5	3.3	3.6	4.0	2.3
Dunleith, Miss.	3.1	3.3	2.8	3.0	3.4	2.5
Mean	2.6	2.3	2.1	2.9	3.0	2.2
			UPPER AND CENTRAL SOUTH			
Blacksburg, Va.	2.1	3.2	3.0	1.7	1.8	1.8
Orange, Va.	2.4	2.0	3.0	2.0	2.0	2.0
Beltsville, Md.	1.8	2.0	2.0	2.0	2.0	2.0
Mean	2.1	2.4	2.7	1.9	1.9	1.9
			EAST COAST			
Petersburg, Va.	3.5	2.0	3.0	5.0	4.0	4.0
Holland, Va.	3.1	2.0	2.0	4.0	3.0	3.0
Norfolk, Va.	2.4	2.0	2.0	3.0	3.0	3.0
Charlotte C.H., Va.	1.3	1.0	2.0	2.0	2.0	1.0
Williamsburg, Va.	3.4	3.0	3.0	4.0	4.0	4.0
Mean	2.7	1.6	2.4	3.6	3.2	3.0

1/Not included in the mean.
(1)(2)(3)Order of Planting.

Table 6: (Continued)

Location	C463	CX2239-50	C464	CX1339-30	Patoka	Gibson
			WEST			
Melrose, La.	4.0	3.0	4.0	4.0	3.0	3.0
Nowata, Okla.	4.0	5.0	3.0	5.0	5.0	4.0
Calhoun, La.	4.0	3.0	4.0	4.0	3.0	4.0
Stillwater, Okla.	5.0	3.0	5.0	3.0	4.0	5.0
Stuttgart, Ark.	4.0	3.3	4.0	2.8	3.8	4.0
Crowley, La.	5.0	4.0	5.0	5.0	5.0	5.0
Miami, Okla.	5.0	4.0	5.0	3.0	5.0	4.0
Fayetteville, Ark.	3.5	1.5	3.8	2.0	3.5	3.8
Denton, Texas	4.0	4.0	4.0	4.0	3.0	3.0
Renner, Texas	3.5	3.5	3.3	4.0	3.0	3.0
Mean	4.2	3.4	4.1	3.7	3.8	3.9
			DELTA			
St. Joseph, La.	1.0	1.0	2.0	2.0	2.0	1.0
Stoneville, Miss. (1)	2.1	1.8	3.5	2.3	2.0	1.8
Stoneville, Miss. (2)	3.9	3.0	3.9	2.5	2.3	3.8
Stoneville, Miss. (3)	3.5	2.2	3.5	3.3	3.5	2.6
Clarkedale, Ark.	3.3	3.0	3.3	3.0	3.3	3.3
Sikeston, Mo.	3.3	1.0	3.0	1.0	2.5	2.3
Moorhead, Miss.	3.3	3.0	4.0	3.1	2.5	2.8
Baton Rouge, La.	2.0	1.0	2.0	1.0	2.0	2.0
Tunica, Miss.	3.8	3.5	3.5	2.8	4.0	2.8
Dunleith, Miss.	3.1	3.1	3.9	3.6	2.5	2.8
Mean	2.9	2.3	3.4	2.6	2.6	2.6
			UPPER AND CENTRAL SOUTH			
Blacksburg, Va.	1.5	3.5	1.3	2.6	1.2	1.5
Orange, Va.	2.0	4.0	2.0	3.0	2.0	2.0
Beltsville, Md.	1.0	1.0	1.0	2.0	2.0	3.0
Mean	1.5	2.8	1.4	2.5	1.7	2.2
			EAST COAST			
Petersburg, Va.	4.0	2.0	4.0	2.0	4.0	5.0
Holland, Va.	3.0	3.0	3.0	3.0	5.0	3.0
Norfolk, Va.	2.0	1.0	3.0	1.0	3.0	3.0
Charlotte C.H., Va.	1.0	1.0	1.0	1.0	1.0	1.0
Williamsburg, Va.	3.0	3.0	4.0	3.0	3.0	3.0
Mean	2.6	3.3	3.0	2.0	3.2	3.0

Table 7: Summary of the percentage of oil for the strains in the Uniform Test, Group IV-S, 1947

Location	Mean	S100 (Cert)	S100	C508	C101	C470
			WEST			
Melrose, La.	21.2	20.4	20.3	22.0	21.0	21.2
Nowata, Okla.	19.9	18.8	18.6	20.0	19.6	21.1
Calhoun, La.	21.2	18.8	18.7	22.7	21.1	22.7
Stillwater, Okla.	20.5	19.4	19.2	21.0	20.2	21.5
Stuttgart, Ark.	20.9	19.8	19.7	21.2	20.9	22.4
Crowley, La.	21.1	19.1	19.1	23.1	21.3	21.6
Fayetteville, Ark.	20.4	18.6	18.5	21.1	20.6	20.9
Mean	20.7	19.3	19.2	21.6	20.7	21.6
			DELTA			
St. Joseph, La.	22.1	19.7	20.2	23.7	22.1	22.1
Stoneville, Miss. 4/22[1]	21.8	19.9	19.4	23.1	21.9	23.0
Stoneville, Miss. 5/27[1]	21.4	19.2	19.3	22.8	21.1	21.4
Stoneville, Miss. 6/12[1]	20.2	18.3	18.0	20.8	20.8	21.0
Clarkedale, Ark.	21.4	19.8	19.8	22.2	21.0	21.9
Sikeston, Mo.	21.5	20.1	20.1	22.5	21.0	22.2
Moorhead, Miss.	21.5	18.6	18.5	23.4	22.4	22.4
Tunica, Miss.	22.3	20.1	20.4	23.0	22.1	23.3
Baton Rouge, La.	23.1	21.5	22.1	23.6	23.1	23.4
Dunleith, Miss.	21.9	20.2	20.4	23.1	21.8	22.3
Mean	21.7	19.7	19.8	22.8	21.7	22.3
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	21.4	19.7	19.4	22.6	20.3	21.9
Blacksburg, Va.	21.0	20.4	20.4	21.9	21.3	20.8
Orange, Va.	22.1	21.2	21.2	23.6	22.5	22.2
Jackson, Tenn.	22.5	19.8	19.7	25.2	21.8	23.5
Mean	21.8	20.3	20.2	23.3	21.5	22.1
			EAST COAST			
Petersburg, Va.	21.2	19.1	19.2	22.7	20.9	21.8
Norfolk, Va.	20.9	19.0	19.1	22.4	20.7	21.7
Charlotte, C. H., Va.	21.7	19.8	19.9	22.6	21.7	22.0
Mean	21.3	19.3	19.4	22.6	21.1	21.8
MEAN (24 tests)		19.6	19.6	22.5	21.3	22.0

1/Planting Dates.

Table 7: (Continued)

Location	C463	CX2239-50	C464	CX1339-30	Patoka	Gibson
		WEST				
Melrose, La.	21.7	21.5	21.4	22.0	20.1	21.1
Nowata, Okla.	21.3	19.7	20.9	19.5	18.9	20.3
Calhoun, La.	22.7	19.9	22.7	20.9	21.6	21.6
Stillwater, Okla.	21.2	20.5	21.4	20.4	20.3	20.2
Stuttgart, Ark.	21.8	19.2	21.8	21.1	20.5	22.0
Crowley, La.	22.6	20.9	21.5	20.6	21.3	21.3
Fayetteville, Ark.	20.6	21.4	20.8	21.2	19.6	21.3
Mean	21.7	20.4	21.5	20.8	20.3	21.1
		DELTA				
St. Joseph, La.	23.8	21.1	23.4	22.8	22.0	22.4
Stoneville, Miss. 4/22[1]	23.3	20.9	22.6	21.6	22.1	22.1
Stoneville, Miss. 5/27[1]	23.1	21.5	22.2	21.9	21.2	21.3
Stoneville, Miss. 6/12[1]	21.4	19.1	21.3	20.5	20.6	20.6
Clarkedale, Ark.	22.4	20.8	22.6	21.7	21.2	21.9
Sikeston, Mo.	22.3	21.4	22.4	21.7	21.2	22.1
Moorhead, Miss.	23.9	19.4	22.2	21.1	22.6	21.5
Tunica, Miss.	24.6	21.1	23.8	22.4	21.5	22.9
Baton Rouge, La.	23.8	23.4	23.8	24.2	21.7	23.1
Dunleith, Miss.	23.3	20.9	22.3	22.0	22.1	22.0
Mean	23.2	21.0	22.7	22.0	21.6	22.0
		UPPER AND CENTRAL SOUTH				
Knoxville, Tenn.	23.5	20.8	22.3	21.4	22.4	21.4
Blacksburg, Va.	21.8	21.0	21.1	21.7	20.1	20.0
Orange, Va.	22.5	21.1	23.0	22.4	21.9	21.5
Jackson, Tenn.	24.9	22.9	22.8	22.8	20.7	23.8
Mean	23.2	21.5	22.3	22.1	21.3	21.7
		EAST COAST				
Petersburg, Va.	22.6	20.7	21.8	21.3	20.6	22.4
Norfolk, Va.	23.2	20.1	22.3	20.4	19.4	22.1
Charlotte C. H., Va.	22.6	21.8	22.4	22.3	21.0	22.5
Mean	22.8	20.9	22.2	21.3	20.3	22.3
MEAN (24 tests)	22.7	20.9	22.2	21.6	21.0	21.7

Table 8: Two-year summary of agronomic and chemical data for the strains in the Uniform Test, Group IV-S, 1946-47

	No. of Locations	S100	C101	Patoka	Gibson
YIELDS:					
West	4	14.5	11.7	10.9	11.4
Delta	5	24.4	22.9	20.5	19.6
Central & Upper South	5	24.0	24.1	23.8	20.8
Mean	14	21.4	20.1	18.9	17.7
YIELD RANK:					
West		1	2	4	3
Delta		1	2	3	4
Central & Upper South		2	1	3	4
AVERAGE OF ALL TESTS:					
Lodging		2.1	2.1	1.7	2.1
Plant Height (Inches)		39.9	31.8	27.2	30.7
Maturity[1/]		+9.2	+3.1	-0.8	0
Seed Quality		2.5	3.1	2.9	2.7
Seed Weight		13.7	15.1	15.3	13.1
Percentage of Protein		43.5	41.8	43.6	41.5
Percentage of Oil		19.5	20.8	20.7	21.2
Iodine Number of Oil		129.1	128.0	130.6	129.8

[1/] Days earlier (-) or later (+) than Gibson. Gibson required an average of 119.4 days to mature.

Table 9: Summary of the two-year average yields and yield rank, 1946-47, for the strains of the Uniform Test, Group IV-S

	Mean	S100	C101	Patoka	Gibson
		YIELDS			
		West			
Nowata, Okla.	16.3	18.6	15.5	15.3	15.7
Stillwater, Okla.	14.0	18.0	13.6	11.6	13.0
Stuttgart, Ark.	11.5	12.9	12.0	10.7	10.3
Fayetteville, Ark.	6.7	8.4	5.8	6.2	6.4
Mean		14.5	11.7	10.9	11.4
		Delta			
Sikeston, Mo.	31.4	33.5	31.9	30.3	29.8
Stoneville, Miss.	24.1	27.0	26.0	22.0	21.2
Dunleith, Miss.	18.1	18.4	20.6	16.6	16.8
Tunica, Miss.	18.1	20.4	17.7	17.6	16.6
Baton Rouge, La.	17.7	22.9	18.3	16.0	13.8
Mean		24.4	22.9	20.5	19.6
		Upper and Central South			
Jackson, Tenn.	24.9	26.3	26.9	23.5	22.8
Charlotte C. H., Va.	24.5	26.9	24.7	24.3	22.1
Orange, Va.	23.2	24.1	24.3	23.8	20.5
Knoxville, Tenn.	23.0	23.6	22.4	24.5	21.5
Blacksburg, Va.	20.4	19.3	22.4	23.0	17.0
Mean		24.0	24.1	23.8	20.8
MEAN (14 tests)		21.4	20.1	18.9	17.7
		YIELD RANK			
		West			
Nowata, Okla.		1	3	4	2
Stillwater, Okla.		1	2	4	3
Stuttgart, Ark.		1	2	3	4
Fayetteville, Ark.		1	4	3	2
Mean		1	2	4	3
		Delta			
Sikeston, Mo.		1	2	3	4
Stoneville, Miss.		1	2	3	4
Dunleith, Miss.		2	1	4	3
Tunica, Miss.		1	2	3	4
Baton Rouge, La.		1	2	3	4
Mean		1	2	3	4
		Upper and Central South			
Jackson, Tenn.		2	1	3	4
Charlotte C. H., Va.		1	2	3	4
Orange, Va.		2	1	3	4
Knoxville, Tenn.		2	3	1	4
Blacksburg, Va.		3	2	1	4
Mean		2	1	3	4

Table 10: Four-year summary of agronomic and chemical data for the strains in the Uniform Test, Group IV-S, 1944-47

	No. of Locations	S100	C101	Patoka	Gibson
YIELDS:					
West	1	15.5	11.9	11.4	11.7
Delta	4	26.6	24.7	22.0	21.2
Upper & Central South	4	24.6	23.4	23.2	21.2
Mean	9	25.6	24.1	21.5	21.2
YIELD RANK:					
West		1	2	4	3
Delta		1	2	3	4
Upper & Central South		1	2	3	4
AVERAGE OF ALL TESTS:					
Lodging		2.0	2.0	1.5	2.1
Plant Height (Inches)		35.9	30.4	25.6	29.9
Maturity[1/]		+8.8	+2.6	-1.4	0
Seed Quality		2.5	3.0	2.9	2.7
Seed Weight		13.8	14.9	14.9	13.2
Percentage of Protein		43.1	40.9	42.9	41.2
Percentage of Oil		19.5	21.1	21.0	21.1
Iodine Number of Oil		129.1	128.1	129.8	129.7

[1/] Days earlier (-) or later (+) than Gibson. Gibson required an average of 121.3 days to mature.

Table 11: Summary of the four-year average yields and yield rank, 1944-47, for the strains of the Uniform Test, Group IV-S

	Mean	S100	C101	Patoka	Gibson
			YIELD		
			West		
Stillwater, Okla.	12.6	15.5	11.9	11.4	11.7
			Delta		
Stoneville, Miss.	28.8	31.6	32.0	25.6	26.1
Sikeston, Mo.	26.3	29.8	26.8	24.3	24.2
Tunica, Miss.	23.1	25.3	23.3	21.8	21.8
Baton Rouge, La.	16.3	19.5	16.8	16.2	12.5
Mean		26.6	24.7	22.0	21.2
			Upper and Central South		
Orange, Va.	29.2	31.0	29.3	29.5	26.9
Jackson, Tenn.	21.7	24.4	22.4	20.5	19.6
Blacksburg, Va.	20.8	20.9	21.4	21.9	18.8
Knoxville, Tenn.	20.8	22.1	20.6	21.0	19.6
Mean		24.6	23.4	23.2	21.2
MEAN (9 tests)		25.6	24.1	21.5	21.2
			YIELD RANK		
			West		
Stillwater, Okla.		1	2	4	3
			Delta		
Stoneville, Miss.		2	1	4	3
Sikeston, Mo.		1	2	3	4
Tunica, Miss.		1	2	3	3
Baton Rouge, La.		1	2	3	4
Mean		1	2	3	4
			Upper and Central South		
Orange, Va.		1	3	2	4
Jackson, Tenn.		1	2	3	4
Blacksburg, Va.		3	2	1	4
Knoxville, Tenn.		1	3	2	4
Mean		1	2	3	4

UNIFORM TEST, GROUP V

The Uniform Test, Group V, is composed of two varieties, one introduction, and ten new strains. The approximate range of maturity of the new strains included in Group V extends from five days later than Gibson to five days earlier than Ogden. This was the first year that strains of Group V maturity were available for testing. S100 is included as the standard of comparison for all of the strains. Ogden is included to facilitate comparisons with Group VI. The origin of these varieties and strains is as follows:

Strain or Variety	Source or Originating Agency	Origin
Ogden	Tenn. Agr. Exp. Sta.	Sel. from Tokyo x P.I. 54610
D49-977	Delta Br. Exp. Sta. & U.S.R.S.L.	Sel. from Macoupin x Arksoy
D414-714	Delta Br. Exp. Sta. & U.S.R.S.L.	Sel. from Chief x Arksoy
D417-721	Delta Br. Exp. Sta. & U.S.R.S.L.	Sel. from Arksoy x Patoka
D418-177	Delta Br. Exp. Sta. & U.S.R.S.L.	Sel. from Patoka x Arksoy
D423-774	Delta Br. Exp. Sta. & U.S.R.S.L.	Sel. from Dunfield x Arksoy
D540-1	Delta Br. Exp. Sta. & U.S.R.S.L.	Sel. from Ogden x Arksoy
N45-2559	N.C. Exp. Sta. & U.S.R.S.L.	Sel. from Macoupin x Monotta
P.I. 97066	U. S. D. A.	Introduction from Korea
S100 (Cert.)	Missouri Agr. Exp. Sta.	Sel. from rogue in Illini
N45-1466	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Ralsoy x Ogden
N45-2565	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Chief x Arksoy
N45-3102	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Ralsoy x Ogden

Twenty tests of the Group V strains were planted. Seed stocks of three of the new strains were not sufficient for planting at all locations. The tests at Coweta, Oklahoma, were destroyed by jack rabbits. Thin stands at a number of locations reduced the number of tests completed to twelve. The agronomic and chemical data for all locations are summarized in tables 12 to 18, inclusive.

The results of the 1947 tests do not show any of the new strains to be particularly outstanding. D540-1 equalled S100 in yield, however, it is late in maturity and relatively low in percent oil. N45-3102, also late maturing, approached S100 in yield and contained 0.5% more oil than S100. Neither of these strains yielded as well as Ogden, nor were they as high in percentage of oil. D540-1, because of late maturity, was shifted to Group VI in the 1948 tests. Only D418-177 and D417-721 of these new strains are being tested in Group V in 1948.

In addition to the Uniform Test, Group V, a Preliminary Test V$_p$ composed of 36 strains and varieties was grown at five locations. Yields were low at all locations and differences in yield between varieties within tests were small, due largely to a late summer drought at these locations. The agronomic and chemical data for these strains are given in tables 19 to 21, inclusive.

Three of these strains appeared sufficiently promising for inclusion in the 1948 tests. D517-14, from the cross Arksoy 2913 x Patoka, was entered in Group VI. D421-737, from the cross L7-1355 x Magnolia, and D512-3, from the cross C171 x Arksoy 2913, were entered in the Uniform Group V.

Table 12: Summary of the agronomic and chemical data for the strains of the Uniform Test, Group V, 1947

Location	No. of Tests	Mean	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
				YIELD				
West	4	8.0	11.0	8.8	8.0	9.2	7.3	9.2
Delta	4	21.4	25.9	23.7	26.4	23.5	23.4	20.0
Upper & Central South	4	18.6	26.4	21.5	19.0	19.9	21.1	18.0
Mean	12	16.0	21.1	18.0	17.8	17.5	17.3	15.7
				YIELD RANK				
West			1	4	5	2	9	2
Delta			2	3	1	6	4	8
Upper & Central South			1	2	5	4	3	7
				LODGING				
West	3	1.8	1.4	1.7	1.5	2.4	1.8	2.0
Delta	5	2.2	1.5	1.7	1.6	1.8	2.3	2.4
Upper & Central South	5	2.1	1.4	1.6	2.0	2.0	2.2	2.1
Mean	13	2.1	1.4	1.7	1.7	2.0	2.1	2.2
				HEIGHT				
West	4	25.8	24.5	24.5	25.3	26.5	24.5	23.8
Delta	5	40.0	33.2	34.8	42.6	32.8	41.2	42.8
Upper & Central South	5	39.2	35.8	35.6	41.0	34.6	38.6	41.6
Mean	14	35.7	31.6	32.1	37.1	31.6	35.5	36.9
				MATURITY 1/				
West	3		+12.0	+3.0	0	+12.0	-1.3	+4.7
Delta	5		+14.8	+12.6	0	+14.8	+1.6	+9.4
Upper & Central South	3		+7.7	+5.0	0	+4.3	-6.0	+4.7
Mean	11		+12.1	+7.5	0	+11.2	-1.3	+6.8

1/Days earlier (-) or later (+) than S100 (Cert.).

Table 12: (Continued)

Location	N45-1466	N45-2565	D423-774	D414-714	D49-977	N45-2559	P.I. 97066
			YIELD				
West	7.0	7.9	7.9	6.9	7.4	6.8	6.7
Delta	21.8	23.0	18.4	20.1	18.4	16.5	14.9
Upper & Central South	18.4	15.7	17.5	17.3	16.1	16.6	14.5
Mean	15.7	15.5	14.6	14.8	14.0	13.3	12.0
			YIELD RANK				
West	10	6	6	11	8	12	13
Delta	7	5	10	9	11	12	13
Upper & Central South	6	12	8	9	11	10	13
			LODGING				
West	1.5	1.8	1.7	1.7	1.4	2.0	2.5
Delta	2.0	2.3	2.8	2.5	1.7	2.4	3.3
Upper & Cen. South	2.2	2.3	2.7	2.0	1.8	2.0	3.0
Mean	2.0	2.2	2.5	2.1	1.7	2.2	3.0
			HEIGHT				
West	22.8	26.3	25.8	22.8	25.0	34.5	28.5
Delta	31.4	46.8	42.4	41.2	34.2	51.0	47.8
Upper & Cen. South	33.6	42.3	38.6	40.6	38.2	47.4	41.6
Mean	29.7	39.3	36.3	35.7	33.0	45.0	40.1
			MATURITY[1]/				
West	+2.7	+12.0	+3.3	+3.3	+3.0	+9.7	+10.7
Delta	+8.0	+1.7	+11.2	+5.8	+10.8	+16.2	+15.6
Upper & Cen. South	-2.3	+4.7	-2.0	-3.0	+4.0	+4.3	+5.0
Mean	+3.7	+5.3	+5.4	+2.7	+6.8	+11.2	+11.4

Table 12: (Continued)

Location	No. of Tests	Mean	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
			SEED QUALITY					
West	4	2.9	2.3	2.3	3.8	3.5	3.5	2.6
Delta	5	2.0	1.9	1.6	2.3	2.1	1.8	2.4
Upper & Central South	1	1.2	1.0	1.0	2.0	1.0	1.0	1.0
Mean		2.3	2.0	1.8	2.9	2.6	2.4	2.3
			COMPOSTION					
			PERCENTAGE OF OIL					
West	1	19.4	20.1	18.9	18.3	18.6	19.6	19.8
Delta	5	20.5	21.2	20.2	20.0	20.5	21.1	20.7
Upper & Central South	3	20.3	21.7	20.0	19.6	20.3	20.3	20.7
Mean		20.3	21.2	20.0	19.7	20.2	20.7	20.6
			PERCENTAGE OF PROTEIN					
MEAN	9	42.3	40.5	42.1	42.5	41.1	43.9	42.8
			IODINE NUMBER OF OIL					
MEAN	9	129.5	131.8	132.9	127.0	131.9	129.2	128.5

Table 12: (Continued)

Location	N45-1466	N45-2565	D523-774	D417-714	D49-977	N45-2559	P. I. 97066
			SEED QUALITY				
West	3.8	3.0	3.3	2.1	2.3	2.6	3.2
Delta	2.2	2.3	1.8	2.1	1.7	1.9	2.3
Upper & Central South	1.0	2.0	1.0	1.0	1.0	1.0	1.0
MEAN	2.7	2.6	2.3	2.0	1.9	2.1	2.5
			COMPOSITION				
			PERCENTAGE OF OIL				
West	20.4	19.1	20.2	19.5	20.3	19.2	18.6
Delta	21.0	19.6	21.7	20.1	21.3	19.9	19.4
Upper & Cen. South	20.8	19.2	20.5	20.3	21.1	20.7	19.3
MEAN	20.9	19.4	21.1	20.1	21.1	20.1	19.3
			PERCENTAGE OF PROTEIN				
MEAN	42.2	42.1	42.2	42.7	41.4	43.2	42.9
			IODINE NUMBER OF OIL				
MEAN	128.6	128.8	127.8	127.4	130.5	129.9	129.5

Table 13: Summary of the yield in bushels per acre of the strains of the Uniform Test, Group V, 1947

Location	Date of Planting	Mean Yield	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721	N45-1466
			WEST						
Stuttgart, Ark.	5-27	9.9	11.4	10.9	10.8	11.0	9.1	9.5	9.9
Miami, Okla.	5-29	8.5	11.4	9.0	7.2	9.8	8.8	10.6	7.8
Fayetteville, Ark.		8.5	13.9	8.9	6.5	11.7	7.0	8.8	6.0
Stillwater, Okla.	5-10	5.1	7.3	6.4	7.4	4.3	4.1	7.9	4.4
Chillicothe, Tex.[1]	6-16	3.8	5.5	6.4	2.8	-	2.2	5.0	-
Denton, Texas[1]	4-24	-	5.3	-	-	-	2.7	3.4	-
Mean		8.0	11.0	8.8	8.0	9.2	7.3	9.2	7.0
			DELTA						
Stoneville, Miss.	4-22	24.2	30.3	29.4	31.5	29.2	27.7	19.3	23.9
Sikeston, Mo.	5-27	22.7	27.1	21.3	24.4	25.7	22.9	21.7	23.0
Clarkedale, Ark.[1]	5-28	22.0	26.2	26.0	29.3	19.6	21.3	-	21.4
St. Joseph, La.	4-28	20.6	22.8	25.6	26.6	22.6	23.1	20.4	23.1
Tunica, Miss.	5-7	17.9	23.3	18.4	23.0	16.3	19.9	18.6	17.2
Mean		21.4	25.9	23.7	26.4	23.5	23.4	20.0	21.8
			UPPER AND CENTRAL SOUTH						
Plymouth, N. C.	5-7	21.4	36.4	31.4	19.8	25.8	25.4	15.2	24.6
Knoxville, Tenn.	4-22	22.0	29.9	25.2	25.4	21.7	26.3	24.6	19.1
Watkinsville, Ga.	4-22	15.7	18.4	14.7	15.5	13.7	16.0	16.4	16.4
Jackson, Tenn.	4-21	15.3	20.7	14.6	15.1	18.3	16.8	15.7	13.6
Belle Mina, Ala.[1]	5-7	12.3	14.8	14.4	8.9	-	11.4	12.2	-
McCullers, N. C.[1]	5-9	-	35.2	30.9	-	28.5	22.9	29.4	19.9
Mean		18.6	26.4	21.5	19.0	19.9	21.1	18.0	18.4
MEAN (12 tests)		16.0	21.1	18.0	17.8	17.5	17.3	15.7	15.7

[1] Not included in the mean.

Table 13: (Continued)

Location	N45-2585	D423-774	D414-714	D49-977	N45-2559	P.I. 97066	Bu. Nec. For Sig. (5%)	Coef. of Var.
				WEST				
Stuttgart, Ark.	9.9	9.1	9.2	9.8	8.8	9.0	N.S.	15%
Miami, Okla.	10.1	8.0	7.0	6.3	8.0	6.6	2.4	20%
Fayetteville, Ark.	9.4	9.1	5.4	8.1	7.4	8.8	2.4	19%
Stillwater, Okla.	2.2	5.3	5.8	5.4	2.9	2.4	2.7	38%
Chillicothe, Tex.[1]	-	2.6	4.6	3.4	3.8	1.6	1.5	26%
Denton, Texas[1]	-	4.4	-	3.3	-	2.5		
Mean	7.9	7.9	6.9	7.4	6.8	6.7		
				DELTA				
Stoneville, Miss.	24.7	21.8	28.3	17.7	16.8	13.7	6.2	14%
Sikeston, Mo.	24.4	20.5	20.2	22.6	23.3	18.5	2.8	9%
Clarkedale, Ark.[1]	21.0	-	18.8	21.9	20.7	17.2	5.3	16%
St. Joseph, La.	21.7	16.7	14.9	13.7	17.2	17.8	7.7	26%
Tunica, Miss.	21.0	12.5	17.0	19.4	8.6	9.7	5.6	22%
Mean	23.0	18.4	20.1	18.4	16.5	14.9		
				UPPER AND CENTRAL SOUTH				
Plymouth, N. C.	14.8	23.9	16.6	16.1	15.7	12.3	5.7	19%
Knoxville, Tenn.	19.4	16.2	21.6	20.8	18.8	16.7	4.4	14%
Watkinsville, Ga.	12.3	16.7	18.8	13.1	18.4	14.0	3.0	13%
Jackson, Tenn.	16.2	13.2	12.3	14.3	13.4	14.8	4.2	19%
Belle Mina, Ala.[1]	-	12.8	11.7	11.4	12.2	13.3	2.3	16%
McCullers, N. C.[1]	-	31.5	25.7	14.0	23.0	37.6	4.4	11%
Mean	15.7	17.5	17.3	16.1	16.6	14.5		
MEAN (12 Tests)	15.5	14.6	14.8	14.0	13.3	12.0		

Table 13a: Summary of yield rank for the strains of the Uniform Test, Group V, 1947

Location	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
			WEST			
Stuttgart, Ark.	1	3	4	2	9	8
Miami, Okla.	1	5	9	4	6	2
Fayetteville, Ark.	1	5	11	2	10	6
Stillwater, Okla.	3	4	2	9	10	1
Chillicothe, Texas	2	1	7	-	9	3
Denton, Texas	1	3	-	-	6	4
			DELTA			
Stoneville, Miss.	2	3	1	4	6	10
Sikeston, Mo.	1	10	3	2	7	9
Clarkedale, Ark.	2	3	1	9	6	-
St. Joseph, La.	5	2	1	6	4	8
Tunica, Miss.	1	7	2	10	4	6
			UPPER AND CENTRAL SOUTH			
Plymouth, N. C.	1	2	9	3	4	11
Knoxville, Tenn.	1	4	3	6	2	5
Watkinsville, Ga.	2	8	7	10	6	5
Jackson, Tenn.	1	8	6	2	3	5
Belle Mina, Ala.	1	2	10	-	8	5
McCullers, N. C.	2	4	-	6	9	5

Table 13a: (Continued)

Location	N45-1466	N45-2565	D423-774	D414-714	D49-977	N45-2559	P.I. 97066
			WEST				
Stuttgart, Ark.	5	5	11	9	7	13	12
Miami, Okla.	8	3	7	10	12	7	11
Fayetteville, Ark.	12	3	4	13	8	9	6
Stillwater, Okla.	8	13	7	5	6	11	12
Chillicothe, Texas	-	-	8	4	6	5	10
Denton, Texas	-	-	2	-	5	-	7
			DELTA				
Stoneville, Miss.	8	7	9	5	11	12	13
Sikeston, Mo.	6	3	11	12	8	5	13
Clarkedale, Ark.	5	7	-	10	4	8	11
St. Joseph, La.	3	7	9	12	13	11	10
Tunica, Miss.	8	3	11	9	5	13	12
			UPPER AND CENTRAL SOUTH				
Plymouth, N. C.	5	12	6	7	8	10	13
Knoxville, Tenn.	10	9	13	7	8	11	12
Watkinsville, Ga.	5	12	4	1	11	3	9
Jackson, Tenn.	10	4	12	13	9	11	7
Belle Mina, Ala.	-	-	4	7	8	6	3
McCullers, N. C.	10	-	3	7	11	8	1

Table 14: Summary of the lodging data for the strains of the Uniform Test, Group V, 1947

Location	Mean	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
			WEST				
Miami, Okla.	2.4	2.0	2.0	2.5	3.0	2.0	3.0
Fayetteville, Ark.	1.4	1.3	2.0	1.0	2.3	1.3	1.0
Stillwater, Okla.	1.6	1.0	1.0	1.0	2.0	2.0	2.0
Denton, Texas[1]	-	1.0	1.0	1.0	-	1.0	1.0
Mean	1.8	1.4	1.7	1.5	2.4	1.8	2.0
			DELTA				
Stoneville, Miss.	2.8	1.3	1.5	2.5	1.8	3.5	4.0
Sikeston, Mo.	1.7	1.0	1.8	1.0	1.0	1.3	1.8
Clarkedale, Ark.	1.7	1.3	1.3	1.0	1.8	2.0	1.5
St. Joseph, La.	2.6	2.0	2.0	2.0	2.0	3.0	3.0
Tunica, Miss.	2.0	1.8	1.8	1.5	2.3	1.5	1.8
Mean	2.2	1.5	1.7	1.6	1.8	2.3	2.4
			UPPER AND CENTRAL SOUTH				
Plymouth, N. C.	2.7	2.0	2.0	3.0	2.0	3.0	3.0
Knoxville, Tenn.	3.5	2.0	3.0	2.0	4.0	3.0	3.0
Watkinsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.5	1.0	1.0	2.0	2.0	2.0	1.0
Belle Mina, Ala.[1]	0.6	1.0	0	0	-	0	1.0
McCullers, N. C.[1]	1.8	1.0	1.0	-	1.0	2.0	2.5
Mean	2.1	1.4	1.6	2.0	2.0	2.2	2.1

[1] Not included in the mean.

Table 14: (Continued)

Location	N45-1466	N45-2565	D423-774	D417-714	D49-977	N45-2559	P. I. 97066
			WEST				
Miami, Okla.	2.5	3.0	2.0	2.0	2.0	2.0	3.0
Fayetteville, Ark.	1.0	1.3	1.0	1.0	1.3	2.0	1.5
Stillwater, Okla.	1.0	1.0	2.0	2.0	1.0	2.0	3.0
Denton, Texas [1]	-	-	1.0	-	1.0	1.0	1.0
Mean	1.5	1.8	1.7	1.7	1.4	2.0	2.5
			DELTA				
Stoneville, Miss.	2.5	3.3	4.0	3.8	1.5	2.8	4.1
Sikeston, Mo.	1.3	1.8	2.5	2.0	1.8	2.3	2.3
Clarkedale, Ark.	2.3	1.5	2.0	1.7	1.0	1.5	3.3
St. Joseph, La.	2.0	3.0	3.0	3.0	2.0	3.0	4.0
Tunica, Miss.	2.0	1.8	2.3	2.0	2.0	2.3	2.8
Mean	2.0	2.3	2.8	2.5	1.7	2.4	3.3
			UPPER AND CENTRAL SOUTH				
Plymouth, N. C.	2.0	3.0	4.0	3.0	2.0	3.0	3.0
Knoxville, Tenn.	5.0	3.0	5.0	4.0	3.0	3.0	5.0
Watkinsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Jackson, Tenn.	1.0	2.0	1.0	1.0	2.0	1.0	2.0
Belle Mina, Ala. [1]	-	-	0	1.0	1.0	1.0	1.0
McCullers, N. C.	2.0	-	2.5	1.0	1.0	2.0	4.0
Mean	2.2	2.3	2.7	2.0	1.8	2.0	3.0

Table 15: Summary of the maturity data, days earlier (-) or later (+) than S100, for the strains of the Uniform Test, Group V, 1947

Location	Date of Planting	Ogden	D540-1	S100[2/] (Cert.)	N45-3102	D418-177	D417-721	N45-1466
			WEST					
Stuttgart, Ark.	5-27	+17	+9	0	+17	0	+9	+9
Fayetteville, Ark.		+4	0	0	+4	-4	0	-4
Stillwater, Okla.	5-10	+15	0	0	+15	0	+5	+3
Mean		+12.0	+3.0	0	+12.0	-1.3	+4.7	+2.7
			DELTA					
Stoneville, Miss.	4-22	+15	+13	0	+14	-1	+15	+15
Sikeston, Mo.	5-27	+13	+9	0	+11	0	+10	+7
Clarkedale, Ark.	5-28	+14	+9	0	+14	0	0	+7
St. Joseph, La.	4-28	+22	+22	0	+22	+8	+12	+8
Tunica, Miss.	5-7	+10	+10	0	+13	+1	+10	+3
Mean		+14.8	+12.6	0	+14.8	+1.6	+9.4	+8.0
			UPPER AND CENTRAL SOUTH					
Plymouth, N. C.	5-7	+6	+3	0	0	0	0	-5
Knoxville, Tenn.	4-22	-1	-2	0	-2	-18	-2	-9
Jackson, Tenn.	4-21	+18	+14	0	+15	0	+16	+7
Belle Mina, Ala.[1/]	5-7	+4	-2	0	-	-2	-2	-
Mean		+7.7	+5.0	0	+4.3	-6.0	+4.7	-2.3

[1/] Not included in mean.

[2/] S100 required 142 days to mature.

Table 15: (Continued)

Location	N45-2565	D423-774	D414-714	D49-977	N45-2559	P.I. 97066	S100 Matured	Days to Maturity
			WEST					
Stuttgart, Ark.	+16	+9	+9	+9	+10	+10	9-23	123
Fayetteville, Ark.	0	-2	-4	0	+4	+4		
Stillwater, Okla.	+20	+3	+5	0	+15	+18	9-30	143
Mean	+12.0	+3.3	+3.3	+3.0	+9.7	+10.7		
			DELTA					
Stoneville, Miss.	+21	+16	+9	+14	+16	+17	9-9	140
Sikeston, Mo.	+15	+5	+6	+12	+14	+11	10-1	131
Clarkedale, Ark.	+14	+14	0	+10	+14	+14	10-6	127
St. Joseph, La.	+22	+22	+8	+8	+22	+22	9-4	129
Tunica, Miss.	+11	-1	+6	+10	+15	+14	9-25	141
Mean	+1.7	+11.2	+5.8	+10.8	+16.2	+15.6		
			UPPER AND CENTRAL SOUTH					
Plymouth, N.C.	0	0	0	0	0	0	10-7	153
Knoxville, Tenn.	-2	-16	-14	-2	-5	-2	10-11	172
Jackson, Tenn.	+16	+10	+5	+14	+18	+17	9-22	154
Belle Mina, Ala.	-	-2	-2	0	0	-2	10-4	150
Mean	+4.7	-2.0	-3.0	+4.0	+4.3	+5.0		

Table 16: Summary of the height data for the strains of the Uniform Test, Group V, 1947

Location	Mean	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
			WEST				
Stuttgart, Ark.	18.7	17	17	18	20	18	18
Miami, Okla.	24.8	25	23	26	26	24	22
Fayetteville, Ark.	21.5	20	20	18	24	19	18
Stillwater, Okla.	38.0	36	38	39	36	37	37
Denton, Texas 1/	-	23	25	30	-	24	25
Mean	25.8	24.5	24.5	25.3	26.5	24.5	23.8
			DELTA				
Stoneville, Miss.	41.6	27	35	47	25	48	50
Sikeston, Mo.	42.2	41	40	45	42	41	39
Clarkedale, Ark.	39.8	35	37	40	36	39	39
St. Joseph, La.	37.2	25	25	40	25	40	46
Tunica, Miss.	39.6	38	37	41	36	38	40
Mean	40.0	33.2	34.8	42.6	32.8	41.2	42.8
			UPPER AND CENTRAL SOUTH				
Plymouth, N. C.	45.7	40	42	50	42	44	44
Knoxville, Tenn.	41.4	41	38	44	34	40	47
Watkinsville, Ga.	30.2	30	29	32	30	28	32
Jackson, Tenn.	37.6	32	33	38	33	37	39
Belle Mina, Ala. 1/	38.6	32	30	45	-	36	37
McCullers, N. C. 1/	40.9	36	36	-	34	44	46
Mean	39.2	35.8	35.6	41.0	34.6	38.6	41.6

1/Not included in the mean.

Table 16: (Continued)

Location	N45-1466	N45-2565	D423-774	D414-714	D49-977	N45-2559	P.I. 97066
			WEST				
Stuttgart, Ark.	16	20	18	16	16	27	22
Miami, Okla.	22	26	24	20	24	34	26
Fayetteville, Ark.	17	22	23	19	23	28	28
Stillwater, Okla.	36	37	38	36	37	49	38
Denton, Texas[1]	-	-	31	-	23	33	30
Mean	22.8	26.3	25.8	22.8	25.0	34.5	28.5
			DELTA				
Stoneville, Miss.	27	53	43	49	27	56	56
Sikeston, Mo.	38	42	43	39	43	51	45
Clarkedale, Ark.	37	46	43	35	40	49	42
St. Joseph, La.	22	48	42	42	22	52	54
Tunica, Miss.	33	45	41	41	39	47	42
Mean	31.4	46.8	42.4	41.2	34.2	51.0	47.8
			UPPER AND CENTRAL SOUTH				
Plymouth, N. C.	42	54	40	48	48	54	46
Knoxville, Tenn.	32	46	37	43	43	51	42
Watkinsville, Ga.	30	28	30	30	28	32	34
Jackson, Tenn.	32	41	42	38	36	50	38
Belle Mina, Ala.[1]	-	-	40	37	36	48	45
McCullers, N. C.	32	-	44	44	36	50	48
Mean	33.6	42.3	38.6	40.6	38.2	47.4	41.6

Table 17: Summary of the seed quality data for the strains of the Uniform Test, Group V, 1947

Location	Mean	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
			WEST				
Stuttgart, Ark.	2.6	2.0	2.0	3.5	3.0	3.0	2.5
Miami, Okla.	2.9	2.0	2.0	4.0	4.0	3.0	3.0
Fayetteville, Ark.	2.4	2.0	2.3	2.5	2.8	2.8	1.8
Stillwater, Okla.	3.8	3.0	3.0	5.0	4.0	5.0	3.0
Chillicothe, Tex.[1/]	-	3.0	2.0	4.0	-	4.0	3.0
Denton, Texas[1/]		3.0	4.0	-	-	5.0	5.0
Mean	2.9	2.3	2.3	3.8	3.5	3.5	2.6
			DELTA				
Stoneville, Miss.	2.5	2.4	1.8	1.9	2.4	2.0	3.0
Sikeston, Mo.	1.2	1.0	1.0	1.0	1.0	1.3	1.5
Clarkedale, Ark.	2.4	2.0	2.3	3.0	2.5	2.3	2.0
St. Joseph, La.	1.6	2.0	1.0	2.0	2.0	1.0	2.0
Tunica, Miss.	2.5	2.3	1.8	3.5	2.8	2.3	3.3
Mean	2.0	1.9	1.6	2.3	2.1	1.8	2.4
			UPPER AND CENTRAL SOUTH				
Watkinsville, Ga.	1.2	1.0	1.0	2.0	1.0	1.0	1.0
Belle Mina, Ala.[1/]		2.5	2.1	4.3	-	4.3	4.3
McCullers, N. C.[1/]		4.0	4.0	-	4.0	5.0	4.0

[1/] Not included in mean.

Table 17: (Continued)

Location	N45-1466	N45-2565	D423-774	D414-714	D49-977	N45-2559	P.I. 97066
			WEST				
Stuttgart, Ark.	3.0	2.5	2.8	2.0	2.0	2.0	3.5
Miami, Okla.	4.0	3.0	4.0	2.0	2.0	2.0	3.0
Fayetteville, Ark.	3.0	2.5	2.5	1.5	2.3	2.5	2.3
Stillwater, Okla.	5.0	4.0	4.0	3.0	3.0	4.0	4.0
Chillicothe, Tex.[1]	-	-	2.0	2.0	2.0	3.0	4.0
Denton, Texas[1]	-	-	5.0	-	4.0	-	-
Mean	3.8	3.0	3.3	2.1	2.3	2.6	3.2
			DELTA				
Stoneville, Miss.	2.8	2.8	2.5	2.6	2.9	2.5	2.5
Sikeston, Mo.	1.3	1.3	1.3	1.3	1.0	1.0	1.3
Clarkedale, Ark.	2.7	2.3	2.0	2.0	2.3	2.8	2.8
St. Joseph, La.	1.0	3.0	1.0	2.0	1.0	1.0	2.0
Tunica, Miss.	3.3	2.3	2.3	2.5	1.3	2.3	2.8
Mean	2.2	2.3	1.8	2.1	1.7	1.9	2.3
			UPPER AND CENTRAL SOUTH				
Watkinsville, Ga.	1.0	2.0	1.0	1.0	1.0	1.0	1.0
Belle Mina, Ala.[1]	-	-	3.3	4.8	2.3	1.8	2.3
McCullers, N. C.[1]	5.0	-	4.0	5.0	5.0	5.0	4.0

Table 18: Summary of the percentage of oil for the strains of the Uniform Test, Group V, 1947

Location	Mean	Ogden	D540-1	S100 (Cert.)	N45-3102	D418-177	D417-721
			WEST				
Fayetteville, Ark.	19.4	20.1	18.9	18.3	18.6	19.6	19.8
			DELTA				
Stoneville, Miss.	20.4	21.0	20.1	19.9	20.6	21.1	20.7
Sikeston, Mo.	20.9	21.8	20.3	19.7	21.3	21.3	21.7
Clarkedale, Ark.	21.0	21.6	20.7	20.2	20.8	21.1	21.6
St. Joseph, La.	19.7	20.0	19.4	19.9	19.6	20.1	19.0
Tunica, Miss.	20.6	21.5	20.4	20.3	20.3	21.8	20.7
Mean	20.5	21.2	20.2	20.0	20.5	21.1	20.7
			UPPER AND CENTRAL SOUTH				
Knoxville, Tenn.	19.4	21.2	19.1	18.9	19.6	19.9	18.8
Watkinsville, Ga.	19.9	21.7	19.7	19.4	18.9	19.8	19.4
Jackson, Tenn.	21.7	22.1	21.1	20.5	22.4	21.3	23.9
Belle Mina, Ala.1/	-	21.4	20.2	18.8	-	19.9	20.2
Mean	20.3	21.7	20.0	19.6	20.3	20.3	20.7
MEAN (9 tests)	20.3	21.2	20.0	19.7	20.2	20.7	20.6

1/Not included in mean.

Table 18: (Continued)

Location	N45-1466	N45-2565	D423-774	D414-714	D49-977	N45-2559	P. I. 97066
			WEST				
Fayetteville, Ark.	20.4	19.1	20.2	19.5	20.3	19.2	18.6
			DELTA				
Stoneville, Miss.	20.8	19.8	22.0	19.6	21.2	20.0	19.0
Sikeston, Mo.	21.5	19.5	21.9	20.9	22.0	19.8	20.0
Clarkedale, Ark.	21.6	19.8	22.1	20.8	21.9	20.4	20.6
St. Joseph, La.	20.2	19.0	20.4	19.1	20.6	19.7	18.5
Tunica, Miss.	20.9	19.7	21.9	20.0	21.0	19.6	19.1
Mean	21.0	19.6	21.7	20.1	21.3	19.9	19.4
			UPPER AND CENTRAL SOUTH				
Knoxville, Tenn.	20.0	18.0	19.3	18.7	20.5	20.4	18.1
Watkinsville, Ga.	20.8	18.4	20.4	20.4	20.5	20.5	18.7
Jackson, Tenn.	21.7	21.1	21.9	21.7	22.3	21.3	21.2
Belle Mina, Ala.[1/]	-	-	20.7	19.9	20.6	19.8	19.6
Mean	20.8	19.2	20.5	20.3	21.1	20.7	19.3
MEAN (9 tests)	20.9	19.4	21.1	20.1	21.1	20.1	19.3

Table 19: Summary of the agronomic and chemical data for the strains of Preliminary Test V, 1947

Variety or Strain	Origin	Yield		Lodging	Height (In.)	Matur. Index
		Bu/Acre	Rank			
Ogden		20.5	1	1.2	30	+12.6
D517-14	Arksoy 2913 x Patoka	19.4	2	1.8	34	+10.0
D421-737	L7-1355 x Magnolia	18.9	3	2.0	38	+9.0
S100		18.7	4	1.3	36	Sept. 26
D418-984	Patoka x Arksoy 2913	18.0	5	1.5	30	+5.0
D417-721	Arksoy 2913 x Patoka	17.9	6	1.5	33	+8.6
D514-38	Chief x Arksoy 2913	17.8	7	1.4	32	+5.2
D512-3	C171 x Arksoy 2913	17.5	8	2.5	30	+7.2
D520-26	L7-1355 x Arksoy 2913	17.4	9	1.5	33	+9.6
D523-88	Dunfield x Arksoy	17.1	10	1.5	27	+7.2
D533-14	Tenn. N. P. x Dunfield	17.1	11	1.4	33	+6.2
D523-74	Dunfield x Arksoy	17.0	12	1.4	24	+9.2
D523-91	Dunfield x Arksoy	16.9	13	1.7	31	+9.8
D424-757	Manchuria 13-177 x Arksoy	16.9	14	1.8	32	+5.0
D523-83	Dunfield x Arksoy	16.9	15	1.8	28	+10.6
D55-26	Monetta x Manchuria 13-177	16.8	16	2.3	32	+7.8
D523-93	Dunfield x Arksoy	16.7	17	1.4	27	+6.8
D517-9	Arksoy 2913 x Patoka	16.6	18	1.2	27	+5.6
D523-58	Dunfield x Arksoy	16.6	19	1.6	36	+6.4
D524-57	Manchuria 13-177 x Arksoy	16.5	20	1.6	35	+6.4
D523-26	Dunfield x Arksoy	16.4	21	2.2	38	+9.6
D532-59	Haberlandt x Dunfield	16.3	22	2.5	34	+10.2
D523-75	Dunfield x Arksoy	16.2	23	1.7	27	+8.8
D433-857	Tenn. N. P. x Dunfield	15.9	24	1.3	33	+7.0
D414-714	Chief x Arksoy 2913	15.9	25	1.3	33	+4.2
D49-977	Macoupin x Arksoy 2913	15.5	26	1.3	30	+7.6
D523-65	Dunfield x Arksoy	15.4	27	1.4	27	+8.8
D55-17	Monetta x Manchuria 13-177	15.3	28	1.9	32	+6.8
D517-8	Arksoy 2913 x Patoka	15.0	29	1.3	30	+6.4
D510-25	Macoupin x Monetta	15.0	30	2.3	34	+9.6
D59-42	Macoupin x Arksoy 2913	14.9	31	1.2	29	+6.8
D55-14	Monetta x Manchuria 13-177	14.9	32	2.4	32	+6.8
D510-21	Macoupin x Monetta	14.6	33	1.4	33	+6.4
D523-87	Dunfield x Arksoy	14.6	34	1.9	28	+8.2
D532-63	Haberlandt x Dunfield	14.3	35	2.8	36	+11.4
D59-26	Macoupin x Arksoy 2913	13.9	36	2.0	31	+8.2

Table 19: (Continued)

Variety or Strain	Seed Quality	Grams/100 Beans	Percentage of Protein 1/	Percentage of Oil 1/	Iodine No. of Oil 1/
Ogden	1.9	13.2	41.5	20.3	132.7
D517-14	2.2	11.7	42.8	21.6	125.5
D421-737	2.2	12.3	43.6	20.0	130.5
S100	2.6	12.9	43.8	18.5	132.1
D418-984	2.9	13.3	43.5	21.2	122.2
D417-721	2.2	11.1	43.8	21.1	126.3
D514-38	2.2	10.4	44.3	19.8	129.4
D512-3	2.1	10.7	42.2	21.0	130.6
D520-26	2.5	11.0	44.2	19.3	128.6
D523-88	2.4	11.9	42.4	21.5	128.6
D533-14	2.2	9.9	41.5	22.5	132.6
D523-74	1.9	10.8	43.0	20.2	133.2
D523-91	1.8	11.0	40.9	21.5	131.2
D424-757	2.8	11.1	44.5	20.4	121.5
D523-83	2.3	12.3	42.5	21.4	129.8
D55-26	2.0	9.5	43.8	18.5	127.5
D523-93	2.4	11.2	42.9	20.9	129.3
D517-9	2.1	11.8	44.0	20.1	133.0
D523-58	2.4	12.2	45.7	20.8	126.4
D524-57	3.2	13.0	42.1	22.0	128.0
D523-26	2.8	13.5	43.4	21.5	124.1
D532-59	2.2	12.0	41.4	22.2	127.2
D523-75	2.3	11.2	42.7	21.0	130.5
D433-857	2.4	14.6	42.8	22.4	134.0
D414-714	2.1	10.1	45.0	19.5	131.0
D49-977	1.9	12.0	42.8	20.8	132.3
D523-65	2.2	10.5	42.3	20.8	132.9
D55-17	2.5	11.7	42.9	19.0	125.2
D517-8	2.3	11.9	42.1	21.2	129.7
D510-25	2.0	9.4	41.9	19.2	132.1
D59-42	2.0	12.0	43.3	20.4	133.5
D55-14	2.2	10.0	45.0	18.2	127.6
D510-21	2.1	9.7	41.9	19.6	130.9
D523-87	2.3	9.7	42.9	20.4	131.2
D532-63	2.0	10.2	41.7	20.8	129.8
D59-26	2.0	10.0	42.6	19.8	132.6

1/Stoneville data.

Table 20: Summary of yields in bushels per acre for the strains of Preliminary Test V, 1947

Strain	Stone-ville	Clarke-dale	Sikes-ton	Stuttgart, Ark. May	Stuttgart, Ark. June	Marianna	Mean
Ogden	33.5	28.6	22.8	15.0	14.3	9.0	20.5
D517-14	33.9	23.6	21.4	16.4	13.9	7.2	19.4
D421-737	31.9	25.7	19.9	16.4	12.4	7.2	18.9
$100	23.0	28.7	23.0	16.2	13.2	8.0	18.7
D418-984	26.5	25.2	19.5	16.1	14.3	6.1	18.0
D417-721	26.5	25.1	18.7	15.6	14.3	7.4	17.9
D514-38	26.8	25.8	19.6	13.5	14.3	7.0	17.8
D512-3	29.9	23.6	18.2	14.2	12.8	6.5	17.5
D520-26	25.5	22.8	21.5	15.0	14.1	5.7	17.4
D523-88	24.9	26.0	17.2	15.8	12.4	6.4	17.1
D533-14	29.2	20.9	18.9	15.5	11.6	6.6	17.1
D523-74	24.1	24.1	20.0	14.7	12.1	7.1	17.0
D523-91	22.7	24.6	19.9	14.0	13.1	7.0	16.9
D424-757	21.8	24.2	19.4	16.1	13.0	6.8	16.9
D523-83	19.2	22.9	23.3	14.5	13.7	7.7	16.9
D55-26	21.9	22.1	21.0	16.4	12.1	7.1	16.8
D523-93	20.5	24.5	19.6	14.6	14.2	7.0	16.7
D517-9	23.6	21.8	20.5	15.5	11.8	6.6	16.6
D523-58	17.8	26.1	20.2	15.2	12.4	8.1	16.6
D524-57	27.4	20.5	18.7	13.9	13.5	4.7	16.5
D523-26	23.1	23.0	18.9	14.1	12.7	6.4	16.4
D532-59	22.7	20.8	19.3	15.6	11.2	8.1	16.3
D523-75	19.8	25.5	17.9	14.8	11.5	7.6	16.2
D433-857	20.8	21.3	18.4	14.5	13.6	6.5	15.9
D414-714	23.4	22.6	17.0	14.3	11.2	6.7	15.9
D49-977	17.0	24.9	20.0	13.5	12.9	4.9	15.5
D523-65	20.0	21.6	17.7	15.0	10.8	7.3	15.4
D55-17	21.8	17.5	19.2	13.6	13.0	6.7	15.3
D517-8	24.9	19.2	20.2	12.4	9.1	3.9	15.0
D510-25	17.3	20.4	18.8	15.0	10.2	8.3	15.0
D59-42	17.6	23.5	17.9	13.9	10.2	6.4	14.9
D55-14	20.1	19.7	15.6	15.9	11.8	6.1	14.9
D510-21	15.5	19.5	19.4	13.4	12.4	7.1	14.6
D523-87	11.3	23.2	21.1	14.0	11.8	6.2	14.6
D532-63	17.9	18.8	18.2	13.0	10.2	7.8	14.3
D59-26	17.6	17.5	17.9	13.2	11.5	5.7	13.9
Mean	22.8	22.9	19.5	14.7	12.4	6.8	16.5
Diff. required for Sig.:							
(5% level)	7.6	4.6	4.9	2.6	2.2	2.6	
(1% level)	10.0	6.0	3.7	3.5	2.5	3.3	
Coef. of Var.	22.3	13.3	13.4	12.0	15.0	25.0	

Table 21: Summary of yield rank for the strains of Preliminary Test V, 1947

Variety or Strain	Stoneville Miss.	Clarkedale Ark.	Sikeston Mo.	Stuttgart, Ark. June	Stuttgart, Ark. May	Marianna Ark.
Ogden	2	2	3	14	1	1
D517-14	1	15	5	1	7	11
D421-737	3	6	13	1	18	11
S100	17	1	2	4	11	5
D418-984	8	8	17	5	1	30
D417-721	8	9	24	9	1	9
D514-38	7	5	15	30	1	16
D512-3	4	15	27	24	16	24
D520-26	10	20	4	14	6	33
D523-88	11	4	33	8	18	26
D533-14	5	27	22	11	27	22
D523-74	13	14	11	19	22	13
D523-91	18	11	13	26	12	16
D424-757	21	13	18	5	13	19
D523-83	28	20	1	21	8	7
D55-26	20	23	7	1	22	13
D523-93	24	12	15	20	5	16
D517-9	14	24	8	11	24	22
D523-58	30	3	9	13	18	3
D524-57	6	29	24	28	10	35
D523-26	16	19	22	25	17	26
D532-59	18	28	20	9	30	3
D523-75	27	7	29	18	28	8
D433-857	23	26	26	21	9	24
D414-714	15	22	34	23	30	20
D49-977	34	10	11	30	15	34
D523-65	26	25	32	14	32	10
D55-17	21	35	21	29	13	20
D517-8	11	33	9	36	36	36
D510-25	33	30	23	14	33	2
D59-42	31	17	29	28	33	26
D55-14	25	31	35	7	24	30
D510-21	35	32	18	32	18	13
D523-87	36	18	6	26	24	29
D532-63	29	34	27	34	33	6
D59-26	31	35	29	33	28	33

UNIFORM TEST, GROUP VI

The Uniform Test, Group VI, is composed of four named varieties and six strains. The origin of the strains is as follows:

Variety or Strain	Source or Originating Agency	Origin
Arksoy 2913	Ark. Agr. Exp. Sta.	Selection from Arksoy
Burdette 12	Burdette Planting Company	Selection from Ogden
Burdette #19	Burdette Planting Company	Selection from Arksoy
Dortchsoy #2	Robert L. Dortch Seed Co.	Selection from Ogden
Ogden	Tenn. Agr. Exp. Sta.	Sel. from Tokyo x P.I. 54610
N44-639	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Missoy x Ogden
N45-2885	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Haberlandt x Ogden
N45-2994	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Ralsoy x Ogden
N45-3013	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Ralsoy x Ogden
N45-3048	N. C. Exp. Sta. & U.S.R.S.L.	Sel. from Ralsoy x Ogden

Six new strains were included in the Group VI test in 1947. One of these strains, entered in the test as Burdette 12, has been named Hale-Ogden 12. The other new strains under test are the North Carolina strains, N45-3048, N45-2994, N45-3013, N45-2885, and N44-639. While a number of tests failed because of adverse weather conditions, injury from jack rabbits and other causes, the results from 40 tests, 36 completed, are summarized in tables 22 to 30, inclusive.

Ogden and the Ogden selections, Burdette #12 and Dortchsoy #2, were the highest yielding varieties of Group VI maturity. Both of these selections are very similar to Ogden. Burdette #12 was slightly taller and later in maturity and contained 0.6% less oil than Ogden in the 1947 tests.

N45-3048, a selection from the cross Ralsoy x Ogden, yielded well over the region. This strain is of Group VII maturity and has been dropped from Group VI in the 1948 tests. N45-2994 is a yellow seeded selection from the cross Ralsoy x Ogden and has yielded well in the East Coast area and at a number of other locations over the region. This strain is taller and later than Ogden and lower in percentage of oil.

Table 22: Summary of the agronomic and chemical data for the strains of the Uniform Test, Group VI, 1947

Location	No. of Tests	Mean	Burdette #12	Ogden	Dortchsoy #2	N45-3048
			YIELD			
West	11	9.3	9.7	9.3	9.0	11.8
Delta	11	19.7	22.9	23.5	23.1	19.3
Upper & Central South	9	19.9	23.5	21.9	21.3	21.6
East Coast	5	29.5	33.1	30.3	31.3	33.4
Mean	36	17.9	20.4	19.7	19.5	19.5
			YIELD RANK			
West			3	6	7	1
Delta			3	1	2	5
Upper & Central South			1	2	4	3
East Coast			2	6	3	1
Mean			1	2	3	3
			LODGING			
West	8	1.4	1.3	1.3	1.5	1.6
Delta	8	1.9	1.6	1.5	1.5	2.1
Upper & Central South	4	1.6	1.5	1.3	1.3	1.5
East Coast	5	2.4	1.9	1.7	1.9	2.6
Mean	25	1.8	1.6	1.4	1.5	2.0
			MATURITY[1]			
West	8		0.0	0.0	0.0	+12.0
Delta	10		+1.5	0.0	-0.2	+16.4
Upper & Central South	6		+1.5	0.0	-0.3	+15.3
East Coast	5		+2.2	0.0	+1.0	+9.4
Mean	29		+1.3	0.0	+0.1	+13.3
			HEIGHT			
West	9	24.6	22.4	23.2	23.0	29.2
Delta	9	33.5	32.2	31.0	30.4	37.1
Upper & Central South	6	33.9	32.2	31.3	30.0	37.2
East Coast	5	38.0	36.8	34.4	35.4	41.4
Mean	29	32.5	30.9	30.0	29.7	36.2

1/Days earlier (-) or later (+) than Ogden.

Table 22: (Continued)

Location	N45-2994	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
			YIELD			
West	9.6	9.9	9.7	8.5	7.8	7.4
Delta	19.1	17.0	18.2	17.7	19.4	16.6
Upper & Central South	19.1	20.1	19.4	18.9	16.3	16.3
East Coast	31.3	30.8	28.4	26.5	26.3	26.1
Mean	17.9	17.5	17.3	16.4	16.0	15.0
			YIELD RANK			
West	5	2	3	8	9	10
Delta	6	9	7	8	4	10
Upper & Central South	7	5	6	8	9	9
East Coast	3	5	7	8	9	10
Mean	5	6	7	8	9	10
			LODGING			
West	1.7	1.5	1.3	1.5	1.2	1.3
Delta	2.0	1.8	1.9	2.1	2.1	1.9
Upper & Central South	2.0	1.5	1.5	1.5	2.0	2.3
East Coast	2.5	2.4	2.3	3.0	2.5	2.7
Mean	2.0	1.8	1.7	2.0	1.9	2.0
			MATURITY[1/]			
West	+2.8	+7.2	+0.1	+2.6	-1.4	0.0
Delta	+6.9	+12.6	+1.0	+2.8	-0.1	+1.1
Upper & Central South	+7.8	+13.0	+1.5	+3.8	-1.3	-1.0
East Coast	+6.6	+8.0	+1.4	+2.2	+0.8	-0.2
Mean	+6.0	+10.2	+1.0	+2.9	-0.5	0.0
			HEIGHT			
West	25.1	25.7	25.5	25.0	23.8	23.3
Delta	36.3	34.8	34.8	35.8	32.2	30.4
Upper & Central South	36.2	35.3	34.7	35.5	33.3	33.0
East Coast	41.6	40.0	37.4	39.4	38.4	35.6
Mean	34.8	34.0	33.1	33.9	31.9	30.6

Table 22: (Continued)

Location	No. of Tests	Mean	Burdette #12	Ogden	Dortchsoy #2	N45-3048
			SEED QUALITY			
West	12	3.1	3.0	2.9	3.1	3.2
Delta	13	2.0	1.8	2.1	2.0	1.7
Upper & Central South	3	1.7	1.3	1.7	1.4	1.2
East Coast	3	3.2	3.7	4.0	3.3	2.3
Mean		2.6	2.5	2.7	2.5	2.1
			SEED WEIGHT			
West	4	14.7	15.7	16.6	16.7	14.2
Delta	10	11.6	11.9	12.5	11.9	12.7
Upper & Central South	8	12.8	13.4	13.7	13.1	13.3
East Coast	4	14.8	14.9	15.8	15.2	15.0
Mean		12.9	13.4	14.0	13.5	13.5
			PERCENTAGE OF OIL			
West	4	21.2	21.3	21.9	21.7	21.2
Delta	10	20.2	20.3	21.0	20.9	21.0
Upper & Central South	8	20.0	19.8	20.5	20.4	20.9
East Coast	4	20.5	20.7	21.3	21.3	20.5
Mean		20.3	20.4	21.0	20.9	20.9
			PERCENTAGE OF PROTEIN			
West	4	42.5	42.6	41.9	41.7	42.1
Delta	10	41.0	40.1	39.6	39.3	40.1
Upper & Central South	8	42.6	43.0	41.6	41.5	41.0
East Coast	4	44.0	43.9	43.3	43.1	43.0
Mean		42.2	42.0	41.1	40.9	41.1
			IODINE NUMBER OF OIL			
West	4	128.9	129.3	128.1	128.6	129.3
Delta	10	132.7	133.1	132.9	133.0	131.9
Upper & Central South	8	132.2	132.7	132.1	132.5	132.6
East Coast	4	134.5	136.2	136.3	135.8	132.9
Mean		132.2	132.9	132.4	132.6	131.9

Table 22: (Continued)

Location	N45-2994	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
			SEED QUALITY			
West	3.1	3.7	3.3	3.1	2.9	2.8
Delta	2.1	2.5	2.0	2.3	1.8	1.8
Upper & Central South	2.0	2.4	1.9	1.7	1.9	1.9
East Coast	3.0	3.0	3.0	3.0	3.3	3.7
Mean	2.6	2.9	2.6	2.5	2.5	2.6
			SEED WEIGHT			
West	14.6	14.5	13.4	15.6	12.8	12.1
Delta	11.8	11.7	10.4	11.9	10.6	10.4
Upper & Central South	13.5	12.6	11.7	13.1	12.3	11.7
East Coast	15.2	15.1	14.3	15.5	13.6	13.3
Mean	13.3	12.9	11.9	13.4	11.9	11.5
			PERCENTAGE OF OIL			
West	20.5	21.9	21.2	21.5	20.0	20.6
Delta	19.3	20.9	19.8	20.7	19.1	19.4
Upper & Central South	19.6	21.1	19.8	20.1	18.9	19.4
East Coast	20.0	21.0	20.5	20.0	19.5	20.0
Mean	19.7	21.1	20.1	20.5	19.2	19.7
			PERCENTAGE OF PROTEIN			
West	42.9	41.5	42.1	41.4	45.7	43.1
Delta	41.9	40.1	41.3	40.6	43.7	43.1
Upper & Central South	42.9	40.5	42.5	42.4	46.0	44.0
East Coast	44.7	43.1	43.6	44.1	46.2	45.0
Mean	42.8	40.9	42.1	41.8	45.1	43.7
			IODINE NUMBER OF OIL			
West	131.8	129.9	128.5	128.6	126.2	128.3
Delta	134.2	133.6	131.6	132.2	131.5	132.6
Upper & Central South	134.6	132.8	131.5	132.2	130.2	131.1
East Coast	134.9	133.0	135.6	135.3	132.5	132.0
Mean	134.1	132.7	131.7	132.1	130.4	131.4

Table 23: Summary of yields in bushels per acre for the strains of the Uniform Test, Group VI, 1947

Location	Date of Planting	Mean Yield	Burdette #12	Ogden	Dortchsoy #2	N45-3048	N45-2994
			WEST				
Tishomingo, Okla.	5-2	15.5	16.1	15.9	14.2	18.6	14.4
Miller County, Ark.	5-12	12.7	15.0	14.9	15.2	15.6	11.2
Calhoun, La.	4-24	10.3	11.3	11.1	11.7	7.1	8.9
Fayetteville, Ark.		9.9	12.3	12.1	9.6	12.9	8.5
Stuttgart, Ark.	5-27	9.6	10.9	10.7	10.1	11.6	10.4
Heavener, Okla.	5-5	9.4	10.8	7.8	7.6	13.0	10.8
Lubbock, Texas	6-9	8.4	8.7	7.6	8.6	10.9	11.2
Crowley, La.	4-29	8.2	5.3	5.7	6.8	13.9	12.2
Melrose, La.	4-22	6.8	3.6	3.8	3.4	10.7	7.5
Stillwater, Okla.	5-10	5.9	6.1	6.4	6.5	7.0	6.5
Chillicothe, Texas	6-16	5.2	6.4	6.4	5.3	8.0	4.0
Denton, Texas[1]	4-24	3.9	4.9	3.6	3.6	-	2.9
Mean		9.3	9.7	9.3	9.0	11.8	9.6
			DELTA				
Baton Rouge, La.	4-25	32.2	38.5	38.1	35.9	22.5	29.3
St. Joseph, La.	4-28	28.5	31.7	30.0	33.7	30.7	25.4
Sikeston, Mo.	5-27	23.5	26.7	26.3	23.3	18.6	24.0
Stoneville, Miss.	4-22	22.8	26.9	26.9	27.1	25.6	26.5
Stoneville, Miss.	5-26	22.2	27.9	25.9	21.8	29.5	22.1
Stoneville, Miss.	6-12	21.2	22.4	26.2	26.1	25.9	19.7
Clarkedale, Ark.	5-28	21.3	24.7	23.9	27.1	21.8	23.1
Onward, Miss.	5-13	14.2	14.7	18.8	15.5	13.9	13.4
Moorhead, Miss.	5-26	13.4	16.6	18.4	18.8	7.5	13.8
Tunica, Miss.	5-7	12.2	16.9	17.8	19.9	9.7	6.2
Marianna, Ark.	5-5	5.0	5.2	6.2	4.6	6.3	6.0
Anchorage, Miss.[1]	5-17	16.7	-	23.8	12.0	14.1	17.4
Dunleith, Miss.[1]	5-27	10.1	10.1	14.0	10.0	13.9	9.8
Desha County, Ark.[1]	5-6	6.0	5.8	6.2	6.8	-	6.1
Mean		19.7	22.9	23.5	23.1	19.3	19.1

[1] Not included in the mean.

Table 23: (Continued)

Location	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913	Diff. Req. Sig. (5%)	Coef. of Var.
			WEST				
Tishomingo, Okla.	14.9	17.4	16.0	13.8	13.6	-	14%
Miller County, Ark.	14.1	11.0	10.8	9.4	9.5	1.9	10%
Calhoun, La.	8.7	11.4	8.7	12.1	11.4	2.3	15%
Fayetteville, Ark.	11.7	8.0	9.4	7.5	7.1	2.9	20%
Stuttgart, Ark.	9.7	8.5	8.7	8.0	7.1	2.0	14%
Heavener, Okla.	10.8	9.2	9.2	7.6	7.0	2.5	19%
Lubbock, Texas	9.4	9.5	7.6	5.9	5.0	0.6	3%
Crowley, La.	10.0	9.2	8.2	5.4	5.5	2.7	23%
Melrose, La.	7.4	9.3	6.0	8.7	7.7	2.6	27%
Stillwater, Okla.	5.8	8.0	4.0	4.1	4.2	N.S.	39%
Chillicothe, Texas	6.0	5.5	4.4	2.8	3.2	1.8	24%
Denton, Texas [1]	4.4	3.1	3.4	3.7	3.6		
Mean	9.9	9.7	8.5	7.8	7.4		
			DELTA				
Baton Rouge, La.	29.6	33.4	30.0	35.0	29.3	5.4	12%
St. Joseph, La.	23.7	29.7	29.2	27.8	23.0	5.9	14%
Sikeston, Mo.	21.1	22.5	24.4	23.6	24.4	2.5	7%
Stoneville, Miss.	21.6	19.0	22.3	17.4	15.0	7.7	23%
Stoneville, Miss.	23.2	16.1	13.4	23.2	18.4	6.8	21%
Stoneville, Miss.	19.0	23.5	16.2	17.4	16.0	6.1	20%
Clarkedale, Ark.	17.1	18.7	20.1	19.1	17.2	4.0	13%
Onward, Miss.	14.2	11.8	9.8	14.9	14.7	4.5	22%
Moorhead, Miss.	5.2	13.7	12.6	17.5	9.7	3.8	19%
Tunica, Miss.	7.9	6.9	13.4	12.6	10.2	4.5	26%
Marianna, Ark.	4.8	4.8	3.5	4.6	4.4	N.S.	25%
Anchorage, Miss. [1]	16.8	16.3	15.2	18.2	-	5.8	24%
Dunleith, Miss.	8.9	-	4.1	-	-		
Desha County, Ark. [1]	4.6	5.1	8.3	6.2	4.5		
Mean	17.0	18.2	17.7	19.4	16.6		

Table 23: (Continued)

Location	Date of Planting	Mean Yield	Burdette #12	Ogden	Dortchsoy #2	N45-3048	N45-2994
			UPPER AND CENTRAL SOUTH				
Blairsville, Ga.	5-20	38.9	43.9	43.5	42.8	41.5	33.3
State College, Miss.	4-28	27.8	32.7	29.9	30.6	33.0	27.4
Crossville, Ala.	5-8	21.0	25.9	21.1	22.2	21.0	22.1
Knoxville, Tenn.	4-22	20.4	27.8	28.9	28.0	24.6	13.5
Experiment, Ga.	5-17	18.2	18.5	17.6	16.7	19.9	21.6
Jackson, Tenn.	4-21	15.9	19.2	17.6	14.4	15.6	16.5
Belle Mina, Ala.	5-7	12.9	16.0	13.0	13.6	9.9	12.7
Rome, Ga.	5-26	11.9	15.0	11.8	11.3	15.5	14.3
Watkinsville, Ga.	4-22	11.8	12.5	13.6	12.4	13.7	10.3
Mean		19.9	23.5	21.9	21.3	21.6	19.1
			EAST COAST				
Petersburg, Va.	5-12	43.6	46.4	34.9	45.6	57.4	48.5
McCullers, N. C.	5-9	35.7	38.5	38.4	38.6	39.2	37.0
Willard, N. C.	5-21	29.3	33.3	30.5	29.4	31.0	36.8
Plymouth, N. C.	5-7	21.4	27.5	31.4	25.3	18.9	16.8
Monetta, S. C.	5-26	17.7	19.8	16.4	17.5	20.5	17.6
Mean		29.5	33.1	30.3	31.3	33.4	31.3

Table 23: (Continued)

Location	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913	Diff. Req. Sig. (5%)	Coef. of Var.
			UPPER AND CENTRAL SOUTH				
Blairsville, Ga.	36.9	45.9	36.5	30.3	33.9	7.9	14%
State College, Miss.	29.6	20.9	28.1	24.3	21.4	6.3	16%
Crossville, Ala.	23.9	19.3	19.1	16.1	19.1	2.9	6%
Knoxville, Tenn.	20.7	19.6	17.2	12.3	11.2	4.9	17%
Experiment, Ga.	17.5	17.5	17.4	18.4	17.2	N.S.	14%
Jackson, Tenn.	14.6	13.2	16.7	16.3	15.1	2.4	10%
Belle Mina, Ala.	12.5	13.8	13.1	13.6	10.6	1.8	10%
Rome, Ga.	12.8	14.6	10.3	4.9	8.2		
Watkinsville, Ga.	12.7	10.2	11.5	10.9	10.3	2.5	14%
Mean	20.1	19.4	18.9	16.3	16.3		
			EAST COAST				
Petersburg, Va.	45.9	38.6	41.2	39.4	48.5	11.6	18%
McCullers, N. C.	39.6	33.5	30.0	29.9	31.8	4.7	9%
Willard, N. C.	30.9	28.0	26.7	25.9	20.4	4.8	11%
Plymouth, N. C.	18.2	24.7	17.7	18.8	14.7	4.6	15%
Monetta, S. C.	19.4	17.0	16.7	17.4	14.9	3.0	12%
Mean	30.8	28.4	26.5	26.3	26.1		

Table 23a: Summary of yield rank for the strains of the Uniform Test, Group VI, 1947

Location	Burdette #12	Ogden	Dortchsoy #2	N45-3048	N45-2994	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
				WEST						
Tishomingo, Okla.	3	5	8	1	7	6	2	4	9	10
Miller County, Ark.	3	4	2	1	6	5	7	8	10	9
Calhoun, La.	5	6	2	10	7	8	3	8	1	3
Fayetteville, Ark.	2	3	5	1	7	4	8	6	9	10
Stuttgart, Ark.	2	3	5	1	4	6	8	7	9	10
Heavener, Okla.	2	7	8	1	2	2	5	5	8	10
Lubbock, Texas	5	7	6	2	1	4	3	7	9	10
Crowley, La.	10	7	6	1	2	3	4	5	9	8
Melrose, La.	9	8	10	1	5	6	2	7	3	4
Stillwater, Okla.	6	5	3	2	3	7	1	10	9	8
Chillicothe, Texas	2	2	6	1	8	4	5	7	10	9
				DELTA						
Baton Rouge, La.	1	2	3	10	7	9	5	6	4	7
St. Joseph, La.	2	4	1	3	8	9	5	6	7	10
Sikeston, Mo.	1	2	7	10	5	9	8	3	6	3
Stoneville, Miss.	2	2	1	5	4	7	8	6	9	10
Stoneville, Miss.	2	3	7	1	6	4	9	10	4	8
Stoneville, Miss.	5	1	2	3	6	7	4	9	8	10
Clarkedale, Ark.	2	3	1	5	4	10	8	6	7	9
Tunica, Miss.	3	2	1	7	10	8	9	4	5	6
Marianna, Ark.	4	2	7	1	3	5	5	10	7	9
Onward, Miss.	4	1	2	7	8	6	9	10	3	4
Moorhead, Miss.	4	2	1	9	5	10	6	7	3	8

Table 23a: (Continued)

Location	Burdette #12	Ogden	Dortchsoy #2	N45-3048	N45-2994	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
				UPPER AND CENTRAL SOUTH						
Blairsville, Ga.	2	3	4	5	9	6	1	7	10	8
State College, Miss.	1	4	3	2	7	5	10	6	8	9
Crossville, Ala.	1	5	3	6	4	2	7	8	10	8
Knoxville, Tenn.	3	1	2	4	8	5	6	7	9	10
Experiment, Ga.	3	5	10	2	1	6	6	8	4	9
Jackson, Tenn.	1	2	9	6	4	8	10	3	5	7
Belle Mina, Ala.	1	6	3	10	7	9	2	5	3	8
Rome, Ga.	2	6	7	1	4	5	3	8	10	9
Watkinsville, Ga.	4	2	5	1	8	3	10	6	7	8
				EAST COAST						
Petersburg, Va.	4	10	6	1	2	5	9	7	8	2
McCullers, N. C.	4	5	3	2	6	1	7	9	10	8
Willard, N. C.	2	5	6	3	1	4	7	8	9	10
Plymouth, N. C.	2	1	3	5	9	7	4	8	6	10
Monetta, S. C.	2	9	5	1	4	3	7	8	6	10

Table 24: Summary of lodging data for the strains of the Uniform Test, Group VI, 1947

Location	Mean	Burdette #12	Ogden	Dortchsoy #2	N45-3048	N45-2994
			WEST			
Miller County, Ark.	1.5	1.3	1.5	1.5	1.0	1.8
Calhoun, La.	1.0	1.0	1.0	1.0	2.0	1.0
Fayetteville, Ark.	1.1	1.0	1.0	1.0	1.3	1.0
Stuttgart, Ark.	1.1	1.0	1.0	1.0	1.0	1.0
Lubbock, Texas	1.2	2.0	1.0	2.0	1.0	1.0
Crowley, La.	1.4	1.0	1.0	1.0	2.0	2.0
Melrose, La.	2.2	2.0	2.0	2.0	3.0	3.0
Stillwater, Okla.	2.0	1.0	2.0	3.0	2.0	3.0
Denton, Texas	1.0	1.0	1.0	1.0	1.0	1.0
Mean	1.4	1.3	1.3	1.5	1.6	1.7
			DELTA			
Baton Rouge, La.	2.0	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.5	1.0	1.0	1.0	2.0	2.0
Sikeston, Mo.	1.5	1.3	1.0	1.0	1.8	1.3
Stoneville, Miss. 4/22	1.5	1.0	1.0	1.0	2.3	2.3
Stoneville, Miss. 5/26	2.7	2.8	2.3	2.0	3.0	2.5
Stoneville, Miss. 6/12	2.5	2.0	2.5	2.3	2.8	2.5
Clarkedale, Ark.	2.0	1.3	1.3	2.0	1.8	2.0
Tunica, Miss.[1]	-	2.3	1.5	2.0	-	-
Marianna, Ark.	1.1	1.0	1.0	1.0	1.0	1.0
Anchorage, Miss.[1]	-	1.0	1.0	1.0	-	-
Moorhead, Miss.[1]	-	2.0	1.5	1.8	-	2.0
Mean	1.9	1.6	1.5	1.5	2.1	2.0
			UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	2.6	2.0	2.0	2.0	2.0	3.0
Jackson, Tenn.	1.2	1.0	1.0	1.0	1.0	2.0
Belle Mina, Ala.	1.7	2.0	1.0	1.0	2.0	2.0
Watkinsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0
Mean	1.6	1.5	1.3	1.3	1.5	2.0
			EAST COAST			
Petersburg, Va.	3.7	3.0	2.0	3.0	3.0	4.0
McCullers, N. C.	1.9	1.5	1.3	1.3	2.8	2.5
Willard, N. C.	2.6	2.0	2.0	2.0	3.0	3.0
Plymouth, N. C.	2.6	2.0	2.0	2.0	3.0	2.0
Monetta, S. C.	1.0	1.0	1.0	1.0	1.0	1.0
Mean	2.4	1.9	1.7	1.9	2.6	2.5

Table 24: (Continued)

Location	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
		WEST			
Miller County, Ark.	1.8	1.5	1.8	1.3	1.3
Calhoun, La.	1.0	1.0	1.0	1.0	1.0
Fayetteville, Ark.	1.3	1.0	1.0	1.0	1.3
Stuttgart, Ark.	1.0	1.3	1.0	1.8	1.3
Lubbock, Texas	1.0	2.0	1.0	1.0	1.0
Crowley, La.	2.0	1.0	2.0	1.0	1.0
Melrose, La.	2.0	2.0	2.0	2.0	2.0
Stillwater, Okla.	2.0	1.0	3.0	1.0	2.0
Denton, Texas	1.0	1.0	1.0	1.0	1.0
Mean	1.5	1.3	1.5	1.2	1.3
		DELTA			
Baton Rouge, La.	2.0	2.0	2.0	2.0	2.0
St. Joseph, La.	1.0	2.0	2.0	2.0	1.0
Sikeston, Mo.	1.5	1.3	1.8	2.3	1.8
Stoneville, Miss. 4/22	1.3	1.5	2.5	1.0	1.0
Stoneville, Miss. 5/26	3.0	2.5	3.0	3.0	2.5
Stoneville, Miss. 6/12	2.8	2.8	2.5	2.0	3.0
Clarkedale, Ark.	2.0	1.8	2.0	2.8	2.8
Tunica, Miss.[1]	-	-	2.0	2.5	2.5
Marianna, Ark.	1.0	1.0	1.0	2.0	1.3
Anchorage, Miss.[1]	-	1.0	1.0	1.5	1.0
Moorhead, Miss.[1]	-	2.3	2.0	2.3	3.0
Mean	1.8	1.9	2.1	2.1	1.9
		UPPER AND CENTRAL SOUTH			
Knoxville, Tenn.	2.0	2.0	3.0	4.0	4.0
Jackson, Tenn.	1.0	1.0	1.0	1.0	2.0
Belle Mina, Ala.	2.0	2.0	1.0	2.0	2.0
Watkinsville, Ga.	1.0	1.0	1.0	1.0	1.0
Mean	1.5	1.5	1.5	2.0	2.3
		EAST COAST			
Petersburg, Va.	3.0	5.0	5.0	4.0	5.0
McCullers, N. C.	2.2	1.0	2.0	2.2	1.8
Willard, N. C.	3.0	2.0	3.0	3.0	3.0
Plymouth, N. C.	3.0	2.5	4.0	2.5	2.5
Monetta, S. C.	1.0	1.0	1.0	1.0	1.0
Mean	2.4	2.3	3.0	2.5	2.7

[1]/Not included in the mean.

Table 25: Summary of maturity data, days earlier (-) or later (+) than Ogden, for the strains of the Uniform Test, Group VI, 1947

Location	Date Planted	Burdette #12	Ogden[2]	Dortchsoy #2	N45-3048	N45-2994
		WEST				
Miller County, Ark.	5-12	0	0	0	+13	0
Calhoun, La.	4-24	+2	0	0	+12	-3
Fayetteville, Ark.		0	0	0	+9	0
Stuttgart, Ark.	5-27	0	0	0	+11	+10
Lubbock, Texas	6-9	-5	0	-10	+20	-10
Crowley, La.	4-29	0	0	0	+19	+9
Melrose, La.	4-22	-1	0	0	+9	+6
Stillwater, Okla.	5-10	0	0	0	+15	+3
Denton, Texas	4-24	+4	0	+10	-	+10
Mean		0.0	0.0	0.0	+12.0	+2.8
		DELTA				
Baton Rouge, La.	4-25	+4	0	0	+13	+8
St. Joseph, La.	4-28	0	0	0	+22	+11
Sikeston, Mo.	5-27	+2	0	0	+12	+4
Stoneville, Miss.	4-22	+2	0	+1	+15	+5
Stoneville, Miss.	5-26	+5	0	+1	+15	+8
Stoneville, Miss.	6-12	-4	0	-1	+5	-2
Clarkedale, Ark.	5-28	+2	0	+1	+14	+2
Tunica, Miss.	5-7	+5	0	+1	+15	+10
Marianna, Ark.	5-5	0	0	0	+42	+13
Moorhead, Miss.[1]	5-26	0	0	0	-	+5
Anchorage, Miss.[1]	5-17	-1	0	-1	+11	+10
Mean		+1.5	0.0	-0.2	+16.4	+6.9
		UPPER AND CENTRAL SOUTH				
State College, Miss.	4-28	+9	0	0	+16	+9
Knoxville, Tenn.	4-22	0	0	0	+13	+12
Experiment, Ga.	5-17	0	0	0	+17	+12
Jackson, Tenn.	4-21	0	0	-2	+11	+6
Belle Mina, Ala.	5-7	0	0	0	+7	0
Watkinsville, Ga.	4-22	0	0	0	+28	+8
Mean		+1.5	0.0	-0.3	+15.3	+7.8
		EAST COAST				
Petersburg, Va.	5-12	+5	0	+5	+11	+15
McCullers, N. C.	5-9	+2	0	0	+8	+4
Willard, N. C.	5-21	+2	0	0	+5	+2
Plymouth, N. C.	5-7	+2	0	0	+5	+2
Monetta, S. C.	5-26	0	0	0	+18	+10
Mean		+2.2	0.0	+1.0	+9.4	+6.6

[1] Not included in the mean.

[2] Ogden required 150 days to mature.

Table 25: (Continued)

Location	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913	Ogden Matured	Days to Maturity
			WEST				
Miller County, Ark.	0	0	0	0	0	10-17	158
Calhoun, La.	+12	0	+2	0	0	10-8	167
Fayetteville, Ark.	+9	0	0	0	0	10-14	
Stuttgart, Ark.	+11	0	0	-3	0	10-10	136
Lubbock, Texas	0	-10	+5	-15	-5	10-20	133
Crowley, La.	+17	+4	+9	0	+4	10-1	155
Melrose, La.	+1	-1	+6	-1	-1	10-4	165
Stillwater, Okla.	+10	+3	-2	-2	-2	10-18	161
Denton, Texas	+5	+5	+3	+8	+4	9-22	151
Mean	+7.2	+0.1	+2.6	-1.4	0.0		
			DELTA				
Baton Rouge, La.	+11	-2	+7	-2	+3	9-17	145
St. Joseph, La.	+11	0	0	0	+11	9-26	151
Sikeston, Mo.	+10	+1	+2	+2	+2	10-15	141
Stoneville, Miss.	+9	+2	+5	-2	-4	9-30	161
Stoneville, Miss.	+13	+3	+6	+1	+2	10-6	133
Stoneville, Miss.	+2	-6	-4	-9	-6	10-22	132
Clarkedale, Ark.	+10	0	0	+7	0	10-20	145
Tunica, Miss.	+16	0	+4	+2	+4	10-5	151
Marianna, Ark. [1]	+33	+13	0	0	0	10-3	151
Moorhead, Miss. [1]	-	0	+4	-1	-1	9-30	127
Anchorage, Miss. [1]	+11	-1	+8	0	-1	10-4	140
Mean	+12.6	+1.0	+2.8	-0.1	+1.1		
			UPPER AND CENTRAL SOUTH				
State College, Miss.	+9	0	+9	0	0	10-2	157
Knoxville, Tenn.	+12	-1	+1	-1	0	10-10	171
Experiment, Ga.	+12	+9	+4	0	0	10-1	137
Jackson, Tenn.	+10	+1	+1	-1	0	10-10	173
Belle Mina, Ala.	+7	0	0	-6	-6	10-8	154
Watkinsville, Ga.	+28	0	+8	0	0	9-18	149
Mean	+13.0	+1.5	+3.8	-1,3	-1.0		
			EAST COAST				
Petersburg, Va.	+10	+3	+3	+5	0	10-15	156
McCullers, N. C.	+5	-1	+2	-1	-1	10-16	160
Willard, N. C.	+2	0	0	0	0	10-13	145
Plymouth, N. C.	+5	+1	+2	0	0	10-13	159
Monetta, S. C.	+18	+4	+4	0	0	10-6	133
Mean	+8.0	+1.4	+2.2	+0.8	-0.2		

Table 26: Summary of the height data for the strains of the Uniform Test, Group VI, 1947

Location	Mean	Burdette #12	Ogden	Dortchsoy #2	N45-3048
		WEST			
Miller County, Ark.	35.9	33	34	33	40
Calhoun, La.	20.4	16	19	16	33
Fayetteville, Ark.	20.5	18	19	18	27
Stuttgart, Ark.	20.5	19	18	19	23
Lubbock, Texas	27.7	28	30	34	22
Crowley, La.	18.3	12	15	15	28
Melrose, La.	24.2	23	19	18	28
Stillwater, Okla.	37.5	36	36	36	40
Chillicothe, Texas	15.5	14	14	15	20
Denton, Texas	25.7	25	28	26	31
Mean	24.6	22.4	23.2	23.0	29.2
		DELTA			
Baton Rouge, La.	24.2	22	22	20	26
St. Joseph, La.	29.8	30	24	25	38
Sikeston, Mo.	40.9	40	40	37	43
Stoneville, Miss.	32.2	34	30	33	36
Stoneville, Miss.	35.6	34	34	32	40
Stoneville, Miss.	33.6	31	32	31	38
Clarkedale, Ark.	39.0	38	39	36	40
Marianna, Ark.	30.9	28	26	27	34
Moorhead, Miss.	35.3	33	32	33	39
Desha County, Ark. 1/	36.2	33	34	32	-
Mean	33.5	32.2	31.0	30.4	37.1
		UPPER AND CENTRAL SOUTH			
State College, Miss.	32.3	30	30	29	35
Knoxville, Tenn.	39.5	40	42	40	41
Experiment, Ga.	28.3	26	24	20	30
Jackson, Tenn.	36.8	34	34	31	44
Belle Mina, Ala.	35.1	33	28	30	41
Watkinsville, Ga.	31.2	30	30	30	32
Mean	33.9	32.2	31.3	30.0	37.2
		EAST COAST			
Petersburg, Va.	40.8	40	32	37	45
McCullers, N. C.	38.0	38	36	36	42
Willard, N. C.	36.4	34	34	34	42
Plymouth, N. C.	41.6	42	40	40	40
Monetta, S. C.	33.4	30	30	30	38
Mean	38.0	36.8	34.4	35.4	41.4

1/Not included in mean.

Table 26: (Continued)

Location	N45-2994	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
			WEST			
Miller County, Ark.	39	38	36	36	37	33
Calhoun, La.	22	22	21	25	14	16
Fayetteville, Ark.	20	27	18	18	22	18
Stuttgart, Ark.	22	21	20	24	21	18
Lubbock, Texas	25	21	36	26	22	33
Crowley, La.	20	20	19	18	19	17
Melrose, La.	27	26	27	27	23	24
Stillwater, Okla.	39	39	38	37	38	36
Chillicothe, Texas	17	18	15	13	16	13
Denton, Texas	20	25	25	26	26	25
Mean	25.1	25.7	25.5	25.0	23.8	23.3
			DELTA			
Baton Rouge, La.	25	25	26	28	26	22
St. Joseph, La.	35	32	28	28	30	28
Sikeston, Mo.	43	42	42	42	41	39
Stoneville, Miss.	37	31	35	38	24	24
Stoneville, Miss.	40	37	37	39	33	30
Stoneville, Miss.	35	37	37	34	32	30
Clarkedale, Ark.	40	39	39	41	40	38
Marianna, Ark.	32	33	32	32	32	33
Moorhead, Miss.	40	37	37	40	32	30
Desha County, Ark. 1/	39	36	41	43	35	33
Mean	36.3	34.8	34.8	35.8	32.2	30.4
			UPPER AND CENTRAL SOUTH			
State College, Miss.	35	33	32	34	32	33
Knoxville, Tenn.	38	39	43	37	37	38
Experiment, Ga.	36	30	27	34	28	28
Jackson, Tenn.	40	40	38	38	35	34
Belle Mina, Ala.	38	38	36	36	36	35
Watkinsville, Ga.	30	32	32	34	32	30
Mean	36.2	35.3	34.7	35.5	33.3	33.0
			EAST COAST			
Petersburg, Va.	48	42	39	39	46	40
McCullers, N. C.	40	40	36	40	36	36
Willard, N. C.	40	38	36	38	34	34
Plymouth, N. C.	42	42	44	44	44	38
Monetta, S. C.	38	38	32	36	32	30
Mean	41.6	40.0	37.4	39.4	38.4	35.6

Table 27: Summary of the percentage of oil for the strains of the Uniform Test, Group VI, 1947

Location	Mean	Burdette #12	Ogden	Dortchsoy #2	N45-3048
		WEST			
Tishomingo, Okla.	22.5	22.3	22.7	22.5	23.2
Miller County, Ark.	20.3	21.0	21.2	21.3	19.1
Stuttgart, Ark.	19.4	19.6	20.1	19.9	20.7
Heavener, Okla.	22.4	22.3	23.4	23.0	21.6
Mean	21.2	21.3	21.9	21.7	21.2
		DELTA			
Baton Rouge, La.	21.8	21.5	22.4	22.2	22.1
St. Joseph, La.	19.1	19.0	19.7	19.1	19.1
Sikeston, Mo.	21.0	20.7	21.6	21.5	22.0
Stoneville, Miss.	19.9	20.1	20.8	20.3	21.2
Stoneville, Miss.	20.0	20.4	20.1	20.2	21.9
Stoneville, Miss.	20.8	20.8	21.3	21.0	21.6
Clarkedale, Ark.	21.2	21.2	21.3	21.9	22.6
Tunica, Miss.	20.2	20.3	21.6	21.6	20.6
Onward, Miss.	17.9	17.7	18.5	18.2	18.3
Moorhead, Miss.	20.5	20.8	22.3	22.5	20.4
Mean	20.2	20.3	21.0	20.9	21.0
		UPPER AND CENTRAL SOUTH			
Blairsville, Ga.	21.1	21.3	21.8	21.7	21.5
State College, Miss.	19.6	19.6	20.0	19.8	20.4
Crossville, Ala.	19.6	19.1	19.1	19.6	21.3
Knoxville, Tenn.	19.5	19.6	20.1	20.5	20.9
Experiment, Ga.	18.8	18.3	18.4	18.4	19.9
Jackson, Tenn.	21.6	21.3	22.6	22.3	20.9
Belle Mina, Ala.	20.6	20.1	20.8	21.4	20.9
Watkinsville, Ga.	19.5	18.9	21.1	19.7	21.3
Mean	20.0	19.8	20.5	20.4	20.9
		EAST COAST			
Petersburg, Va.	20.4	20.7	20.9	21.0	20.5
McCullers, N. C.	21.4	21.4	22.2	22.0	21.5
Willard, N. C.	20.6	21.1	21.7	21.5	20.8
Plymouth, N. C.	19.5	19.7	20.2	20.5	19.3
Mean	20.5	20.7	21.3	21.3	20.5
MEAN (26 tests)	20.3	20.4	21.0	20.9	20.9

Table 27: (Continued)

Location	N45-2994	N45-3013	N45-2885	N44-639	Burdette #19	Arksoy 2913
			WEST			
Tishomingo, Okla.	21.6	23.6	22.7	23.3	21.3	21.4
Miller County, Ark.	19.4	20.4	20.5	21.0	19.3	20.1
Stuttgart, Ark.	18.6	20.7	18.2	19.9	17.9	18.5
Heavener, Okla.	22.5	22.8	23.3	21.9	21.3	22.3
Mean	20.5	21.9	21.2	21.5	20.0	20.6
			DELTA			
Baton Rouge, La.	21.1	22.5	22.7	22.0	20.4	21.4
St. Joseph, La.	17.9	20.0	18.8	19.4	18.5	19.1
Sikeston, Mo.	20.3	22.0	20.1	21.4	19.5	20.5
Stoneville, Miss.	19.0	20.2	19.0	20.9	18.9	18.6
Stoneville, Miss.	19.0	21.2	19.6	19.5	19.3	18.6
Stoneville, Miss.	20.0	22.2	20.3	21.1	19.9	20.0
Clarkedale, Ark.	20.8	21.5	20.7	21.5	20.0	20.5
Tunica, Miss.	18.4	20.7	20.2	21.6	18.5	18.3
Onward, Miss.	17.1	17.9	17.1	18.1	17.0	18.6
Moorhead, Miss.	19.8	21.0	19.8	21.3	18.9	18.0
Mean	19.3	20.9	19.8	20.7	19.1	19.4
			UPPER AND CENTRAL SOUTH			
Blairsville, Ga.	20.5	22.0	20.8	20.0	20.5	21.0
State College, Miss.	18.8	20.0	19.6	19.6	19.0	19.2
Crossville, Ala.	20.4	21.2	18.3	19.1	18.5	19.6
Knoxville, Tenn.	18.8	20.9	19.6	19.5	17.8	17.7
Experiment, Ga.	18.9	19.5	18.7	18.7	18.6	18.6
Jackson, Tenn.	20.6	22.5	21.7	22.2	20.3	21.2
Belle Mina, Ala.	20.3	21.3	20.6	21.3	19.7	20.0
Watkinsville, Ga.	18.7	21.0	19.3	20.3	16.9	18.0
Mean	19.6	21.1	19.8	20.1	18.9	19.4
			EAST COAST			
Petersburg, Va.	20.2	21.4	19.7	19.8	19.5	20.5
McCullers, N. C.	20.8	22.1	21.5	20.9	20.3	20.8
Willard, N. C.	19.7	20.2	20.5	20.4	20.0	19.9
Plymouth, N. C.	19.1	20.1	20.3	19.0	18.2	18.7
Mean	20.0	21.0	20.5	20.0	19.5	20.0
MEAN (26 tests)	19.7	21.1	20.1	20.5	19.2	19.7

Table 28: Two-year summary of agronomic and chemical data for the strains of the Uniform Test, Group VI, 1946-47

	No. of Tests	Dortchsoy #2	Ogden	Burdette #19	Arksoy 2913
YIELDS:					
West	7	12.5	12.1	8.9	9.4
Delta	6	25.6	23.8	20.5	18.1
Upper & Central South	5	22.3	21.9	18.3	17.0
East Coast	3	33.6	34.2	24.6	22.8
Mean	21	21.6	20.9	16.7	15.6
YIELD RANK:					
West		1	2	4	3
Delta		1	2	3	4
Upper & Central South		1	2	3	4
East Coast		2	1	3	4
LODGING		1.6	1.5	2.0	2.1
PLANT HEIGHT (Inches)		30.9	30.4	32.1	30.4
MATURITY[1/]		+1.1	0	-0.2	-0.6
SEED QUALITY		2.2	2.4	2.2	2.3
SEED WEIGHT		14.0	14.6	12.5	12.4
PERCENTAGE OF PROTEIN		40.6	41.0	44.9	43.5
PERCENTAGE OF OIL		20.7	21.1	19.3	19.9
IODINE NUMBER OF OIL		134.3	134.2	131.7	132.4

1/Days earlier (-) or later (+) than Ogden. Ogden required an average of 149.3 days to mature.

Table 29: Summary of the two-year average yields for the strains of the Uniform Test, Group VI, 1946-47.

Location	Mean	Dortchsoy #2	Ogden	Burdette #19	Arksoy 2913
			WEST		
Lubbock, Texas	16.7	22.0	18.8	12.7	13.4
Stillwater, Okla.	13.5	14.7	15.6	11.5	12.0
Stuttgart, Ark.	10.8	11.6	10.8	11.1	9.5
Heavener, Okla.	8.0	8.3	8.6	7.3	7.7
Fayetteville, Ark.	10.1	11.6	11.8	7.5	9.3
Chillicothe, Texas	6.7	7.7	8.9	4.9	5.4
Miller County, Ark.	9.5	11.4	10.3	7.6	8.8
Mean	10.8	12.5	12.1	8.9	9.4
			DELTA		
Clarkedale, Ark.	24.1	30.0	25.0	21.9	19.3
Marianna, Ark.	13.7	14.1	13.2	13.5	13.8
Sikeston, Mo.	30.6	31.8	33.1	28.7	28.9
Anchorage, Miss.[1]		23.4	27.7	24.5	-
Stoneville, Miss.	22.8	24.6	25.7	22.1	18.8
Dunleith, Miss.[1]	-	19.0	17.4	-	-
Tunica, Miss.	16.4	21.4	20.3	14.1	9.9
Baton Rouge, La.	24.4	31.9	25.5	22.5	17.7
Mean	22.0	25.6	23.8	20.5	18.1
			UPPER AND CENTRAL SOUTH		
Crossville, Ala.	28.6	32.7	32.9	25.1	23.6
Knoxville, Tenn.	19.8	25.5	26.2	13.8	13.7
Jackson, Tenn.	24.3	25.1	25.6	23.9	22.7
Belle Mina, Ala.	15.1	15.6	14.1	17.3	13.5
Watkinsville, Ga.	11.7	12.7	10.8	11.4	11.7
Mean	19.9	22.3	21.9	18.3	17.0
			EAST COAST		
McCullers, N. C.	36.3	43.1	41.9	29.5	30.7
Plymouth, N. C.	32.0	38.7	41.5	25.2	22.6
Monetta, S. C.	18.2	19.1	19.3	19.1	15.1
Mean	28.8	33.6	34.2	24.6	22.8
MEAN (21 tests)	18.7	21.6	20.9	16.7	15.6

Table 30: Summary of yield rank for the two-year average, 1946-47, for the strains of the Uniform Test, Group VI

Location	Dortchsoy #2	Ogden	Burdette #19	Arksoy 2913
		WEST		
Lubbock, Texas	1	2	4	3
Stillwater, Okla.	2	1	4	3
Stuttgart, Ark.	1	3	2	4
Heavener, Okla.	2	1	4	3
Fayetteville, Ark.	2	1	4	3
Chillicothe, Texas	2	1	4	3
Miller County, Ark.	1	2	4	3
		DELTA		
Clarkedale, Ark.	1	2	3	4
Marianna, Ark.	1	4	3	2
Sikeston, Mo.	2	1	4	3
Stoneville, Miss.	2	1	3	4
Tunica, Miss.	1	2	3	4
Baton Rouge, La.	1	2	3	4
		UPPER AND CENTRAL SOUTH		
Crossville, Ala.	2	1	3	4
Knoxville, Tenn.	2	1	3	4
Jackson, Tenn.	2	1	3	4
Belle Mina, Ala.	2	3	1	4
Watkinsville, Ga.	1	4	3	2
		EAST COAST		
McCullers, N. C.	1	2	4	3
Plymouth, N. C.	2	1	3	4
Monetta, S. C.	2	1	2	4

UNIFORM TEST, GROUP VII

The Group VII test consisted of six named varieties, one introduction and six strains. The origin of these varieties and strains is as follows:

Variety or Strain	Source or Originating Agency	Origin
Burdette #20	Burdette Planting Co.	Selection from Arksoy
CNS	J. E. Wannamaker	Selection from Clemson
Nanksoy	U. S. D. A.	P.I. 104881 from Nanking, China
Ogden	Tenn. Agr. Exp. Sta.	Sel. from Tokyo x P.I. 54610
Palmetto	U. S. D. A.	P.I. 71587 from Nanking, China
Roanoke	N. C. Exp. Sta. & U.S.R.S.L.	Selection from Nanking
F.C. 30967-W	U. S. D. A.	Selection from mixed seed lot
N42-26	N.C. Exp. Sta. & U.S.R.S.L.	Selection from Arksoy
N44-92	N.C. Exp. Sta. & U.S.R.S.L.	Sel. from Ogden x Haberlandt
N44-774	N.C. Exp. Sta. & U.S.R.S.L.	Sel. from Ogden x Missoy
N44-937	N.C. Exp. Sta. & U.S.R.S.L.	Sel. from Ogden x Palmetto
N45-3563	N.C. Exp. Sta. & U.S.R.S.L.	Sel. from Missoy x Ogden

Two new strains, N45-3563 and N44-937, were added to this test in 1947. Woods Yellow which had been tested for four years and Tanner, a distinctly low yielding variety, were dropped from the test. Yields were taken on 36 tests in 1947. The agronomic and chemical data and the two and four-year averages are summarized in tables 31 to 41, inclusive.

In 1943, Woods Yellow was the principal oil seed variety of Group VII being grown in the South. Volstate had been released but was not widely grown at this time. Other varieties being grown were primarily forage types. In the Southeast, the varieties producing fair yields of seed were forage types. Many of them, Palmetto, Clemson, Missoy, Nanking, and others, were introductions from the Nanking, China, area and were low in percentage of oil and yield.

The superiority of Roanoke and Volstate over Woods Yellow in yield and oil content was shown in the earlier tests, 1943-46. Roanoke and Volstate continue to be the leading varieties of this maturity for the mid- and upper-South. Roanoke has a slight advantage over Volstate in yield and percentage of oil.

In the Southeast, the two strains, N42-26 and N44-774, have led the other varieties in the Group VII tests in 1946 and 1947. Both of these strains are superior to Palmetto and CNS in yield and percentage of oil. The new strain, N45-3563, yielded well over the Southeast this past year. This strain appears very promising and would make a valuable variety for the lower South because of its high oil content if it continues to yield well over the area.

The higher yielding varieties in the West were N44-774, followed by Burdette 20, N44-3563, and Volstate. N44-774 was the high-yielding variety of this group in 1946.

Table 31: Summary of the agronomic and chemical data for the strains of the Uniform Test, Group VII, 1947

Location	No. of Tests	Mean Yield	Roanoke	Volstate	N42-26	Ogden	N45-3563	N44-92
			YIELD					
West	6	10.9	11.8	12.5	11.7	9.9	12.5	9.8
Delta	7	17.5	20.7	19.7	19.4	21.3	18.7	19.8
Upper & Central South	9	19.4	23.9	23.3	20.8	22.2	19.6	20.5
East Coast	10	26.4	31.1	31.2	30.2	30.8	29.5	29.4
Southeast	4	19.2	18.4	18.0	23.6	16.3	21.8	20.6
Mean	36	19.5	22.7	22.4	21.9	21.7	21.2	21.1
			YIELD RANK					
West			5	3	6	9	3	10
Delta			2	5	6	1	8	4
Upper & Central South			1	2	4	3	8	5
East Coast			2	1	4	3	5	6
Southeast			8	9	1	12	2	5
			LODGING					
West	8	1.8	1.4	1.4	2.0	1.1	1.7	1.4
Delta	6	2.8	2.5	2.3	3.0	1.9	2.8	2.3
Upper & Central South	6	1.9	2.2	2.0	2.3	1.2	1.5	1.3
East Coast	7	2.7	2.4	2.6	2.5	1.8	2.9	2.2
Southeast	4	1.6	1.0	1.3	1.5	1.0	1.5	1.5
Mean	31	2.2	1.9	1.9	2.3	1.4	2.1	1.7
			HEIGHT					
West	8	28.7	25.9	25.5	33.5	20.5	27.5	30.1
Delta	7	37.9	33.7	33.0	41.6	27.7	39.4	42.0
Upper & Central South	6	32.2	33.2	30.8	33.7	28.3	30.5	35.0
East Coast	7	42.1	45.3	41.4	45.0	36.3	40.9	46.0
Southeast	5	29.8	24.8	23.2	34.8	21.2	28.4	33.8
Mean	33	34.3	32.8	31.1	37.9	26.9	33.5	37.4
			MATURITY[1]/					
West	7		+0.4	0	-5.5	-7.9	-2.0	-8.9
Delta	5		+4.2	0	-1.8	-5.8	+1.6	-8.8
Upper & Central South	7		+3.9	0	-3.9	-11.6	+0.7	-4.3
East Coast	6		-2.2	0	-3.2	-12.7	+2.7	-7.3
Southeast	4		+2.8	0	-2.0	-7.5	+0.3	-4.5
Mean	29		+1.7	0	-3.5	-9.4	+0.6	-6.8

[1]/Days earlier (-) or later (+) than Volstate.

Table 31: (Continued)

Location	Burdette #20	N44-774	N44-937	CNS	30967-W	Nanksoy	Palmetto
			YIELD				
West	12.7	13.3	9.2	11.3	7.5	10.7	9.0
Delta	19.2	17.4	19.9	13.5	14.1	13.0	11.2
Upper & Central South	19.2	20.0	20.0	16.6	17.0	16.0	13.6
East Coast	26.8	24.6	25.6	19.5	22.9	18.6	22.6
Southeast	20.2	21.7	17.5	20.8	13.9	19.0	17.8
Mean	20.3	19.8	19.5	16.4	16.1	15.6	15.3
			YIELD RANK				
West	2	1	11	7	13	8	12
Delta	7	9	3	11	10	12	13
Upper & Central South	9	6	6	11	10	12	13
East Coast	7	9	8	12	11	13	10
Southeast	6	3	11	4	13	7	10
			LODGING				
West	2.0	1.8	1.9	2.8	1.1	2.5	2.2
Delta	3.0	2.9	2.9	3.7	1.9	3.7	3.4
Upper & Central South	2.0	1.7	1.3	2.3	1.0	2.7	2.7
East Coast	2.7	2.5	2.6	3.9	1.7	4.1	3.1
Southeast	1.8	1.5	1.6	2.5	1.0	2.3	1.8
Mean	2.3	2.1	2.1	3.1	1.4	3.1	2.7
			HEIGHT				
West	33.0	27.3	33.8	27.6	20.8	27.0	40.6
Delta	43.1	40.9	45.0	34.3	28.3	32.7	51.6
Upper & Central South	32.8	32.5	33.3	29.8	26.2	31.5	41.3
East Coast	46.0	42.6	43.7	36.3	37.6	37.0	48.7
Southeast	33.4	30.8	35.8	26.6	24.6	28.2	42.4
Mean	37.9	34.9	38.5	31.1	27.5	31.3	45.1
			MATURITY[1/]				
West	-4.0	-1.4	-8.9	-2.0	-2.3	-2.3	-0.4
Delta	-3.2	-8.2	-4.6	+11.6	+0.6	+11.2	+8.6
Upper & Central South	-5.1	+0.3	-6.0	-1.0	+1.0	-0.3	+2.6
East Coast	-3.0	+0.7	-9.2	+2.3	-1.8	+2.3	+0.7
Southeast	-2.5	+2.3	-4.5	+4.3	-2.3	+2.0	+1.5
Mean	-3.7	-1.2	-6.9	+2.3	-0.9	-2.1	+2.4

Table 31: (Continued)

Location	No. of Tests	Mean Yield	Roanoke	Vol-state	N42-26	Ogden	N45-3563	N44-92
			SEED QUALITY					
West	9	2.8	2.4	2.5	3.0	3.4	2.5	3.3
Delta	8	1.9	1.5	2.1	1.9	2.0	2.1	2.1
Upper & Central South	5	2.1	2.0	2.1	2.2	2.6	1.7	2.1
East Coast	5	2.3	2.0	2.1	2.3	3.0	2.0	2.7
Southeast	4	2.9	3.0	2.9	2.8	3.5	3.1	3.1
Mean	31	2.4	2.1	2.3	2.4	2.9	2.3	2.7
			SEED WEIGHT					
West	4	12.9	14.4	14.0	12.2	15.8	12.8	14.0
Delta	7	11.7	12.9	12.9	10.3	12.3	12.4	11.2
Upper & Central South	8	13.7	15.6	14.8	12.8	16.0	13.5	14.8
East Coast	6	14.4	15.6	16.0	13.8	16.6	15.2	16.8
Southeast	5	14.6	16.2	15.6	13.9	16.6	15.1	15.7
Mean	30	13.4	14.9	14.6	12.5	15.3	13.8	14.4
			PERCENTAGE OF PROTEIN					
West	4	42.8	40.2	40.5	43.0	42.6	40.6	43.2
Delta	7	41.2	39.3	39.8	40.4	40.6	41.3	41.5
Upper & Central South	8	42.1	39.8	40.0	41.7	41.8	40.5	41.1
East Coast	6	42.6	40.1	39.8	41.8	42.8	41.1	42.0
Southeast	5	42.9	41.0	41.4	42.2	43.3	41.2	42.9
Mean	30	42.2	40.0	40.2	41.7	42.1	40.9	42.0
			PERCENTAGE OF OIL					
West	4	20.1	21.8	21.6	20.4	21.0	21.3	20.4
Delta	7	20.1	21.3	21.1	20.6	20.4	21.4	20.8
Upper & Central South	8	19.6	21.4	21.0	20.1	20.4	20.8	20.5
East Coast	6	19.3	21.0	21.0	20.3	20.8	20.5	20.4
Southeast	5	20.2	21.8	21.4	20.5	20.9	21.6	20.7
Mean	30	19.8	21.4	21.2	20.4	20.6	21.1	20.6
			IODINE NUMBER OF OIL					
West	4	128.7	130.3	131.1	129.5	127.2	130.8	127.3
Delta	7	131.5	133.1	133.6	132.8	134.2	132.4	132.4
Upper & Central South	8	133.8	134.3	135.4	133.5	133.3	135.6	132.3
East Coast	6	135.7	136.6	136.6	135.5	136.0	137.1	134.2
Southeast	5	132.3	134.0	134.3	133.2	132.2	134.3	131.0
Mean	30	132.7	133.9	134.5	133.2	133.1	134.3	131.8

Table 31: (Continued)

Location	Burdette #20	N44-774	N44-937	CNS	30967-W	Nanksoy	Palmetto
			SEED QUALITY				
West	2.7	3.0	3.5	2.4	2.7	2.6	2.2
Delta	1.7	1.9	2.2	1.6	1.9	2.0	2.0
Upper & Central South	1.7	2.2	2.6	2.2	1.7	1.7	1.9
East Coast	2.3	2.3	3.2	2.2	1.7	2.2	2.3
Southeast	2.6	2.8	3.3	2.5	2.8	2.8	3.0
Mean	2.2	2.4	2.9	2.1	2.2	2.3	2.2
			SEED WEIGHT				
West	13.0	12.1	12.1	12.1	15.3	12.0	10.4
Delta	10.4	11.6	10.1	12.0	13.0	12.3	10.7
Upper & Central South	13.0	13.0	12.5	12.6	15.5	12.4	11.1
East Coast	13.8	13.0	13.6	13.1	16.2	12.5	11.3
Southeast	13.3	13.6	13.9	13.5	16.5	13.7	12.0
Mean	12.6	12.7	12.3	12.6	15.2	12.6	11.1
			PERCENTAGE OF PROTEIN				
West	44.5	41.3	42.8	44.4	44.4	45.1	43.9
Delta	40.5	40.9	40.7	43.1	41.9	43.6	42.0
Upper & Central South	43.7	41.3	42.4	44.7	43.2	43.6	44.1
East Coast	43.0	42.4	43.1	45.1	42.8	44.9	45.2
Southeast	43.2	42.4	42.5	44.3	43.0	44.0	43.9
Mean	42.8	41.6	42.5	44.3	43.0	44.0	43.9
			PERCENTAGE OF OIL				
West	20.4	20.1	20.6	18.8	19.4	18.0	17.6
Delta	20.6	20.0	20.1	18.7	19.5	18.4	18.0
Upper & Central South	19.9	19.4	20.0	17.7	19.0	17.7	17.4
East Coast	20.0	18.4	19.8	16.9	18.9	16.4	16.7
Southeast	20.8	19.5	19.8	18.7	19.9	18.4	17.8
Mean	20.3	19.5	20.0	18.1	19.3	17.8	17.5
			IODINE NUMBER OF OIL				
West	130.0	129.1	127.2	127.4	128.9	126.0	128.2
Delta	133.4	130.4	129.8	129.2	132.0	127.3	129.3
Upper & Central South	133.5	134.5	132.7	132.9	133.8	133.1	134.6
East Coast	136.1	135.6	134.7	134.6	134.6	134.7	137.1
Southeast	134.0	131.6	130.5	131.1	130.2	130.1	133.6
Mean	133.6	132.6	131.3	131.3	132.3	130.6	132.8

Table 32: Summary of yields in bushels per acre for the strains of the Uniform Test, Group VII, 1947

Location	Date of Planting	Mean Yield	Roanoke	Volstate	N42-26	Ogden	N45-3563	N44-92
			WEST					
Tishomingo, Okla.	5-2	13.5	14.0	15.2	13.2	14.3	13.2	13.8
Stuttgart, Ark.	5-27	11.9	14.0	13.5	11.2	13.3	12.2	10.2
Miller County, Ark.	5-12	11.5	13.1	14.0	11.8	10.9	13.7	11.5
Crowley, La.	4-29	10.4	12.4	13.7	13.0	7.3	11.4	9.4
Calhoun, La.	4-24	7.7	10.6	9.8	7.9	7.3	7.8	7.3
Melrose, La.	4-22	10.4	6.8	8.9	12.8	6.1	16.7	6.4
Chillicothe, Tex. [1]	6-15	6.7	6.7	8.7	5.8	4.7	5.6	6.1
College Station, Tex. [1]		-	5.0	5.9 [2]	8.0	2.6	9.1	-
Renner, Texas [1]		-	-	-	-	-	30.8	12.0
Mean		10.9	11.8	12.5	11.7	9.9	12.5	9.8
			DELTA					
Baton Rouge, La.	4-25	24.8	18.4	22.1	31.6	33.6	27.6	31.4
St. Joseph, La.	4-28	22.7	25.1	23.5	25.2	20.5	22.3	31.4
Stoneville, Miss. [1]	4-22	21.2	21.7	16.7	23.2	25.6	30.5	22.7
Stoneville, Miss. [1]	5-26	19.7	29.7	22.0	20.2	25.2	20.9	19.9
Stoneville, Miss. [1]	6-12	21.8	27.9	24.2	23.2	26.4	21.9	18.0
Clarkedale, Ark.	5-28	16.9	23.4	24.0	17.5	21.5	18.4	16.0
Anchorage, Miss.	5-17	15.0	22.1	16.5	16.7	17.7	13.4	15.5
Onward, Miss.	5-13	12.8	16.3	16.4	12.5	19.5	11.1	13.9
Dunleith, Miss.		9.2	18.1	18.5	9.0	10.4	7.8	7.8
Marianna, Ark. [1]	5-5	4.4	4.3	6.2	5.4	4.2	4.2	4.7
Moorhead, Miss. [1]			12.6	10.9	9.4	18.9	6.0	11.0
Mean		17.5	20.7	19.7	19.4	21.3	18.7	19.8
			UPPER AND CENTRAL SOUTH					
Blairsville, Ga.		34.9	40.7	44.6	39.6	38.6	33.7	41.2
State College, Miss.	4-28	27.2	34.5	35.8	25.7	31.1	32.0	28.9
State College, Miss.	6-16	15.0	20.7	20.0	17.4	18.5	15.1	16.5
Crossville, Ala.	5-7	21.6	27.0	28.7	23.3	26.0	19.4	23.2
Clemson, S. C.	5-22	17.4	22.1	19.1	17.1	19.8	19.7	17.2
Clemson, S. C.	6-5	18.4	22.0	17.5	18.0	21.4	18.2	20.0
Clemson, S. C.	6-19	17.3	18.8	19.9	19.4	19.3	16.1	18.1
Experiment, Ga.	5-17	14.9	17.7	14.2	17.1	14.7	14.5	12.9
Watkinsville, Ga.	4-22	8.4	11.8	10.1	9.4	10.7	8.1	6.6
Rome, Ga. [1]	5-26	-	25.4	24.0	-	-	-	23.1
Belle Mina, Ala. [1]	5-7	10.3	10.0	12.0	13.9	11.3	9.4	12.8
Mean		19.5	23.9	23.3	20.8	22.2	19.6	20.5

[1] Not included in mean.
[2] Average of 3 replications.

Table 32: (Continued)

Location	Burd. #20	N44-774	N44-937	CNS	30967-W	Nank-soy	Pal-metto	Diff. Req. Sig.(5%)	C.V.
				WEST					
Tishomingo, Okla.	15.4	16.3	10.1	16.4	7.6	16.0	10.4	3.8	20%
Stuttgart, Ark.	11.6	14.3	10.3	12.1	9.9	12.3	10.4	2.3	14%
Miller County, Ark.	13.0	14.3	9.4	10.7	10.3	6.1	10.6	4.0	24%
Crowley, La.	8.0	12.3	4.5	13.9	7.4	14.5	7.9	3.6	24%
Calhoun, La.	8.6	8.4	6.6	8.0	5.0	6.6	5.6	2.0	18%
Melrose, La.	19.6	14.3	14.5	6.7	4.7	8.7	8.8	4.5	30%
Chillicothe, Tex.	5.6	8.9	4.9 2/	9.3	2.6	6.6	5.7 2/	2.9	25%
College Station, Tex	-	8.6	2.8 2/	11.6	2.0	9.4	3.9 2/		
Renner, Texas	18.6	28.4	-	27.5	5.8	19.7	19.9		
Mean	12.7	13.3	9.2	11.3	7.5	10.7	9.0		
				DELTA					
Baton Rouge, La.	31.9	23.4	28.2	17.1	17.5	21.7	18.3	5.4	15%
St. Joseph, La.	25.9	22.8	28.4	18.4	17.6	17.5	16.2	7.2	22%
Stoneville, Miss.	20.9	24.8	30.2	20.8	12.2	12.5	14.1	6.7	22%
Stoneville, Miss.	15.4	21.7	16.2	15.7	-	11.3	18.3	5.5	19%
Stoneville, Miss.	20.5	23.8	20.2	19.6	-	20.9	15.6	6.7	21%
Clarkedale, Ark.	15.0	16.0	13.9	13.7	16.0	11.5	13.4	3.4	14%
Anchorage, Miss.	19.9	16.0	16.2	7.3	15.6	13.1	5.6	5.4	25%
Onward, Miss.	12.4	10.0	17.3	11.2	10.1	8.2	7.2	2.7	15%
Dunleith, Miss.	8.3	8.9	5.0	5.7	9.6	6.2	3.6	3.7	28%
Marianna, Ark.	3.0	-	4.8	-	-	-	2.5	N.S.	42%
Moorhead, Miss.	5.6	5.3	12.5	-	4.1	-	-		
Mean	19.2	17.4	19.9	13.5	14.1	13.0	11.2		
				UPPER AND CENTRAL SOUTH					
Blairsville, Ga.	33.3	34.1	33.3	32.6	28.3	33.3	19.8	9.8	20%
State College, Miss.	28.5	30.2	27.9	20.6	25.5	17.8	15.5	7.8	20%
State College, Miss.	16.0	11.9	16.3	11.0	13.6	10.3	7.3	2.5	12%
Crossville, Ala.	23.4	19.5	20.3	17.2	23.0	15.4	13.7	4.2	14%
Clemson, S. C.	14.8	19.9	15.6	16.4	14.1	15.5	14.8	3.2	10%
Clemson, S. C.	19.0	19.9	19.1	17.6	12.7	16.5	17.7	N.S.	20%
Clemson, S. C.	14.9	18.9	19.3	14.9	13.7	14.9	16.2	4.4	15%
Experiment, Ga.	16.2	16.6	17.8	11.6	13.3	13.9	13.2	3.8	18%
Watkinsville, Ga.	6.5	9.3	10.1	7.3	9.1	6.1	4.1	2.4	20%
Rome, Ga.	21.9	23.4	-	21.8	-	-	16.2		
Belle Mina, Ala.	12.5	5.6	10.1	-	5.8	-	-	3.2	21%
Mean	19.2	20.0	20.0	16.6	17.0	16.0	13.6		

Table 32: (Continued)

Location	Date of Planting	Mean Yield	Roa-noke	Vol-state	N42-26	Ogden	N45-3563	N44-92
			EAST COAST					
Petersburg, Va.	5-12	40.5	46.4	50.8	43.3	40.3	39.9	44.0
McCullers, N. C.	5-9	32.5	45.8	39.9	37.2	33.9	38.8	34.0
Norfolk, Va.	5-13	30.9	40.7	41.7	32.9	37.3	25.8	32.8
Florence, S. C.	5-22	27.1	29.1	24.0	33.1	28.0	31.5	32.0
Florence, S. C.	6-20	29.1	28.0	26.3	31.4	35.0	36.3	35.5
Willard, N. C.	5-21	28.4	32.7	32.1	37.9	32.3	38.8	35.0
Williamsburg, Va.	5-19	24.0	27.1	29.1	27.1	32.0	24.4	25.8
Plymouth, N. C.	5-7	20.1	25.9	30.0	22.0	31.0	23.4	22.8
Rocky Mount, N. C.	5-2	18.6	22.1	21.2	22.5	16.0	23.0	18.4
Holland, Va.	5-16	12.3	13.2	16.9	14.2	21.9	12.7	14.0
Mean		26.4	31.1	31.2	30.2	30.8	29.5	29.4
			SOUTHEAST					
Blackville, S. C.	5-17	27.2	25.2	26.1	33.5	23.8	36.1	27.7
Blackville, S. C.	7-7	10.3	11.5	11.2	14.9	5.8	7.4	14.1
Monetta, S. C.	5-26	20.5	21.6	20.7	21.5	16.2	24.1	17.1
Tifton, Ga.	5-2	18.7	15.1	13.9	24.4	19.5	19.4	23.4
Tifton, Ga.[1/]	6-8	8.5	-	6.2	13.1	8.0	-	10.7
Richmond Hill, Ga.	5-30	10.0	6.4	7.5	12.1	10.4	9.4	13.0
Mean		19.2	18.4	18.0	23.6	16.3	21.8	20.6

Table 32; (Continued)

Location	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto	Diff. Req. Sig. (5%)	C.V.
				EAST COAST					
Petersburg, Va.	38.3	44.1	34.5	35.9	35.5	36.2	36.7	5.3	9%
McCullers, N. C.	30.3	31.1	31.8	22.1	27.8	17.0	33.5	4.7	10%
Norfolk, Va.	38.0	25.6	30.3	28.2	26.9	23.1	18.3	6.9	16%
Florence, S. C.	27.3	22.5	31.8	22.2	22.5	23.0	24.8	6.4	16%
Florence, S. C.	31.9	26.9	29.9	22.3	25.3	19.9	29.5	5.1	12%
Willard, N. C.	27.3	26.0	32.1	18.3	16.4	15.2	25.1	6.1	15%
Williamsburg, Va.	24.1	22.1	22.4	17.9	25.4	17.6	17.6	4.5	13%
Plymouth, N. C.	16.5	17.0	17.5	8.0	23.3	8.9	14.5	5.4	19%
Rocky Mount, N. C.	17.5	21.0	14.1	14.2	14.7	17.5	20.1	4.0	15%
Holland, Va.	16.5	9.2	11.9	6.3	11.0	7.2	5.7	3.8	21%
Mean	26.8	24.6	25.6	19.5	22.9	18.6	22.6		
				SOUTHEAST					
Blackville, S. C.	28.2	32.0	25.5	27.2	20.1	26.4	22.4	6.0	13%
Blackville, S. C.	12.7	13.3	7.5	11.9	7.8	6.5	8.8	5.2	35%
Monetta, S. C.	19.7	24.3	15.6	24.0	14.5	24.8	22.5	3.3	11%
Tifton, Ga.	20.2	17.3	21.5	20.0	13.0	18.4	17.4	3.5	13%
Tifton, Ga.[1]	14.3	10.0	-	10.7	2.6	6.4	2.5	4.2	35%
Richmond Hill, Ga.	12.5	13.0	12.2	10.2	1.7[3]	11.4	9.8	N.S.	39%
Mean	20.2	21.7	17.5	20.8	13.9	19.0	17.8		

[3]Not included in the analyses.

Table 32a: Summary of the yield rank for the strains of the Uniform Test, Group VII, 1947

Location	Roanoke	Volstate	N42-26	Ogdon	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						WEST							
Tishomingo, Okla.	7	5	9	6	9	8	4	2	12	1	13	3	11
Stuttgart, Ark.	2	3	9	4	6	12	8	1	10	7	13	5	10
Miller County, Ark.	4	2	6	8	3	7	5	1	12	9	11	13	10
Crowley, La.	5	3	4	12	7	8	9	6	13	2	11	1	10
Calhoun, La.	1	2	6	9	7	8	3	4	11	5	13	10	12
Melrose, La.	9	6	5	12	2	11	1	4	3	10	13	8	7
Chillicothe, Texas	4	3	7	10	7	5	7	2	9	1	13	5	6
College Station, Tex.	6	-	5	7	3	-	-	4	-	1	8	2	-
Renner, Texas	-	-	7	8	1	9	6	2	10	3	11	5	4
						DELTA							
Baton Rouge, La.	10	8	3	1	6	4	2	7	5	13	12	9	11
St. Joseph, La.	5	6	4	9	8	1	3	7	2	10	11	12	13
Stoneville, Miss. 4/22	7	10	5	3	1	6	8	4	2	9	13	12	11
Stoneville, Miss. 5/26	1	3	6	2	5	7	11	4	9	10	-	12	8
Stoneville, Miss. 6/12	1	3	5	2	6	11	8	4	9	10	-	7	12
Clarkedale, Ark.	2	1	5	3	4	6	9	6	10	11	6	13	12
Marianna, Ark.	5	1	2	6	6	4	8	-	3	-	-	-	9
Anchorage, Miss.	1	5	4	3	10	9	2	7	6	12	8	11	13
Onward, Miss.	4	3	6	1	9	5	7	11	2	8	10	12	13
Dunleith, Miss.	2	1	5	3	9	8	7	6	12	11	4	10	13
Moorhead, Miss.	2	5	6	1	7	4	8	9	3	-	10	-	-
						UPPER AND CENTRAL SOUTH							
Blairsville, Ga.	3	1	4	5	7	2	10	6	9	11	12	8	13
State College, Miss. 4/28	2	1	9	4	3	6	7	5	8	11	10	12	13
State College, Miss. 6/16	1	2	4	3	8	5	7	10	6	11	9	12	13
Crossville, Ala.	2	1	5	3	10	6	4	9	8	11	7	12	13
Clemson, S. C. 5/22	1	5	7	3	4	6	11	2	9	8	13	10	12
Clemson, S. C. 6/5	1	11	8	2	7	3	6	4	5	10	13	12	9
Clemson, S. C. 6/19	6	1	2	3	9	7	12	5	4	11	13	10	8

Table 32a: (Continued)

Location	Roanoke	Volstate	N42-26	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-motto
					UPPER AND CENTRAL SOUTH (Cont'd)								
Experiment, Ga.	2	8	3	6	7	12	5	4	1	13	10	9	11
Watkinsville, Ga.	1	3	5	2	8	10	11	6	3	9	7	12	13
Rome, Ga.	1	2	-	-	-	4	5	3	-	6	-	-	7
Belle Mina, Ala.	7	4	1	5	8	2	3	10	6	-	9	-	-
					EAST COAST								
Petersburg, Va.	2	1	5	6	7	4	8	3	13	11	12	10	9
McCullers, N. C.	1	2	4	6	3	5	10	9	8	12	11	13	7
Norfolk, Va.	2	1	5	4	10	6	3	11	7	8	9	12	13
Florence, S. C. 5/22	5	9	1	6	4	2	7	11	3	13	11	10	8
Florence, S. C. 6/20	8	10	5	3	1	2	4	9	6	12	11	13	7
Willard, N. C.	4	7	2	5	1	3	8	9	7	11	12	13	10
Williamsburg, Va.	3	2	4	1	7	5	8	10	9	11	6	12	13
Plymouth, N. C.	3	2	7	1	4	6	10	9	8	13	5	12	11
Rocky Mount, N. C.	3	4	2	10	1	7	9	5	13	12	11	9	6
Holland, Va.	6	2	4	1	7	5	3	10	8	12	9	11	13
					SOUTHEAST								
Blackville, S. C. 5/15	10	8	2	11	1	5	4	3	9	6	13	7	12
Blackville, S. C. 7/7	6	7	1	13	11	2	4	3	10	5	9	12	8
Monetta, S. C.	6	8	7	11	3	10	9	2	12	4	13	1	5
Tifton, Ga. 5/2	11	12	1	6	7	2	4	10	3	5	13	8	9
Tifton, Ga. 6/8	-	8	2	6	-	3	1	5	-	3	9	7	10
Richmond Hill, Ga.	11	10	4	6	9	1	2	1	3	7	12	5	8

Table 33: Summary of the lodging data for the strains of the Uniform Test, Group VII, 1947

Location	Mean	Roa-noke	Vol-state	N42-26	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						WEST								
Stuttgart, Ark.	1.3	1.0	1.0	1.5	1.0	1.0	1.3	1.5	1.0	1.0	2.3	1.3	2.0	1.0
Miller County, Ark.	1.7	1.0	1.8	1.8	1.3	1.8	1.3	1.8	1.3	1.8	3.0	1.0	3.0	1.5
Crowley, La.	2.0	2.0	2.0	3.0	1.0	2.0	2.0	2.0	3.0	2.0	3.0	1.0	3.0	3.0
Calhoun, La.	2.0	2.0	2.0	3.0	1.0	2.0	1.0	2.0	2.0	3.0	3.0	1.0	2.0	3.0
Melrose, La.	2.4	1.0	1.0	2.0	1.0	3.0	2.0	3.0	3.0	3.0	4.0	1.0	4.0	3.0
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
College Sta., Tex.	2.0	1.8	1.5	1.8	1.5	1.5	1.8	1.5	1.5	2.0	3.8	1.8	3.5	2.0
Renner, Texas	1.6	1.0	1.0	2.0	1.0	1.3	1.0	2.8	1.8	1.5	2.0	1.0	1.8	3.0
Mean	1.8	1.4	1.4	2.0	1.1	1.7	1.4	2.0	1.8	1.9	2.8	1.1	2.5	2.2
						DELTA								
Baton Rouge, La.	2.6	2.0	2.0	3.0	2.0	3.0	2.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0
St. Joseph, La.	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0	4.0	3.0	2.0	3.0	4.0
Stoneville, Miss.	2.3	1.3	1.3	2.5	1.0	2.5	1.5	3.0	2.5	2.3	3.8	1.0	3.8	3.8
Stoneville, Miss.	3.0	3.3	2.0	3.8	2.3	3.0	2.3	3.3	3.0	2.3	3.8	2.3	3.8	3.5
Stoneville, Miss.	3.0	2.8	2.5	3.0	2.0	2.5	2.8	2.8	3.3	3.0	4.0	2.3	4.0	3.3
Clarkedale, Ark.	2.8	2.5	2.8	2.5	2.0	2.5	2.0	3.0	2.5	2.5	4.5	2.0	4.5	2.5
Marianna, Ark. 1/	1.5	2.0	1.8	2.0	1.0	1.0	1.0	2.0	1.0	1.0	-	-	3.0	1.0
Mean	2.8	2.5	2.3	3.0	1.9	2.8	2.3	3.0	2.9	2.9	3.7	1.9	3.7	3.4
						UPPER AND CENTRAL SOUTH								
State College, Miss.	3.0	2.0	2.0	4.0	1.0	2.0	2.0	4.0	3.0	3.0	5.0	1.0	5.0	5.0
Clemson, S. C.	2.0	3.0	3.0	3.0	1.0	2.0	1.0	2.0	2.0	1.0	2.0	1.0	3.0	2.0
Clemson, S. C.	2.2	3.0	3.0	2.0	2.0	1.0	1.0	2.0	1.0	1.0	3.0	1.0	4.0	4.0
Clemson, S. C.	1.9	3.0	2.3	3.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Experiment, Ga.	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
Watkinsville, Ga.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Belle Mina, Ala. 1/	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	1.0	-	-
Mean	1.9	2.2	2.0	2.3	1.2	1.5	1.3	2.0	1.7	1.3	2.3	1.0	2.7	2.7

Table 33: (Continued)

Location	Mean	Roa-noke	Vol-state	N42-26	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						EAST COAST								
Petersburg, Va.	2.6	2.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0	3.0	3.0	2.0	3.0	3.0
McCullers, N. C.	2.5	2.0	2.0	2.5	1.0	2.5	1.0	3.5	2.0	2.0	4.5	1.5	4.5	3.0
Norfolk, Va.	2.9	3.0	3.2	2.5	2.5	3.5	2.7	2.2	3.0	2.2	4.2	1.7	3.7	3.0
Willard, N. C.	3.0	3.0	2.8	2.5	1.8	3.2	2.0	3.0	3.0	3.5	4.5	2.0	4.5	3.5
Williamsburg, Va.	1.5	1.0	1.0	1.0	1.0	2.0	3.0	1.0	1.0	1.0	2.0	1.0	3.0	1.0
Plymouth, N. C.	3.2	3.0	3.0	3.0	2.0	3.0	2.5	3.0	2.5	3.5	5.0	2.0	5.0	4.0
Rocky Mount, N. C.	3.2	3.0	3.0	3.0	2.0	3.0	2.0	4.0	3.0	3.0	4.0	2.0	5.0	4.0
Mean	2.7	2.4	2.6	2.5	1.8	2.9	2.2	2.7	2.5	2.6	3.9	1.7	4.1	3.1
						SOUTHEAST								
Blackville, S. C.	2.4	1.0	2.0	2.0	1.0	2.0	3.0	2.0	2.0	3.0	5.0	1.0	4.0	3.0
Blackville, S. C.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Monetta, S. C.	1.8	1.0	1.0	2.0	1.0	2.0	1.0	3.0	2.0	1.5	3.0	1.0	3.0	2.0
Richmond Hill, Ga.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Mean	1.6	1.0	1.3	1.5	1.0	1.5	1.5	1.8	1.5	1.6	2.5	1.0	2.3	1.8

1/ Not included in the mean.

Table 34: Summary of the height data for the strains of the Uniform Test, Group VII, 1947

Location	Mean	Roa-noke	Vol-state	N42-25	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						WEST								
Stuttgart, Ark.	27.5	29	28	27	20	26	28	30	28	29	28	20	26	38
Miller County, Ark.	41.5	43	43	46	32	40	44	46	40	44	39	32	42	48
Crowley, La.	24.4	20	22	32	12	22	25	28	20	24	28	16	30	38
Calhoun, La.	27.0	20	19	35	19	22	30	36	23	32	31	17	25	46
Melrose, La.	32.5	21	22	40	16	30	30	40	30	52	33	18	32	58
Chillicothe, Texas	18.2	19	18	20	11	19	19	17	18	19	18	15	16	28
College Sta., Tex.	32.7	39	36	35	36	34	34	33	31	34	25	32	25	31
Renner, Texas	25.7	16	16	35	18	27	31	34	28	36	19	16	20	38
Mean	28.7	25.9	25.5	33.5	20.5	27.5	30.1	33.0	27.3	33.8	27.6	20.8	27.0	40.6
						DELTA								
Baton Rouge, La.	35.2	23	24	46	21	37	35	44	38	48	35	22	35	50
St. Joseph, La.	33.5	19	18	40	16	37	42	36	40	48	29	20	28	62
Stoneville, Miss.	36.2	26	27	41	30	39	43	41	40	50	32	24	28	53
Stoneville, Miss.	40.9	43	40	41	34	39	45	45	44	50	35	35	35	50
Stoneville, Miss.	36.8	38	39	39	25	38	38	44	36	35	36	29	32	43
Clarkedale, Ark.	43.8	45	44	43	36	46	47	48	46	46	40	35	38	55
Marianna, Ark. 1/	34.6	36	34	36	27	34	35	37	29	36	-	-	36	41
Anchorage, Miss. 1/	-	39	38	37	-	35	-	41	35	-	26	31	31	46
Mean	37.9	33.7	33.0	41.6	27.7	39.4	42.0	43.1	40.9	45.0	34.3	28.3	32.7	51.6
						UPPER AND CENTRAL SOUTH								
State College, Miss.	36.8	37	35	37	33	34	40	34	39	44	36	31	34	45
Clemson, S. C.	29.8	34	32	35	24	28	34	31	29	27	27	23	28	36
Clemson, S. C.	31.7	32	33	34	32	24	33	39	29	27	32	23	32	42
Clemson, S. C.	25.2	27	23	26	23	27	28	21	27	26	22	20	23	35
Experiment, Ga.	37.1	36	32	34	28	38	38	40	40	44	34	28	40	50
Watkinsville, Ga.	32.7	33	30	36	30	32	37	32	31	32	28	32	32	40
Bello Mina, Ala. 1/	39.1	41	41	42	30	40	48	36	43	38	-	33	-	-
Mean	32.2	33.2	30.8	33.7	28.3	30.5	35.0	32.8	32.5	33.3	29.8	26.2	31.5	41.3

Table 34: (Continued)

Location	Mean	Roa-noke	Vol-state	N42-26	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						EAST COAST								
Petersburg, Va.	46.4	57	45	42	42	42	51	54	48	48	44	46	40	44
McCullers, N. C.	42.0	44	42	48	34	42	44	48	44	40	36	36	36	52
Norfolk, Va.	45.4	50	45	47	39	40	47	47	48	46	43	42	43	53
Willard, N. C.	39.8	42	38	42	32	42	44	44	40	46	32	34	34	48
Williamsburg, Va.	39.4	40	40	46	37	40	46	37	38	36	35	35	36	46
Plymouth, N. C.	39.8	40	38	42	38	38	44	44	40	42	32	38	34	48
Rocky Mount, N. C.	41.5	44	42	48	32	42	46	48	40	48	32	32	36	50
Mean	42.1	45.3	41.4	45.0	36.3	40.9	46.0	46.0	42.6	43.7	36.3	37.6	37.0	48.9
						SOUTHEAST								
Blackville, S. C.	33.1	29	25	37	21	33	39	35	35	44	27	28	31	46
Blackville, S. C.	23.0	19	18	28	15	21	30	24	28	24	20	25	20	27
Monetta, S. C.	41.8	40	38	48	34	42	38	48	40	48	38	32	42	56
Richmond Hill, Ga.	24.8	18	17	29	17	24	31	28	26	31	23	18	22	38
Tifton, Ga.	26.5	18	18	32	19	22	31	32	25	32	25	20	26	45
Tifton, Ga.[1/]	-	-	18	26	18	-	23	27	20	-	21	20	19	21
Mean	29.8	24.8	23.2	34.8	21.2	28.4	33.8	33.4	30.8	35.8	26.6	24.6	28.2	42.4

[1/] Not included in the mean.

Table 35: Summary of the maturity data, days earlier (-) or later (+) than Volstate, for the strains of the Uniform Test, Group VII, 1947

Location	Date Planted	Roa-noke	Vol-state[2]	N42-26	Ogden	N45-3563	N44-92	Burd. #20
			WEST					
Stuttgart, Ark.	5-27	0	0	-1	-11	0	-11	-1
Miller County, Ark.		0	-	-13	-13	0	-13	-13
Crowley, La.	4-29	0	0	-5	-19	0	-15	-8
Calhoun, La.	4-24	0	0	-5	-5	-5	-9	0
Melrose, La.	4-22	0	0	+3	-5	-3	0	+5
College Sta. Texas	5-28	+1	0	-5	0	-5	-6	-1
Renner, Texas		+2	0	-12	-2	-1	-9	-10
Mean		+0.4	0	-5.5	-7.9	-2.0	-8.9	-4.0
			DELTA					
Baton Rouge, La.	4-25	0	0	+1	-5	+1	-5	-3
St. Joseph, La.	4-28	+3	0	0	-21	-3	-10	-7
Stoneville, Miss.	4-22	+1	0	-8	+12	-1	-14	-6
Stoneville, Miss.	5-26	-1	0	-7	-16	-2	-13	-7
Stoneville, Miss.	6-12	+18	0	+5	+1	+13	-2	+7
Clarkedale, Ark.	5-28	0	-	-18	-23	0	-13	-18
Marianna, Ark.	5-5	+13	-	0	-22	+21	-7	+13
Mean		+4.2	0	-1.8	-5.8	+1.6	-8.8	-3.2
			UPPER AND CENTRAL SOUTH					
State College, Miss.	4-28	+2	0	-7	-16	0	-7	-16
State College, Miss.	6-16	+7	0	-4	-8	+7	-7	-4
Clemson, S. C.	5-22	+5	0	-10	-5	-5	-10	-10
Clemson, S. C.	6-5	+3	0	-7	-7	0	-7	-7
Clemson, S. C.	6-19	+3	0	-4	-10	-7	-7	-7
Experiment, Ga.	5-17	+7	0	+5	-7	+10	+2	+2
Mean		+3.9	0	-3.9	-11.6	+0.7	-4.3	-5.1
			EAST COAST					
Petersburg, Va.	5-12	-6	0	-10	-13	+5	-13	-6
McCullers, N. C.	5-9	+1	0	-3	-14	+1	-7	-3
Willard, N. C.	5-21	+1	0	-1	-9	+1	-6	-1
Williamsburg, Va.	5-19	-9	0	0	-11	0	-12	0
Plymouth, N. C.	5-7	0	0	0	-11	+4	+2	-1
Rocky Mount, N. C.	5-2	0	0	-5	-18	+5	-8	-7
Mean		-2.2	0	-3.2	-12.7	+2.7	-7.3	-3.0
			SOUTHEAST					
Blackville, S. C.	5-15	+4	0	-1	-2	-1	-2	-7
Blackville, S. C.	7-7	+3	0	-7	-7	-2	-3	-7
Monetta, S. C.	5-26	+4	0	0	-14	+4	-6	0
Tifton, Ga.	5-2	0	0	0	-7	0	-7	+4
Tifton, Ga.[1]	6-8	-	0	-3	-7	-	0	+2
Mean		+2.8	0	-2.0	-7.5	+0.3	-4.5	-2.5

[1] Not included in mean.
[2] Volstate required 158 days to mature.

Table 35: (Continued)

Location	N44-774	N44-937	CNS	30967-W	Nank-soy	Pal-metto	Volstate Matured	Days to Maturity
				WEST				
Stuttgart, Ark.	0	-12	0	0	0	0	10-21	147
Miller County, Ark.	0	-13	0	0	0	0		
Crowley, La.	0	-19	-10	-19	-5	0	10-20	174
Calhoun, La.	+2	-19	-10	-19	-5	0	10-20	174
Melrose, La.	0	+5	+5	-2	+5	+5	10-15	176
College Sta., Texas	-5	-4	-5	-2	-6	-6	10-31	156
Renner, Texas	-7	-12	-9	+15	-13	-7		
Mean	-1.4	-8.9	-2.0	-2.3	-2.3	-0.4		
				DELTA				
Baton Rouge, La.	+15	-5	+17	-2	+20	+25	9-25	153
St. Joseph, La.	-2	-7	+7	-2	+7	0	10-17	172
Stoneville, Miss.	+3	-13	+8	-1	+6	+6	10-17	178
Stoneville, Miss.	+6	-16	+6	-2	+3	-1	10-22	149
Stoneville, Miss.	+19	+18	+20	+10	+20	+13	10-16	126
Clarkedale, Ark.	0	-13	0	-13	0	-13		
Marianna, Ark.	+22	-20	-	-	+22	+21	10-23	171
Mean	-8.2	-4.6	+11.6	+0.6	+11.2	+8.6		
				UPPER AND CENTRAL SOUTH				
State College, Miss.	+7	-7	0	-7	0	0	10-18	173
State College, Miss.	+7	-7	+7	+7	+7	+7	10-18	124
Clemson, S. C.	-7	0	-7	0	-7	-4	11-4	166
Clemson, S. C.	-5	0	-4	0	-4	0	11-7	155
Clemson, S. C.	-7	-7	-5	0	-5	0	11-7	141
Experiment, Ga.	+7	+7	+2	+7	+7	+7	10-8	144
Mean	+0.3	-6.0	-1.0	+1.0	*0.3	+2.6		
				EAST COAST				
Petersburg, Va.	-6	-19	0	-8	0	0		
McCullers, N. C.	0	-7	+3	+1	+3	0	10-27	171
Willard, N. C.	+1	-7	+2	-4	+2	0	10-22	154
Williamsburg, Va.	0	-12	0	-9	0	0	10-27	161
Plymouth, N. C.	+4	-2	+4	+4	+4	+4	10-24	170
Rocky Mount, N. C.	+5	-8	+5	+5	+5	0		
Mean	+0.7	-9.2	+2.3	-1.8	+2.3	+0.7		
				SOUTHEAST				
Blackville, S. C.	0	+6	+4	-10	-1	-7	10-30	168
Blackville, S. C.	-3	-4	-1	0	-1	-4	11-15	131
Monetta, S. C.	+4	-14	+5	+2	+5	+2	10-20	147
Tifton, Ga.	+8	-6	+9	-1	+10	+15	10-7	158
Tifton, Ga. 1/	0	-	+1	0	-2	-1	10-13	-
Mean	+2.3	-4.5	+4.3	-2.3	+2.0	+1.5		

Table 36: Summary of the percentage of oil for the strains of the Uniform Test, Group VII, 1947

Location	Mean	Roa-noke	Vol-state	N42-26	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						WEST								
Tishomingo, Okla.	21.9	23.5	23.9	21.7	22.5	23.9	23.1	21.5	22.6	22.2	21.2	20.4	19.2	18.7
Stuttgart, Ark.	19.7	21.7	21.4	20.6	20.0	20.9	18.1	20.3	20.0	19.8	17.8	19.6	17.3	18.0
Miller County, Ark.	18.8	20.1	20.0	19.3	20.8	19.5	19.9	19.4	18.1	20.2	16.9	17.7	16.3	16.3
Crowley, La.	20.1	22.0	21.2	19.8	20.7	21.0	20.5	20.4	19.6	20.0	19.4	19.7	19.3	17.3
Mean	20.1	21.8	21.6	20.4	21.0	21.3	20.4	20.4	20.1	20.6	18.8	19.4	18.0	17.6
						DELTA								
Baton Rouge, La.	21.6	21.8	21.7	22.8	22.9	23.6	23.3	22.7	20.9	21.6	19.2	21.7	19.0	19.8
St. Joseph, La.	19.5	20.4	20.4	20.0	19.2	20.8	20.2	20.5	19.1	19.5	18.7	19.2	18.4	17.5
Stoneville, Miss.	19.9	20.7	20.2	20.1	20.0	21.9	20.4	20.4	20.4	20.4	19.1	18.3	18.6	17.9
Stoneville, Miss.	20.3	22.7	22.3	21.2	19.4	22.0	20.2	20.8	20.2	19.6	18.7	19.9	18.6	17.9
Stoneville, Miss.	19.9	21.4	21.6	20.4	20.9	20.1	20.8	20.1	19.6	20.0	18.7	19.3	18.0	17.7
Clarkedale, Ark.	21.1	23.4	23.6	21.7	21.8	22.4	21.6	21.0	21.4	20.9	18.8	21.0	18.2	18.0
Onward, Miss.	18.2	19.0	18.1	18.3	18.4	19.2	18.9	18.8	18.1	18.4	17.5	17.2	17.7	17.2
Mean	20.1	21.3	21.1	20.6	20.4	21.4	20.8	20.6	20.0	20.1	18.7	19.5	18.4	18.0
						UPPER AND CENTRAL SOUTH								
Blairsville, Ga.	19.8	22.3	21.3	20.2	21.0	20.9	20.4	19.9	19.4	20.2	17.3	19.5	17.5	17.7
State College, Miss.	19.6	21.2	20.7	20.1	19.5	20.9	20.6	20.1	19.6	19.7	18.0	19.3	17.7	17.1
State College, Miss.	20.2	22.5	22.2	21.5	20.7	21.8	21.6	20.6	19.8	20.3	17.6	19.8	17.1	17.1
Crossville, Ala.	21.6	22.4	22.5	22.8	22.6	22.4	23.8	22.5	20.6	22.1	19.6	20.7	19.8	19.1
Clemson, S. C.	18.8	21.1	20.3	19.4	20.3	20.1	19.5	18.8	18.7	19.8	16.8	17.5	16.5	16.1
Clemson, S. C.	19.2	21.4	21.0	19.3	20.5	19.9	20.0	19.0	18.8	19.5	17.0	18.4	17.7	17.1
Clemson, S. C.	19.2	21.2	21.1	19.5	20.3	20.1	19.4	19.6	19.2	19.6	17.2	18.7	16.8	16.9
Experiment, Ga.	18.8	19.4	18.9	18.3	18.6	20.3	18.5	18.9	19.3	19.0	18.6	18.1	18.7	17.8
Mean	19.6	21.4	21.0	20.1	20.4	20.8	20.5	19.9	19.4	20.0	17.8	19.0	17.7	17.4

Table 36: (Continued)

Location	Mean	Roa-noke	Vol-state	N42-26	Ogden	N45-3563	N44-92	Burd. #20	N44-774	N44-937	CNS	30967W	Nank-soy	Pal-metto
						EAST COAST								
Petersburg, Va.	19.0	21.0	20.8	19.7	20.5	20.1	19.9	19.3	18.3	19.9	16.6	18.6	16.2	16.5
McCullers, N. C.	20.4	21.9	21.8	21.5	21.9	21.4	21.5	21.4	19.3	21.6	17.9	19.5	17.3	17.9
Norfolk, Va.	19.0	20.9	21.3	20.3	19.9	20.0	19.5	19.4	18.6	18.6	17.1	18.7	16.7	16.5
Florence, S. C.	19.5	21.3	20.9	20.1	20.9	21.3	20.7	20.2	18.4	19.2	17.5	19.4	16.7	17.4
Willard, N. C.	19.1	20.6	20.7	20.0	20.8	20.8	20.4	20.3	17.8	19.5	16.5	18.9	16.4	16.2
Williamsburg, Va.	18.7	20.5	20.5	19.9	20.5	19.4	20.4	19.3	17.8	19.9	15.6	18.3	15.6	15.7
Mean	19.3	21.0	21.0	20.3	20.8	20.5	20.4	20.0	18.4	19.8	16.9	18.9	16.5	16.7
						SOUTHEAST								
Blackville, S. C.	20.1	21.5	20.9	20.5	21.0	21.0	20.3	21.1	19.0	20.1	19.0	19.6	18.7	18.2
Blackville, S. C.	20.8	22.9	22.5	21.0	21.8	21.7	21.6	21.8	19.7	20.8	19.5	20.2	18.8	18.7
Monetta, S. C.	19.4	21.7	21.6	20.4	18.9	21.5	20.1	20.5	19.1	18.8	16.9	19.2	17.0	16.5
Tifton, Ga.	20.0	20.8	20.4	20.1	20.8	22.0	20.4	20.3	19.9	19.6	19.0	19.7	18.7	17.9
Richmond Hill, Ga.	20.4	22.1	21.7	20.3	22.2	21.8	21.0	20.2	20.0	19.8	19.1	20.9	18.8	17.9
Mean	20.2	21.8	21.4	20.5	20.9	21.6	20.7	20.8	19.5	19.8	18.7	19.9	18.4	17.8

Table 37: Two-year summary of agronomic and chemical data for the strains in the Uniform Test, Group VII, 1946-47

	No. of Tests	Ogdon	N44-92	Roanoke	Vol-stato	N42-26	N44-774	CNS	Pal-metto	Burdette #20
YIELDS:										
West	2	10.4	9.9	11.7	13.0	10.8	13.5	12.4	10.5	10.9
Delta	3	26.3	23.4	22.8	21.6	23.9	23.7	17.7	15.8	23.4
Upper & Central South	5	23.4	20.8	23.9	22.7	19.8	20.6	14.9	14.3	-
East Coast	6	37.1	36.5	33.5	34.3	32.1	29.4	21.0	25.0	-
Southeast	4	15.2	17.0	15.1	13.9	18.9	19.1	17.6	16.0	-
Mean	20	25.0	24.1	23.6	23.3	23.0	22.7	17.4	17.7	
YIELD RANK:										
West		8	9	4	2	6	1	3	7	5
Delta		1	4	6	7	2	3	8	9	4
Upper & Central South		2	4	1	3	6	5	7	8	-
East Coast		1	2	4	3	5	6	8	7	-
Southeast		6	4	7	8	2	1	3	5	-
AVERAGE OF ALL LOCATIONS:										
Lodging		1.3	1.6	1.8	1.8	2.2	1.9	2.9	2.7	2.5
Plant Height		26.1	36.5	30.9	29.7	37.2	33.7	30.1	44.6	38.0
Maturity 1/		-9.8	-6.5	+1.2	0	-3.6	-0.6	+1.8	+1.8	-
Seed Quality		2.7	2.6	2.1	2.2	2.3	2.4	2.2	2.3	2.1
Seed Weight		15.0	14.7	14.9	14.6	12.7	12.9	12.9	11.1	12.7
Percentage of Protein		41.8	41.6	40.0	40.2	42.1	41.8	44.9	44.5	42.8
Percentage of Oil		20.8	20.8	21.6	21.4	20.4	19.7	18.2	17.7	20.3
Iodine No. of Oil		135.1	133.9	135.3	136.1	134.8	133.8	132.6	133.9	134.6

1/Days earlier (-) or later (+) than Volstate.

Table 38: Summary of the two-year average yields for the strains of the Uniform Test, Group VII, 1946-47

Location	Mean	Ogden	N44-92	Roanoke	Volstate
		WEST			
Stuttgart, Ark.	13.8	12.4	11.0	14.8	15.6
Chillicothe, Texas	9.1	8.3	8.7	8.5	10.3
Miller County, Ark.[1]	-	-	-	-	12.3
Mean		10.4	9.9	11.7	13.0
		DELTA			
Stoneville, Miss.[2]	22.5	25.7	24.1	25.7	22.2
Baton Rouge, La.	22.1	24.5	26.0	12.8	14.4
Clarkedale, Ark.	21.7	28.8	20.0	29.9	28.1
Mean		26.3	23.4	22.8	21.6
		UPPER AND CENTRAL SOUTH			
Crossville, Ala.	27.0	35.0	31.3	31.8	31.6
State College, Miss.	26.6	31.3	26.6	34.9	32.4
Clemson, S. C.	20.0	21.8	21.3	22.6	21.2
Experiment, Ga.	16.6	17.8	15.2	19.3	17.2
Watkinsville, Ga.	9.8	11.0	9.4	10.8	11.0
Mean		23.4	20.8	23.9	22.7
		EAST COAST			
Petersburg, Va.	40.0	41.3	42.2	42.7	44.7
McCullers, N. C.	35.2	37.9	37.0	43.6	37.7
Willard, N. C.	29.1	29.2	39.4	27.6	27.8
Williamsburg, Va.	28.7	35.4	31.4	30.5	33.7
Plymouth, N. C.	28.0	38.6	35.7	29.4	31.9
Holland, Va.	25.7	40.1	33.4	27.2	29.7
Florence, S. C.[1]		26.0	-	25.0	20.8
Mean		37.1	36.5	33.5	34.3
		SOUTHEAST			
Blackville, S. C.[3]	21.8	18.2	23.4	18.5	18.6
Monetta, S. C.	20.2	17.7	17.2	22.5	20.4
Tifton, Ga.[3]	12.7	12.7	14.6	10.5	8.1
Richmond Hill, Ga.	11.7	12.0	12.6	9.0	8.5
Mean		15.2	17.0	15.1	13.9
MEAN (20 tests)		25.0	24.1	23.6	23.3

[1] Not included in the mean.
[2] Data from three planting dates.
[3] Data from two planting dates.

Table 38: (Continued)

Location	N42-26	N44-774	Palmetto	CNS	Burdette 20 [1]
		WEST			
Stuttgart, Ark.	13.9	15.0	12.4	13.8	14.9
Chillicothe, Texas [1]	7.6	12.0	8.5	10.9	6.9
Miller County, Ark. [1]	10.9	11.6	-	12.5	9.7
Mean	10.8	13.5	10.5	12.4	10.9
		DELTA			
Stoneville, Miss. [2]	24.8	23.2	15.4	18.2	22.9
Baton Rouge, La.	26.0	27.6	19.4	20.6	27.2
Clarkedale, Ark.	20.9	20.3	12.6	14.3	20.2
Mean	23.9	23.7	15.8	17.7	23.4
		UPPER AND CENTRAL SOUTH			
Crossville, Ala.	24.2	24.9	20.7	16.7	-
State College, Miss.	26.0	28.5	15.2	17.9	-
Clemson, S. C.	19.6	20.4	16.7	16.5	-
Experiment, Ga.	18.7	16.8	14.2	13.8	-
Watkinsville, Ga.	10.3	12.5	4.9	9.6	9.0
Mean	19.8	20.6	14.3	14.9	-
		EAST COAST			
Petersburg, Va.	41.2	39.0	35.4	33.1	-
McCullers, N. C.	34.4	33.3	32.7	24.6	-
Willard, N. C.	34.1	28.4	27.8	18.4	-
Williamsburg, Va.	31.0	27.6	17.4	22.7	-
Plymouth, N. C.	27.9	24.0	23.6	13.1	-
Holland, Va.	24.1	24.2	12.9	14.0	-
Florence, S. C. [1]	27.0	21.9	19.2	19.0	-
Mean	32.1	29.4	25.0	21.0	-
		SOUTHEAST			
Blacksville, S. C. [3]	26.5	25.5	21.0	22.9	-
Monetta, S. C. [3]	20.2	23.5	18.5	21.2	20.4
Tifton, Ga. [3]	16.2	12.5	12.5	14.2	-
Richmond Hill, Ga.	12.7	14.8	11.9	12.1	-
Mean	18.9	19.1	16.0	17.6	-
MEAN (20 tests)	23.0	22.7	17.7	17.4	

Table 39: Summary of yield rank of the two-year average yields for the strains of the Uniform Test, Group VII, 1946-47

Location	Ogden	N44-92	Roanoke	Volstate	N42-26	N44-774	Palmetto	CNS	Burdette #20
				WEST					
Stuttgart, Ark.	7	9	4	1	5	2	7	6	3
Chillicothe, Texas	7	4	5	3	8	1	5	2	9
Miller County, Ark.	-	-	-	2	4	3	-	1	5
				DELTA					
Stoneville, Miss.	1	4	1	7	3	5	9	8	6
Baton Rouge, La.	5	3	9	8	3	1	7	6	2
Clarkedale, Ark.	2	7	1	3	4	5	9	8	6
				UPPER AND CENTRAL SOUTH					
Crossville, Ala.	1	4	2	3	6	5	7	8	-
State College, Miss.	3	5	1	2	6	4	8	7	-
Clemson, S. C.	2	3	1	4	6	5	7	8	-
Experiment, Ga.	3	6	1	4	2	5	7	8	-
Watkinsville, Ga.	2	6	4	2	5	1	9	7	8
				EAST COAST					
Holland, Va.	1	2	4	3	6	5	8	7	-
Petersburg, Va.	4	3	2	1	5	6	8	7	-
McCullers, N. C.	2	4	1	3	5	6	7	8	-
Willard, N. C.	3	1	6	5	2	4	7	8	-
Williamsburg, Va.	1	3	5	2	4	6	7	8	-
Plymouth, N. C.	3	1	6	5	2	4	7	8	-
Florence, S. C.	2	-	3	5	1	4	6	7	-
				SOUTHEAST					
Blackville, S. C.	8	3	7	6	1	2	5	4	-
Monetta, S. C.	9	8	2	4	6	1	7	3	4
Tifton, Ga.	4	2	7	8	1	5	5	3	-
Richmond Hill, Ga.	5	3	7	8	2	1	6	4	-

Table 40: Four-year summary of agronomic and chemical data for the strains of the Uniform Test, Group VII, 1944-47

	No. of Tests	Roanoke	Ogden	Volstate	Palmetto	CNS
YIELDS:						
West	1	18.9	15.8	18.7	15.3	15.9
Delta	3	24.8	28.0	23.9	16.4	17.3
Upper & Central South	4	22.7	20.7	20.8	12.8	15.7
East Coast	4	30.5	30.4	28.6	25.7	19.1
Southeast	3	16.8	16.5	16.0	17.6	17.9
Mean (15 tests)		23.8	23.6	22.4	18.1	17.4
YIELD RANK:						
West		1	4	2	5	3
Delta		2	1	3	5	4
Upper & Central South		1	3	2	5	4
East Coast		1	2	3	4	5
Southeast		3	4	5	2	1
AVERAGE OF ALL LOCATIONS:						
Lodging		1.7	1.3	1.7	2.7	3.0
Height (Inches)		32.2	26.5	31.1	47.1	30.8
Maturity[1/]		+1.6	-11.9	0	+1.5	+1.4
Seed Quality		2.0	2.5	2.0	2.1	1.9
Seed Weight		15.0	15.3	14.7	11.6	13.1
Percentage of Protein		40.0	41.9	40.1	44.7	45.2
Percentage of Oil		21.7	20.8	21.4	17.8	18.3
Iodine Number of Oil		133.9	134.2	135.0	132.4	131.2

[1/] Days earlier (-) or later (+) than Volstate. Volstate required 161 days to mature.

Table 41: Summary of the four-year average yields and yield rank, 1944-47, for the strains of the Uniform Test, Group VII

Location	Mean	Roanoke	Vol-state	Ogden	CNS	Pal-metto	Roanoke	Vol-state	Ogden	CNS	Pal-metto
			YIELD						YIELD RANK		
					WEST						
Stuttgart, Ark.	16.9	18.9	18.7	15.8	15.9	15.3	1	2	4	3	5
Miller County, Ark.	-	-	21.0	-	13.8	-					
					DELTA						
Clarkedale, Ark.	27.3	33.2	32.2	36.0	16.9	18.2	2	3	1	5	4
Stoneville, Miss.	24.3	30.3	27.5	29.7	19.4	14.8	1	3	2	4	5
Baton Rouge, La.	14.6	10.9	11.9	18.4	15.7	16.2	5	4	1	3	2
Mean		24.8	23.9	28.0	17.3	16.4					
					UPPER AND CENTRAL SOUTH						
State College, Miss.	23.0	30.6	28.4	28.4	15.8	11.9	1	2	2	4	5
Clemson, S. C.	21.5	25.1	23.2	22.6	19.1	17.6	1	2	3	4	5
Experiment, Ga.	17.9	21.3	18.2	18.9	17.6	13.4	1	3	2	4	5
Watkinsville, Ga.	11.7	13.9	13.2	12.7	10.3	8.3	1	2	3	4	5
Mean		22.7	20.8	20.7	15.7	12.8					
					EAST COAST						
McCullers, N. C.	31.2	38.1	34.0	32.4	21.9	29.6	1	2	3	5	4
Plymouth, N. C.	26.4	29.5	30.3	34.6	14.6	23.1	3	2	1	5	4
Willard, N. C.	25.9	27.4	27.2	29.0	17.8	28.3	3	4	1	5	2
Florence, S. C.	23.9	27.1	23.0	25.7	22.0	21.6	1	3	2	4	5
Mean		30.5	28.6	30.4	19.1	25.7					
					SOUTHEAST						
Monetta, S. C.	20.8	22.1	21.4	19.7	20.9	19.8	1	2	5	3	4
Tifton, Ga.	18.1	17.0	16.3	17.9	19.5	19.6	4	5	3	2	1
Richmond Hill, Ga.	12.0	11.3	10.4	11.9	13.2	13.4	4	5	3	2	1
Mean		16.8	16.0	16.5	17.9	17.6					
MEAN (15 tests)		23.8	22.4	23.6	17.4	18.1					

UNIFORM TEST, GROUP VIII

The Uniform Test, Group VIII, consists of seven varieties, one new strain and one introduction. The origin of these varieties and strains is as follows:

Variety or Strain	Source or Originating Agency	Origin
Acadian	La. Agr. Exp. Sta.	Formerly La. 40-290
Cherokee	U. S. Dept. of Agr.	P.I. 93057 from Hangchow, China
La. Green	La. Agr. Exp. Sta.	Sel. from a hybrid population
Mamloxi	Delta Branch Exp. Sta.	Sel. from Mammoth Yellow x Biloxi
Mamotan 6640	Delta Branch Exp. Sta.	Sel. from Mammoth Yellow x Otootan
Seminole	U. S. Dept. of Agr.	P. I. 83058 from Hangchow, China
*Wannamaker #1	J. E. Wannamaker	Sel. from mixed seed lot
Yelnando	Coker Pedigreed Seed Co.	Sel. from Yelredo x Nanda
P.I.85897	U. S. Dept. of Agr.	Introduction from Shizuoka, Japan, in 1930

*Renamed JW45

Twenty-four tests of Group VIII were grown at 20 locations across the South. Yields are reported on only 17 tests from 13 locations. The agronomic and chemical data including two and four-year averages are given in tables 42 to 51, inclusive.

Dry weather, insect, and disease injury, singly or together, are usually responsible for the high percentage of failures of the Group VIII tests. The need of varieties carrying disease resistance and having the ability to thrive under the adverse conditions usually occurring at some time during the long growing season is apparent from these tests. Deficiencies in lime, potash, and phosphorous in the soils of the Lower South, particularly in the Coastal Plain, are undoubtedly responsible for the poor showing of soybeans in this area.

In the Southeast, the leading varieties were Mamotan, Yelnando, Wannamaker #1, and Mamloxi in 1947. These varieties ranked in this order in the two-year average with the exception of Wannamaker #1 which was included in only the 1947 tests. It should be noted, however, that Acadian is slightly above Mamotan and Mamloxi in yield according to the four-year average from tests in the Southeast. Acadian has the highest oil content of the varieties of Group VIII.

Acadian and Louisiana Green have led the tests at Baton Rouge and St. Joseph, Louisiana. Louisiana Green, however, has not appeared promising at other locations in the region. While yields were generally low in the West, Wannamaker #1, Yelnando, Mamotan, and Acadian led most of the tests. Yelnando, Mamotan, and Acadian are the leading varieties in two-year averages in this area. In general, the results from the uniform tests and from dates of planting tests indicate that late plantings of varieties of late maturity in the dry areas can be expected to yield relatively more than earlier plantings, or early-maturing varieties. Serious shattering and low yields of poor quality seed usually result from early plantings of most varieties.

Table 42: Summary of the agronomic data for the strains of the Uniform Test, Group VIII, 1947

	No. of Tests	Mean	Mamotan 6640	Acadian	Mamloxi
			YIELD		
West	5	9.3	9.8	10.1	9.5
Delta	4	18.9	23.2	25.7	21.5
Southeast[1/]	7	15.1	17.8	14.5	15.8
Mean	16	14.2	16.7	15.9	15.3
			YIELD RANK		
West			3	2	5
Delta			2	1	3
Southeast			1	6	4
			LODGING		
West	5	2.2	1.8	2.2	1.8
Delta	5	3.3	2.7	3.8	2.8
Southeast	3	2.1	1.3	2.3	1.7
Mean	13	2.6	2.0	2.8	2.2
			HEIGHT		
West	5	34.4	28.6	41.2	32.2
Delta	5	49.3	41.8	62.2	49.4
Southeast	5	39.2	32.6	45.8	37.4
Mean	15	41.0	34.3	49.7	39.7
			MATURITY[2/]		
West	4		-0.8	0	-0.5
Delta	5		-6.2	0	+1.8
Southeast	5		-2.0	0	+6.0
Mean	14		-3.2	0	+2.6

[1/] Includes Florence, S. C. and Experiment, Ga.

[2/] Days earlier (-) or later (+) than Acadian.
Acadian required an average of 172 days to mature.

Table 42: (Continued)

Location	Wanna-maker #1	Yel-nando	P.I. 85897	Louisiana Green	Seminole	Cherokee
			YIELD			
West	10.9	9.3	9.7	8.9	7.9	7.3
Delta	19.1	20.8	16.8	19.5	11.9	11.8
Southeast	16.1	16.3	15.3	12.6	14.2	13.9
Mean	15.2	15.2	13.9	13.2	11.7	11.3
			YIELD RANK			
West	1	6	4	7	8	9
Delta	6	4	7	5	8	9
Southeast	3	2	5	9	7	8
			LODGING			
West	2.0	2.1	2.8	3.1	2.4	2.0
Delta	3.3	3.2	3.2	3.8	3.6	3.2
Southeast	1.7	2.3	2.3	3.0	2.7	1.7
Mean	2.4	2.6	2.8	3.3	2.9	2.4
			HEIGHT			
West	27.6	37.2	31.8	42.2	33.4	35.0
Delta	41.6	50.4	41.6	59.8	45.8	51.0
Southeast	35.6	39.4	38.2	46.0	37.8	39.6
Mean	34.9	42.3	37.2	49.3	39.0	41.9
			MATURITY[2]			
West	-5.8	-1.5	-1.5	+6.3	-2.0	+0.5
Delta	-2.4	-2.2	+7.6	+13.0	+2.8	+4.6
Southeast	-2.6	-3.8	+4.4	+7.4	-2.6	+2.6
Mean	-3.4	-2.6	+3.9	+9.1	-0.5	+2.7

Table 42: (Continued)

Location	No. of Tests	Mean	Mamotan 6640	Acadian	Mamloxi
		SEED QUALITY			
West	5	1.9	1.6	1.1	1.9
Delta	5	2.9	3.0	2.6	2.9
Southeast	3	2.6	2.3	2.8	2.7
Mean	13	2.4	2.3	2.1	2.5
		SEED WEIGHT			
West	3	13.9	14.3	10.4	12.7
Delta	5	13.6	13.5	10.7	11.7
Southeast	5	16.7	16.3	12.2	15.4
Mean	13	14.9	14.8	11.2	13.4
		COMPOSITION			
		PERCENTAGE OF PROTEIN			
Mean	9	43.1	42.4	42.4	43.0
		PERCENTAGE OF OIL			
West	3	18.6	18.6	20.2	17.9
Delta	5	19.4	19.6	21.1	18.5
Southeast	4	18.7	19.1	19.3	18.7
Mean	9	19.0	19.2	20.3	18.4
		IODINE NUMBER OF OIL			
Mean	9	132.2	135.0	133.4	135.2

Table 42: (Continued)

Location	Wanna-maker #1	Yel-nando	P.I. 85897	Louisiana Green	Seminole	Cherokee
			SEED QUALITY			
West	1.9	1.9	2.4	1.2	3.0	2.3
Delta	2.9	3.4	2.8	3.0	3.4	2.6
Southeast	2.3	2.7	2.8	2.7	2.8	2.2
Mean	2.4	2.7	2.6	2.2	3.1	2.4
			SEED WEIGHT			
West	15.9	14.8	12.2	10.2	19.6	14.8
Delta	15.4	14.1	11.6	9.4	20.8	15.2
Southeast	17.6	17.3	15.1	12.1	24.2	20.1
Mean	16.4	15.5	13.1	10.6	21.8	17.0
			COMPOSITION			
			PERCENTAGE OF PROTEIN			
MEAN	42.4	42.9	41.3	43.5	45.0	45.2
			PERCENTAGE OF OIL			
West	18.8	18.7	19.5	18.0	18.0	18.2
Delta	19.6	19.4	20.2	18.6	19.2	18.2
Southeast	19.2	19.1	19.6	18.2	18.7	18.0
Mean	19.2	19.1	19.6	18.2	18.7	18.0
			IODINE NUMBER OF OIL			
MEAN	128.9	126.9	131.2	135.1	132.5	132.1

Table 43: Summary of yields in bushels per acre for the strains of the Uniform Test, Group VIII, 1947

Location	Date Planted	Mean	Mamotan 6640	Acadian	Mamloxi	Wanna-maker #1	Yel-nando
			WEST				
Crowley, La.	4-29	13.0	10.8	18.5	11.3	14.5	12.7
Stuttgart, Ark.	5-27	11.9	12.9	10.8	12.4	15.3	11.1
Miller County, Ark.	5-12	9.2	11.2	9.7	10.6	12.3	10.7
Chillicothe, Texas	6-15	6.8	7.7	5.9	7.3	7.2	7.9
Calhoun, La.	4-24	5.5	6.6	5.4	5.9	5.3	4.3
Mean		9.3	9.8	10.1	9.5	10.9	9.3
			DELTA				
Baton Rouge, La.	4-25	19.9	14.6	30.8	18.6	12.9	20.5
Stoneville, Miss.	4-22	19.5	32.4	25.6	28.4	23.1	22.5
Stoneville, Miss.	5-27	21.0	28.1	23.7	21.7	24.2	26.3
Stoneville, Miss. 2/	6-12	20.4	24.1	22.1	16.5	20.7	27.2
St. Joseph, La.	4-28	15.2	17.5	22.8	17.2	16.2	13.7
Mean		18.9	23.2	25.7	21.5	19.1	20.8
			SOUTHEAST 1/				
Monetta, S. C.	5-26	20.8	20.2	22.3	21.8	22.1	22.5
Experiment, Ga.	5-17	20.5	23.8	20.2	22.7	21.2	20.6
Experiment, Ga.	6-16	14.5	14.4	15.1	14.2	18.6	15.0
Florence, S. C.	6-19	17.8	29.6	13.8	20.0	22.6	23.9
Tifton, Ga.	5-2	15.9	15.1	17.0	12.8	13.0	14.1
Tifton, Ga.	6-8	7.0	7.9	6.9	9.1	10.9	10.2
Richmond Hill, Ga.	5-30	9.5	13.5	6.0	9.9	4.4	7.5
Mean		15.1	17.8	14.5	15.8	16.1	16.3

1/ Including Florence, S. C. and Experiment, Ga.

2/ Not included in the mean.

Table 43: (Continued)

Location	P.I. 85897	Louisiana Green	Seminole	Cherokee	Diff. Req Sig.(5%)	C.V.
			WEST			
Crowley, La.	15.0	16.5	7.4	10.6	3.9	20%
Stuttgart, Ark.	10.7	11.1	12.9	9.5	2.5	15%
Miller County, Ark.	10.1	5.5	6.9	5.8	2.2	17%
Chillicothe, Texas	4.6	6.9	6.9	6.7	2.2	18%
Calhoun, La.	7.9	4.6	5.4	3.9	1.8	22%
Mean	9.7	8.9	7.9	7.3		
			DELTA			
Baton Rouge, La.	23.0	29.9	13.6	14.9	5.2	18%
Stoneville, Miss.	12.5	10.2	12.1	8.6	7.0	25%
Stoneville, Miss.	21.7	16.6	12.9	14.8	5.0	16%
Stoneville, Miss.[2]	23.2	16.8	-	12.4	7.8	22%
St. Joseph, La.	10.0	21.1	9.1	8.9	3.7	17%
Mean	16.8	19.5	11.9	11.8		
			SOUTHEAST[1]			
Monetta, S. C.	20.1	20.3	19.0	18.5	N.S.	11%
Experiment, Ga.	19.6	19.0	18.4	19.0	N.S.	12%
Experiment, Ga.	13.9	9.1	15.1	14.9	3.4	16%
Florence, S. C.	12.9	10.9	14.2	12.3	6.5	25%
Tifton, Ga.	18.0	15.4	22.6	15.5	4.2	18%
Tifton, Ga.	4.0	7.2	3.6	3.6	3.9	38%
Richmond Hill, Ga.	18.5	6.5	6.4	13.2	5.5	39%
Mean	15.3	12.6	14.2	13.9		

Table 43a: Summary of yield rank for the strains of the Uniform Test, Group VIII, 1947

Location	Mamotan 6640	Acadian	Mamloxi	Wanna-maker#1	Yelnando
		WEST			
Crowley, La.	7	1	6	4	5
Stuttgart, Ark.	2	7	4	1	5
Miller County, Ark.	2	6	4	1	3
Chillicothe, Texas	2	8	3	4	1
Calhoun, La.	2	4	3	6	8
		DELTA			
Baton Rouge, La.	6	1	5	9	4
Stoneville, Miss. 4/22	1	3	2	4	5
Stoneville, Miss. 5/27	1	4	5	3	2
Stoneville, Miss. 6/12	2	4	7	5	1
St. Joseph, La.	3	1	4	5	6
		SOUTHEAST			
Monetta, S. C.	6	2	4	3	1
Experiment, Ga. 5/17	1	5	2	3	4
Experiment, Ga. 6/16	6	2	7	1	4
Florence, S. C.	1	6	4	3	2
Tifton, Ga. 5/2	6	3	9	8	7
Tifton, Ga. 6/8	4	6	3	1	2
Richmond Hill, Ga.	2	8	4	9	5

Table 43a: (Continued)

Location	P.I. 85897	Louisiana Green	Seminole	Cherokee
		WEST		
Crowley, La.	3	2	9	8
Stuttgart, Ark.	8	5	2	9
Miller County, Ark.	5	9	7	8
Chillicothe, Texas	9	5	5	7
Calhoun, La.	1	7	4	9
		DELTA		
Baton Rouge, La.	3	2	8	7
Stoneville, Miss.	6	8	7	9
Stoneville, Miss.	5	7	9	8
Stoneville, Miss.	3	6	-	8
St. Joseph, La.	7	2	8	9
		SOUTHEAST		
Monetta, S. C.	7	5	8	9
Experiment, Ga.	6	7	9	7
Experiment, Ga.	8	9	3	5
Florence, S. C.	7	9	5	8
Tifton, Ga.	2	5	1	4
Tifton, Ga.	9	5	7	7
Richmond Hill, Ga.	1	6	7	3

Table 44: Summary of the lodging data for the strains of the Uniform Test, Group VIII, 1947

Location	Mean	Mamotan 6640	Acadian	Mamloxi	Wanna-maker #1	Yel-nando	P.I. 85897	La. Green	Seminole	Cherokee
				WEST						
Crowley, La.	3.2	3.0	3.0	3.0	3.0	3.0	3.0	5.0	3.0	3.0
Stuttgart, Ark.	1.7	1.0	1.0	1.0	1.0	2.0	3.0	3.0	2.0	1.0
Miller County, Ark.	2.1	1.0	3.0	1.0	2.0	1.5	3.8	2.3	2.8	2.0
Chillicothe, Texas	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Calhoun, La.	3.1	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0
Mean	2.2	1.8	2.2	1.8	2.0	2.1	2.8	3.1	2.4	2.0
				DELTA						
Baton Rouge, La.	3.2	3.0	4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0
Stoneville, Miss.	3.2	2.3	4.0	2.3	3.0	2.8	4.0	3.8	3.5	2.8
Stoneville, Miss.	3.3	2.7	3.5	2.3	3.8	3.3	3.4	4.0	3.9	3.0
Stoneville, Miss.	2.9	1.7	3.5	2.5	2.7	3.0	2.5	3.3	3.5	3.3
St. Joseph, La.	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
Mean	3.3	2.7	3.8	2.8	3.3	3.2	3.2	3.8	3.6	3.2
				SOUTHEAST						
Monetta, S. C.	2.8	2.0	3.0	2.0	2.0	3.0	3.0	4.0	3.0	3.0
Experiment, Ga.	2.6	1.0	3.0	2.0	2.0	3.0	3.0	4.0	4.0	1.0
Richmond Hill, Ga.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Mean	2.1	1.3	2.3	1.7	1.7	2.3	2.3	3.0	2.7	1.7

Table 45: Summary of the height data for the strains of the Uniform Test, Group VIII, 1947

Location	Mean	Mamotan 6640	Acadian	Mamloxi	Wanna-maker #1	Yel-nando	P.I. 85897	La. Green	Seminole	Chero-kee
					WEST					
Crowley, La.	33.1	26	46	28	25	30	33	48	28	34
Stuttgart, Ark.	31.1	25	34	28	26	36	28	39	32	32
Miller County, Ark.	49.4	44	56	48	44	54	46	54	50	49
Chillicothe, Texas	21.7	19	23	18	18	24	23	23	24	23
Calhoun, La.	36.6	30	47	39	25	42	29	47	33	37
Mean	34.4	28.6	41.2	32.2	27.6	37.2	31.8	42.2	33.4	35.0
					DELTA					
Baton Rouge, La.	49.7	35	66	48	35	50	38	70	42	63
Stoneville, Miss.	51.5	44	68	51	43	48	47	59	49	54
Stoneville, Miss.	49.8	47	59	51	47	52	42	55	48	47
Stoneville, Miss.	42.2	35	50	40	38	47	41	52	38	39
St. Joseph, La.	53.3	48	68	57	45	55	40	63	52	52
Mean	49.3	41.8	62.2	49.4	41.6	50.4	41.6	59.8	45.8	51.0
					SOUTHEAST					
Monotta, S. C.	51.6	44	60	48	48	54	54	60	48	48
Experiment, Ga.	49.1	42	58	48	46	46	44	58	48	52
Tifton, Ga.	38.9	29	51	36	32	39	35	48	37	42
Tifton, Ga.	23.0	21	22	22	23	24	25	26	23	21
Richmond Hill, Ga.	33.3	27	38	33	29	34	33	38	33	35
Mean	39.2	32.6	45.8	37.4	35.6	39.4	38.2	46.0	37.8	39.6

Table 46: Summary of the maturity data, days earlier (-) or later (+) than Acadian, for the strains of the Uniform Test, Group VIII, 1947

Location	Date Planted	Mamotan 6640	1/ Acadian	Mam-loxi	Wanna-maker#1	Yel-nando	P.I. 85897	La. Green	Semi-nole	Chero-kee	Acadian Matured	Days to Maturity
					WEST							
Crowley, La.	4-29	-9	0	-9	-14	-9	-9	0	-16	-5	11-10	195
Stuttgart, Ark.	5-27	0	0	0	-2	-2	-2	9	0	0	11-3	160
Miller County, Ark.	5-12	+12	0	+12	0	+12	+12	+12	+12	+12	10-30	171
Calhoun, La.	4-24	-7	0	-5	-7	-7	-7	+4	-4	-5	11-1	191
Mean		-0.8	0	-0.5	-5.8	-1.5	-1.5	+6.3	-2.0	+0.5		
					DELTA							
Baton Rouge, La.	4-25	-20	0	-10	-20	-10	-5	+12	-15	-5	10-30	188
Stoneville, Miss.	4-22	0	0	+6	0	0	+20	+20	+15	+19	11-1	193
Stoneville, Miss.	5-27	-5	0	+2	-3	-6	+7	+7	+8	+7	11-13	170
Stoneville, Miss.	6-12	+6	0	+6	+6	0	+11	+16	+13	+2	11-11	152
St. Joseph, La.	4-28	-12	0	+5	+5	+5	+5	+10	-7	0	11-1	187
Mean		-6.2	0	+1.8	-2.4	-2.2	+7.6	+13.0	+2.8	+4.6		
					SOUTHEAST							
Monetta, S. C.	5-26	0	0	0	0	0	0	+4	0	0	11-6	164
Experiment, Ga.	5-17	-4	0	+4	0	-4	+3	+14	0	0	11-1	168
Tifton, Ga.	5-2	-2	0	+14	-1	-3	+12	+6	0	+9	10-21	171
Tifton, Ga.	6-8	-4	0	+2	-9	-9	+7	+3	-10	+1	11-3	148
Richmond Hill, Ga.	5-30	0	0	+10	-3	-3	0	+10	-3	+3	10-25	148
Mean		-2.0	0	+6.0	-2.6	-3.8	+4.4	+7.4	-2.6	+2.6		

1/Acadiam required an average of 172 days to mature.

Table 47: Summary of the percentage of oil for the strains of the Uniform Test, Group VIII, 1947

Location	Mean	Mamotan 6640	Acadian	Mamloxi	Wanna-maker #1	Yel-nando	P.I. 85897	La. Green	Seminole	Cherokee
					WEST					
Crowley, La.	19.9	19.7	21.8	18.9	19.5	19.7	21.9	19.6	18.3	19.7
Stuttgart, Ark.	19.0	19.2	20.6	18.8	19.3	19.0	19.1	17.9	18.7	18.7
Miller County, Ark.	17.0	16.9	18.2	16.1	17.5	17.3	17.5	16.6	17.0	16.2
Mean	18.6	18.6	20.2	17.9	18.8	18.7	19.5	18.0	18.0	18.2
					DELTA					
Baton Rouge, La.	19.8	20.2	21.1	18.8	19.2	20.4	20.4	19.5	20.3	18.0
Stoneville, Miss.	19.7	21.2	21.2	19.1	20.6	19.4	20.0	18.3	19.1	18.4
Stoneville, Miss.	19.4	20.0	20.8	18.5	19.7	20.0	19.4	18.3	19.2	18.8
Stoneville, Miss.	18.8	18.8	20.5	18.2	19.2	19.3	19.5	17.2	18.4	18.3
St. Joseph, La.	19.2	17.8	21.8	17.9	19.5	17.8	21.7	19.5	19.2	17.7
Mean	19.4	19.6	21.1	18.5	19.6	19.4	20.2	18.6	19.2	18.2
					SOUTHEAST					
Monetta, S. C.	17.8	18.0	18.3	17.9	17.9	18.4	18.6	17.7	17.1	16.5
Experiment, Ga.	19.2	19.3	19.8	19.1	19.6	19.2	19.7	18.9	19.1	18.2
Experiment, Ga.	18.6	19.0	19.9	19.2	18.8	18.6	19.0	17.5	18.0	17.7
Tifton, Ga.	19.0	20.2	19.0	18.5	19.8	19.7	18.8	17.2	20.5	17.6
Mean	18.7	19.1	19.3	18.7	19.0	19.0	19.0	17.8	18.7	17.5
MEAN (12 tests)	19.0	19.2	20.3	18.4	19.2	19.1	19.6	18.2	18.7	18.0

Table 48: Two-year summary of agronomic and chemical data for the strains in the Uniform Test, Group VIII, 1946-47

	No. of Tests	Mamo-tan	Aca-dian	Yel-nando	Mam-loxi	La. Green	Chero-kee	Semi-nole
YIELDS:								
West	3	12.0	11.7	12.1	10.8	10.9	9.9	9.6
Delta	2	24.4	28.1	22.3	22.5	25.4	14.9	12.3
Southeast	4	17.2	13.7	15.4	15.2	12.6	13.8	12.9
Mean	9	17.0	16.2	15.8	15.4	14.6	12.8	11.7
YIELD RANK:								
West		2	3	1	5	4	6	7
Delta		3	1	5	4	2	6	7
Southeast		1	5	2	3	7	4	6
AVERAGE OF ALL TESTS:								
Lodging		1.8	2.7	2.4	2.0	3.3	2.4	2.8
Plant Height		34.4	48.9	41.7	38.4	48.2	40.7	38.2
Maturity		-1.4	0	-0.2	+1.9	+8.6	+2.7	+1.6
Seed Quality		2.4	2.0	2.6	2.3	2.3	2.4	3.0
Seed Weight		16.4	11.6	15.9	14.1	11.0	17.7	23.9
Percentage of Protein		42.4	42.6	43.2	43.0	43.9	45.6	45.0
Percentage of Oil		19.1	19.9	19.0	18.3	17.9	17.9	18.6
Iodine Number of Oil		136.8	135.6	129.8	137.3	137.6	134.5	134.4

Table 49: Two-year summary of yields in bushels per acre and yield rank for the strains in the Uniform Test, Group VIII, 1946-47

Location	Mean	Mamo-tan	Aca-dian	Yel-nando	Mam-loxi	La. Green	Chero-kee	Semi-nole
				WEST				
Stuttgart, Ark.	13.0	13.8	12.5	13.0	13.2	13.4	11.8	13.2
Miller County, Ark.	10.6	10.6	13.8	12.3	9.1	10.2	9.9	8.3
Chillicothe, Texas	9.4	11.5	8.8	11.1	10.2	9.0	8.1	7.3
Mean	11.0	12.0	11.7	12.1	10.8	10.9	9.9	9.6
				DELTA				
Baton Rouge, La.	23.2	19.7	34.7	21.3	21.2	33.6	17.6	14.0
Stoneville, Miss.	19.4	29.1	21.4	23.3	23.8	15.3	12.2	10.6
Mean	21.3	24.4	28.1	22.3	22.5	24.5	14.9	12.3
				SOUTHEAST				
Monetta, S. C.	19.7	20.5	22.3	20.6	21.6	18.5	18.4	16.3
Florence, S. C.	15.9	24.3	11.3	20.2	17.0	11.5	12.1	15.0
Tifton, Ga.	11.7	12.4	11.8	11.0	11.8	12.0	11.5	11.7
Richmond Hill, Ga.	10.1	11.5	9.3	9.6	10.4	8.3	13.3	8.5
Mean	14.4	17.2	13.7	15.4	15.2	12.6	13.8	12.9
MEAN (9 tests)		17.0	16.2	15.8	15.4	14.6	12.8	11.7
				YIELD RANK				
				WEST				
Stuttgart, Ark.		1	6	5	3	2	7	3
Miller County, Ark.		3	1	2	6	4	5	7
Chillicothe, Texas		1	5	2	3	4	6	7
				DELTA				
Baton Rouge, La.		5	1	3	4	2	6	7
Stoneville, Miss.		1	4	3	2	5	6	7
				SOUTHEAST				
Monetta, S. C.		4	1	3	2	5	6	7
Florence, S. C.		1	7	2	3	6	5	4
Tifton, Ga.		1	3	7	3	2	6	5
Richmond Hill, Ga.		2	5	4	3	7	1	6

Table 50: Four-year summary of agronomic and chemical data for the strains in the Uniform Test, Group VIII, 1944-47

	No. of Tests	Acadian	Mamotan	Mamloxi	Seminole	Cherokee
YIELDS:						
West	2	15.0	16.6	16.4	11.6	
Delta	2	26.5	22.2	20.8	12.6	
Southeast	3	16.9	15.8	16.4	15.1	13.8
Mean	7	19.1	17.9	17.7	13.4	
YIELD RANK:						
West		3	1	2	4	
Delta		1	2	3	4	
Southeast		1	3	2	4	
AVERAGE OF ALL TESTS:						
Lodging		2.7	1.7	2.1	2.8	2.4
Plant Height		51.2	36.2	40.5	40.6	42.6
Maturity[1/]		0	+0.8	+3.9	+2.8	+4.1
Seed Quality		1.8	2.2	2.4	2.7	2.2
Seed Weight		12.0	17.0	14.4	25.1	18.3
Percentage of Protein		43.0	42.5	43.1	44.9	45.8
Percentage of Oil		19.7	19.2	18.1	19.0	17.9
Iodine Number of Oil		135.0	136.0	136.8	133.1	133.6

[1/] Days earlier (+) or later (-) than Acadian.
Acadian required 168 days to mature.

Table 51: Four-year summary of yields in bushels per acre and yield rank for the strains of the Uniform Test, Group VIII, 1944-47

Location	Mean	Acadian	Mamotan	Mamloxi	Seminole	Cherokee[1]
			WEST			
Stuttgart, Ark.	15.8	15.7	16.2	16.5	14.9	13.7
Miller County, Ark.	13.9	14.2	17.0	16.2	8.2	-
Mean	14.9	15.0	16.6	16.4	11.6	
			DELTA			
Stoneville, Miss.	22.2	23.4	29.0	24.7	11.6	12.3
Baton Rouge, La.	18.8	29.5	15.4	16.8	13.5	-
Mean	20.5	26.5	22.2	20.8	12.6	
			SOUTHEAST			
Monetta, S. C.	18.6	19.6	19.2	19.9	15.8	14.4
Tifton, Ga.	18.0	18.3	17.2	18.4	18.2	14.0
Richmond Hill, Ga.	11.5	12.8	10.9	11.0	11.2	13.0
Mean	16.0	16.9	15.8	16.4	15.1	13.8
MEAN (7 tests)		19.1	17.9	17.7	13.4	
			YIELD RANK			
			WEST			
Stuttgart, Ark.		3	2	1	4	5
Miller County, Ark.		3	1	2	4	
			DELTA			
Stoneville, Miss.		3	1	2	4	
Baton Rouge, La.		1	3	2	4	
			SOUTHEAST			
Monetta, S. C.		2	3	1	4	
Tifton, Ga.		2	4	1	3	
Richmond Hill, Ga.		1	4	3	2	

[1] Not included in the mean.

SOYBEAN DISEASE INVESTIGATIONS IN THE SOUTHERN STATES

by Howard W. Johnson

INTRODUCTION

This is the second progress report on the cooperative soybean disease research conducted in the southern states by the Division of Forage Crops and Diseases. The work is closely integrated with the soybean breeding and improvement work of the U. S. Regional Soybean Laboratory and with the soybean work of the state agricultural experiment stations in the region. The state and federal employees cooperating in these investigations supplied much of the information summarized in this annual report of progress. Recognition of this is made in the report by indicating the location at which each particular phase of the work was done. As in the previous year, major attention has been given to rating the varieties and strains in the uniform soybean test groups for susceptibility and resistance to diseases. This phase of the work is shared by almost all of the cooperators and is presented as a general summary of all the data submitted to the coordinator.

COOPERATING AGENCIES AND PERSONNEL

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Louisiana Agricultural Experiment Station;
Botany, Bacteriology and Plant Pathology Department:
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Mississippi Agricultural Experiment Station;
Plant Pathology Department:
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North Carolina Agricultural Experiment Station;
Botany Department, Plant Pathology Section:
S. G. Lehman

EXPERIMENTAL RESULTS

a-4-3: SOYBEAN PRODUCTION, BREEDING, DISEASE, AND QUALITY INVESTIGATIONS.

a-4-3-9: Selecting Soybeans For Resistance To Diseases Affecting Yields: - for forage, food, and industrial purposes

As in previous years, disease ratings were made at a number of locations throughout the Southern States on the varieties and strains in the uniform soybean nurseries. An examination of these data shows that the bacterial foliage diseases again were widespread and sufficiently severe in many locations to reveal definite differences in susceptibility and resistance. The following varieties and strains in the various maturity groups showed resistance to the bacterial foliage diseases:

Group IV-S: None

Group V: D540-1 (Ogden x Arksoy), and D418-177 (Patoka x Arksoy 2913)

Group VI: Ogden, Dortchsoy 2, and Burdette 12

Group VII: CNS, Nanksoy, Palmetto, N44-92 (Haberlandt x Ogden) N44-937 (Palmetto x Ogden), and N45-3563 (Missoy x Ogden)

Group VIII: Louisiana Green, Cherokee, and P. I. 85897

The resistance exhibited by the above varieties and strains is largely to bacterial pustule, which appears year in and year out to be the most widespread and prevalent of the three bacterial leaf diseases. The lack of resistance in the material of early maturity (Group IV-S) points to the need for further selection in material that matures in September in the South. Interest in early maturing varieties is still increasing in the Delta area and a variety maturing as early or earlier than S100 and possessing resistance to bacterial diseases would be very well received. S100 is being grown rather widely, but because of its susceptibility to wildfire and pustule, there is doubt in my mind that it will be grown very long in the Delta. We should be working intensively now on something to take its place, in my judgement.

A severe local epidemic of wildfire occurred in the soybean nurseries at Stoneville, Mississippi, in 1947, and this disease was observed also in nurseries in Louisiana, Alabama, Georgia, North Carolina, and South Carolina. Septoria leafspot was generally prevalent in many nurseries in the South for the first time in 1947. This may have been due to some especially favorable climatic condition, or the disease may be increasing in importance on soybeans in the South. No varietal resistance to Septoria was observed in 1947.

In an inoculation test made at McCullers, North Carolina, involving 30 varieties and selections of soybeans and the bacteria causing the three leaf diseases referred to above, the following showed high resistance to bacterial pustule: Burdette 12, Dortchsoy 2, Ogden, CNS, Nanksoy, Cherokee, Palmetto, Louisiana Green, N44-92 (Haberlandt x Ogden), and N44-774 (Ogden x Missoy). High susceptibility was shown by Burdette 19 and 20, Mamotan, Acadian, Yelnando, and Volstate. Very few infections resulted from the inoculations with blight or wildfire in this test, although conditions were deemed favorable at the time of inoculation.

In a subsidiary test at McCullers, plants of Haberlandt, S100, Ralsoy, and Roanoke already having a moderate number of bacterial pustule lesions were sprayed with a mixture of bacterial pustule and wildfire bacteria. Subsequently, all four of these varieties developed mild to moderate infestations of wildfire, indicating that entrance of the wildfire bacteria was through pustule lesions already present on the plants. Ogden plants, which had no pustule lesions, were also sprayed with the mixture of pustule and wildfire bacteria in this test and developed neither pustule nor wildfire.

At Stoneville, Mississippi, 36 strains of soybeans growing in a field nursery were inoculated with the bacteria causing blight, pustule, and wildfire in that order during the period from May 27 to June 18, 1947. A light general infestation of bacterial blight was evident by June 18 and appeared to have resulted from the inoculations of May 27 and 28 with the bacteria causing this disease. By mid-August a severe epidemic of wildfire and pustule was evident and in addition to the variety CNS, planted as a check, the following hybrid strains showed resistance to this disease-complex: 575-1 and 575-6 (Ralsoy x CNS), 576-11, -12, and -18 (Ogden x CNS), 577-18 (Volstate x CNS), 582-2 (S100 x CNS), N42-159 (Nanking selection), N44-92 and -95 (Haberlandt x Ogden), and N44-781 (Ogden x Missoy). The soybean strains in this disease nursery were planted as duplicate 10-foot rows with the susceptible variety Ralsoy on each side of each strain to serve as a spreader of inoculum.

At Experiment, Georgia, 47 soybean selections made during the past three years from plots inoculated with the fungus causing southern blight were tested against this organism in an inoculation experiment with non-selected progenies serving as the controls. No evidence of increased resistance in the selected lines over the non-selected controls was evident. Nineteen soybean varieties not previously tested for resistance to this disease were also included in the test and all proved susceptible. Under the experimental conditions tried to date, no variety of soybean yet tested has shown any appreciable resistance to this soil borne disease.

a-4-3-10: Leaf And Stem Diseases Of Soybeans: - studies of the organisms causing them and methods for their control.

At McCullers, North Carolina, three varieties of soybeans, Ralsoy, Ogden, and Roanoke, were dusted 6 times at approximately weekly intervals in 1947 with a dust containing 7 per cent copper and 2-1/2 per cent DDT. The check rows in this test were dusted with DDT in order to control insects. Thirty, sixty, and ninety pounds of dust per acre were put on at each application, and the final application was made August 27. Only moderate infestations of bacterial pustule and blight developed on the control plots, but as the plants approached maturity Cercospora leafspot caused a severe leaf necrosis on the plants in the control plots. On October 10, an observer could readily pick out the copper dusted plots by the better appearance of the leaves. The copper dusted plants matured somewhat later and had stems freer of fungus growth than the control plants dusted with DDT only.

Studies are underway in North Carolina on the survival of the bacteria causing blight, pustule, and wildfire of soybeans in the infected leaves, in seeds, and in the soil. Such studies will yield further information on the methods of overwintering and dissemination of these pathogenes.

Powdery mildew of soybeans was observed in meager amounts at McCullers, North Carolina, in 1947. It appears that the rainy fall of 1947 was less favorable for the development of this disease than were the drier fall seasons of 1945 and 1946 when powdery mildew was more abundant.

The anthracnose disease of soybeans is being studied in North Carolina to gain a more adequate appraisal of its role in soybean culture. Numerous isolations from seedlings and diseased pods have yielded a species of Colletotrichum morphologically very similar to, if not identical with, Colletotrichum truncatum, the causal agent of lima bean anthracnose. The fungus isolated from soybeans is seed borne and at least partially controlled by seed treatment. It is highly destructive to soybean seedlings in the pre-emergence and early post-emergence stages. As the plants become older, they apparently become more resistant. The work of the past season indicates that destruction of seedlings and the consequent reduction of stands is the most serious aspect of the activity of this fungus on commonly grown field varieties of soybeans.

Exceptionally dry weather during the greater portion of the growing season resulted in soybean diseases being less severe in Louisiana in 1947 than in 1946. However, the 8 pathogens observed on soybeans in 1946 were all observed again in 1947. In addition, Helminthosporium leafspot became sufficiently prevalent in the nursery at Baton Rouge to warrant rating it along with the other more common leaf diseases. In October, this organism was isolated from brown lesions on soybean stems. An aerial infection of Rhizoctonia developed in the nursery at Baton Rouge in August 1947 and killed leaves of plants in some rows.

In Louisiana isolations of Diaporthe and Colletotrichum were made from a number of locations and an effort is being made to determine their part in the killing back of soybean stems. Two distinct species of Colletotrichum were isolated, one with falcate conidia and the other with ellipsoid conidia. Both were produced in acervuli from which dark setae extended. Cultures of the strain with falcate conidia produced asci, but mature viable ascospores have not yet been obtained. This same culture produced brown colored, pin-point size, necrotic lesions when greenhouse-grown plants were sprayed with a spore suspension.

In Georgia in 1947, a few diseases of unknown origin were observed on soybeans and fungi were isolated in some cases. No inoculations to establish pathogenicity have been made yet.

At McCullers, North Carolina, in 1947, no bacterial infections were observed in an isolated plot of S100 soybeans grown from seed produced under irrigation at Bard, California, in the fall of 1946. In a comparable plot of S100 soybeans grown here, from seed produced at McCullers in 1946, a moderate to heavy infestation of bacterial pustule and a light infestation of wildfire developed in 1947. It appears from these results, and from comparable results obtained in 1946, that it is possible to take eastern-grown, bacterial-infested soybean seed and grow it one generation under irrigation in an arid region and obtain a small supply of foundation seed free of seed-borne bacteria.

a-4-3-11: Root and Crown Diseases of Soybeans: - studies of the organisms causing them and methods for their control

The regional soybean seed treatment test in which two treatments, Arasan Dust (50 per cent tetramethyl thiuramdisulfide) and Arasan SF (75 per cent tetramethyl thiuramdisulfide), were compared on five soybean varieties, i.e., Lincoln, S100, Ralsoy, Ogden, and Roanoke, was planted by cooperators at 10 locations in the South. The original germinations of the seed lots used in this test were as follows: Lincoln, 66 per cent; S100, 87 per cent; Ralsoy, 99 per cent; Ogden, 96 per cent; and Roanoke, 98 per cent. The Arasan dust was applied with a barrel seed treater at the rate of two ounces per bushel. The Arasan SF was applied as a slurry in a slurry seed treater at the rate of 1-1/2 ounces per bushel to provide approximately the same quantity of the active ingredient. The test was planted on three different dates, early, medium, and late, at most locations.

The average emergence obtained on each planting date at the various locations is summarized in Tables 1, 2, and 3.

Table 1: Average emergence obtained from first planting of southern uniform soybean seed-treatment test at various locations in 1947

LOCATION	Planting Date	TREATMENT1/ Arasan Dust	Arasan Slurry	Non-treated Check
Tifton, Ga.	May 5	49	46	42
Experiment, Ga.	April 22	45**	42**	37
Watkinsville, Ga.	April 25	74**	73**	63
McCullers, N. C.	April 26	72**	70**	62
Rocky Mount, N. C.	April 23	54**	56**	42
Beltsville, Md.	April 30	24**	27**	20
Baton Rouge, La.2/	April 19	6*	8*	3
Stoneville, Miss.	April 23	63**	64**	53
Stuttgart, Ark.	April 23	76**	78**	64
ALL LOCATIONS	April 19 to May 5	51.5	51.4	42.9

1/Figures for each location are averages of 30 rows, i.e. five varieties, each replicated six times.

2/Soil packed by heavy rain on day after planting.
**Increase over non-treated check highly significant
*Increase over non-treated check significant.

Table 2: Average emergence obtained from second planting of southern uniform soybean seed-treatment test at various locations in 1947.

LOCATION	Planting date	TREATMENT 1/ Arasan Dust	Arasan Slurry	Non-treated Check
Tifton, Ga.	May 20	67**	67**	63
Experiment, Ga.	May 14	73**	73**	63
Watkinsville, Ga.	May 16	65**	68**	52
Rocky Mount, N. C.	May 8	73**	53**	35
Plymouth, N. C.	May 8	50	53	50
Beltsville, Md.	May 29	53**	53**	45
Ridgley, Md. (A)	May 28	64**	64**	54
Ridgley, Md. (B)	May 28	60**	58**	46
Baton Rouge, La.	May 13	58**	59**	47
Stoneville, Miss.	May 16	68**	66**	57
Stuttgart, Ark.	May 19	64**	65**	49
ALL LOCATIONS	May 8 to May 29	61.4	61.7	49.9

1/Figures for each location are averages of 30 rows, i.e. five varieties each replicated six times.

**Increase over non-treated check highly significant.

Table 3: Average emergence obtained from third planting of southern uniform soybean seed-treatment test at various locations in 1947.

LOCATION	Planting Date	TREATMENT 1/ Arasan Dust	Arasan Slurry	Non-treated Check
Tifton, Ga.	June 12	42	40	39
Experiment, Ga.	June 17	49*	49*	44
Watkinsville, Ga.	June 10	73**	73**	56
McCullers, N. C.	June 4	66**	67**	62
Rocky Mount, N. C.	June 5	58**	56**	48
Beltsville, Md.	June 20	78**	77**	66
Baton Rouge, La.	June 13	37**	37**	25
Stoneville, Miss.	June 16	34**	34**	25
Stuttgart, Ark.	June 9	61**	58**	43
ALL LOCATIONS	June 4 to 20	55.2	54.3	45.4

1/Figures for each location are averages of 30 rows, i.e. five varieties each replicated 6 times.

**Increase over non-treated check highly significant.

*Increase over non-treated check significant.

It is evident from the above data that Arasan Dust and Arasan Slurry gave approximately equal significant increases in seedling stands above the non-treated seed. It would appear from these results, and from comparable results obtained in earlier years, that soybean seed treatment would be an advantageous practice in regions in the South where inoculation with bacterial cultures is not needed to obtain good nodulation.

In another seed treatment test conducted only at Stoneville, Mississippi, six varieties of soybeans were treated with eight different fungicides. Five of these materials, i.e., Arasan dust, New Improved Ceresan, Spergon, Arasan SF, and 2 per cent Ceresan, gave seedling stands that were significantly higher than the stand obtained from non-treated seed, as shown in table 4:

Table 4: Average number of plants obtained from each hundred treated and non-treated soybean seeds at Stoneville, Mississippi, in 1947

Treatment	Rate (Oz. per bu.)	Ralsoy	Ogden	Lincoln	Roanoke	Delsta	S100	All
Arasan dust	2	82[1]	79	29	82	88	88	75[2]**
New Improved Ceresan	1	87	77	23	84	84	88	74**
Spergon	2	86	78	23	77	88	85	73**
Arasan SF	1-1/2	87	74	22	76	80	84	70**
2% Ceresan	2	85	72	22	78	80	81	70**
Dow 9-B	2	85	67	13	66	85	82	66
Phygon wettable	4	80	66	19	68	78	78	65
Phygon dust	2	70	65	13	54	86	77	61
Non-treated	-	79	68	14	66	79	81	64

[1]/Each figure is average number of plants from four 10-foot rows of 100 seeds each.

[2]/Each figure is average number of plants from twenty-four 10-foot rows of 100 seeds each.

**Increase in number of plants over the non-treated check is highly significant statistically.

Experiments made in Georgia in 1947 show that soybean plants possess little, or no, resistance to southern blight (caused by the fungus Sclerotium rolfsii) in the early stages of their growth, but that many plants are resistant in the later stages of growth. This resistance may be due to the maturing plant stem becoming too hard for the fungous to penetrate.

WEATHER CONDITIONS AND GENERAL GROWTH RESPONSES AT MOST OF THE NURSERY LOCATIONS DURING THE 1947 SEASON

The following general notes compiled from information supplied by the cooperators may be helpful in interpreting performance of the nurseries at individual locations.

Temperature and rainfall at most of the nursery locations for the 1947 season are presented in graphs at the end of this section of the report. The daily mean temperatures and rainfall are taken from "Climatological Data" published by the Weather Bureau. The arc is the normal mean monthly temperature for the location.

Oklahoma: The rather severe drought in July, August, and early September severely injured the beans. Many varieties failed to set seed except on blossoms which came on late in the season. For this reason the date of maturity was extremely variable within a variety and the beans varied from a green to ripe at the time of harvest. We found this year that the later maturing varieties were favored by such a season, as we had no killing frost until after the last harvest. We also found that delayed planting gave better yields for the same reason.

Chillicothe, Texas: Seasonal conditions were very poor for soybeans. Ten inches of rain fell during May prior to the 21st of the month. There was no effective rainfall from that time until October 15. The crop was made practically without rainfall except right at the end of the season.

All groups with the exception of Group VIII must be harvested before the crop is mature according to definition; otherwise, shattering would be so high that there would be no point in harvesting. Even Group VIII is harvested as a usual thing before the leaves are killed, as the first killing frost in the fall usually does not kill soybeans. Yields of all were quite low and quality was usually poor. Seed quality alone would make it impossible to grow varieties except those in Group VII and VIII. A few of the varieties in Group VII, notably N44-774, Volstate, and CNS, produced as many or more beans than the best variety in Group VIII. Nevertheless, it is still felt that varieties in Group VIII hold the most promise for production in this area. Mamotan 6640 is probably the best variety in the test.

June proved to be a better planting date than May, which is in conformity with previous results. Mamotan was better in production than either Mamloxi or Velnando, and Mamotan also produced seed of better quality.

Denton, Texas: Tests were planted on April 24 and a full stand emerged. There was plenty of rainfall early in the season, but a period of drought began about the first week in June and lasted until the first week in September. Hot, dry weather in July and August caused low yields and shriveled seeds. Plantings of Group VII and Group VIII made more vegetative growth than earlier maturing groups but failed to set any seed. Their failure to set seed may be attributed to hot, dry winds at blooming time. Root rot infection was lighter this year than in previous years. One of the varieties which set seed showed much resistance to shattering.

Lubbock, Texas: The soybean varieties, as a whole, were disappointing in their yields, especially the later-maturing groups. This was due largely to climatic conditions, which were extremely adverse during the growing season. Groups VII and VIII were very late in maturing this year, as a result these few varieties which set beans were caught by the frost on November 4.

Fayetteville, Arkansas: The rainfall was about normal during the spring and first half of July. The temperatures were low during that period. The stands were very uneven which might have been caused by the low temperature at planting time. The rainfall was deficient during the last of July and first part of August. The mid-summer temperatures were higher than normal. The earlier varieties seemed to suffer less from the drought than some of the later varieties. The rain during the last part of August probably came at the time of high water requirement of the earlier varieties. No disease caused any appreciable amount of injury. There was evidence of insect (grasshopper) feeding in late summer, but the injury was insignificant. There were very little weeds or grass in the experimental area.

Stuttgart, Arkansas: The drought during most of the growing season was very serious at Stuttgart. There was sufficient moisture so that all of the soybeans planted in May emerged and made satisfactory growth for a short time. The soil became quite dry, so that the soybeans planted June 9 and 11 did not germinate until it rained June 20. All experimental plots were irrigated on August 5. That irrigation was delayed a few days too long as the early varieties had shed many blooms without setting seed. The entire experimental area was irrigated again on August 28. The midseason and late varieties benefited from the irrigations more than the early (Group IV-S and V) varieties. The plants did not make enough growth to shade the ground so the soil baked and was very hard after each irrigation. All the plots were cultivated after the first irrigation but the soil was hard in some places and too wet in others so it did not do too much good. The soil was not cultivated after the second irrigation as by that time plants of some varieties were too tall and were lodged.

There was no grass or weed competition. There was a little grass so the entire experimental area was hoed one time. It was dry after that so no more weeds and grass came up.

All of the common leaf spot disease were found in trace amounts some time during the season, but none caused any serious damage. A few dead plants were found that appeared to be affected by the same disease mentioned on page 5 of the 1946 report of this project.

No damage was caused by insects. A few blister beetles were found from time to time but they were checked before they caused any damage. There were a few spotted bean leaf beetles, but the damage was insignificant. Corn ear worms caused considerable damage to soybeans on some farm fields in the Stuttgart area, but they caused no damage to soybeans in these experiments.

Soybeans on the Rice Branch Experiment Station that were not irrigated produced very low yields of seed which were low in quality. In areas where the land had been cropped to soybeans in 1946, the yield was even lower than where the land had been in rice in 1946. Where soybeans followed soybeans there seemed to be more pod and stem blight and also more "dud" than in areas where soybeans followed rice. The difference was striking on Section 3-A, part of which was in soybeans and part in rice in 1946.

Marianna, Arkansas: The drought caused more damage at Marianna than at any other place in the State where soybean tests were conducted. There was no effective rainfall from the middle of August until late in October. As a result the latest varieties in Group VII and all varieties in Group VIII produced so few seeds that they were not harvested. The abnormally high temperature and a complex of diseases contributed to the low yields also. The tests were on the same area used for the experiments in 1946. It looked as if the continuous cropping to soybeans was detrimental. That is, the results here were about the same as the condition on Section 3-A at the Rice Branch Station. The plots were free of weeds and grass. No insects caused appreciable damage.

Clarkedale, Arkansas: The rainfall was deficient at Clarkedale but the distribution during the summer was fair so the yields were comparatively better at this Station than they were elsewhere in the State. The soil was too wet at planting time, which caused poor stands on a few plots. All of the rainfall during the last half of June was on the twentieth and twenty-second. The rain in July came on the sixth and eighteenth, so the rainfall was well distributed during the early summer. Although there was no rain in September, there was an 0.85 inch rain on August 25, so the plants did not suffer seriously for moisture in September.

There was no serious loss from diseases. The area where the tests were located was cropped to soybeans in 1946. There was enough moisture throughout the growing season so there was no evidence of loss caused by pod and stem blight. Probably the reason that disease appeared to be causing serious damage at some places in the State was because the plants were weakened by drought.

There was more feeding by the spotted bean leaf beetle here than at any of the other Stations. That is generally true each year. Many farm fields in that part of the State were dusted with insecticides to control that insect. The damage was not great to the soybeans in these experiments.

Miller County, Arkansas: The rainfall was deficient and the temperatures were high during the mid-summer in Miller County. The drought injury, however, was not as serious as it was at Marianna or Desha County.

The stands were good. There was no serious weed or grass competition. There was a little crab grass which probably came in after the rain in August. The lodging appeared to have been caused by the storm in September as all of the plants were leaning in the same direction.

Diseases were not much of a factor. Most of the leaf diseases were found in trace amounts. Late in September there were a few dead plants, some were

infected with charcoal rot and some with southern blight. Those plants were probably weakened by the summer drought and those diseases were secondary.

There was a trace of insect feeding on the leaves late in September. That was probably caused by grasshoppers as there were a few in that area. There was a trace of feeding on the pods which looked like corn ear worm damage. Neither of these were serious.

A nearby pasture was dusted with 2,4-D, and cotton in the field across the road from the soybean test was damaged slightly by that chemical. No damage was noted on the soybeans.

Winchester, Arkansas: The drought was extremely serious in Desha County. The rainfall records given for that location (data from Dumas) are misleading. There was an effective rain about July 4 and none after that, except a light shower or two, until late in September.

Groups VI and VII and a fertilizer test were planted May 6. The soil was very moist and the seedbed was loose. The plants emerged rapidly and were coming up to a good stand when chickens got in the field and scratched and pulled up many of the plants so the stands were poor in many plots in the variety tests. The fertilizer test was planted with a tractor planter and the chickens did not bother those plants and the stands were good in that test.

It was too wet to cultivate until about four weeks after planting. By that time, it was impossible to get the area well cultivated and free of weeds and grass.

Because of the poor stand, weeds and grass, and dry weather, the yields were low and there were some missing plots of the varieties harvested. Most of the varieties and strains in Group VI and the earliest ones in Group VII produced some seed and were harvested.

There was little, or no, damage caused by any disease or insect.

Tennessee: Conditions for soybeans were generally less favorable than in 1946, particularly in west Tennessee, the region of heaviest production. Spring and early summer growing conditions, both rainfall and temperature, were normal. An extended drought during the latter part of the growing season reduced yields materially, particularly of the later-maturing varieties. The latest varieties all matured before the first killing frost. Disease damage was negligible throughout the state. However, in the Delta region of west Tennessee the Mexican Bean Beetle did cause some damage.

Tunica, Mississippi: Extremely dry weather prevailed at Tunica throughout the growing season, although rainfall in April and May approached normal. Little, if any, effective rain fell from late June until well into October. The varieties of IV-S maturity were not as badly injured by the drought as were the later-maturing varieties. The bean leaf beetle in late August riddled the leaves of the later varieties. This beetle was controlled by dusting by plane with a 5% DDT dust at the rate of ten pounds per acre.

Stoneville and Dunleith, Mississippi: Climatic conditions were not particularly favorable for soybean production in 1947. A cool, wet planting season was followed by below normal rainfall during July, August, and early September. Early-maturing varieties, in general, were favored by climatic conditions. Dry, hot weather during flowering and pod setting of late varieties reduced yields of the late varieties below normal. Diseases were very prevalent through August. Insect injury from the web worms, the bean leaf beetle, and the corn ear worm was evident at different periods during the growing season.

Moorhead, Mississippi: As at other locations in the Mississippi Delta, dry weather prevailed during July, August, and September. Yields of late varieties were reduced by the dry weather and by bean leaf beetle injury.

Anchorage, Mississippi: A dry June followed by more normal rainfall in July, resulted in good yields of Ogden and other varieties of Group VI maturity. Stands at this location were generally poor and weedy.

State College, Mississippi: Rainfall at State College was less than half normal during May and September and it was slightly below normal during October. On the other hand, 10.03 inches fell during June, which is 5.69 inches above normal and 6.62 inches of this fell in one 24-hour period. July and August were favorable for growth and fruiting. The leaf worm arrived too late for serious injury. Some diseases were present, but damage appeared to be slight.

Belle Mina, Alabama: The weather from early spring through June was rather wet and unusually cool with the balance of the growing season dry. From July 1 to October 31, a total of 11 inches of rain fell in 20 light showers. Beginning on July 25, temperatures were very high for 45 days, going up to 106 on two days, and exceeding the 100 mark on several days. This rather light rainfall and extremely high temperature cut the prospective yield of soybeans, lespedeza and all rather late-maturing crops to a low level. In addition to the unfavorable weather, the yield of the late-maturing beans was seriously cut by the fall army worms.

Crossville, Alabama: A cold, wet spring retarded the growth of the soybean varieties. In spite of getting 5.03 inches of rainfall in August, the varieties suffered for lack of moisture during this period as over three inches fell in two hard rains with most of it lost in run-off.

Blairsville, Georgia: The rainfall was fairly well distributed, although there was a dry spell from September 11 to October 7. Temperatures did not go above 91° during August and averaged between 80° to 85°. Conditions were excellent for soybeans. Diseases were not greatly in evidence. Some mosaic and Septoria were noted.

Experiment, Georgia: Temperatures were moderate throughout July and August, but reached a high of 95° on several days the first part of September. It was dry from August 24 until October 8. Rainfall was short in July and September. A total of .49 inch rainfall fell during the month of September. After it started raining on October 8, rainfall has been more or less continuous. The

dry weather cut the soybean yields at Experiment to a great extent. Diseases were not severe on the varieties.

Rome, Georgia: The months of July and September were unusually dry. From the middle of August to September 8 very little rain fell, and then from September 8 to October 8 only a trace of rain fell at Rome. Temperatures during August reached 101° and the mean maximum temperature for the month of August was 92.5°. It continued hot up until September 20. Conditions were not too good for soybean production. In general, stands were thin but free of diseases. Blister beetles injured a few rows.

Watkinsville, Georgia: July, August, and early September were hot and dry; late September, October, and early November were cool and damp. This cool, damp weather during the ripening and harvesting periods was probably responsible for the small amount of shattering. The varieties here were badly diseased in addition to suffering from the drought in July and August. Pustule blight and wildfire, singly and together, were observed on many of the varieties.

Beltsville, Maryland: Temperatures at Beltsville, Maryland, during the 1947 growing season were above normal, except for a cold period early in May, another during the latter part of July, and a third during the last 9 days of September. A killing frost occurred September 28 and was followed by unseasonably high temperatures during most of October. A mean temperature of 65° set an all-time record for the month.

Rainfall was above normal except in April and October. Rain was recorded on 16 days during May; total 7.20 inches. June rainfall totaled 5.47 inches, of which 3.37 inches fell June 13 and 14. Rain was well distributed in July; total 4.52 inches. 3.38 inches fell on August 26 and 27 with high wind which laid the soybeans flat; a total for August of 6.49 inches. Rain was well distributed in September until the last 5 days of the month; total 3.58 inches. Only .25 inch fell between September 25 and October 29. October total was 1.57 inches, a low record for the month.

Orange, Virginia: Weather conditions in this section throughout the year were exceedingly dry and most all crops suffered from lack of moisture. Dry weather conditions were responsible for the low soybean yields in 1947.

Blacksburg, Virginia: The growing season at Blacksburg was a rather unusual one in that the mean temperature was rather low. We experienced heavy rainfall throughout the season with cool, cloudy weather. As a result, many of the varieties in the Group IV-S did not fully mature by the time of the first killing frost, September 28.

Charlotte Court House, Virginia: May, June, and July were unusually dry. Soybeans were damaged by wind and a hailstorm on July 31. Yields of Group IV-S, however, were good.

Petersburg, Virginia: Seasonal conditions, in general, were very favorable for soybeans. The mean yields of the varieties of Groups IV-S and VII were 38.6 and 40.5, respectively. The highest yield of all varieties was Volstate with 50.8 bushels per acre.

Williamsburg, Virginia: The tests were planted May 19 in a soil having ample moisture for prompt germination. June, July, and August were very dry months, less than one-third the normal rainfall. However, growth was good and the plants relatively free of insect and disease infestation.

Heavy rains in September, while aiding Group VII, were responsible for damage to the seed of the early-maturing group. It seems probable that the rain and hot humid days caused the beans approaching maturity to heat in the pods, resulting in moldy and discolored beans.

Holland, Virginia: 1947 yields are generally much higher in the earlier than in the later-maturing group. The reverse of this is usually the case. However, early in September there was a very heavy infestation of Mexican beetles which caused severe injury in the later-maturing varieties but did not affect the early ones due to stage of maturity.

Norfolk, Virginia: The weather at the Virginia Truck Experiment Station was generally rather favorable for the soybean tests, with rainfall a little less than usual for the growing season for soybeans, but little damage to the crop occurred from this condition.

McCullers, North Carolina: Growing conditions were good until late August when many of the varieties showed evidence of wilting because of droughty conditions. Continuous rainy weather after mid-September delayed maturity on early-maturing varieties and reduced seed quality. Highest yields were obtained from strains maturing in late October.

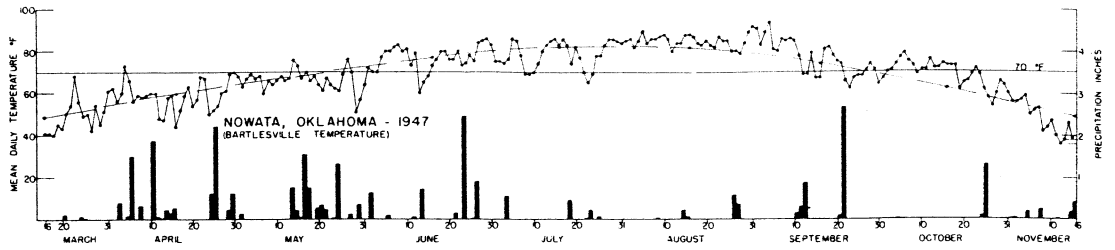
Willard, North Carolina: Above normal rainfall occurred for July, August, September, October, and November. Several heavy windstorms caused considerable lodging early in the season. As a result of the excessive rainfall, seed quality was low and harvesting was delayed.

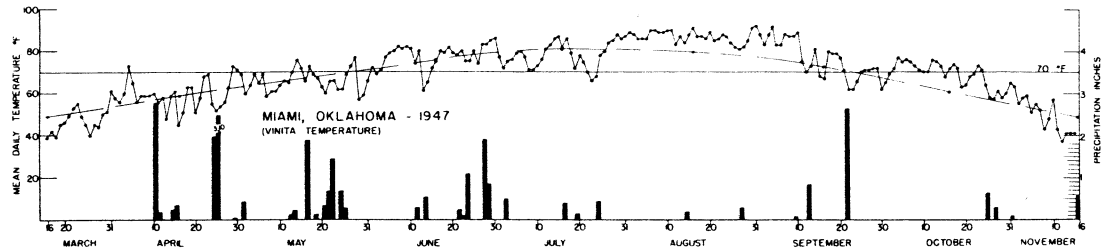
Plymouth, North Carolina: Above normal rainfall fell during each month of the growing season except May and June. All varieties made extremely heavy growth. The rainy weather, together with the water-logged condition of the soil, appeared to reduce yields and seed quality. Varieties expected to mature in the latter half of September and early October remained green until mid-October.

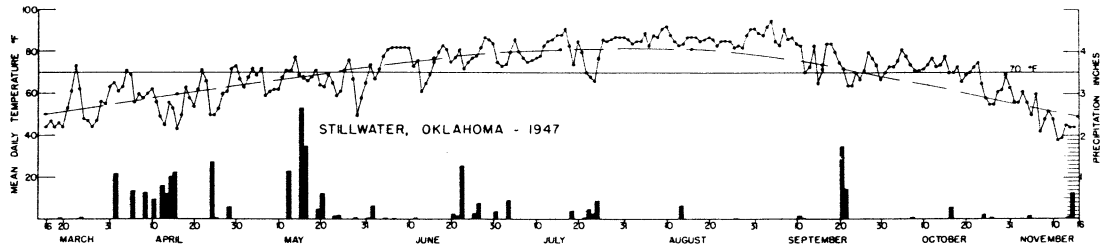
Florence, South Carolina: Rainfall was deficient through April and May, but above normal thereafter. Considerable lodging occurred in the May plantings. This season was one of the few times in which the June 20 plantings have given higher yields than May plantings.

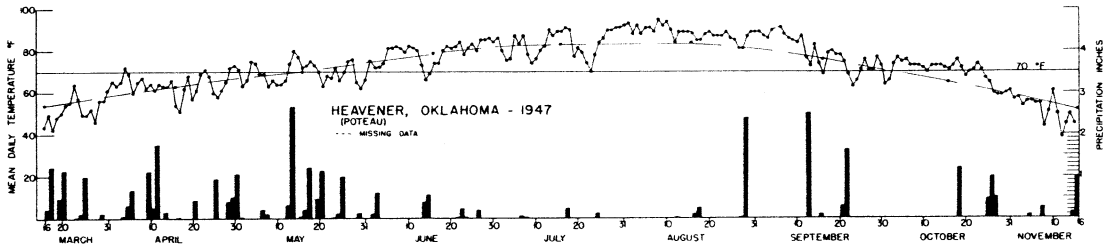
Soybeans were grown in this field for the sixth consecutive year. No apparent increase in disease prevalence has been noted.

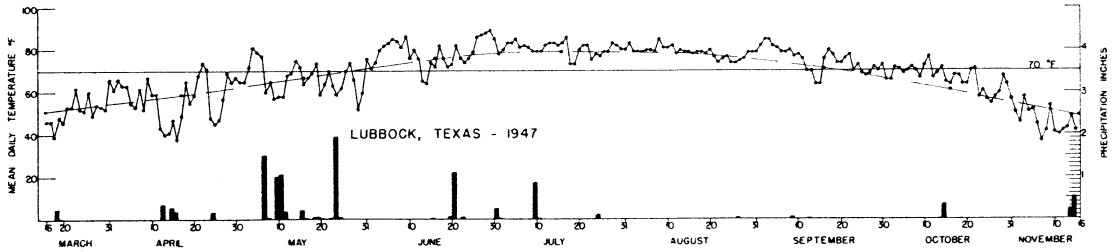
Monetta, South Carolina: All strains made excellent growth. A prolonged dry period of 25 days in late August and early September is believed to have reduced yields materially.

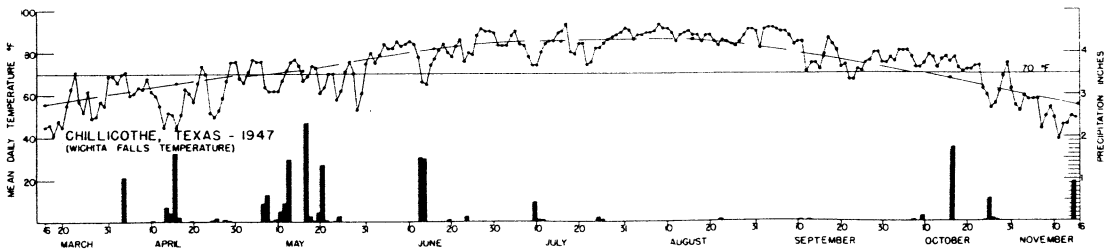

NOWATA, OKLAHOMA - 1947
(BARTLESVILLE TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

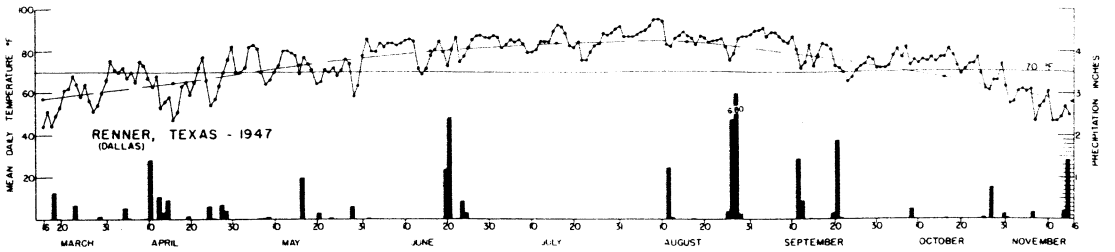

MIAMI, OKLAHOMA - 1947
(VINITA TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

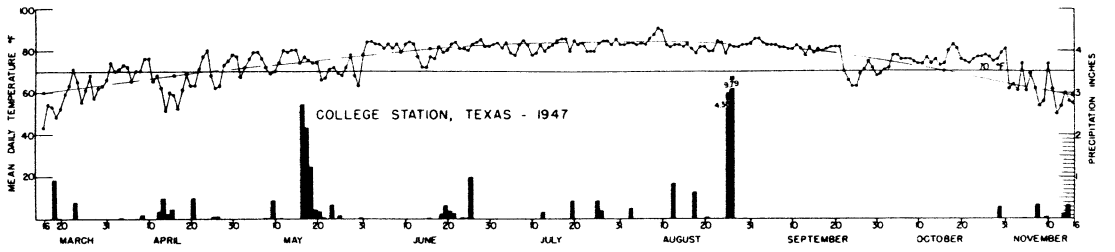

STILLWATER, OKLAHOMA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

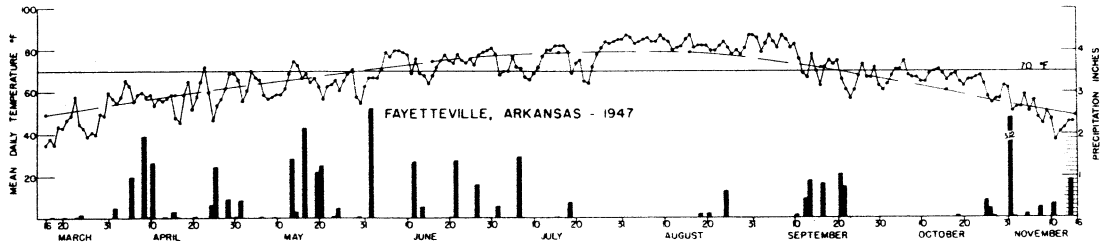

HEAVENER, OKLAHOMA - 1947
(POTEAU)
--- MISSING DATA
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

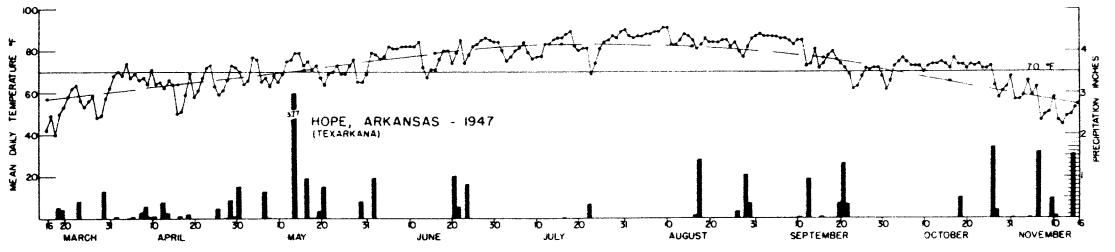

LUBBOCK, TEXAS - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

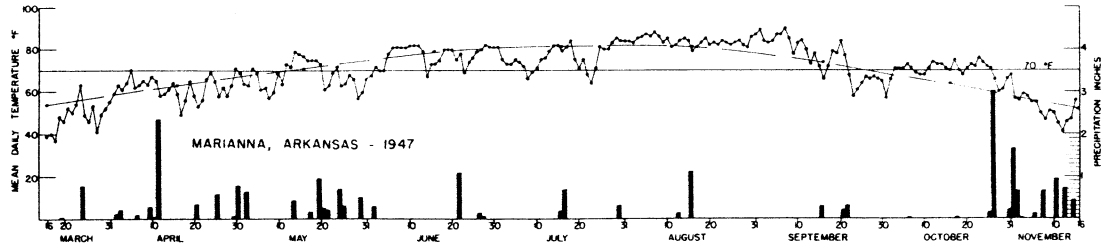

CHILLICOTHE, TEXAS - 1947
(WICHITA FALLS TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

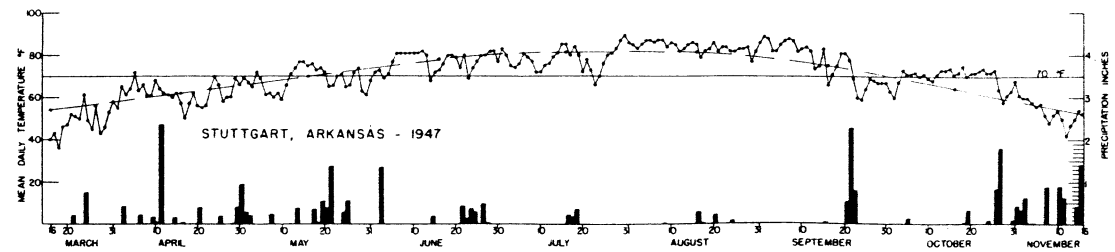

RENNER, TEXAS - 1947
(DALLAS)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
6.90
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

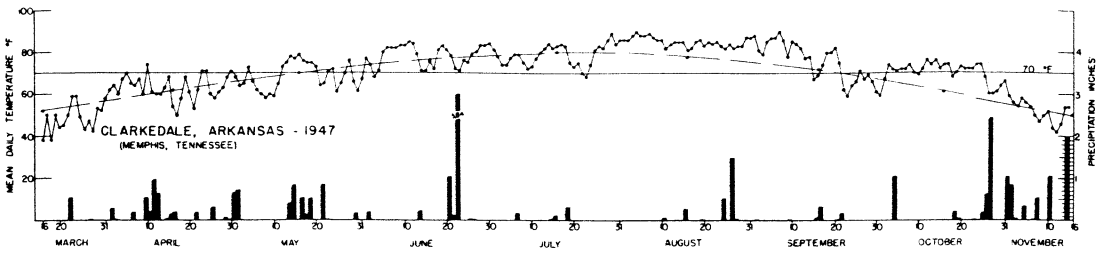

COLLEGE STATION, TEXAS - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
4.36
9.79
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

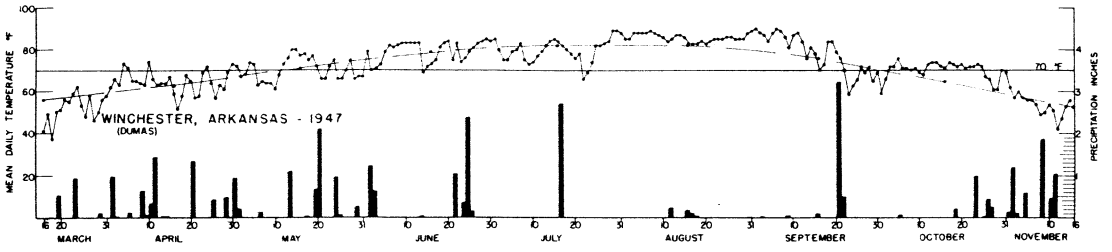

FAYETTEVILLE, ARKANSAS - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
5.13
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

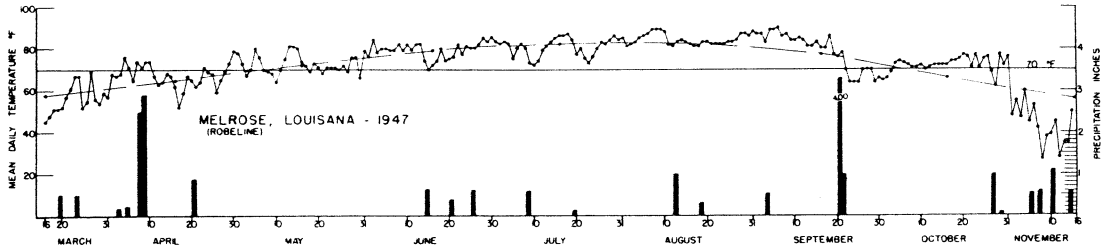

HOPE, ARKANSAS - 1947
(TEXARKANA)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
3.77
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

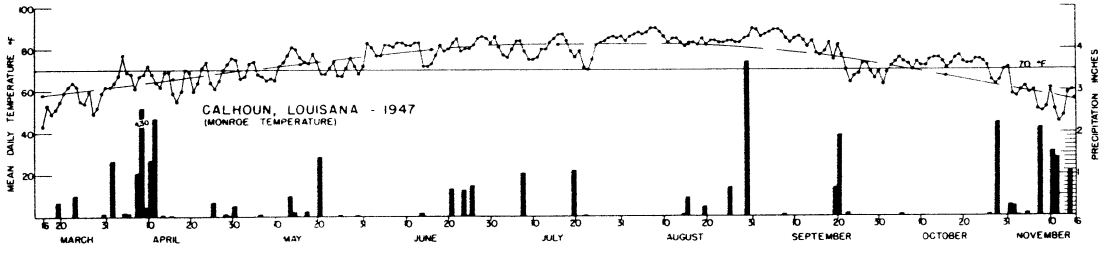

MARIANNA, ARKANSAS - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

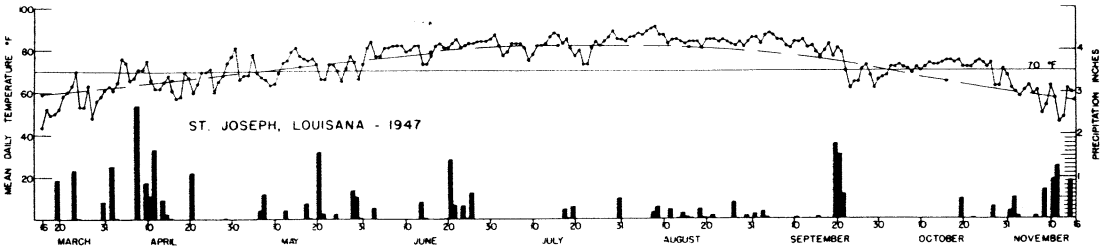

STUTTGART, ARKANSAS - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

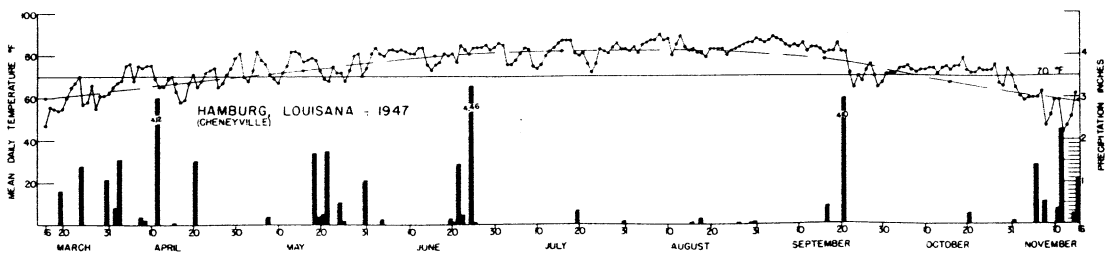

CLARKEDALE, ARKANSAS - 1947
(MEMPHIS, TENNESSEE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

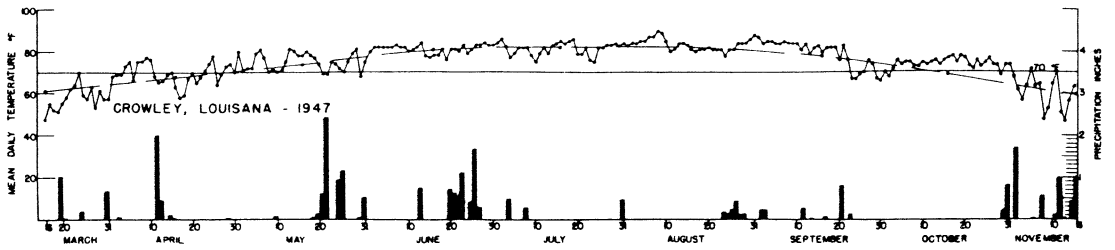

WINCHESTER, ARKANSAS - 1947
(DUMAS)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

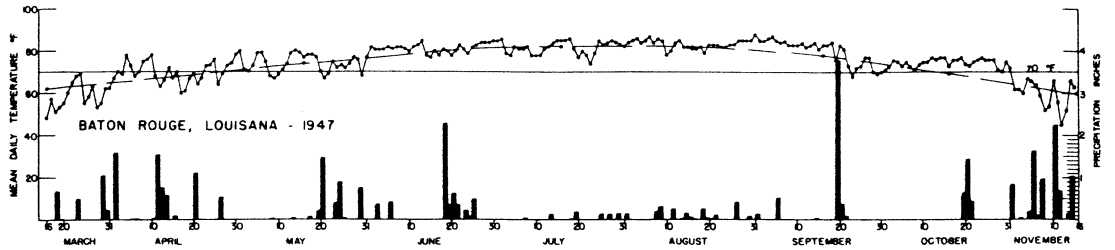

MELROSE, LOUISANA - 1947
(ROBELINE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

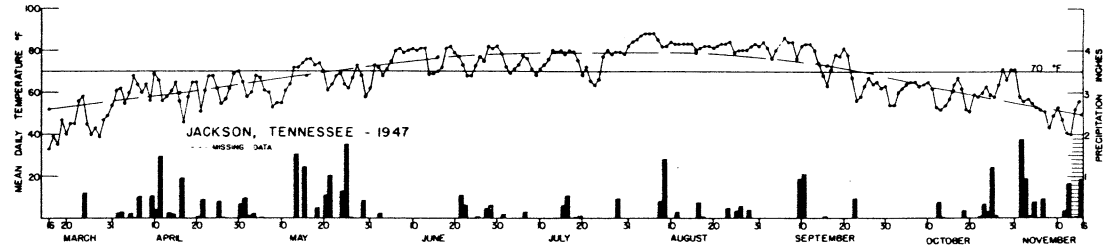

CALHOUN, LOUISANA - 1947
(MONROE TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

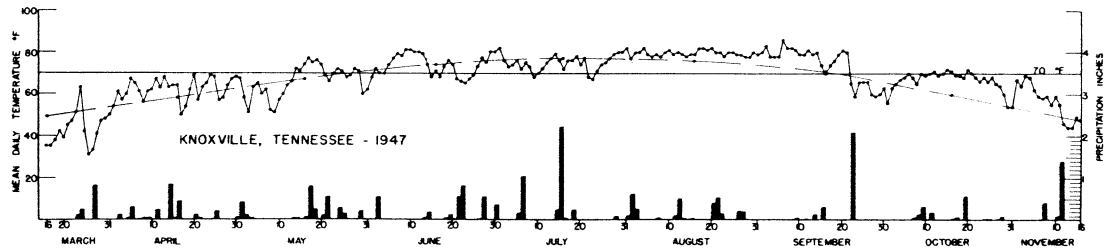

ST. JOSEPH, LOUISANA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

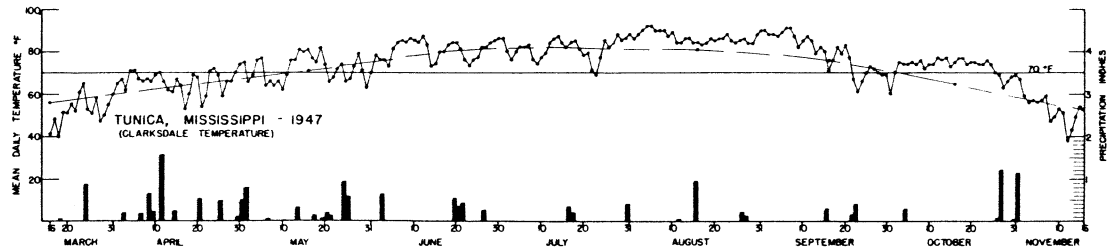

HAMBURG, LOUISANA - 1947
(GHENEYVILLE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

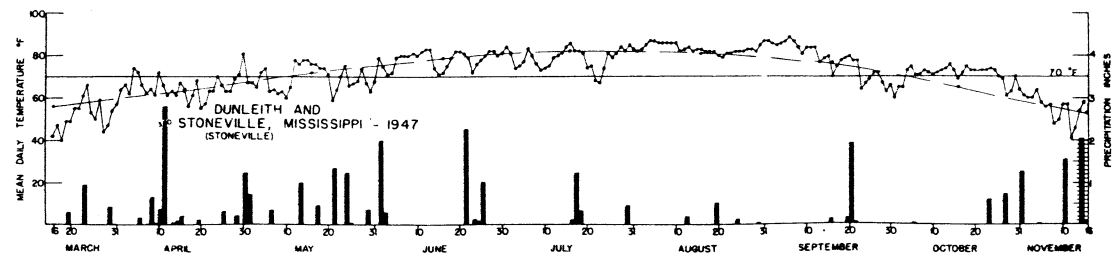

CROWLEY, LOUISANA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

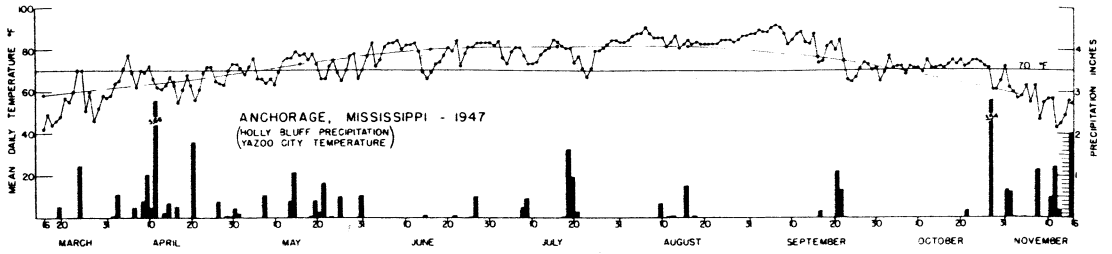

BATON ROUGE, LOUISANA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

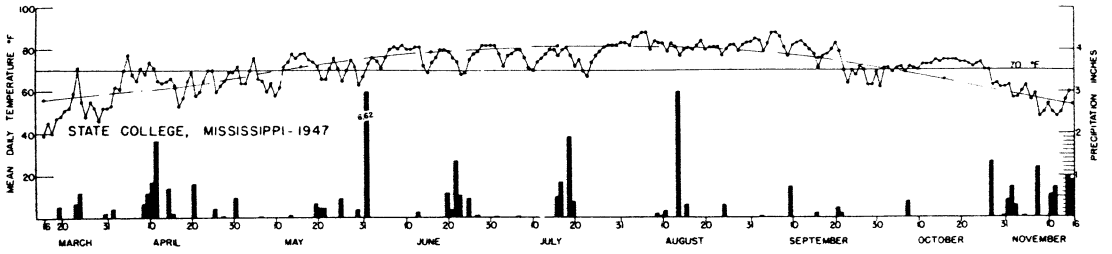

JACKSON, TENNESSEE - 1947
- - - MISSING DATA
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

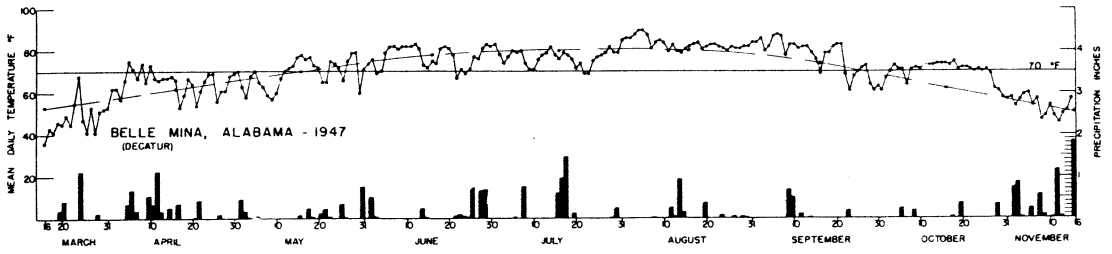

KNOXVILLE, TENNESSEE - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

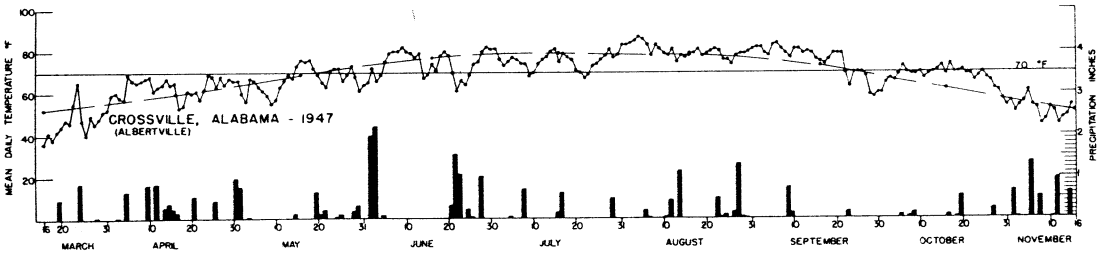

TUNICA, MISSISSIPPI - 1947
(CLARKSDALE TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

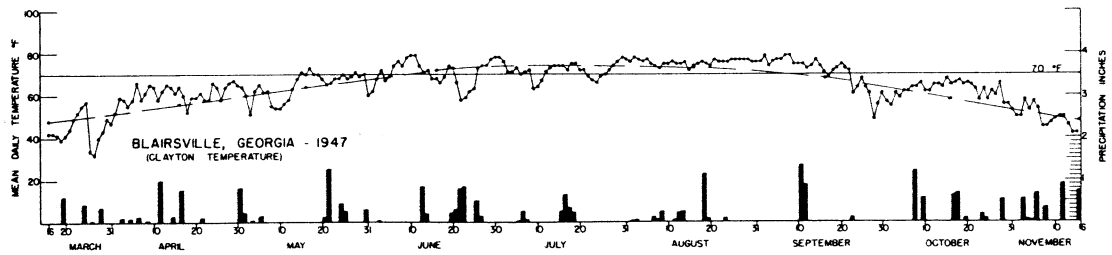

DUNLEITH AND
STONEVILLE, MISSISSIPPI - 1947
(STONEVILLE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

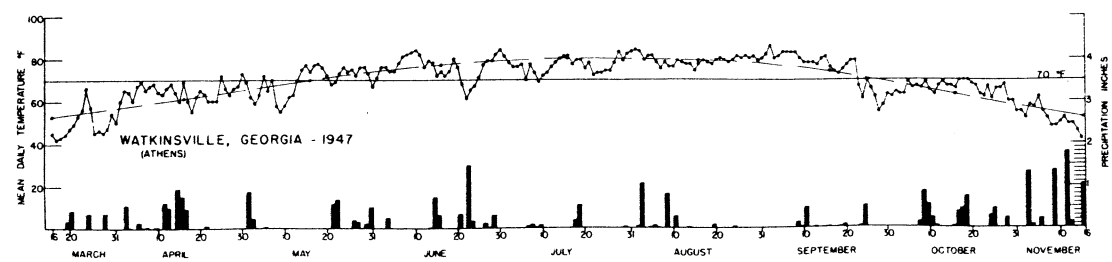

ANCHORAGE, MISSISSIPPI - 1947
(HOLLY BLUFF PRECIPITATION)
(YAZOO CITY TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

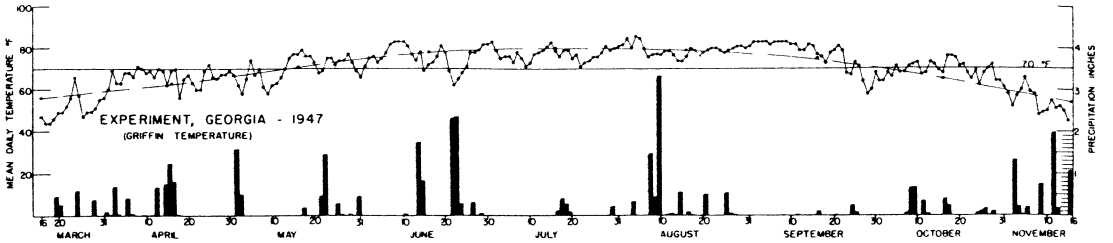

STATE COLLEGE, MISSISSIPPI - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

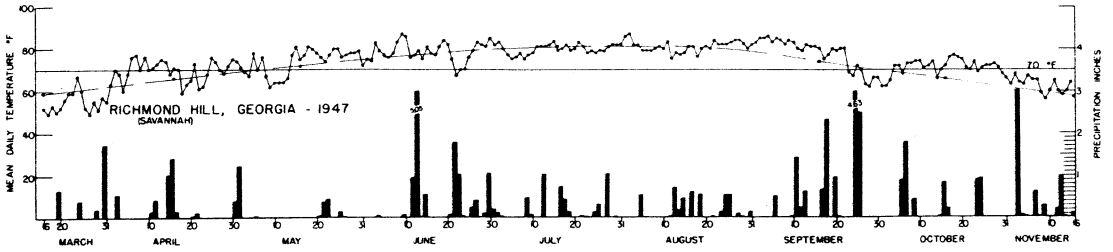

BELLE MINA, ALABAMA - 1947
(DECATUR)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

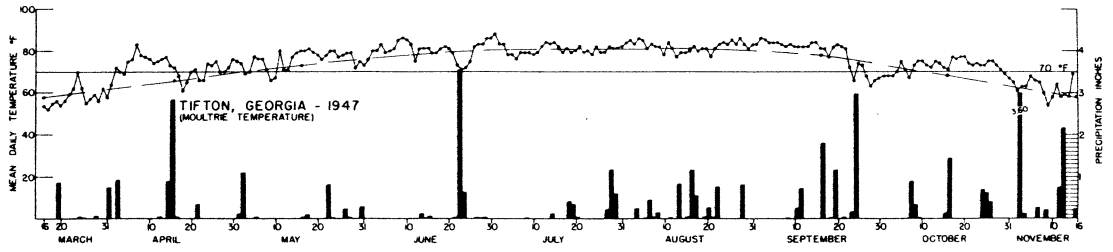

CROSSVILLE, ALABAMA - 1947
(ALBERTVILLE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

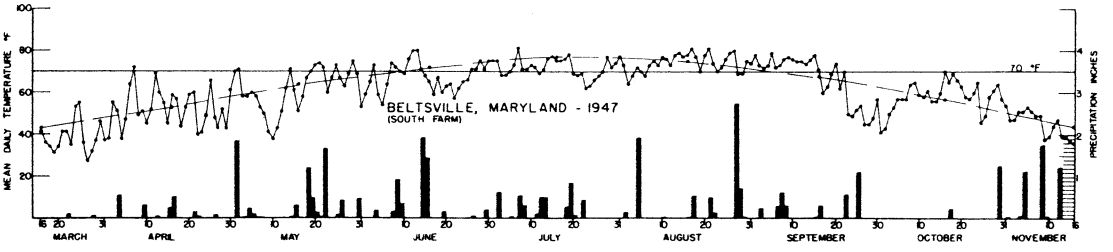

BLAIRSVILLE, GEORGIA - 1947
(CLAYTON TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

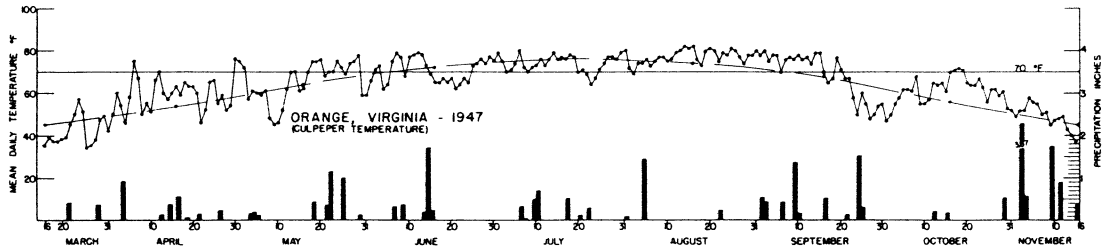

WATKINSVILLE, GEORGIA - 1947
(ATHENS)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

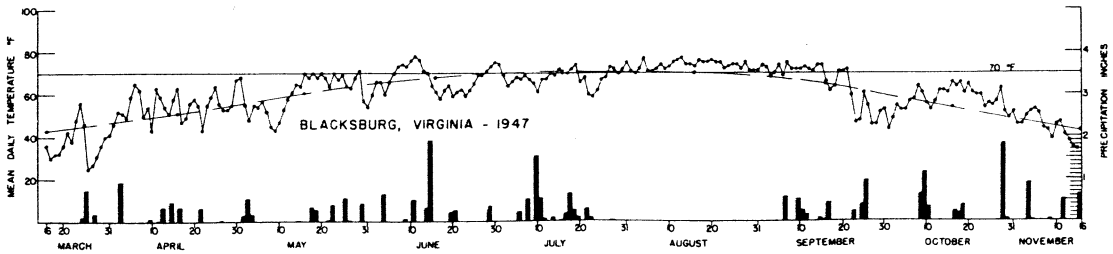

EXPERIMENT, GEORGIA - 1947
(GRIFFIN TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

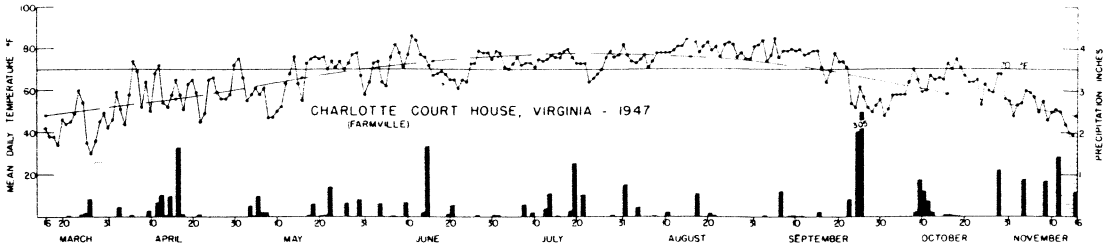

RICHMOND HILL, GEORGIA - 1947
(SAVANNAH)
5.66
4.65
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

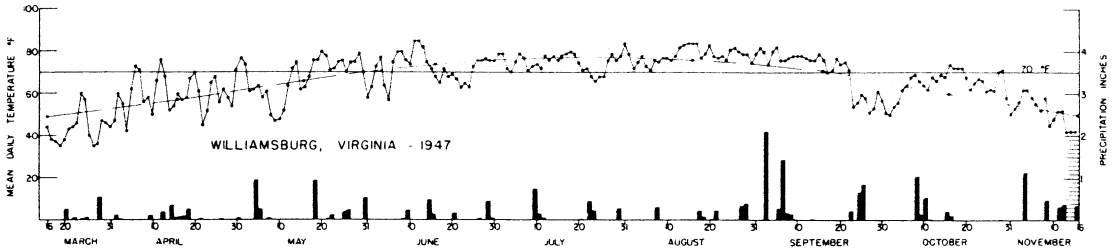

TIFTON, GEORGIA - 1947
(MOULTRIE TEMPERATURE)
3.60
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

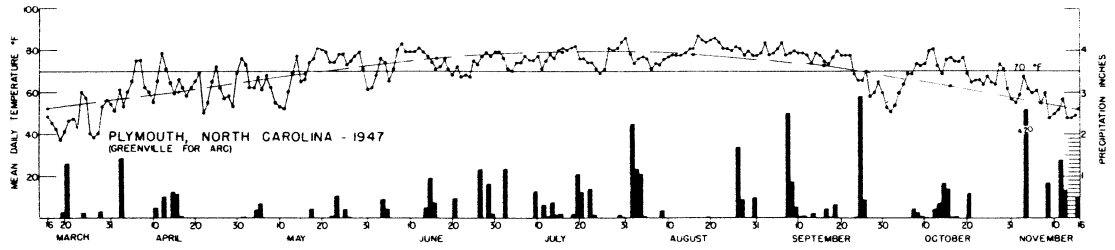

BELTSVILLE, MARYLAND - 1947
(SOUTH FARM)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

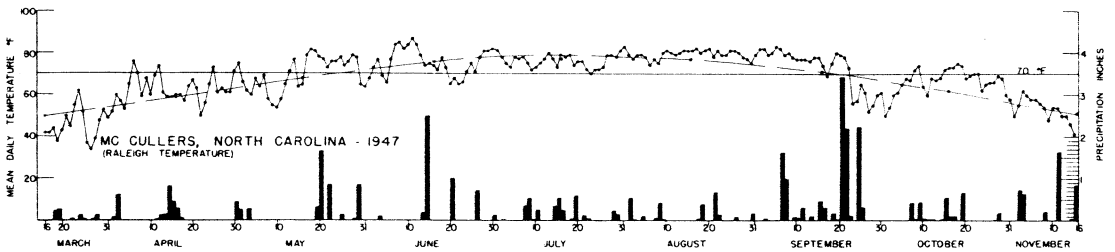

ORANGE, VIRGINIA - 1947
(CULPEPER TEMPERATURE)
3.57
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

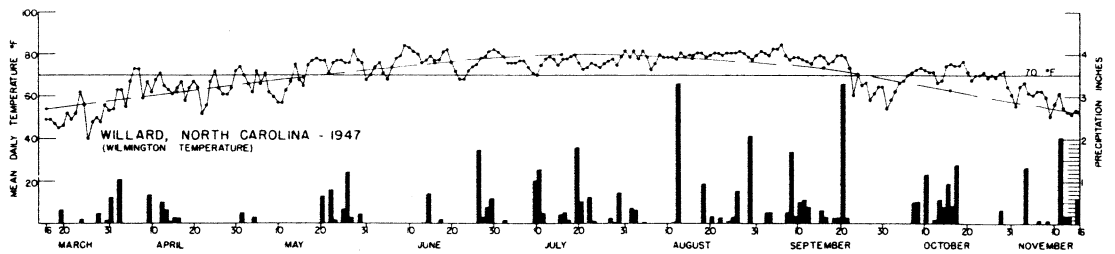

BLACKSBURG, VIRGINIA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

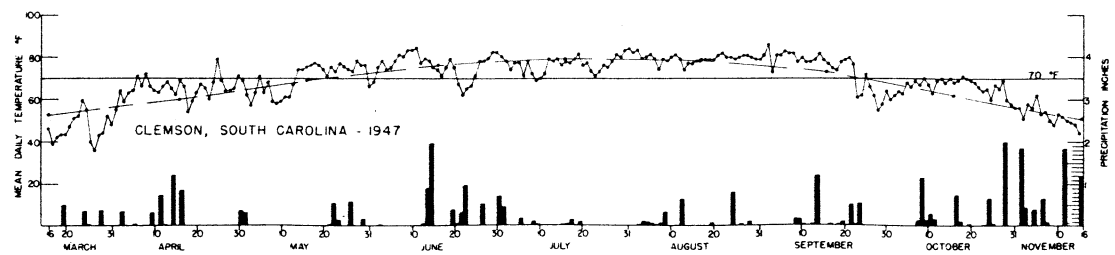

CHARLOTTE COURT HOUSE, VIRGINIA - 1947
(FARMVILLE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

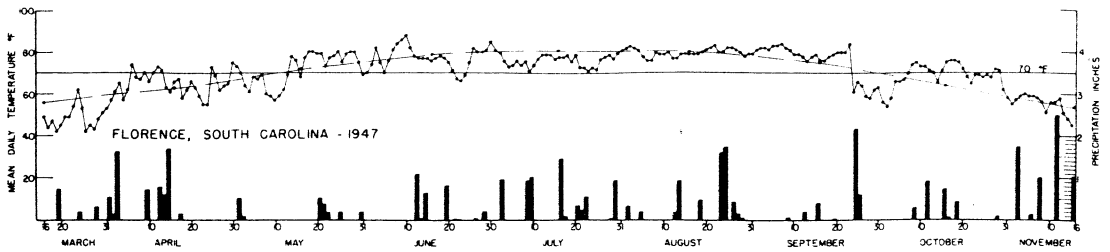

WILLIAMSBURG, VIRGINIA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

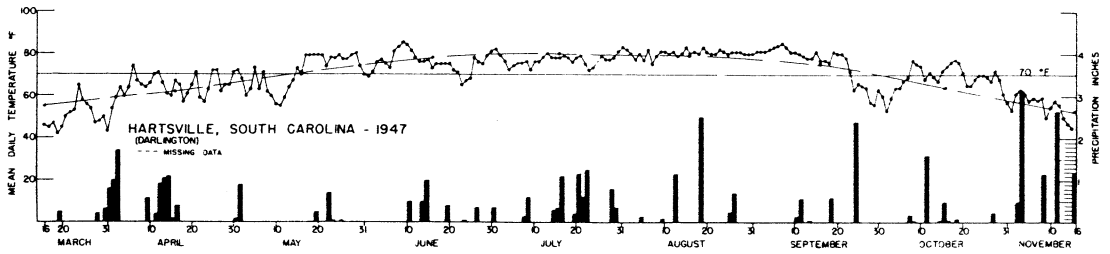

PLYMOUTH, NORTH CAROLINA - 1947
(GREENVILLE FOR ARC)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

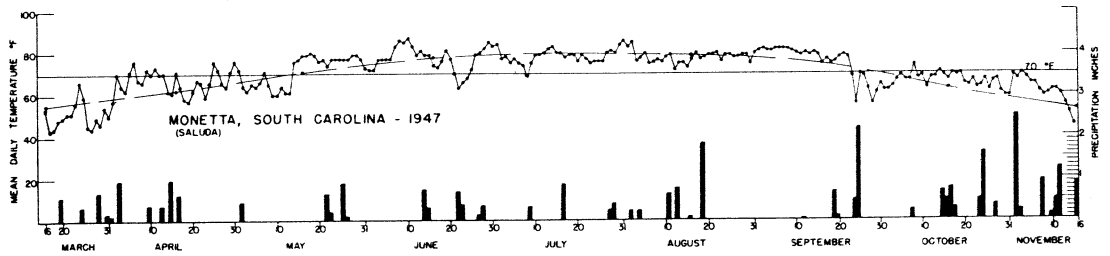

MC CULLERS, NORTH CAROLINA - 1947
(RALEIGH TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER

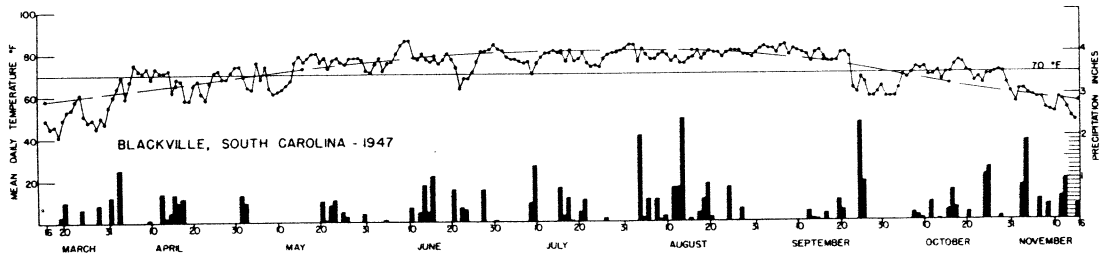

WILLARD, NORTH CAROLINA - 1947
(WILMINGTON TEMPERATURE)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


CLEMSON, SOUTH CAROLINA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


FLORENCE, SOUTH CAROLINA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


HARTSVILLE, SOUTH CAROLINA - 1947
(DARLINGTON)
--- MISSING DATA
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


MONETTA, SOUTH CAROLINA - 1947
(SALUDA)
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER


BLACKVILLE, SOUTH CAROLINA - 1947
MEAN DAILY TEMPERATURE °F
PRECIPITATION INCHES
70 °F
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER