U. S. REGIONAL SOYBEAN LABORATORY
Urbana, Illinois

RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS, 1943

PART II. SOUTHERN STATES
Hdqrs: Stoneville, Mississippi

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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

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RESULTS OF THE COOPERATIVE UNIFORM SOYBEAN TESTS
PART II: SOUTHERN STATES

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1943

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compiled by

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INTRODUCTION

The increased demand for vegetable oils because of wartime needs resulted in the expansion of the program of the U. S. Regional Soybean Laboratory at Urbana, Illinois, to include 12 Southern States. The states comprising the southern section are Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. Headquarters for the southern section are located at the Delta Experiment Station, Stoneville, Mississippi.

The most important objective of the Regional program is the development of superior varieties of soybeans for industrial purposes for the South. An essential part of this objective is the evaluation of existing southern strains and varieties of soybeans in Uniform Variety Tests. Since 1936, the Regional Soybean Laboratory has been conducting tests composed of groups of varieties and strains of soybeans classified according to maturity in the North Central States. At the time of the inauguration of the southern program, four such uniform variety groups were being tested. The Uniform Variety Test, Group I, contains the short season varieties adapted to the northern tier of states in the North Central Region. The seasonal requirements of Group II, III, and IV, are progressively longer. In keeping with this classification, the southern soybean varieties were tentatively divided into two Uniform Variety Tests, Groups V and VI.

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The Uniform Variety Test, Group V, includes varieties which normally mature in late September and early October over much of the South. Group VI contains the later maturing strains. The varieties, Arksoy, Ralsoy, Ogden, and others are typical of the maturity of Group V, while Mammoth Yellow, Mamloxi, and Biloxi are typical strains of Group VI.

In addition to these two Uniform Variety Tests, Group IV composed of varieties of the approximate maturity of Macoupin, were grown at a number of locations in the northern and northwestern part of this region.

In addition to the Uniform Variety Tests, five Dates of Planting Tests were conducted at various points over the South. It is important to know the effect of date of planting not only on yield of soybeans, but also on the chemical composition of the seed. Relatively wide differences in the chemical composition and yield due to variations in rainfall, temperature, and time of planting, have been reported in the North Central States. The long growing season in the South coupled with the wide variations in rainfall and temperature in different sections of the 12 Southern States are factors which must be fully evaluated in order to successfully expand the production of soybeans in the South.

Average results, both agronomic and chemical, of the Uniform Variety Tests, Groups IV, V, and VI, and the Dates of Planting Tests for the 1943 season are herein reported. The location of the Uniform Variety and Dates of Planting Tests are shown in Figure 1.

COOPERATING AGENCIES AND PERSONNEL
for the
SOUTHERN STATES

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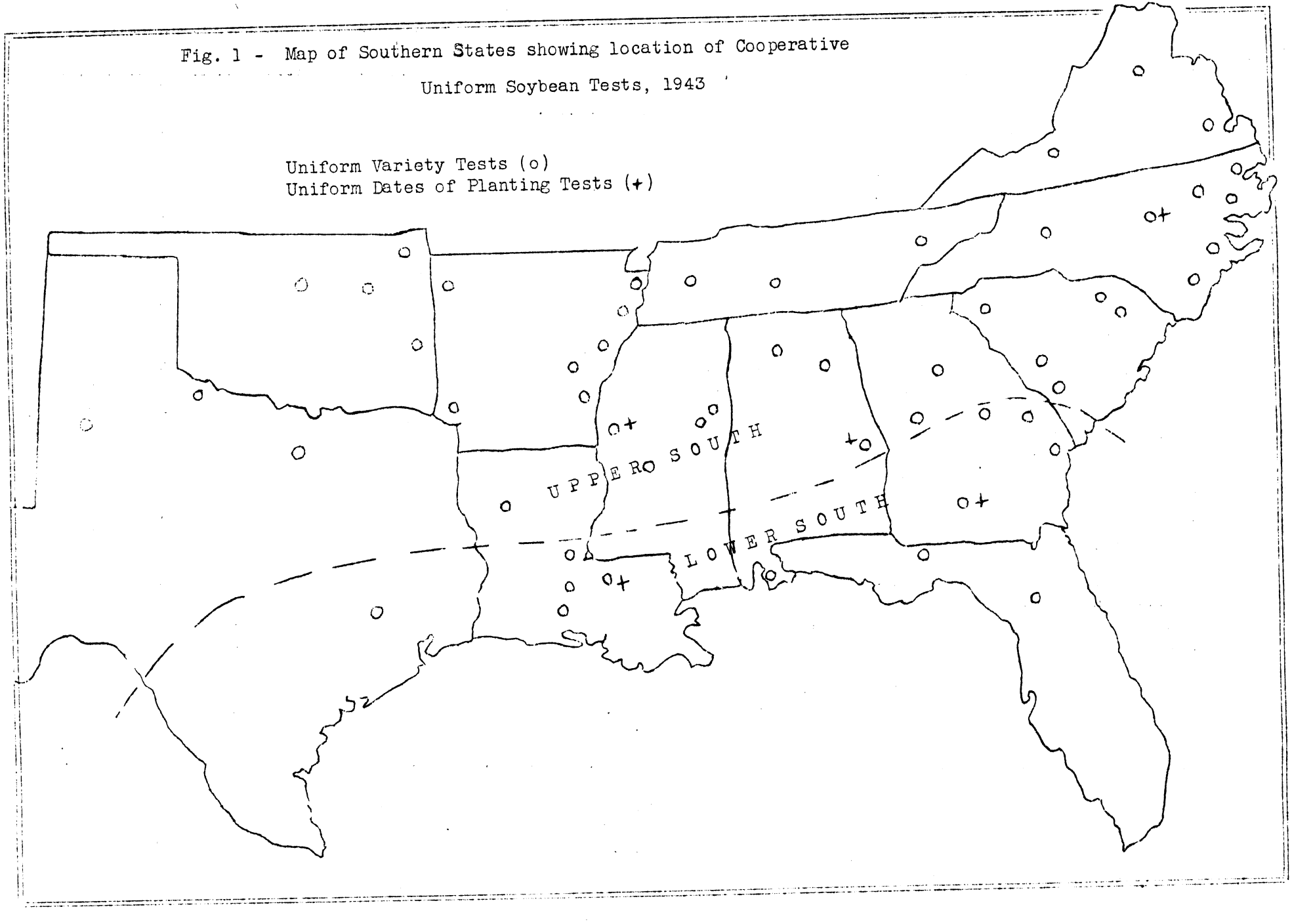
LOCATION OF COOPERATIVE NURSERIES

Location	Cooperator	Uniform Tests				
		Group II	Group III	Group IV	Group V	Group VI
Auburn, Ala.	Alabama Agricultural Experiment Station				x	x
Belle Mina, Ala.[4]	Tennessee Valley Substation				x	
Crossville, Ala.	Sand Mountain Substation				x	
Fairhope, Ala.	Gulf Coast Substation				x	x
Fayetteville, Ark.	Arkansas Agricultural Experiment Station				x	
Keiser, Ark.	Delta Substation, Cotton Branch Station			x	x	
Clarkedale, Ark.	Delta Substation, Cotton Branch Station				x	x
Marianna, Ark.	Cotton Branch Station				x	x
Stuttgart, Ark.	Rice Branch Station			x	x	x
Winchester, Ark.	J. A. Newton				x	x
Hope, Ark.	Fruit and Truck Branch Station				x	x
Gainesville, Fla.[1]	Florida Agricultural Experiment Station				x	x
Watkinsville, Ga.	Southern Piedmont Conservation Exp. Sta.				x	x
Experiment, Ga.	Georgia Agricultural Experiment Station				x	x
Sandersville, Ga.	Thomas Gilmore				x	x
Millen, Ga.	Ben Franklin				x	x
Richmond Hill, Ga.	Ford Farms				x	x
Tifton, Ga.	Georgia Coastal Plain Experiment Station				x	x
State College, Miss.	Agricultural Experiment Station				x	
Stoneville, Miss.	Delta Branch Experiment Station				x	x
West Point, Miss.	Alfalfa Branch Station				x	
Raymond, Miss.[2]	Raymond Branch Station					x
Baton Rouge, La.	Louisiana Agricultural Experiment Station				x	x
Hamburg, La.[4]	W. T. Nolin				x	x
Crowley, La.	J. M. Jenkins				x	x
Opelousas, La.	John Dumas				x	x
Melrose, La.[4]	J. H. Henry				x	x

Location	Cooperator	Uniform Tests				
		Group II	Group III	Group IV	Group V	Group VI
Raleigh, N.C.	North Carolina Agricultural Exp. Sta.				x	x
Statesville, N.C.	Piedmont Branch Station				x	
Wenona, N.C.	Blackland Branch Station				x	
Rocky Mount, N.C.[3]	Upper Coastal Branch Station				x	x
Trenton, N.C.[3]	C. M. Foy				x	x
Willard, N.C.	Coastal Plain Station				x	x
Miami, Okla.	Leo Dohogne			x		
Stillwater, Okla.	Oklahoma Agricultural Experiment Station			x	x	
Wagoner, Okla.	L. E. Blair			x	x	
Heavener, Okla.	Heavener Substation				x	
Clemson, S.C.	South Carolina Agr. Exp. Sta.				x	x
Florence, S.C.	Pee Dee Experiment Station				x	x
Monetta, S.C.	Miss Bessie Johnson				x	x
Blackville, S.C.	Edisto Experiment Station			x	x	x
Hartsville, S.C.	Coker Pedigreed Seed Company				x	x
Knoxville, Tenn.	Tennessee Agricultural Experiment Station				x	
Columbia, Tenn.	Middle Tennessee Experiment Station				x	
Jackson, Tenn.	West Tennessee Experiment Station				x	
College Station, Tex.[4]	Texas Agricultural Experiment Station		x	x	x	
Chillicothe, Tex.	Texas Substation #12	x	x	x		
Denton, Tex.	Texas Substation #6			x		
Lubbock, Tex.	Texas Substation #8			x		
Blacksburg, Va.[5]	Virginia Agricultural Experiment Station		x	x		
Orange, Va.	Orange County Experiment Station			x		
Williamsburg, Va.	James County Experiment Station				x	

[1]Seed failed to develop.
[2]Yields not taken because of irregularities due to salt spots in test area.
[3]Yields not taken because of irregularities caused by soil deficiencies.
[4]Yields not taken because of disease and drought injury.
[5]Reported in North Central States report, Part I.

Fig. 1 - Map of Southern States showing location of Cooperative Uniform Soybean Tests, 1943



METHODS

All uniform tests have been planted in replicated rod-row plots, using either a simple lattice or a randomized block design with four replications, Row widths used at the different test locations have varied from 36 to 42 inches, depending upon the width in common use or the equipment available for handling the crop. Seedings have been made at the rates of 200 viable seeds per row. Satisfactory stands have been obtained throughout the region under normal soil and weather conditions at planting time.

Yields were taken on individual replications after the seed had been dried to a uniform moisture content basis.

Chemical composition was determined for each strain in a Uniform Test on composite samples prepared by combining equal weights of seed from each replication at each location included in the particular Group Test. Percentage composition of the seed is expressed on a dry basis. Seed weight for each strain was also determined on the variety composite and was recorded as weight (in grams) per 100 seeds.

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

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

Shattering notes were recorded on a scale of 1 to 5 as follows:

1 No shattering
2 1% to 5% shattered
3 6% to 10% shattered
4 11% to 24% shattered
5 25% and over shattered

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 fairly 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, Gibson; Group V, Arksoy 2913; and Group VI, Mammoth Yellow.

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

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

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

Statistical Analyses: All completed yield tests were analyzed by analysis of variance to determine differences required for significance. In general, the coefficients of variation of individual tests were high. The wide range in varietal productivity and adaption within each test, disease and insect injury, and lack of soil uniformity all contributed to the high variability. While the differences required for significance are listed in the tables, some caution should be exercised in their use.

Uniform Test, Group IV

The Uniform Test, Group IV, is composed of only nine varieties and strains adapted to Missouri, southern Illinois, and Indiana, and possibly to the more northern edge of the Southern Region. The origin of these varieties is as follows:

Strain	Source or Originating Agency	Origin
Boone	Missouri Agr. Expt. Sta.	Sel. from P.I. 54563-3
Chief	Illinois Agr. Expt. Sta.	Sel. from (Illini x Manchu)
Gibson	Purdue Agr. Expt. Sta.	Sel. from CX551 (Midwest x Dunfield)
Macoupin	Elmer Hulcher	Sel. from commercial lot
Patoka	Purdue Agr. Expt. Sta.	Sel. from P.I. 70218-2
C2	Purdue Agr. Expt. Sta.	Sel. from CX231 (Dunfield x Midwest)
S32-11	Missouri Agr. Expt. Sta.	Sel. from (P.I. 37062 x Illini)
S49-18	Missouri Agr. Expt. Sta.	Sel. from (Virginia x P.I. 54610-3)
S100	Missouri Agr. Expt. Sta.	Rogue from a plot of Illini

Variety Tests of Group IV were grown in Texas, Oklahoma, Arkansas, Virginia, and South Carolina. The adverse climatic conditions under which most of these tests were grown are reflected in the yields. Severe droughts and excessively high temperatures at Chillicothe, Texas, and at the locations in Oklahoma, Arkansas, and Virginia, greatly reduced the yields of soybeans. The highest yields of this group were obtained at Lubbock, Texas, under irrigation.

The agronomic and chemical data for all locations are summarized in table 1. The mean agronomic response and the chemical composition of the varieties at each location is given in tables 2-10. The total rainfall for June, July, and August and the mean response of all varieties to location is given in table 11. The mean squares for yield, and "F" values for percentage protein and oil, iodine number of the oil, seed weight, and plant height are given in tables 12 and 13.

Too much significance should not be placed on the agronomic data from many of these tests because of the abnormal season. Relatively low percentages of oil and high percentages of protein were typical of the composition of the beans from the drought areas, although seed from the tests at Keiser, Arkansas, and Orange, Virginia, were relatively high in content of oil. S100, Gibson, and S32-11 were the higher yielding strains of the group. S100 has looked promising over much of the area. Desirable characteristics of this variety are: low shattering, good plant height, fair seed quality and yield. S100 is, however, low in oil and approximately 10 days later than most of the varieties in the test.

Table 1. Summary of agronomic and chemical data for the strains in the Uniform Test, Group IV, 1943.

Strain	Yield (Bu. per A.)	Lodging	Shattering	Height (In.)	Maturity[1]	Seed Quality	Weight 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
No. of Tests	10	10	10	10	10	10	10	10	10	10
S100	11.1	1.8	1.3	32.3	+10.1	2.2	11.4	45.6	17.7	125.8
Gibson	10.3	1.8	2.3	26.7	+ 0.0	2.1	10.2	42.9	19.9	124.6
S32-11	10.0	2.1	1.7	29.9	+ 0.3	2.7	9.0	44.2	18.7	127.0
Patoka	9.5	1.1	1.5	21.7	- 0.9	2.6	11.9	46.0	18.8	125.5
S49-18	9.4	1.9	1.8	28.6	+ 0.9	3.3	9.7	45.0	18.3	122.7
C2	8.8	1.8	2.1	29.2	- 0.3	3.3	10.4	45.4	18.4	118.0
Boone	8.8	1.6	1.8	30.4	+ 3.6	3.3	11.0	45.3	18.5	117.0
Chief	8.2	1.7	2.2	28.0	- 0.6	3.1	10.0	42.5	20.2	121.6
Macoupin	7.9	1.5	1.6	30.6	+ 4.0	2.4	11.3	44.1	20.2	119.5
Dif. nec. for sig. (5% level)	+0.8			+2.9			+0.8	+1.1	+0.7	+2.6

[1]Days earlier (-) or later (+) than Gibson. Gibson required 118 days to mature.

Table 2. Summary of yields in bushels per acre for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 10 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.	Chillicothe Tex.	Denton Tex.[1]
S100	11.1	15.2	18.4	13.7	9.9	14.0	12.1	10.6	5.1	6.4	5.6	--
Gibson	10.3	16.2	13.8	13.9	9.7	13.4	9.6	8.2	7.4	5.2	6.0	9.7
S32-11	10.0	16.4	12.1	11.9	13.4	11.0	8.9	8.1	6.8	6.2	5.2	10.6
Patoka	9.5	16.8	11.9	13.8	10.2	12.0	9.2	7.7	6.1	4.7	2.5	10.1
S49-18	9.4	16.6	11.5	11.6	12.3	9.5	8.6	8.3	5.9	4.9	5.3	11.5
C2	8.8	16.1	11.2	12.7	12.8	10.5	6.3	8.6	5.2	3.3	1.5	9.2
Boone	8.8	14.1	13.1	14.0	11.0	10.2	5.5	6.9	5.4	4.6	3.3	8.9
Chief	8.2	13.3	12.7	10.0	12.3	6.1	5.0	5.5	6.1	6.5	4.7	12.8
Macoupin	7.9	11.3	13.6	11.3	9.0	6.9	7.4	7.2	4.6	4.0	4.0	6.5
Mean yield	9.3	15.5	13.1	12.5	11.2	10.4	8.1	7.9	5.8	5.1	4.2	
Coef. of var.	18.2%	12.2%	12.4%	19.5%	17.1%	20.8%	14.4%	26.2%	17.8%	20.0%	22.8%	
Bu. nec. for sig.(5% level)	0.8	2.8	2.4	3.4	2.8	3.2	1.7	3.0	1.5	1.5	1.4	

[1]Not included in the mean.

Table 3. Yield rank for the strains in the Uniform Test, Group IV, 1943.

Strain	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.	Chillicothe Tex.
S100	6	1	4	7	1	1	1	8	2	2
Gibson	4	2	2	8	2	2	4	1	4	1
S32-11	3	6	6	1	4	4	5	2	3	4
Patoka	1	7	3	6	3	3	6	3	6	8
S49-18	2	8	7	3	7	5	3	5	5	3
C2	5	9	5	2	5	7	2	7	9	9
Boone	7	4	1	5	6	8	8	6	7	7
Chief	8	5	9	3	9	9	9	3	1	5
Macoupin	9	3	8	9	8	6	7	9	8	6

Table 4. Summary of lodging notes for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 9 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Denton Tex.
S100	1.8*	1.5	1.0	2.0	-	2.0	2.0	1.2	2.0	1.0
Gibson	1.8	2.0	1.0	1.3	4.0	2.0	2.0	1.0	2.0	1.0
S32-11	2.1	3.0	2.0	2.0	4.0	2.0	2.0	1.0	2.0	1.0
Patoka	1.1	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0
S49-18	1.9	2.0	1.0	1.5	3.0	3.0	2.0	1.2	2.0	1.0
C2	1.8	3.0	1.0	1.8	2.0	2.0	2.0	1.2	2.0	1.0
Boone	1.6	2.0	1.0	1.8	2.0	2.0	2.0	1.0	2.0	1.0
Chief	1.7	2.0	1.0	1.3	2.0	2.0	2.0	1.2	3.0	1.0
Macoupin	1.5	2.0	1.0	1.8	3.0	1.0	1.0	1.0	2.0	1.0

*Only 8 tests included in the mean.

Table 5. Summary of shattering notes for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 8 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.
S100	1.3	1.0	1.0	1.0	2.0	1.0	1.0	1.0	2.0
Gibson	2.3	1.0	2.0	1.3	2.0	2.0	3.0	4.0	3.0
S32-11	1.7	1.0	1.0	1.5	2.0	2.0	2.0	1.0	3.0
Patoka	1.5	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
S49-18	1.8	1.0	1.0	1.3	2.0	2.0	3.0	1.0	3.0
C2	2.1	1.0	2.0	1.0	2.0	2.0	2.0	4.0	3.0
Boone	1.8	1.0	2.0	1.3	2.0	2.0	2.0	1.0	3.0
Chief	2.2	1.0	2.0	1.3	2.0	2.0	2.0	4.0	3.0
Macoupin	1.6	1.0	3.0	1.0	2.0	1.0	2.0	1.0	2.0

Table 6. Summary of plant height in inches for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 9 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Denton Tex.
S100	32.3	34	27	34	50	34	26	24	35	27
Gibson	26.7	29	23	29	39	34	21	14	27	24
S32-11	29.9	24	29	31	45	36	28	19	32	25
Patoka	21.7	22	21	23	31	24	15	13	21	25
S49-18	28.6	25	28	27	45	36	27	18	28	23
C2	29.2	32	26	29	43	32	23	14	32	32
Boone	30.4	30	26	31	41	38	24	20	35	29
Chief	28.0	26	28	23	44	35	24	12	38	22
Macoupin	30.6	30	28	33	45	30	26	25	27	31
Mean	28.6	28.0	26.2	28.9	42.6	33.2	23.8	17.7	30.6	26.4

Table 7. Summary of maturity* notes for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 7 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.[1]	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.[1]	Denton Tex.[1]
S100	+ 10.1	+ 7	+ 16	+ 16	--	+ 5	+ 4	+ 23	0	--	--
Gibson	+ 0.0	0	0	0	0	0	0	0	0	0	0
S32-11	+ 0.3	0	- 6	0	0	+ 5	+ 3	+ 2	- 2	0	0
Patoka	- 0.9	- 8	+ 16	0	0	- 8	- 2	+ 3	- 7	0	0
S49-18	+ 0.9	+ 2	- 6	+ 1	0	+ 7	+ 3	+ 1	0	0	0
C2	- 0.3	- 2	0	0	0	- 3	0	+ 1	+ 2	0	0
Boone	+ 3.6	+ 4	0	+ 1	0	+ 5	+ 8	+ 7	0	--	+ 14
Chief	- 0.6	+ 4	- 6	+ 1	0	- 3	+ 2	- 2	0	0	0
Macoupin	+ 4.0	0	+ 16	+ 2	0	+ 5	0	+ 5	0	0	+ 14
Gibson matured		9/9	9/16	8/26	8/27	9/5	9/22	9/3	9/17	8/31	8/17
Date planted		5/4	6/8	5/4	4/23	4/28	6/12	5/10	5/6	5/3	5/8

*Days earlier (-) or later (+) than Gibson. [1]Not included in the mean.

Table 8. Summary of seed quality notes for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 9 Tests	Lubbock Tex.	Stuttgart Ark.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.	Denton Tex.
S100	2.2*	1.5	1.0	3.0	2.0	2.0	2.0	5.0	1.0	-
Gibson	2.1	1.5	2.0	2.5	2.0	2.0	2.0	3.0	2.0	2.0
S32-11	2.7	2.3	2.5	2.0	4.0	2.0	3.0	3.0	2.5	3.0
Patoka	2.6	1.5	2.5	2.5	2.0	2.0	3.0	3.0	3.5	3.0
S49-18	3.3	2.8	3.0	3.0	5.0	3.0	3.0	4.0	3.0	3.0
C2	3.3	1.8	4.0	2.0	4.0	3.0	4.0	4.0	4.0	3.0
Boone	3.3	2.5	2.5	3.5	5.0	3.0	3.0	4.0	3.5	3.0
Chief	3.1	2.5	2.5	2.5	4.0	4.0	3.0	3.0	3.0	3.0
Macoupin	2.4	2.0	1.5	2.0	4.0	2.0	2.0	3.0	2.0	3.0

*Only 8 tests included in the mean.

Table 9. Summary of seed size, grams per 100 seed, for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 10 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.	Chillicothe Tex.	Denton Tex.[1]
S100	11.4	9	15	10	11	10	14	14	9	11	11	--
Gibson	10.2	9	11	11	9	10	11	12	9	10	10	11
S32-11	9.0	8	8	10	8	8	11	11	8	10	8	9
Patoka	11.9	11	12	11	9	11	15	14	12	12	12	11
S49-18	9.7	10	9	10	8	9	11	12	8	10	10	10
C2	10.4	10	10	12	10	10	12	12	10	9	9	10
Boone	11.0	10	11	11	10	10	13	14	10	10	11	10
Chief	10.0	9	9	11	10	10	11	11	9	10	10	10
Macoupin	11.3	10	13	12	10	10	14	13	11	10	10	12
Mean	10.5	9.6	10.9	10.9	9.4	9.8	12.4	12.6	9.6	10.2	10.1	

[1]Not included in the mean.

Table 10. Summary of chemical data for the strains in the Uniform Test, Group IV, 1943.

Strain	Mean of 10 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.	Chillicothe Tex.	Denton Tex.[1]
					Percentage of Protein							
S100	45.6	38.5	49.5	44.4	41.4	46.6	47.3	45.5	46.9	45.4	50.7	--
Gibson	42.9	37.4	44.5	42.8	39.6	46.3	45.3	40.8	41.7	44.3	46.6	44.4
S32-11	44.2	39.6	44.2	44.2	39.7	46.8	46.6	43.2	43.0	45.6	48.6	43.4
Patoka	46.0	38.8	46.3	45.3	43.2	49.8	47.9	44.8	45.1	47.3	51.8	44.4
S49-18	45.0	40.6	45.0	45.2	38.6	48.5	47.7	45.6	43.5	44.6	50.9	43.6
C2	45.4	39.6	47.1	43.9	41.4	45.8	48.6	42.3	44.5	47.0	53.3	45.4
Boone	45.3	38.4	46.1	43.8	40.0	47.1	48.0	44.0	44.9	47.1	54.0	46.0
Chief	42.5	38.3	41.2	40.9	39.1	46.2	45.9	43.5	40.2	43.2	46.3	42.2
Macoupin	44.1	37.2	45.0	41.8	40.2	46.7	47.4	44.8	43.4	43.8	50.4	45.3
Mean	44.5	38.7	45.4	43.6	40.4	47.1	47.2	43.8	43.7	45.4	50.3	
					Percentage of Oil							
S100	17.7	20.2	17.5	17.2	20.0	16.1	17.1	18.8	16.5	17.5	16.3	--
Gibson	19.9	22.5	19.2	19.6	21.1	18.2	18.0	22.6	20.4	19.9	17.9	19.5
S32-11	18.7	21.2	19.5	18.8	19.4	16.6	18.0	21.2	18.2	18.0	15.7	19.0
Patoka	18.8	22.4	18.6	19.3	18.7	15.9	18.2	20.7	18.3	18.6	17.0	19.5
S49-18	18.3	20.9	18.9	18.2	19.9	16.9	16.9	19.8	18.3	17.6	15.1	19.0
C2	18.4	21.6	16.7	20.2	20.5	17.8	15.6	21.7	18.5	17.1	14.2	18.4
Boone	18.5	21.6	19.2	19.5	19.9	16.7	17.0	21.2	18.0	17.8	14.2	18.0
Chief	20.2	22.5	21.0	21.3	21.8	18.3	17.8	20.8	20.5	19.6	17.9	20.6
Macoupin	20.2	22.6	19.9	20.8	21.2	18.8	18.7	20.8	19.7	20.7	18.8	19.2
Mean	19.0	21.7	18.9	19.4	20.3	17.3	17.5	20.8	18.7	18.5	16.3	

Table 10 (continued)

Strain	Mean of 10 Tests	Lubbock Tex.	Stuttgart Ark.	Blackville S.C.	Keiser Ark.	Stillwater Okla.	Wagoner Okla.	Orange Va.	Miami Okla.	Fayetteville Ark.	Chillicothe Tex.	Denton Tex.[1]
					Iodine Number of Oil							
S100	125.8	126.4	124.8	127.2	120.2	125.4	132.2	131.7	128.8	123.9	117.8	--
Gibson	124.6	124.8	123.4	125.6	126.9	123.2	130.3	129.4	123.5	121.7	117.0	117.0
S32-11	127.0	123.0	128.0	128.6	129.7	125.5	132.9	132.3	125.2	126.4	118.7	120.5
Patoka	125.5	125.3	126.9	130.0	129.2	127.4	128.0	130.0	123.1	119.3	114.9	122.9
S49-18	122.7	122.4	124.4	120.7	127.2	118.3	131.2	131.1	121.5	119.7	110.0	117.8
C2	118.0	123.0	117.8	120.0	123.2	111.7	130.3	128.3	112.0	108.6	105.2	109.7
Boone	117.0	121.5	114.6	119.5	121.3	113.8	127.3	127.7	110.6	110.0	103.7	105.2
Chief	121.6	123.2	121.6	128.0	121.7	118.3	127.2	126.4	119.8	117.8	112.3	115.5
Macoupin	119.5	122.6	124.3	122.4	121.2	112.7	127.7	128.1	118.3	117.1	100.7	108.0
Mean	122.4	123.6	122.9	124.7	124.5	119.6	129.7	129.4	120.4	118.3	111.1	

[1]Not included in the mean.

Table 11. Mean response of the varieties of Group IV to location, 1943.

Location	Rainfall June, July, & Aug.	Mean of All Varieties: % Protein	% Oil	I_2 No. of Oil	Av. Yield (Bu. per A.)	Wt. of 100 Seed (Grams)	Plant Height (Inches)
Lubbock, Texas*	5.5	38.7	21.7	123.6	15.5	9.6	28.0
Chillicothe, Texas	2.5	50.3	16.3	111.1	4.2	10.1	--
Denton, Texas	4.4	--	--	--	--	--	26.4
Stillwater, Okla.	3.4	47.1	17.3	119.6	10.4	9.8	33.2
Wagoner, Okla.	7.7	47.2	17.5	129.7	8.1	12.4	23.8
Miami, Okla.	5.0	43.7	18.7	120.4	5.8	9.6	30.6
Fayetteville, Ark.	6.4	45.4	18.5	118.3	5.1	10.2	--
Keiser, Ark.	4.6	40.4	20.3	124.7	11.2	9.4	42.6
Stuttgart, Ark.	2.3	45.4	18.9	122.9	13.1	10.9	26.2
Orange, Va.	4.4	43.8	20.8	129.4	7.9	12.6	17.7
Blackville, S.C.	15.3	43.6	19.4	124.7	12.5	10.9	28.9

*Irrigated.

Table 12. Analysis of variance for yield of seed from 10 locations for the Uniform Test, Group IV, 1943.

Source of Variation	Degrees of Freedom	Mean Square
Locations	9	490.8475**
Varieties	8	41.8775**
Locations x varieties	72	9.1810**
Error	240	2.9010

**Highly significant.

Table 13. "F" values as determined by analysis of variance for agronomic and chemical data for the Uniform Test, Group IV, 1943.

Source of Variation	Degrees of Freedom	"F" Values			
		Seed Size	Percent Protein	Percent Oil	I_2 No. of Oil
Locations	9	14.80**	64.98**	39.74**	30.51**
Varieties	8	10.67**	9.68**	12.96**	14.89**
Error	72				

**Highly significant.

Uniform Test, Group V

The Uniform Soybean Variety Test, Group V, is composed of 16 named varieties, 5 plant selections, and 4 U. S. D. A. plant introductions. The origin of these varieties and strains is as follows:

Variety or Strain	Originating Agency	Origin
Arkan	Ark. Agr. Exp. Sta.	P.I. Introduction
Arksoy	U. S. D. A.	P.I. 35335 from Pingyang, Chosen, 1914
Arksoy 2913	Ark. Agr. Exp. Sta.	Selection from Arksoy
Ralsoy	Purina Mills, G.H. Banks	Selection from Arksoy 2913
Boone	Mo. Agr. Exp. Sta.	Selection from P.I. 54563-3
Delsoy	U. S. D. A.	P.I. 85355
Macoupin	Elmer Hulcher	Selection from commercial lot
Magnolia	U. S. D. A.	P.I. 85537 from Suigen, Chosen, 1929
Mammoth Yellow	Unknown	Grown in North Carolina since 1880
Mamredo	Delta Exp. Sta.	Sel. from a cross (Mam.Yel. X Laredo)
Monetta	U. S. D. A.	P.I. 71608 from Nanking, China, 1927
Ogden	Tenn. Agr. Exp. Sta.	Sel. from a cross (Tokyo X P.I. 54610)
Rokusun 25A	U. S. D. A.	Sel. from P.I. 80481
Tenn. Non-pop	Tenn. Agr. Exp. Sta.	Sel. from a cross (Tokyo X P.I. 54610)
Volstate	Tenn. Agr. Exp. Sta.	Sel. from a cross (Tokyo X P.I. 54610)
Tokyo	U. S. D. A.	P.I. 8424 from Tokyo, Japan, 1901
Wood's Yellow	T. W. Wood & Sons	Sel. from Mammoth Yellow
Auburn #2	Ala. Agr. Exp. Sta.	Sel. from Monetta
Georgia 723	Ga. Agr. Exp. Sta.	
Georgia 731	Ga. Agr. Exp. Sta.	P.I. 95719-1
S100	Mo. Agr. Exp. Sta.	Rogue from plot of Illini
P.I. 84642	U. S. D. A.	Suigen, Chosen, 1929
P.I. 86974	U. S. D. A.	Zenra Hokudo, Chosen, 1930
P.I. 89775A	U. S. D. A.	Tang Shang, China, 1930
P.I. 87066	U. S. D. A.	Nanmen, Chosen, 1930

The 25 strains of the Uniform Variety Test, Group V, were arranged as a simple lattice and planted at 42 locations over the South. The yields varied widely within tests with coefficients of variability ranging from 12 to over 40 per cent. Because of this wide variation, too much confidence should not be placed in the data from any one location. In analyzing the data from the various locations, it was noted that the erect grain type strains were producing the highest yields in the upper half of the Southern region. In contrast to these results, yields in the Lower South varied widely between locations, largely because of adverse climatic conditions and disease and insect injury on these relatively unadapted strains. Because of these conditions, the data have been divided into two groups, the Upper South with 28 tests, and the Lower South with 10 tests. The geographical division is shown in Figure 1. Yields were not taken on four tests because of serious disease injury, soil toxicity, and insect injury, while incomplete data were secured on five other tests.

Twenty-six completed tests are reported in the regional results of Group V for the Upper South. The average results of all completed tests in the Upper South, both agronomic and chemical data, are summarized in table 14. Yield, yield rank, lodging, shattering, plant height, maturity, seed quality, weight of 100 seed, per cent protein and oil, and iodine number of the oil for the 25 varieties at each location are summarized in tables 15 to 27, respectively.

It is to be noted from table 14 that the Ogden variety has yielded significantly more than any other variety in the tests. The performance of this variety was outstanding in the Upper South. Of the 27 tests on which yields were obtained, Ogden was first 13 times. This variety is of good height for combining under most conditions and is highly resistant to lodging. The seed produced was of high quality and comparatively high in oil. Shattering notes, however, indicate that Ogden shatters slightly more than Arksoy 2913 and Ralsoy, although it is well above the average of the group in this respect.

All tests were analyzed as randomized blocks. The analysis of variance for yields of seed for the 26 locations is given in table 26. The mean squares for locations, varieties, and the variety x location interaction were all highly significant. As might be expected, the variation due to location was much greater than that between varieties.

The "F" values as determined by analysis of variance for seed wight, per cent protein and oil and the iodine number of the oil are given in table 27. Variation between locations and between varieties were highly significant for all factors considered. It is very interesting to note that size of seed, per cent oil, and iodine number of the oil are affected more by varieties than by location. On the other hand, the percentage protein was affected more by location than by variety in 1943.

The mean response of the varieties of Group V to location along with temperature and rainfall records are given in table 28. It has been pointed out in earlier publications that high temperatures coupled with droughty conditions during the period from bloom to maturity tend to reduce the oil content and increase the per cent protein in soybeans. This situation seemed to be generally true of Group V over the South; however, there are a number of exceptions to this situation. The unusually hot dry weather of July and August in Oklahoma resulted in generally low oil, high protein beans. Similar climatic conditions occurred in Arkansas with quite different results. Reasonably good oil per cents were obtained at all locations except Fayetteville and Stuttgart. The average per cent protein at these locations was much higher than at any other points in the States. These and similar results at other locations indicate that soil type, fertility level, or other factors may affect the composition of the soybean. In view of the wide variations in the response of the varietal groups to location, it would be well to have more information on the soils of each test.

Table 14. Summary of agronomic and chemical data for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Yield (Bu. per A.)	Lodging	Shattering	Height (In.)	Maturity*	Seed Quality	Weight 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
No. of Tests	26	26	21	25	18	25	26	26	26	26
Ogden	21.4	1.1	1.7	32.4	+ 4.6	1.9	14.2	43.1	19.5	133.5
Volstate	18.2	1.5	1.6	34.0	+17.8	1.6	13.4	40.9	19.9	134.6
Delsoy	17.6	1.8	2.6	29.9	+10.3	2.0	13.4	44.9	16.9	133.4
Arksoy	16.6	1.5	1.5	27.9	- 0.2	2.2	11.8	45.5	18.6	132.1
P.I. 89775A	16.0	2.0	1.6	38.0	+11.4	2.5	11.9	42.6	18.3	134.8
Tenn. Non-pop	15.8	2.1	1.6	41.0	+23.8	2.6	15.6	43.7	18.2	135.0
Arksoy 2913	15.7	1.4	1.3	27.4	0.0	2.2	12.1	45.8	18.7	131.6
Ralsoy	15.7	1.5	1.4	27.7	+ 0.2	2.1	12.1	45.9	18.5	131.5
Mamredo	14.7	1.6	3.0	31.8	+ 0.6	2.4	12.9	42.5	18.9	127.0
P.I. 97066	14.7	2.8	2.5	39.6	+ 1.3	2.2	11.3	45.5	17.8	131.6
Wood's Yellow	14.6	1.3	2.1	33.5	+28.1	2.2	19.1	42.7	16.8	133.1
Monetta	14.5	2.8	2.1	35.6	+16.7	2.1	11.4	44.3	15.1	136.4
S100	14.2	1.5	1.9	34.0	-20.9	3.0	11.7	45.3	18.3	126.4
Tokyo	14.1	1.9	2.9	35.4	+22.9	2.4	18.5	42.9	17.6	135.2
Auburn #2	13.9	3.1	2.3	38.4	+11.4	2.1	9.7	43.4	18.2	132.9
Mammoth Yellow	13.0	1.3	3.1	30.9	+ 22.1	2.3	15.2	44.9	17.1	133.8
P.I. 84642	12.7	3.3	2.9	44.2	+ 8.1	2.2	9.0	45.0	18.0	131.1
Georgia 731	12.7	2.8	2.1	36.9	+ 1.2	2.7	14.0	45.4	18.7	129.6
Georgia 723	12.0	2.2	3.0	34.0	- 5.6	3.1	11.2	45.5	17.1	131.8
Magnolia	11.9	2.9	2.3	37.9	+ 7.4	2.4	13.2	44.3	19.2	130.4
Macoupin	11.9	1.7	1.9	32.5	-25.8	3.4	12.2	43.3	20.6	123.1
Arkan	11.1	1.4	3.0	23.9	- 1.8	2.5	12.1	43.5	19.3	127.1
P.I. 86974	10.1	3.7	3.3	43.6	+ 8.9	2.2	8.4	46.2	17.4	133.2
Boone	10.0	2.0	2.1	30.0	-26.4	4.0	11.9	45.0	19.4	119.7
Rokusun 25A	7.5	1.1	3.3	19.8	+ 2.0	3.0	18.3	46.4	17.1	130.5
Dif.Req.for Sig. (5% level)	+ 2.1						+ 2.4	+ 0.8	+ 0.2	+ 1.2

*Days earlier (-) or later (+) than Arksoy 2913. Arksoy 2913 required 148 days to mature.

Table 15. Summary of yields in bushels per acre for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 26 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.	Colum-bia Tenn.
Ogden	21.4	40.1	44.4	33.3	40.0	26.8	25.7	27.2	22.2	25.6	25.3
Volstate	18.2	48.1	30.5	30.1	27.0	23.2	18.3	19.3	22.6	19.0	20.9
Delsoy	17.6	34.9	30.1	30.4	19.9	18.0	21.4	24.6	24.3	21.5	23.1
Arksoy	16.6	29.0	23.8	30.1	21.5	18.9	22.2	20.2	15.5	18.4	18.5
P.I. 89775A	16.0	30.2	24.4	26.9	24.6	18.6	20.0	19.3	21.6	14.8	21.4
Tenn. Non-pop	15.8	45.4	23.5	25.2	35.8	20.8	14.2	20.7	19.8	18.2	16.4
Arksoy 2913	15.7	30.2	23.9	24.2	22.1	19.9	22.0	22.3	14.1	17.9	16.2
Ralsoy	15.7	26.2	21.1	28.9	19.7	17.4	22.9	19.5	13.8	18.3	18.8
Mamredo	14.7	27.8	24.0	20.1	18.9	20.1	18.6	17.3	13.9	20.1	17.4
P.I. 97066	14.7	22.9	26.9	23.7	17.6	18.8	25.0	20.0	16.2	21.6	17.1
Wood's Yellow	14.6	46.5	29.3	25.2	24.9	26.9	14.5	19.1	20.5	11.0	13.9
Monetta	14.5	32.4	25.8	29.6	22.4	21.5	12.2	17.3	16.0	13.5	23.3
S100	14.2	31.0	23.0	17.8	23.7	15.2	19.0	28.4	18.6	18.1	7.6
Tokyo	14.1	36.2	21.7	23.2	26.0	22.7	16.2	15.2	20.4	16.3	13.6
Auburn #2	13.9	23.1	34.6	31.0	13.2	17.1	17.3	14.1	17.6	13.6	21.7
Mammoth Yellow	13.0	32.6	33.4	18.0	24.0	15.9	14.7	18.2	14.5	8.0	16.7
P.I. 84642	12.7	13.1	20.7	26.4	15.2	19.8	18.1	15.7	17.9	15.5	18.3
Georgia 731	12.7	19.3	22.3	15.2	19.6	19.2	23.5	18.9	9.7	17.6	16.0
Georgia 723	12.0	20.7	23.4	16.4	14.1	14.4	20.2	20.9	13.8	21.4	12.8
Magnolia	11.9	19.9	21.9	21.4	8.9	22.9	18.7	11.8	17.6	15.9	13.9
Macoupin	11.9	18.8	16.8	21.2	18.5	14.6	18.3	22.5	15.8	13.3	5.8
Arkan	11.1	13.8	23.6	14.5	14.8	20.4	20.8	13.2	12.3	18.5	10.2
P.I. 86974	10.1	17.6	13.2	19.3	9.0	19.9	14.7	11.4	14.6	10.7	15.8
Boone	10.0	17.8	13.3	13.3	11.1	5.9	17.4	21.6	15.1	13.2	4.5
Rokusun 25A	7.5	11.3	16.3	10.4	12.3	15.3	14.2	6.8	7.2	6.5	7.5
Mean yield	14.0	27.5	24.5	23.0	20.2	18.9	18.8	18.6	16.6	16.3	15.9
Coef. of var.		20.4%	18.4%	19.7%	30.0%	12.6%	13.4%	27.6%	15.4%	20.3%	17.7%
Bu.nec.for sig. (5% level)	2.1	7.9	6.3	6.4	8.5	3.4	3.6	7.2	3.6	4.7	4.0

Table 15. (continued)

Strain	Hartsville S.C.(A)	Hartsville S.C.(B)	Auburn Ala.	Clarkedale Ark.	Keiser Ark.	West Point Miss.	Statesville N.C.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.
Ogden	20.6	21.4	19.8	18.0	20.1	18.0	16.9	17.2	15.1	15.2
Volstate	20.8	17.2	14.3	13.0	21.0	22.2	20.9	10.8	14.1	10.4
Delsoy	15.4	15.9	18.3	18.6	16.4	14.0	16.3	15.1	12.2	16.0
Arksoy	19.5	16.2	19.9	15.2	18.7	14.2	14.9	13.0	16.3	14.7
P.I. 89775A	15.4	15.5	14.8	17.4	18.6	18.7	15.8	13.8	11.7	7.8
Tenn. Non-pop	13.8	17.5	10.9	11.5	20.5	20.0	15.6	6.3	12.4	5.1
Arksoy 2913	20.0	14.1	19.1	14.5	12.5	16.3	13.4	12.0	16.3	13.7
Ralsoy	18.9	14.2	16.5	16.3	15.1	15.2	12.9	12.7	16.8	13.5
Mamredo	14.0	14.7	18.4	14.2	15.8	11.3	12.2	15.8	10.2	11.7
P.I. 97066	12.9	17.0	13.9	14.3	9.4	11.8	12.8	13.8	13.8	13.7
Wood's Yellow	17.3	18.2	9.4	6.9	16.4	14.9	13.2	7.3	15.2	3.3
Monetta	12.5	16.4	15.0	14.4	16.3	9.3	14.2	10.7	10.0	4.5
S100	17.4	12.5	8.9	16.0	8.8	11.2	10.9	13.1	14.6	13.4
Tokyo	18.6	18.1	7.2	11.6	17.1	11.5	13.7	5.5	14.2	5.3
Auburn #2	15.1	14.6	14.1	14.1	10.6	8.6	15.5	10.6	6.3	14.0
Mammoth Yellow	11.8	17.0	5.9	12.8	17.6	14.4	10.3	9.2	8.1	6.9
P.I. 84642	9.6	13.8	17.0	14.9	5.7	11.6	14.0	13.7	1.3	12.0
Georgia 731	13.7	14.4	18.9	8.9	10.8	11.0	8.5	10.1	12.7	10.4
Georgia 723	6.4	7.8	9.2	12.1	8.0	10.6	7.7	14.4	12.5	12.5
Magnolia	9.1	14.8	11.9	14.1	10.6	9.2	6.4	13.4	11.0	10.1
Macoupin	15.3	11.0	12.7	13.1	9.6	6.5	10.7	9.2	13.0	13.5
Arkan	10.9	7.6	16.6	9.9	5.1	0.0	3.5	13.2	7.8	10.8
P.I. 86974	3.9	6.6	10.6	12.5	4.4	8.0	8.8	12.8	0.8	11.5
Boone	13.4	9.6	8.1	10.0	11.6	9.5	11.0	7.6	10.7	9.7
Rokusun 25A	4.2	9.5	9.6	9.4	7.4	8.4	5.8	8.9	4.2	4.5
Mean yield	14.0	14.2	13.6	13.3	13.1	12.8	12.2	11.6	11.2	10.6
Coef. of var.	19.4%	17.6%	20.3%	15.2%	21.0%	26.0%	12.3%	15.6%	24.1%	23.5%
Bu.nec.for sig. (5% level)	3.8	3.5	3.9	2.9	3.9	4.7	2.1	2.5	3.8	3.5

(A)Early planting. (B)Late planting.

Table 15. (continued)

Strain	Winchester Ark.	Marianna Ark.	Heavener Okla.	State College Miss.	Stillwater Okla.	Fayetteville Ark.	Hope Ark.[1]	Trenton N.C.[1]	Williamsburg Va.[1]	Crossville Ala.[1]
Ogden	14.4	9.0	8.2	16.3	8.1	7.9	11.5	38.0	32.2	9.1
Volstate	8.2	11.5	7.5	12.4	6.6	3.7	9.6	34.2	22.3	--
Delsoy	10.9	11.4	8.6	11.6	4.3	5.5	9.8	32.6	28.2	7.7
Arksoy	12.1	12.8	6.9	9.6	5.0	5.9	10.4	33.4	23.1	7.4
P.I. 89775A	12.4	6.9	6.9	5.4	6.9	6.6	8.3	--	28.2	12.4
Tenn. Non-pop	5.4	10.1	7.6	5.5	4.0	4.3	--	--	19.6	--
Arksoy 2913	10.1	6.3	7.6	7.2	7.1	5.0	10.2	29.0	22.3	5.9
Ralsoy	10.5	8.1	8.8	7.8	7.9	6.1	9.5	25.7	22.0	5.8
Mamredo	11.1	6.3	8.2	8.9	7.2	5.0	7.1	19.7	20.5	8.9
P.I. 97066	8.6	5.3	8.6	7.9	3.3	4.8	5.2	--	27.8	7.5
Wood's Yellow	2.2	9.4	7.0	2.7	3.6	1.3	--	--	24.9	--
Monetta	8.6	6.3	7.7	8.6	5.4	4.0	10.4	32.6	13.8	9.8
S100	10.9	6.2	6.6	5.7	7.4	2.8	11.8	22.4	24.2	14.5
Tokyo	5.5	6.8	7.2	7.2	2.7	2.0	--	--	31.5	--
Auburn #2	10.0	6.5	5.3	3.2	5.4	4.4	6.6	--	19.6	7.5
Mammoth Yellow	3.1	8.3	5.9	3.7	4.0	3.9	7.4	--	26.4	--
P.I. 84642	11.2	6.5	6.6	2.7	4.8	4.1	7.8	--	17.2	6.7
Georgia 731	6.7	4.9	6.8	3.7	2.3	4.2	6.0	22.2	23.8	6.9
Georgia 723	12.4	2.6	5.2	2.8	3.0	6.5	8.2	21.4	28.6	8.4
Magnolia	8.3	3.6	6.1	1.9	5.1	2.3	6.1	--	16.5	6.7
Macoupin	8.5	5.1	5.5	2.4	5.9	0.8	10.7	22.1	16.8	11.3
Arkan	9.8	5.7	8.4	5.2	5.8	5.8	9.3	10.3	11.0	5.5
P.I. 86974	9.2	6.8	7.4	3.8	6.0	4.8	3.6	22.6	6.2	4.2
Boone	8.4	5.3	3.6	2.0	5.0	1.4	8.6	14.9	12.8	12.4
Rokusun 25A	2.4	4.1	5.3	0.0	1.1	3.5	4.3	9.9	13.8	1.3
Mean yield	8.8	7.0	6.9	5.9	5.1	4.3			21.3	
Coef. of var.	22.6%	23.3%	14.7%	42.9%	46.1%	33.0%				
Bu.nec.for sig. (5% level)	2.3	2.3	1.4	3.6	3.3	2.0				

[1]Not included in the mean.

Table 16. Yield rank for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.	We-nona N.C.	watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.	Colum-bia Tenn.	Harts-ville S.C.(A)	Harts-ville S.C.(B)	Au-burn Ala.
Ogden	4	1	1	1	2	1	2	3	1	1	2	1	2
Volstate	1	4	4	3	3	14	12	2	6	6	1	5	12
Delsoy	6	5	3	12	17	7	3	1	3	3	9	10	6
Arksoy	12	12	4	11	14	5	9	15	8	8	4	9	1
P.I. 89775A	10	9	8	6	16	10	12	4	17	5	9	11	11
Tenn. Non-pop	3	14	10	2	7	23	8	7	10	13	14	4	17
Arksoy 2913	10	11	12	10	10	6	5	19	12	14	3	17	3
Ralsoy	14	20	7	13	18	4	11	21	9	7	5	16	9
Mamredo	13	10	17	15	9	13	17	20	5	10	13	13	5
P.I. 97066	16	7	13	17	15	2	10	12	2	11	17	6	14
Wood's Yellow	2	6	10	5	1	22	14	5	22	17	8	2	20
Monetta	8	8	6	9	6	25	17	13	19	2	18	8	10
S100	9	16	20	8	22	11	1	8	11	22	7	19	22
Tokyo	5	19	14	4	5	19	20	6	14	19	6	3	24
Auburn #2	15	2	2	21	19	18	21	10	18	4	12	14	13
Mammoth Yellow	7	3	19	7	20	20	16	18	24	12	19	6	25
P.I. 84642	24	21	9	18	12	16	19	9	16	9	21	18	7
Georgia 731	19	17	22	14	13	3	15	24	13	15	15	15	4
Georgia 723	17	15	21	20	24	9	7	21	4	20	23	23	21
Magnolia	18	18	15	25	4	12	23	10	15	17	22	12	16
Macoupin	20	22	16	16	23	14	4	14	20	24	11	20	15
Arkan	23	13	23	19	8	8	22	23	7	21	20	24	8
P.I. 86974	22	25	18	24	10	20	24	17	23	16	25	25	18
Boone	21	24	24	23	25	17	6	16	21	25	16	21	23
Rokusun 25A	25	23	25	22	21	23	25	25	25	23	24	22	19

(A)Early planting.
(B)Late planting.

Table 16 (continued)

Strain	Clarke-dale Ark.	Keiser Ark.	West Point Miss.	States-ville N.C.	Wagon-er Okla.	Ex-peri-ment Ga.	Stutt-gart Ark.	Win-ches-ter Ark.	Mari-anna Ark.	Heav-ener Okla.	State Col-lege Miss.	Still-water Okla.	Fay-ette-ville Ark.	Wil-liams-burg Va.
Ogden	2	3	4	2	1	5	2	1	6	5	1	1	1	1
Volstate	15	1	1	1	15	8	15	19	2	10	2	7	18	12
Delsoy	1	8	10	3	3	14	1	7	3	2	3	17	7	4
Arksoy	6	4	9	7	11	2	3	4	1	14	4	14	5	11
P.I. 89775A	3	5	3	4	5	15	19	2	9	14	13	6	2	4
Tenn.Non-pop	20	2	2	5	24	13	22	22	4	8	12	18	13	16
Arksoy 2913	8	13	5	11	14	2	5	10	14	8	9	5	8	12
Ralsoy	4	12	6	13	13	1	7	9	8	1	8	2	4	14
Mamredo	11	11	14	15	2	18	12	6	14	5	5	4	8	15
P.I. 97066	10	19	11	14	5	9	5	14	19	2	7	21	10	6
Wood's Yellow	25	8	7	12	23	4	25	25	5	13	20	20	24	8
Monetta	9	10	19	8	16	19	23	14	14	7	6	11	16	20
S100	5	20	15	17	10	6	9	7	17	17	11	3	20	9
Tokyo	19	7	13	10	25	7	21	21	10	12	9	23	22	2
Auburn #2	12	16	21	6	17	22	4	11	12	22	18	11	12	16
Mammoth Yellow	16	6	8	19	19	20	20	23	7	20	16	18	17	7
P.I. 84642	7	23	12	9	7	24	11	5	12	17	20	16	15	17
Georgia 731	24	15	16	21	18	11	15	20	22	16	16	24	14	10
Georgia 723	18	21	17	22	4	12	10	2	25	24	19	22	3	3
Magnolia	12	16	20	23	8	16	17	18	24	19	24	13	21	19
Macoupin	14	18	24	18	19	10	7	16	21	21	22	9	25	18
Arkan	22	24	25	25	9	21	14	12	18	4	14	10	6	23
P.I. 86974	17	25	23	20	12	25	13	13	10	11	15	8	10	24
Boone	21	14	18	16	22	17	18	17	19	25	23	14	23	22
Rokusun 25A	23	22	22	24	21	23	23	24	23	22	25	25	19	20

Table 17. Summary of lodging notes for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 26 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.	Colum-bia Tenn.	Au-burn Ala.	Clarke-dale Ark.
Ogden	1.1	1.4	1.0	1.0	1.8	1.0	1.0	1.0	1.8	1.0	2.0	1.0	1.0
Volstate	1.5	2.6	3.0	2.0	2.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.0
Delsoy	1.8	1.8	4.0	2.5	3.3	1.0	1.0	1.0	2.5	1.0	2.8	1.0	2.0
Arksoy	1.5	2.3	3.0	1.5	2.8	1.5	1.0	1.0	2.0	1.0	2.0	1.0	1.0
P.I. 89775A	2.0	2.8	5.0	2.8	4.0	1.5	1.8	1.0	2.0	2.0	2.3	3.0	2.0
Tenn. Non-pop	2.1	3.0	3.0	3.0	3.0	2.2	2.0	1.0	2.3	1.0	2.5	1.5	3.0
Arksoy 2913	1.4	2.5	3.0	1.5	2.5	1.0	1.0	1.0	2.0	1.0	2.3	1.0	1.0
Ralsoy	1.5	2.8	3.0	1.5	2.5	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0
Mamredo	1.6*	2.5	2.0	2.0	3.3	2.0	1.3	1.0	2.5	1.0	1.3	1.0	3.0
P.I. 97066	2.8	4.0	5.0	4.2	3.8	2.2	2.0	1.0	2.8	4.0	4.0	3.0	1.0
Wood's Yellow	1.3	3.1	1.0	1.8	2.3	1.2	1.0	1.0	1.3	1.0	1.5	1.0	2.0
Monetta	2.8	3.3	5.0	3.8	3.3	2.8	3.0	4.0	4.0	2.0	3.8	1.0	4.0
S100	1.5*	1.9	1.0	1.0	2.5	1.0	2.5	1.0	2.5	1.0	2.5	1.0	1.0
Tokyo	1.9	3.3	4.0	1.8	3.0	2.5	1.8	1.0	2.3	1.0	2.3	1.0	4.0
Auburn #2	3.1	4.3	5.0	5.0	3.8	3.0	2.8	5.0	3.8	4.0	2.8	2.0	4.0
Mammoth Yellow	1.3	2.0	1.0	1.2	3.0	1.0	2.0	1.0	1.8	1.0	1.0	1.0	2.0
P.I. 84642	3.3	4.0	5.0	4.8	4.5	3.5	3.0	5.0	3.5	5.0	4.0	3.0	1.0
Georgia 731	2.8	3.4	5.0	4.2	4.0	2.8	3.0	1.0	2.5	3.0	3.3	4.0	2.0
Georgia 723	2.2	3.6	3.0	2.2	4.0	1.5	3.0	1.0	3.0	3.0	2.3	1.0	2.0
Magnolia	2.9	3.6	5.0	4.2	4.0	3.2	3.8	3.0	3.0	4.0	3.5	2.0	2.0
Macoupin	1.7	1.3	5.0	1.2	3.3	1.0	1.5	1.0	2.5	2.0	2.3	1.0	1.0
Arkan	1.4*	1.3	1.0	1.0	2.5	1.0	1.0	1.0	1.3	1.0	1.7	1.0	1.0
P.I. 86974	3.7	4.0	5.0	5.0	5.0	3.2	4.0	5.0	3.8	5.0	3.8	3.5	2.0
Boone	2.0	3.0	5.0	1.0	3.3	1.0	2.5	1.0	3.0	2.0	3.0	1.0	3.0
Rokusun 25A	1.1	1.5	1.0	1.0	1.8	1.0	1.0	1.0	1.3	1.0	1.3	1.0	1.0

*Only 25 tests included in the mean.

Table 17.(continued)

Strain	Keiser Ark.	West Point Miss.	States-ville N.C.	Wagon-er Okla.	Ex-peri-ment Ga.	Stutt-gart Ark.	Mari-anna Ark.	Heav-ener Okla.	State Col-lege Miss.	Still-water Okla.	Fay-ette-ville Ark.	Hope Ark.	Tren-ton N.C.	Wil-liams-burg Va.
Ogden	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
Volstate	1.0	2.0	2.0	1.0	1.0	3.0	2.0	1.0	1.0	2.0	1.0	1.0	1.0	2.0
Delsoy	1.0	1.0	1.0	2.0	1.0	3.0	3.0	2.0	1.0	3.0	1.5	1.0	1.0	1.0
Arksoy	1.0	1.0	1.0	2.0	1.0	2.0	3.0	1.0	1.0	1.0	1.5	1.0	1.0	2.0
P.I. 89775A	2.0	1.0	2.0	2.0	1.0	1.0	1.0	2.0	2.0	3.0	1.0	1.0	2.0	2.0
Tenn. Non-pop	1.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	3.0	3.0	1.0	1.0	2.0	1.0
Arksoy 2913	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
Ralsoy	1.0	1.0	1.0	2.0	1.0	1.0	2.0	2.0	1.0	2.0	1.0	1.0	1.0	2.0
Mamredo	-	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0
P.I. 97066	2.0	2.0	3.0	4.0	1.0	4.0	2.0	3.0	2.0	3.0	1.0	3.0	2.5	2.0
Wood's Yellow	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0
Monetta	2.0	3.0	3.0	2.0	1.0	4.0	2.0	2.0	3.0	2.0	2.0	1.0	3.0	3.0
S100	-	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0	2.0	2.0
Tokyo	1.0	1.0	3.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	2.0	1.0	2.0	1.0
Auburn #2	2.0	3.0	3.0	2.0	1.0	4.0	3.0	2.0	3.0	3.0	1.0	2.0	4.0	2.0
Mammoth Yellow	1.0	1.0	2.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	1.0	1.0
P.I. 84642	1.0	2.0	5.0	4.0	1.0	4.0	3.0	3.0	2.0	3.0	2.0	2.0	4.5	2.0
Georgia 731	2.0	2.0	4.0	4.0	1.0	4.0	1.0	3.0	2.0	4.0	1.5	2.0	3.0	1.0
Georgia 723	2.0	1.0	2.0	2.0	1.0	3.0	1.0	2.0	2.0	3.0	1.0	3.0	2.0	2.0
Magnolia	1.0	2.0	4.0	4.0	1.0	3.0	2.0	2.0	3.0	4.0	1.0	1.0	3.0	3.0
Macoupin	2.0	2.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0	2.0	2.0
Arkan	1.0	-	2.0	3.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	1.0	1.0	2.0
P.I. 86974	2.0	3.0	4.0	4.0	1.0	4.0	4.0	3.0	2.0	4.0	3.0	3.0	5.0	5.0
Boone	2.0	2.0	1.0	2.0	1.0	2.0	1.0	1.0	1.0	2.0	1.0	3.0	2.0	2.0
Rokusun 25A	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	2.0

Table 18. Summary of shattering notes for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 21 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.	Watkins-ville Ga.	Jack-son Tenn.	Colum-bia Tenn.	Au-burn Ala.	Clarke-dale Ark.
Ogden	1.7	2	3	1	1	1	1	1	1	2	1
Volstate	1.6	1	3	1	1	1	1	1	1	2	1
Delsoy	2.6	3	5	3	3	2	3	2	2	3	1
Arksoy	1.5	2	2	1	1	1	1	1	1	2	1
P.I. 89775A	1.6	2	1	1	2	1	1	1	1	2	1
Tenn. Non-pop	1.6*	1	2	1	1	1	1	1	1	3	1
Arksoy 2913	1.3	1	1	1	1	1	1	1	1	2	1
Ralsoy	1.4	1	2	1	2	1	1	1	1	2	1
Mamredo	3.0*	4	5	5	4	3	3	3	2	3	1
P.I. 97066	2.5	4	1	2	1	3	3	3	1	3	1
Wood's Yellow	2.1	1	3	2	2	2	3	1	2	3	1
Monetta	2.1	3	3	3	2	3	3	2	2	1	1
S100	1.9*	2	3	1	1	1	3	1	1	2	1
Tokyo	2.9	4	5	4	4	5	3	2	1	4	1
Auburn #2	2.3	2	3	2	2	3	3	2	1	2	1
Mammoth Yellow	3.1	4	3	5	4	5	3	3	2	5	1
P.I. 84642	2.9	5	3	5	2	5	3	3	2	4	1
Georgia 731	2.1	2	3	2	3	1	1	2	1	2	1
Georgia 723	3.0	5	5	3	3	3	3	2	4	2	2
Magnolia	2.3	3	3	3	2	3	3	1	1	2	1
Macoupin	1.9	1	3	1	4	1	3	1	2	2	1
Arkan	3.0*	4	3	5	4	3	3	3	1	2	3
P.I. 86974	3.3	5	5	5	2	5	3	2	2	3	1
Boone	2.1	1	3	2	2	2	3	1	1	2	1
Rokusun 25A	3.3*	5	3	5	4	5	3	4	3	2	3

*Only 20 tests included in the mean.

Table 18. (continued)

Strain	Keiser Ark.	West Point Miss.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.	Heavener Okla.	State College Miss.	Stillwater Okla.	Hope Ark.	Williamsburg Va.	Crossville Ala.
Ogden	2	2	1	5	2	1	2	2	1	1	2
Volstate	1	1	1	5	1	1	1	2	1	1	5
Delsoy	5	3	1	5	2	1	2	2	3	1	3
Arksoy	1	1	1	5	1	1	1	2	3	1	2
P.I. 89775A	2	2	2	5	1	2	2	2	1	1	1
Tenn. Non-pop	1	1	1	4	1	1	1	2	-	1	5
Arksoy 2913	1	1	1	5	1	1	1	2	1	1	2
Ralsoy	1	1	1	5	1	1	1	2	1	1	2
Mamredo	-	3	1	5	4	1	3	2	5	1	2
P.I. 97066	5	3	1	5	2	2	4	2	3	1	3
Wood's Yellow	2	1	1	5	1	1	2	2	3	1	5
Monetta	2	1	1	5	3	1	2	2	3	1	1
S100	-	3	1	5	1	1	2	4	3	1	1
Tokyo	3	2	1	5	2	1	2	2	4	1	5
Auburn #2	4	3	1	5	2	2	2	2	3	1	2
Mammoth Yellow	3	3	1	5	4	1	3	2	3	1	5
P.I. 84642	5	3	2	5	2	2	2	2	1	1	3
Georgia 731	1	3	2	5	1	2	4	4	1	1	2
Georgia 723	5	3	1	5	2	2	4	2	4	1	2
Magnolia	5	3	1	5	1	1	3	2	3	1	2
Macoupin	1	3	2	5	1	2	1	2	1	1	2
Arkan	5	-	2	5	4	2	3	2	3	1	2
P.I. 86974	5	3	2	5	4	2	4	2	5	1	3
Boone	1	3	2	5	1	5	2	4	1	1	1
Rokusun 25A	5	3	2	5	2	2	-	2	4	1	3

Table 19. Summary of plant height in inches for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 25 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.	Colum-bia Tenn.	Au-burn Ala.	Clarke-dale Ark.
Ogden	32.4	32	36	34	37	23	31	26	32	29	24	19	37
Volstate	34.0	41	44	30	41	25	36	30	39	36	30	18	46
Delsoy	29.9	35	39	32	37	23	40	26	34	32	24	19	38
Arksoy	27.9	29	28	30	37	22	32	20	36	28	25	21	41
P.I. 89775A	38.0	51	42	43	49	27	48	36	43	45	32	34	45
Tenn. Non-pop	41.0	49	54	44	54	30	50	36	50	42	32	39	47
Arksoy 2913	27.4	29	36	30	37	23	30	22	36	24	23	18	35
Ralsoy	27.7	30	30	30	37	22	30	20	36	27	24	17	35
Mamredo	31.8*	33	34	44	56	24	35	20	40	36	27	25	44
P.I. 97066	39.6	58	42	42	54	27	54	34	47	48	29	31	49
Wood's Yellow	33.5	38	36	36	45	27	45	32	40	30	30	22	41
Monetta	35.6	46	37	40	48	27	46	30	45	33	29	23	45
S100	34.0*	45	48	36	48	21	46	36	26	40	27	20	47
Tokyo	35.4	39	38	35	45	28	40	28	42	42	27	21	47
Auburn #2	38.4	52	41	48	55	27	46	36	41	48	35	39	42
Mammoth Yel.	30.9	35	36	32	43	25	38	24	38	32	27	19	39
P.I. 84642	44.2	59	48	57	62	30	56	34	52	56	34	45	52
Georgia 731	36.9	44	36	42	51	28	56	36	40	46	29	31	48
Georgia 723	34.0	39	40	37	46	21	42	28	45	40	32	22	44
Magnolia	37.9	49	42	42	48	30	42	30	45	48	24	35	42
Macoupin	32.5	40	36	36	45	21	42	30	24	42	24	20	48
Arkan	23.9*	18	28	20	34	22	27	18	25	22	15	12	30
P.I. 86974	43.6	60	48	60	56	34	54	30	50	32	30	45	57
Boone	30.0	38	36	35	39	15	40	30	20	38	21	18	38
Rokusun 25A	19.8	17	18	15	29	18	18	20	18	14	13	12	28
Mean	33.6	40.2	38.1	37.2	45.3	24.8	41.0	28.5	37.8	36.4	26.7	25.0	42.6

*Only 24 tests included in the mean.

Table 19. (continued)

Strain	Keiser Ark.	West Point Miss.	States-ville N.C.	Wagon-er Okla.	Experi-ment Ga.	Stutt-gart Ark.	Mari-anna Ark.	Heav-ener Okla.	State College Miss.	Still-water Okla.	Fayette-ville Ark.	Hope Ark.	Tren-ton N.C.
Ogden	35	20	36	28	16	26	28	18	27	34	25	32	25
Volstate	45	32	40	32	26	40	34	20	29	32	33	42	28
Delsoy	44	23	34	28	24	29	30	16	24	36	25	30	26
Arksoy	33	21	34	24	20	27	31	20	26	30	27	32	24
P.I. 89775A	45	39	40	30	38	34	34	20	35	32	25	34	48
Tenn. Non-pop	48	39	44	31	36	39	38	22	41	35	34	38	52
Arksoy 2913	31	20	36	24	16	26	29	18	25	30	26	35	25
Ralsoy	32	21	35	29	18	28	32	21	25	28	25	35	25
Mamredo	--	23	34	31	25	28	32	26	31	28	32	30	25
P.I. 97066	49	39	44	31	32	38	36	28	37	30	30	40	42
Wood's Yellow	39	30	38	31	30	31	30	24	32	30	26	40	34
Monetta	44	38	34	29	36	35	31	29	31	35	30	38	32
S100	--	34	38	24	28	34	30	15	36	34	28	41	34
Tokyo	43	38	42	27	32	36	34	24	33	32	32	46	35
Auburn #2	45	36	40	26	30	37	35	27	36	34	27	40	36
Mammoth Yel.	38	29	36	31	25	30	32	24	25	30	26	30	28
P.I. 84642	52	39	50	30	36	40	40	28	41	31	34	46	54
Georgia 731	45	33	42	25	24	35	32	20	34	31	28	40	47
Georgia 723	42	34	37	30	32	33	27	22	28	32	28	36	32
Magnolia	46	40	36	31	36	34	37	26	36	34	31	38	45
Macoupin	44	36	36	24	24	32	33	16	32	30	28	36	33
Arkan	28	--	30	26	16	26	26	20	24	30	26	28	22
P.I. 86974	51	41	44	30	46	40	44	30	39	36	36	44	54
Boone	37	33	36	28	22	27	26	15	29	36	29	35	30
Rokusun 25A	25	25	24	18	24	20	24	16	17	22	20	25	15
Mean			37.6	27.9	27.7	32.2	32.2	21.8	30.9	31.7	28.4	36.4	34.0

Table 20. Summary of maturity[2] notes for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 18 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.[1]	Wil-lard N.C.	We-nona N.C.[1]	Watkins-ville Ga.	Jack-son Tenn.[1]
Ogden	+ 4.6	0	+15	+ 2	0	+10	+3	0	+12
Volstate	+17.8	+20	+23	+16	*	+13	*	+16	*
Delsoy	+10.3	+ 7	+15	+ 6	*	+ 6	+3	+ 8	*
Arksoy	- 0.2	+ 5	0	0	0	- 4	0	0	+12
P.I. 89775A	+11.4	+12	+15	+ 8	+7	0	+3	+ 9	*
Tenn. Non-pop	+23.8	+33	+23	+24	*	+20	*	+23	*
Arksoy 2913	0.0	0	0	0	0	0	0	0	0
Ralsoy	+ 0.2	0	0	0	0	- 4	0	0	0
Mamredo	+ 0.6	-13	+15	+ 6	+5	0	+3	+ 8	- 1
P.I. 97066	+ 1.3	0	0	+ 5	0	0	+3	+ 8	+18
Wood's Yellow	+28.1	+33	+23	+24	*	+20	*	+29	*
Monetta	+16.7	+20	+15	+14	*	+10	*	+16	*
S100	-20.9	-36	0	-37	-10	-11	-20	-17	-15
Tokyo	+22.9	+33	+23	+19	*	+15	*	+23	*
Auburn #2	+11.4	+12	+15	+13	*	+ 3	*	+ 9	*
Mammoth Yel.	+22.1	+20	+21	+17	*	+10	*	+23	*
P.I. 84642	+ 8.1	+ 5	+15	+ 6	+ 3	+ 3	*	+ 9	*
Georgia 731	+ 1.2	- 8	0	- 2	- 7	+ 3	0	+ 8	- 1
Georgia 723	- 5.6	-17	0	-23	-10	- 8	-20	- 9	+10
Magnolia	+ 7.4	+ 5	0	+ 6	0	+ 2	+ 3	+ 8	*
Macoupin	-25.8	-48	-22	-37	-31	-11	-26	-17	-23
Arkan	- 1.8[a]	+12	0	- 4	- 2	0	0	0	+12
P.I. 86974	+ 8.9	0	+15	+ 6	0	0	*	+ 9	*
Boone	-26.4	-48	-22	-37	-20	-15	-26	-17	-23
Rokusun 25A	+ 2.0[a]	0	0	- 4	- 4	0	- 6	- 9	+12
Arksoy 2913 matured		10/7	9/30	10/1	10/5	10/12	9/28	9/23	9/24
Date planted		4/24	5/7	4/9	4/29	6/17	5/4	5/5	4/21

[1]Not included in the mean.
[2]Days earlier (-) or later (+) than Arksoy 2913.
[a]Only 17 tests included in the mean.
*Frosted.

Table 20. (continued)

Strain	Florence S.C.	Columbia Tenn.[1]	Auburn Ala.	West Point Miss.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.	Winchester Ark.
Ogden	0	- 2	-11	+ 10	+ 18	0	+ 1	+ 12
Volstate	+ 15	*	+ 11	+ 11	+ 21	+ 19	+ 18	+ 12
Delsoy	+ 15	*	0	+ 10	+ 26	+ 2	+ 1	+ 12
Arksoy	0	0	0	0	0	0	0	0
P.I. 89775A	+ 15	*	+ 11	+ 10	+ 18	+ 14	+ 18	+ 12
Tenn. Non-pop	+ 29	*	+ 27	+ 11	+ 24	+ 24	+ 35	+ 12
Arksoy 2913	0	0	0	0	0	0	0	0
Ralsoy	0	+ 3	0	0	+ 3	0	0	0
Mamredo	0	0	-21	- 2	+ 10	- 1	+ 1	0
P.I. 97066	0	0	-11	+ 5	0	- 1	0	+ 12
Wood's Yellow	+ 29	*	+ 27	+ 11	+ 26	+ 33	+ 35	+ 12
Monetta	+ 29	*	+ 11	+ 10	+ 26	+ 14	+ 15	+ 12
S100	-19	-22	-26	- 2	-19	-20	-31	-14
Tokyo	+ 29	*	+ 20	+ 11	+ 28	+ 14	+ 25	+ 12
Auburn #2	+ 15	*	0	+ 9	+ 26	+ 14	+ 1	+ 12
Mammoth Yellow	+ 29	*	+ 27	10	+ 28	+ 14	+ 18	+ 12
P.I. 84642	+ 15	*	0	+ 5	+ 18	+ 14	0	+ 12
Georgia 731	0	+ 3	-21	+ 3	+ 18	- 1	+ 1	+ 12
Georgia 723	-16	- 7	-26	+ 3	+ 18	-20	+ 1	0
Magnolia	0	*	0	+ 9	+ 18	+ 2	+ 1	+ 12
Macoupin	-25	-27	-27	- 2	-23	-20	-46	-22
Arkan	0	0	-21	--	0	0	- 1	0
P.I. 86974	+ 15	*	0	0	+ 18	+ 14	0	+ 12
Boone	-25	-24	-27	- 2	-15	-20	-46	-22
Rokusun 25A	0	- 7	-21	+ 5	+ 22	+ 2	+ 1	+ 12
Arksoy 2913 matured	9/20	10/12	9/24	10/9	10/15	9/26	10/11	10/2
Date planted	4/27	4/22	4/8	5/14	6/12	5/6	5/14	5/21

[1]Not included in the mean.
*Frosted.
Days earlier (-) or later (+) than Arksoy 2913.

Table 20. (continued)

Strain	Marianna Ark.	Heavener Okla.	State College Miss.	Stillwater Okla.	Hope Ark.	Williamsburg Va.	Crossville Ala.[1]
Ogden	0	+13	0	+10	- 4	+ 7	0
Volstate	0	+25	+28	+17	+37	+18	--
Delsoy	0	+13	+ 6	+25	+16	+18	0
Arksoy	0	0	0	0	- 4	0	0
P.I. 89775A	0	+13	+28	0	+16	+ 7	0
Tenn. Non-pop	+22	+25	+12	+17	+50	+18	--
Arksoy 2913	0	0	0	0	0	0	0
Ralsoy	0	0	0	+ 5	0	0	0
Mamredo	-19	- 2	- 7	+17	0	+18	0
P.I. 97066	0	0	+ 6	0	0	0	0
Wood's Yellow	+22	+25	+39	+30	+50	+37	--
Monetta	0	+16	+28	+30	+16	+18	0
S100	-48	0	-27	- 5	-36	-28	-13
Tokyo	+22	+25	+ 8	+20	+48	+37	--
Auburn #2	0	+13	+13	+17	+16	+18	0
Mammoth Yellow	+22	+25	+28	+25	+31	+37	--
P.I 84642	0	+13	+13	0	0	+18	0
Georgia 731	-19	+ 5	+ 6	+17	0	0	0
Georgia 723	-19	+ 5	+ 6	+17	- 4	- 8	-13
Magnolia	-19	+13	+13	+25	+31	+ 7	0
Macoupin	-58	0	-27	- 5	-36	-38	-13
Arkan	-19	0	+ 6	0	- 4	0	0
P.I. 86974	+19	+13	+ 6	0	+16	+18	0
Boone	-58	-15	-27	- 5	-36	-38	-13
Rokusun 25A	0	+13	--	+25	- 4	- 8	0
Arksoy 2913 matured	10/28	10/9	9/30	9/15	10/5	10/14	10/14
Date planted	5/8	6/11	4/13	4/28	5/10	5/18	5/5

[1]Not included in the mean.

Days earlier (-) or later (+) than Arksoy 2913.

Table 21. Summary of seed quality notes for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 25 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.	Colum-bia Tenn.	Au-burn Ala.	Clarke-dale Ark.
Ogden	1.9	2	1	2	2	2	2	1	2	2	3	2	2
Volstate	1.6	1	1	2	1	2	2	2	2	2	2	2	3
Delsoy	2.0	2	2	2	3	2	2	1	2	3	3	1	2
Arksoy	2.2	2	4	2	3	2	2	1	3	3	3	2	2
P.I. 89775A	2.5	4	2	2	3	1	2	2	3	3	4	3	2
Tenn. Non-pop	2.6	4	2	2	2	3	2	3	3	3	3	4	4
Arksoy 2913	2.2	2	2	2	2	2	2	1	3	3	3	2	2
Ralsoy	2.1	2	3	2	2	2	2	1	3	3	3	2	2
Mamredo	2.4	3	3	2	3	2	2	2	3	2	3	4	2
P.I. 97066	2.2	2	2	2	3	2	2	2	3	3	3	2	2
Wood's Yellow	2.2	2	4	2	2	2	3	4	4	4	4	4	4
Monetta	2.1	3	2	2	2	2	2	3	2	2	2	1	2
S100	3.0	4	2	3	4	3	3	1	4	3	5	4	3
Tokyo	2.4	2	3	2	2	3	3	2	3	3	3	4	3
Auburn #2	2.1	3	2	2	3	3	3	2	2	4	2	2	2
Mammoth Yellow	2.3*	2	1	2	3	2	2	3	3	-	3	3	2
P.I. 84642	2.2	3	2	2	2	3	2	3	3	3	3	3	2
Georgia 731	2.7	4	3	3	3	3	2	2	4	3	3	3	2
Georgia 723	3.1	4	3	4	4	4	4	1	3	3	4	3	3
Magnolia	2.4	2	4	2	3	2	2	2	3	3	3	3	2
Macoupin	3.4	4	3	3	4	3	4	1	5	3	5	3	3
Arkan	2.5*	4	3	3	3	2	2	1	3	2	4	3	2
P.I. 86974	2.2	2	2	2	3	2	3	2	2	4	3	2	2
Boone	4.0	5	4	3	5	4	4	1	5	3	5	4	4
Rokusun 25A	3.0**	4	4	4	2	3	4	1	4	3	4	4	2

*Only 24 tests included in the mean.
**Only 23 tests included in the mean.

Table 21. (continued)

Strain	Keiser Ark.	West Point Miss.	States-ville N.C.	Wagon-er Okla.	Stutt-gart Ark.	Win-chester Ark.	Mari-anna Ark.	Heav-ener Okla.	State College Miss.	Still-water Okla.	Fayette-ville Ark.	Hope Ark.	Williams-burg Va.
Ogden	1	1	2	1	2	3	2	1	3	3	2	2	1
Volstate	1	1	1	1	4	1	1	1	3	3	2	2	1
Delsoy	1	1	2	1	2	3	1	1	4	3	2	2	1
Arksoy	1	1	2	2	2	4	1	1	4	3	2	2	2
P.I. 89775A	2	2	2	2	4	3	1	1	4	4	3	2	1
Tenn. Non-pop	1	2	2	3	2	4	2	1	3	4	3	2	1
Arksoy 2913	1	1	2	2	3	4	2	1	4	3	2	2	2
Ralsoy	1	1	2	2	2	3	2	1	4	2	2	2	1
Mamredo	2	1	2	2	2	4	2	1	4	3	2	2	1
P.I. 97066	2	3	2	2	2	3	1	1	4	3	2	2	1
Wood's Yellow	1	1	4	2	2	4	2	1	3	3	4	2	1
Monetta	2	3	1	1	3	4	1	1	3	2	2	2	2
S100	3	3	3	2	2	4	2	1	5	3	4	3	1
Tokyo	2	2	2	1	3	4	1	1	3	3	2	2	1
Auburn #2	1	2	2	1	2	3	2	1	3	2	2	1	1
Mammoth Yel.	1	1	3	1	4	5	2	1	3	4	2	2	1
P.I. 84642	2	1	2	1	2	3	1	1	3	2	2	2	3
Georgia 731	2	3	3	1	2	4	2	1	4	4	3	2	1
Georgia 723	2	2	4	2	4	3	2	2	5	5	2	2	2
Magnolia	2	1	3	1	3	3	2	1	3	3	2	2	3
Macoupin	4	5	4	2	3	4	2	2	4	3	5	3	3
Arkan	2	-	3	1	2	3	1	1	4	3	2	2	3
P.I. 86974	2	2	3	1	2	3	2	1	3	2	2	2	2
Boone	4	4	4	2	4	5	3	3	5	5	5	4	4
Rokusun 25A	2	2	4	2	4	-	2	1	-	5	3	3	3

Table 22. Summary of seed size, grams per 100 seed, for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 26 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.(A)[1]	Wil-lard N.C.(B)	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.
Ogden	14.2	15	16	15	12	16	18	14	11	15	13
Volstate	13.4	14	16	16	15	16	15	12	13	12	13
Edsoy	13.4	13	14	15	13	16	16	13	12	13	13
Arksoy	11.8	11	13	13	12	11	14	12	10	11	12
P.I. 89775A	11.9	12	12	13	12	13	14	10	11	12	10
Tenn. Non-pop	15.6	18	17	19	17	20	17	14	19	13	18
Arksoy 2913	12.1	11	13	13	13	12	13	13	11	10	12
Ralsoy	12.1	12	13	13	12	12	16	13	11	10	13
Mamredo	12.9	13	14	14	13	13	15	13	13	11	13
P.I. 97066	11.3	11	12	13	9	13	13	11	10	12	11
Wood's Yellow	19.1	21	22	25	21	26	21	16	25	18	20
Monetta	11.4	12	12	12	11	13	13	10	13	10	12
S100	11.7	11	13	13	14	11	15	14	11	12	13
Tokyo	18.5	20	22	21	20	21	21	16	22	16	19
Auburn #2	9.7	10	10	11	9	13	11	9	9	8	10
Mammoth Yellow	15.2	15	17	18	18	18	15	15	18	14	15
P.I. 84642	9.0	8	9	10	8	11	10	8	9	9	10
Georgia 731	14.0	14	16	13	15	14	18	15	13	13	13
Georgia 723	11.2	10	15	10	11	10	14	13	10	11	11
Magnolia	13.2	13	13	14	11	15	17	14	12	14	14
Macoupin	12.2	10	13	15	14	11	15	13	12	13	14
Arkan	12.1	12	12	12	11	13	15	12	11	12	13
P.I. 86974	8.4	7	9	8	8	10	10	8	8	9	8
Boone	11.9	11	12	12	13	13	12	14	12	13	14
Rokusun 25A	18.3	15	21	19	19	--	21	23	18	19	18
Mean	13.0	12.8	14.2	14.3	13.2		15.2	13.0	13.0	12.4	13.3

(A)Early planting. (B) Late planting. [1]Not included in the mean.

Table 22. (continued)

Strain	Columbia Tenn.	Hartsville S.C.(A)	Hartsville S.C.(B)	Auburn Ala.	Clarkedale Ark.	Keiser Ark.	West Point Miss.[1]	Statesville N.C.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.
Ogden	14	13	17	15	16	14	15	15	13	13	15
Volstate	12	14	13	12	11	12	14	14	12	15	15
Edsoy	13	13	15	13	13	13	15	13	13	14	14
Arksoy	13	12	12	13	11	12	12	13	12	12	12
P.I. 89775A	13	11	13	10	11	10	13	14	14	12	15
Tenn. Non-pop	14	17	16	16	11	13	16	15	13	18	18
Arksoy 2913	13	12	12	13	12	12	12	13	12	13	12
Ralsoy	13	12	12	13	12	12	11	13	12	13	11
Mamredo	14	12	15	14	13	13	12	12	12	13	13
P.I. 97066	12	11	12	12	11	12	12	11	12	12	12
Wood's Yellow	16	22	21	20	15	18	19	19	17	23	20
Monetta	11	12	13	13	10	10	11	12	11	12	12
S100	10	13	13	15	10	10	13	10	14	13	8
Tokyo	16	19	20	18	14	16	18	19	18	20	22
Auburn #2	10	10	11	9	9	8	10	10	10	10	10
Mammoth Yellow	14	17	16	14	11	14	15	16	13	17	17
P.I. 84642	9	10	10	9	8	8	8	8	8	10	10
Georgia 731	15	14	18	15	13	14	15	15	15	15	14
Georgia 723	11	12	10	12	12	12	12	10	12	11	11
Magnolia	13	13	14	12	12	12	14	13	13	14	15
Macoupin	12	13	12	17	11	11	13	10	13	15	10
Arkan	14	13	14	13	12	13	--	14	12	11	12
P.I. 86974	9	9	9	10	7	7	7	9	8	10	10
Boone	13	15	13	16	10	11	15	10	14	15	9
Rokusun 25A	20	19	23	16	19	18	20	18	19	15	17
Mean	13.0	13.5	14.2	13.6	11.8	12.2		13.0	12.9	13.8	13.4

(A)Early planting. (B) Late planting. [1]Not included in the mean.

Table 22. (continued)

Strain	Winchester Ark.	Marianna Ark.	Heavener Okla.	State College Miss.[1]	Stillwater Okla.	Fayetteville Ark.	Hope Ark.	Williamsburg Va.	Crossville Ala.[1]	Belle Mina Ala.[1]
Ogden	14	15	17	13	11	15	10	14	12	--
Volstate	13	12	15	13	11	13	13	15	--	--
Edsoy	13	13	15	14	12	14	11	15	13	--
Arksoy	11	12	12	11	8	12	9	12	11	--
P.I. 89775A	11	10	14	12	11	12	10	13	10	--
Tenn. Non-pop	15	13	18	13	8	14	15	19	--	--
Arksoy 2913	11	11	13	12	11	12	9	14	11	--
Ralsoy	10	11	13	11	10	12	9	14	12	11
Mamredo	11	12	13	12	10	13	11	15	11	11
P.I. 97066	11	9	12	11	9	12	10	12	11	--
Wood's Yellow	17	14	20	16	13	14	16	22	--	--
Monetta	10	10	12	12	9	10	12	12	10	--
S100	10	10	12	13	9	11	9	10	11	12
Tokyo	17	15	20	18	12	17	19	23	--	--
Auburn #2	8	9	11	10	10	10	8	12	10	--
Mammoth Yellow	14	12	16	14	13	13	16	18	--	--
P.I. 84642	8	8	10	10	9	10	8	10	10	--
Georgia 731	12	11	15	12	10	12	10	15	11	--
Georgia 723	9	10	12	13	9	12	8	12	8	9
Magnolia	12	12	15	14	12	12	12	14	12	--
Macoupin	10	10	12	13	10	11	10	10	14	13
Arkan	11	10	12	14	11	12	10	11	11	10
P.I. 86974	8	6	9	8	7	9	8	9	9	--
Boone	10	9	12	12	10	11	9	10	13	12
Rokusun 25A	19	17	21	--	14	20	13	16	16	14
Mean	11.8	11.2	14.0		10.4	12.5	11.0	13.9		

[1]Not included in the mean.

Table 23. Summary of percentage of protein for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 26 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.(A)[1]	Wil-lard N.C.(B)	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.
Ogden	43.1	42.4	42.3	43.3	42.5	45.1	45.1	41.3	43.8	41.4	44.4
Volstate	40.9	38.4	40.5	39.7	39.7	43.1	42.5	41.0	45.2	36.3	43.3
Edsoy	44.9	44.4	42.0	45.9	44.1	47.9	44.8	44.1	48.3	40.5	46.5
Arksoy	45.5	44.0	43.7	43.7	43.5	45.6	46.3	43.2	46.6	43.0	47.2
P.I. 89775A	42.6	43.1	41.9	44.0	40.0	44.7	44.0	41.7	44.7	38.9	44.8
Tenn. Non-pop	43.7	44.0	43.6	43.8	40.5	46.4	46.1	43.6	45.5	38.3	45.3
Arksoy 2913	45.8	43.3	44.4	45.9	43.1	45.0	47.0	42.3	47.5	43.1	46.2
Ralsoy	45.9	44.5	45.5	44.8	43.5	46.8	47.4	44.1	47.9	44.2	46.7
Mamredo	42.5	40.6	41.8	43.7	41.8	43.2	43.6	40.7	44.5	39.8	44.4
P.I. 97066	45.5	45.0	45.5	46.4	44.3	47.8	46.7	43.1	47.6	42.9	47.1
Wood's Yellow	42.7	41.6	42.1	43.4	39.8	45.3	43.6	43.3	44.1	38.5	47.0
Monetta	44.3	43.4	42.2	42.4	41.1	46.9	44.7	43.4	45.5	41.1	46.8
S100	45.3	43.4	45.3	46.4	45.6	48.0	46.9	45.3	45.9	43.6	46.4
Tokyo	42.9	40.6	43.0	41.4	38.8	45.6	45.5	43.4	45.1	37.5	46.0
Auburn #2	43.4	43.5	42.9	43.7	42.6	48.9	45.3	42.6	46.8	39.7	47.7
Mammoth Yellow	44.9	43.1	42.8	45.3	43.0	46.7	45.7	44.0	48.0	39.3	48.8
P.I. 84642	45.0	45.3	45.6	45.6	43.1	49.2	47.7	46.6	49.1	41.3	48.1
Georgia 731	45.4	45.9	45.0	47.0	44.5	49.3	46.4	45.1	46.6	42.8	47.5
Georgia 723	45.5	45.1	46.8	46.8	43.8	46.8	46.2	45.4	47.3	42.3	45.9
Magnolia	44.3	43.0	42.4	44.9	44.1	47.0	45.1	43.2	46.1	41.6	45.9
Macoupin	43.3	41.1	44.2	43.8	42.9	45.3	42.7	42.3	42.1	43.4	45.9
Arkan	43.5	44.6	42.8	44.3	43.6	43.4	43.8	42.0	45.4	42.7	44.7
P.I. 86974	46.2	46.6	46.9	47.1	44.7	50.3	47.3	48.4	48.7	43.9	50.9
Boone	45.0	43.4	44.3	45.8	45.0	47.4	44.5	44.6	42.8	44.6	46.6
Rokusun 25A	46.4	45.7	45.3	46.7	46.8	--	45.3	46.7	49.4	47.5	48.1
Mean	44.3	43.4	43.7	44.6	42.9		45.4	43.7	46.2	41.5	46.5

(A)Early planting.
(B)Late planting.
[1]Not included in the mean.

Table 23. (continued)

Strain	Columbia Tenn.	Hartsville S.C.(A)	Hartsville S.C.(B)	Auburn Ala.	Clarkedale Ark.	Keiser Ark.	West Point Miss.[1]	Statesville N.C.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.
Ogden	41.5	44.3	41.9	46.9	40.9	38.9	41.8	39.7	45.0	44.8	47.1
Volstate	37.6	43.3	39.6	44.4	38.2	33.9	40.2	39.1	45.0	43.5	47.1
Edsoy	41.7	47.1	45.3	46.6	44.5	42.3	47.1	41.1	48.8	46.6	47.6
Arksoy	43.9	46.6	43.8	46.7	44.3	42.1	46.4	48.8	47.7	46.5	49.7
P.I. 89775A	40.0	45.0	43.3	45.3	41.6	37.5	44.5	42.0	44.4	43.5	47.3
Tenn. Non-pop	39.6	45.3	41.3	47.0	42.1	41.0	45.9	43.0	48.2	45.1	46.5
Arksoy 2913	44.4	46.3	45.5	47.0	45.1	41.9	45.9	47.1	48.2	46.6	52.1
Ralsoy	44.7	45.3	45.2	46.9	46.5	42.2	46.3	47.8	47.7	48.4	50.9
Mamredo	40.9	42.7	41.7	44.5	40.5	37.3	40.7	39.1	44.4	44.2	46.1
P.I. 97066	43.8	46.4	43.0	45.5	45.5	44.7	45.8	44.1	47.3	44.3	49.5
Wood's Yellow	39.4	42.8	40.2	45.4	42.5	39.9	44.2	41.8	46.6	41.9	45.4
Monetta	39.9	45.3	44.2	45.2	44.2	41.0	44.8	41.0	49.6	43.2	51.5
S100	48.1	45.7	46.6	47.1	43.1	39.6	45.1	45.9	47.9	47.1	44.4
Tokyo	37.8	44.1	41.9	46.3	41.6	37.5	44.2	42.4	48.5	43.9	47.9
Auburn #2	40.0	45.1	42.6	43.6	42.5	37.9	46.5	41.8	46.5	44.6	48.0
Mammoth Yellow	40.3	45.6	43.2	49.8	43.7	41.8	45.5	41.6	50.7	46.5	50.9
P.I. 84642	43.2	46.3	42.2	48.7	43.7	42.3	44.8	41.6	46.3	45.8	48.0
Georgia 731	42.8	47.6	43.5	46.9	46.1	42.0	47.4	42.4	47.5	45.3	50.3
Georgia 723	42.9	48.5	45.3	44.2	46.3	41.8	41.4	46.1	48.5	43.6	50.7
Magnolia	41.6	46.6	42.7	45.7	43.9	41.5	44.2	44.1	44.7	45.1	48.8
Macoupin	47.6	43.8	43.0	46.5	42.7	40.5	44.5	43.1	45.6	43.4	43.0
Arkan	42.5	44.6	42.7	45.0	43.8	40.1	--	44.4	43.6	46.3	46.5
P.I. 86974	44.3	46.4	43.9	49.8	44.0	43.8	47.1	43.9	46.6	47.2	47.9
Boone	49.5	47.4	46.1	46.7	43.5	39.5	45.3	45.9	49.2	43.8	45.6
Rokusun 25A	46.1	45.6	45.0	44.2	45.1	43.3	46.9	47.1	49.7	46.4	50.8
Mean	42.6	45.5	43.3	46.2	43.4	40.6		43.4	47.1	45.1	48.1

(A)Early planting. (B) Late planting. [1]Not included in the mean.

Table 23. (continued)

Strain	Winchester Ark.	Marianna Ark.	Heavener Okla.	State College Miss.[1]	Stillwater Okla.	Fayetteville Ark.	Hope Ark.	Williamsburg Va.	Crossville Ala.[1]	Belle-Mina Ala.[1]
Ogden	42.4	38.1	46.3	48.7	48.7	44.9	39.7	43.2	45.3	--
Volstate	38.7	35.0	42.5	44.8	47.2	42.7	37.5	41.9	--	--
Edsoy	43.8	38.5	46.7	48.8	50.2	46.7	43.8	45.7	47.3	--
Arksoy	43.5	42.4	45.9	49.9	51.1	46.9	45.4	46.4	46.7	--
P.I. 89775A	40.5	37.2	44.7	47.4	48.6	41.8	38.8	42.4	43.6	--
Tenn. Non-pop	44.2	39.3	45.3	47.9	47.3	45.1	40.9	43.8	--	--
Arksoy 2913	45.5	42.8	48.5	49.7	51.7	47.5	44.5	44.6	45.5	--
Ralsoy	44.5	42.3	47.5	50.7	45.9	48.2	45.7	45.2	46.9	47.9
Mamredo	40.9	39.4	44.5	47.4	47.0	45.5	41.1	44.2	45.5	47.0
P.I. 97066	46.3	38.0	46.4	49.3	52.3	47.0	44.1	45.4	44.9	--
Wood's Yellow	44.1	37.6	43.4	46.2	48.2	43.9	41.6	42.1	--	--
Monetta	43.8	42.2	48.7	48.2	51.4	46.1	39.4	44.6	44.5	--
S100	41.8	40.2	48.2	49.9	48.6	49.4	39.3	45.8	45.6	48.2
Tokyo	42.5	38.4	45.2	46.7	48.6	43.7	40.0	43.8	--	--
Auburn #2	42.0	36.6	44.5	44.9	50.4	44.2	37.8	44.7	45.1	--
Mammoth Yellow	44.3	37.3	46.3	47.4	51.5	45.2	42.7	45.5	--	--
P.I. 84642	42.3	39.4	46.5	49.6	49.8	46.1	40.5	45.6	43.5	--
Georgia 731	45.2	39.9	44.6	50.5	50.3	47.1	43.3	45.4	46.3	--
Georgia 723	42.1	40.3	46.3	50.9	51.8	45.2	42.7	46.4	43.6	45.1
Magnolia	41.0	40.4	47.5	49.1	49.3	44.5	42.3	45.3	45.0	--
Macoupin	40.5	36.4	45.2	47.5	46.3	47.4	39.4	43.4	44.1	46.9
Arkan	41.7	37.5	43.8	47.7	46.5	42.8	41.7	44.2	47.6	46.5
P.I. 86974	45.1	42.7	46.8	51.0	50.5	46.6	41.8	46.6	46.7	--
Boone	42.2	34.9	47.7	50.4	50.8	49.8	40.5	45.4	45.6	48.1
Rokusun 25A	46.2	42.7	47.3	--	45.1	47.2	47.0	46.8	48.4	50.6
Mean	43.0	39.2	46.0		49.2	45.8	41.7	44.7		

[1]Not included in the mean.

Table 24. Summary of percentage of oil for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 26 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.(A)[1]	Wil-lard N.C.(B)	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.
Ogden	19.5	20.8	21.2	20.2	19.3	19.4	18.1	21.2	18.7	20.5	19.3
Volstate	19.9	21.7	21.1	21.0	20.3	19.5	19.3	20.4	19.7	20.8	19.5
Edsoy	16.9	17.7	18.5	17.8	17.6	17.5	16.4	18.2	16.4	17.7	17.0
Arksoy	18.6	19.7	20.6	20.3	19.4	19.2	18.3	20.2	17.6	19.0	18.5
P.I. 89775A	18.3	18.5	19.5	19.3	18.7	18.0	18.0	19.4	17.7	19.0	17.2
Tenn. Non-pop	18.2	19.1	19.9	18.6	19.5	16.0	17.9	19.0	18.9	19.1	18.2
Arksoy 2913	18.7	19.9	20.7	19.5	19.8	20.0	18.5	21.0	18.3	19.4	19.4
Ralsoy	18.5	19.9	20.4	19.6	19.2	19.3	17.7	20.5	17.7	19.0	19.1
Mamredo	18.9	20.7	19.6	19.1	18.6	19.2	17.9	20.1	19.1	20.1	19.2
P.I. 97066	17.8	18.2	18.9	18.7	17.2	18.0	16.2	19.8	17.6	18.4	17.9
Wood's Yellow	16.8	19.2	18.1	17.3	18.2	17.0	17.0	17.3	17.0	17.6	16.1
Monetta	15.1	16.3	16.1	16.0	15.9	14.0	15.4	15.4	15.8	15.6	15.2
S100	18.3	18.3	18.9	18.1	18.1	16.9	18.1	18.9	18.1	18.9	18.2
Tokyo	17.6	19.8	18.4	18.3	18.8	16.8	16.3	18.6	18.4	18.7	17.2
Auburn #2	18.2	18.1	19.5	18.3	18.2	17.3	17.2	19.0	17.6	18.7	16.4
Mammoth Yellow	17.1	18.5	18.2	17.4	17.3	16.8	16.2	18.5	16.5	18.3	15.6
P.I. 84642	18.0	17.7	18.3	17.8	18.2	16.5	16.8	18.3	17.1	18.9	17.0
Georgia 731	18.7	18.9	20.2	18.8	19.1	17.9	18.1	19.4	18.8	20.1	18.3
Georgia 723	17.1	17.7	17.6	16.1	17.0	17.1	17.9	18.1	15.8	18.7	19.9
Magnolia	19.2	19.8	21.4	19.5	19.1	19.6	19.0	21.4	19.3	19.5	19.5
Macoupin	20.6	21.0	21.1	21.0	21.6	20.2	21.8	21.7	21.1	22.5	19.8
Arkan	19.3	19.4	20.8	19.7	18.9	21.1	18.0	20.8	19.3	20.0	20.2
P.I. 86974	17.4	16.9	17.4	16.8	17.0	16.3	16.1	17.3	17.5	17.4	16.4
Boone	19.4	19.8	20.6	20.3	20.3	20.5	19.5	20.4	20.4	21.2	19.5
Rokusun 25A	17.1	18.3	19.4	18.0	16.9	--	17.2	18.9	17.4	17.0	17.4
Mean	18.2	19.0	19.5	18.7	18.6		17.7	19.4	18.1	19.0	18.1

(A)Early planting. (B) Late planting. [1]Not included in the mean.

Table 24. (continued)

Strain	Columbia Tenn.	Hartsville S.C.(A)	Hartsville S.C.(B)	Auburn Ala.	Clarkedale Ark.	Keiser Ark.	West Point Miss.[1]	Statesville N.C.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.
Ogden	20.0	18.2	20.7	20.1	20.7	21.6	20.4	19.7	18.0	19.5	18.1
Volstate	20.0	20.2	21.1	19.1	20.2	21.4	20.8	19.6	17.2	20.7	18.1
Edsoy	17.1	15.9	18.3	17.7	16.5	17.4	16.2	16.5	15.1	17.9	15.3
Arksoy	17.7	18.1	18.9	19.7	18.5	19.8	18.3	17.7	17.2	19.1	16.2
P.I. 89775A	17.3	17.0	19.4	18.0	17.3	19.0	17.7	17.9	17.3	19.6	16.6
Tenn. Non-pop	18.4	18.0	19.6	18.1	18.8	18.6	17.6	17.8	15.8	19.8	17.4
Arksoy 2913	18.1	18.4	18.5	20.1	18.7	20.4	18.3	17.1	16.9	20.0	15.9
Ralsoy	18.1	18.1	18.4	19.8	18.2	20.3	18.0	16.9	17.4	19.1	15.6
Mamredo	18.9	18.9	18.7	20.3	19.9	21.2	19.5	17.6	17.0	19.7	16.6
P.I. 97066	17.3	16.5	19.4	20.0	17.5	17.4	18.7	17.3	16.8	20.2	15.6
Wood's Yellow	16.1	17.4	17.8	16.7	17.2	17.0	17.1	15.7	15.4	18.3	16.0
Monetta	15.4	14.5	15.8	16.4	14.3	15.8	15.5	14.8	13.4	16.6	13.4
S100	17.5	18.8	17.7	19.1	19.1	20.4	18.2	17.4	16.8	18.5	18.3
Tokyo	17.8	18.8	18.9	17.5	17.9	18.7	18.0	16.8	15.2	18.1	15.8
Auburn #2	18.1	18.1	19.2	18.9	17.9	19.7	16.9	18.3	17.2	18.9	17.0
Mammoth Yellow	16.9	17.1	18.3	17.0	17.4	17.7	17.1	16.9	14.5	18.3	16.7
P.I. 84642	17.7	18.3	19.7	18.3	18.0	18.2	17.9	18.9	17.1	19.0	16.8
Georgia 731	19.5	18.1	20.2	20.1	18.2	19.9	17.4	17.5	16.8	20.4	16.8
Georgia 723	16.9	16.6	16.9	17.8	17.1	19.0	16.9	16.7	15.5	18.8	15.3
Magnolia	18.8	17.4	20.5	19.9	18.6	19.4	19.5	17.6	18.5	21.0	17.8
Macoupin	20.0	20.9	19.8	21.3	20.9	21.1	20.2	19.2	17.5	20.0	20.9
Arkan	19.4	18.8	19.7	21.0	19.5	20.7	--	18.4	18.2	19.9	17.1
P.I. 86974	17.1	17.0	18.6	18.0	17.5	17.3	16.9	18.0	17.0	18.2	16.7
Boone	18.7	20.6	18.7	20.3	19.9	20.3	19.4	17.9	16.6	20.2	18.5
Rokusun 25A	17.1	18.0	17.6	20.5	17.4	18.5	17.0	15.0	14.3	18.5	15.2
Mean	18.0	18.0	18.9	19.0	18.3	19.2		17.5	16.5	19.2	16.7

(A)Early planting. (B) Late planting. [1]Not included in the mean.

Table 24. (continued)

Strain	Win-chester Ark.	Mari-anna Ark.	Heav-ener Okla.	State College Miss.[1]	Still-water Okla.	Fayette-ville Ark.	Hope Ark.	Williams-burg Va.	Cross-ville Ala.[1]	Belle Mina Ala.[1]
Ogden	19.2	20.6	18.4	18.5	16.4	18.0	19.1	19.6	20.0	--
Volstate	20.3	21.1	19.4	19.0	16.4	17.9	21.2	20.0	--	--
Edsoy	17.1	18.1	16.8	15.7	14.0	15.3	16.9	17.3	18.2	--
Arksoy	19.3	19.3	18.4	17.1	15.2	16.6	18.2	18.9	19.1	--
P.I. 89775A	18.8	19.8	18.6	15.9	15.2	17.6	19.3	18.8	19.8	--
Tenn. Non-pop	17.8	18.4	17.7	16.3	13.7	16.7	18.7	18.8	--	--
Arksoy 2913	19.5	19.1	18.5	17.3	15.3	16.8	18.2	19.5	20.2	--
Ralsoy	18.8	19.5	18.3	16.7	15.5	16.3	18.4	19.4	20.0	18.0
Mamredo	19.1	20.6	18.1	18.5	16.9	16.4	19.8	18.0	19.1	17.5
P.I. 97066	16.9	19.4	17.8	16.4	14.2	16.2	18.4	18.8	19.0	--
Wood's Yellow	15.4	17.7	17.0	15.3	14.2	14.4	17.0	16.2	--	--
Monetta	13.8	15.8	13.0	14.5	12.3	13.4	16.9	14.4	15.0	--
S100	19.3	20.3	17.3	17.2	15.9	16.2	19.2	17.9	19.7	18.2
Tokyo	17.2	18.1	16.5	16.2	13.8	15.8	18.3	17.4	--	--
Auburn #2	18.2	19.8	18.6	16.7	15.6	17.3	19.6	18.1	18.1	--
Mammoth Yellow	17.5	18.2	16.4	15.9	15.4	15.7	18.0	16.2	--	--
P.I. 84642	18.4	19.6	18.2	15.9	15.9	17.2	19.3	18.2	18.7	--
Georgia 731	18.2	19.9	19.2	17.1	15.0	16.2	19.4	18.8	18.7	--
Georgia 723	18.5	17.7	16.7	16.0	13.7	16.4	16.2	17.1	18.5	17.3
Magnolia	19.5	19.3	18.6	16.6	16.6	18.2	19.0	19.7	19.9	--
Macoupin	21.6	23.0	19.0	19.7	18.5	18.3	21.5	19.6	22.4	20.8
Arkan	19.6	20.7	18.8	18.7	17.0	17.6	19.8	19.2	18.7	19.4
P.I. 86974	19.1	17.9	17.7	15.8	15.4	16.8	18.7	17.6	17.7	--
Boone	20.2	23.5	17.5	18.0	16.1	16.2	19.9	18.5	21.6	19.8
Rokusun 25A	16.6	16.7	16.7	--	14.1	15.4	17.0	16.5	16.9	15.5
Mean	18.4	19.4	17.7		15.3	16.5	18.7	18.2		

[1]Not included in the mean.

Table 25. Summary of iodine number of the oil for the strains in the Uniform Test, Group V, Upper South, 1943.

Strain	Mean of 26 Tests	Stone-ville Miss.	Clem-son S.C.	McCul-lers N.C.	Knox-ville Tenn.	Wil-lard N.C.(A)[1]	Wil-lard N.C.(B)	We-nona N.C.	Watkins-ville Ga.	Jack-son Tenn.	Flor-ence S.C.
Ogden	133.5	132.6	134.3	135.4	137.5	133.7	134.3	133.2	132.1	134.3	133.4
Volstate	134.6	134.5	133.2	134.8	135.2	130.8	133.3	133.5	133.2	136.4	131.6
Edsoy	133.4	134.7	132.6	131.8	134.3	127.5	133.2	132.8	130.6	134.3	129.4
Arksoy	132.1	134.0	131.6	134.6	134.7	132.4	126.1	132.6	132.2	133.7	132.2
P.I. 89775A	134.8	133.5	134.0	132.6	136.0	125.8	136.0	133.8	135.1	136.9	130.5
Tenn. Non-pop	135.0	135.4	133.2	134.7	134.5	133.1	132.9	133.1	133.4	135.4	134.3
Arksoy 2913	131.6	134.3	131.1	133.2	133.3	132.3	134.6	131.7	132.3	133.2	132.1
Ralsoy	131.5	133.7	131.6	133.6	134.6	132.6	127.5	131.8	132.9	133.0	131.0
Mamredo	127.0	125.2	128.7	126.4	132.6	123.6	131.6	126.6	122.3	126.4	123.2
P.I. 97066	131.6	130.3	125.6	130.1	134.3	132.0	133.9	131.2	125.5	133.4	126.6
Wood's Yellow	133.1	132.6	131.7	133.6	132.6	128.4	131.5	131.0	131.5	134.1	131.6
Monetta	136.4	134.3	135.0	137.2	137.2	135.7	136.3	136.2	132.3	136.3	132.7
S100	126.4	126.9	127.7	128.2	130.6	127.7	129.3	127.7	130.5	126.6	128.7
Tokyo	135.2	135.1	133.6	135.7	134.8	134.1	133.0	133.6	132.9	136.3	133.3
Auburn #2	132.9	132.9	132.1	133.4	135.2	128.6	125.9	135.0	130.5	135.9	129.4
Mammoth Yellow	133.8	134.3	133.7	134.7	134.3	130.9	133.8	130.6	132.9	135.1	130.1
P.I. 84642	131.1	130.9	129.2	130.0	131.8	131.6	131.7	131.0	127.5	132.1	127.3
Georgia 731	129.6	126.4	127.5	131.3	131.2	125.8	131.5	130.3	126.0	127.3	124.9
Georgia 723	131.8	130.9	129.9	131.8	133.4	130.3	130.6	128.0	131.2	133.3	132.3
Magnolia	130.4	128.0	128.6	130.7	131.3	125.0	130.9	127.5	126.0	132.0	124.9
Macoupin	123.1	123.4	123.2	124.9	128.0	125.9	128.3	123.0	129.2	120.5	123.1
Arkan	127.1	127.5	126.9	127.0	126.6	124.1	129.8	127.2	125.5	127.1	124.4
P.I. 86974	133.2	134.4	132.3	133.2	134.4	132.4	134.6	133.2	129.4	133.7	129.8
Boone	119.7	121.2	123.5	115.3	125.8	117.3	133.5	121.6	128.3	114.6	118.0
Bokusun 25A	130.5	126.9	126.5	128.0	130.0	---	138.0	125.2	127.1	133.3	128.6
Mean	131.2	131.0	130.3	131.3	133.0		132.1	130.5	130.0	131.8	128.9

(A)Early planting.
(B)Late planting.
[1]Not included in the mean.

Table 25. (continued)

Strain	Columbia Tenn.	Hartsville S.C.(A)	Hartsville S.C.(B)	Auburn Ala.	Clarkedale Ark.	Keiser Ark.	West Point Miss.[1]	Statesville N.C.	Wagoner Okla.	Experiment Ga.	Stuttgart Ark.
Ogden	138.7	134.5	130.3	129.9	133.2	133.2	133.2	133.7	137.7	131.2	130.9
Volstate	136.8	133.2	131.2	133.7	133.4	132.8	133.7	133.5	139.4	133.3	134.4
Edsoy	135.4	133.7	131.1	131.2	133.4	132.9	132.6	136.4	136.9	131.2	133.7
Arksoy	134.7	130.9	132.6	132.3	132.3	133.5	133.5	130.7	133.2	132.1	130.9
P.I. 89775A	138.3	135.9	134.0	129.2	134.4	135.1	134.1	136.0	137.4	131.6	134.5
Tenn. Non-pop	136.9	133.7	130.6	134.7	134.7	133.2	132.9	133.9	138.8	134.5	135.7
Arksoy 2913	134.6	131.2	132.0	133.7	130.7	131.8	133.2	129.3	133.7	130.7	128.3
Ralsoy	134.0	131.7	132.1	133.4	131.2	132.0	133.4	129.3	133.2	130.9	130.0
Mamredo	132.6	126.9	128.4	120.8	125.8	125.8	127.7	130.9	134.0	124.2	124.9
P.I. 97066	134.7	130.7	135.5	126.6	132.1	132.4	131.5	133.9	135.4	129.3	131.5
Wood's Yellow	136.7	129.4	129.4	131.5	134.4	132.9	130.6	134.3	135.1	132.1	133.2
Monetta	137.7	133.4	133.2	132.9	134.7	134.3	133.3	136.8	141.3	135.8	135.4
S100	128.8	122.9	127.7	126.4	124.4	120.1	125.7	126.4	132.4	124.9	119.6
Tokyo	137.3	133.3	130.8	134.5	135.6	134.3	133.8	134.3	137.4	136.0	137.6
Auburn #2	136.3	132.3	131.2	130.9	131.1	132.1	130.0	134.3	135.5	133.6	132.3
Mammoth Yellow	137.4	132.1	131.5	130.0	132.9	132.6	133.2	135.3	137.0	130.9	131.6
P.I. 84642	133.4	130.3	129.8	127.7	130.3	131.5	131.2	131.7	134.1	131.2	131.7
Georgia 731	132.3	127.6	130.0	125.1	130.0	130.3	128.8	132.0	135.1	125.5	129.7
Georgia 723	135.7	127.7	130.3	134.0	132.6	131.6	128.8	130.1	135.4	128.6	132.3
Magnolia	133.4	127.7	131.1	125.2	130.5	130.3	129.2	133.3	135.4	127.5	131.9
Macoupin	122.0	121.6	128.8	119.2	119.8	117.7	119.7	126.9	128.8	119.4	117.3
Arkan	128.8	125.2	126.9	124.1	128.8	127.1	---	126.5	133.7	119.8	127.2
P.I. 86974	134.7	132.2	132.1	129.4	133.0	132.6	132.9	133.4	136.7	133.2	133.9
Boone	121.0	114.1	124.3	110.1	117.2	117.2	115.5	122.9	128.0	119.4	109.3
Rokusun 25A	133.4	128.8	128.0	129.4	131.5	131.7	130.9	134.3	137.0	128.3	130.6
Mean	133.8	129.6	130.5	128.6	130.7	130.4		132.0	135.3	129.4	129.9

(A)Early planting. (B) Late planting. [1]Not included in the mean.

Table 25. (continued)

Strain	Win-chester Ark.	Mari-anna Ark.	Heav-ener Okla.	State College Miss.[1]	Still-water Okla.	Fayette-ville Ark.	Hope Ark.	Williams-burg Va.	Cross-ville Ala.[1]	Belle Mina Ala.[1]
Ogden	130.4	134.5	135.1	126.6	130.8	135.1	128.7	137.4	133.0	---
Volstate	133.7	136.9	137.1	133.6	136.3	139.7	132.9	136.6	---	---
Edsoy	132.0	136.6	134.6	131.7	134.3	137.3	129.3	135.5	130.0	---
Arksoy	128.9	131.7	130.6	130.4	131.2	134.3	128.9	133.7	131.0	---
P.I. 89775A	134.6	137.2	135.3	131.6	135.7	136.9	132.6	137.8	134.6	---
Tenn. Non-pop	135.1	136.9	135.8	135.4	141.6	137.7	135.2	135.5	---	---
Arksoy 2913	127.2	130.6	130.6	129.8	128.6	132.1	128.0	133.6	131.5	---
Ralsoy	129.4	128.7	131.0	129.9	128.9	133.4	127.7	133.6	130.9	130.9
Mamredo	125.3	120.1	130.8	118.7	126.0	131.7	118.2	131.5	126.9	125.8
P.I. 97066	130.0	134.5	135.7	124.2	133.4	135.7	124.2	134.7	127.2	---
Wood's Yellow	134.2	135.0	133.2	133.1	136.9	136.1	131.1	136.0	---	---
Monetta	137.4	139.7	141.1	134.0	140.0	143.4	132.2	140.3	139.9	---
S100	121.7	123.5	127.0	115.9	124.3	127.8	121.2	130.9	126.9	135.4
Tokyo	135.4	136.6	136.9	135.6	139.4	139.2	134.3	135.4	---	---
Auburn #2	132.4	136.9	134.6	128.1	132.2	136.7	128.0	135.7	134.0	---
Mammoth Yellow	132.6	137.4	135.7	131.7	134.0	138.7	132.3	136.3	---	---
P.I. 84642	131.2	134.5	134.0	129.4	130.3	135.0	127.7	133.3	134.4	---
Georgia 731	128.3	129.3	131.6	121.2	133.2	136.1	124.3	133.4	128.3	---
Georgia 723	129.8	134.7	135.1	128.8	133.3	135.5	128.8	130.9	128.6	127.4
Magnolia	131.0	133.1	133.4	127.0	130.8	135.7	128.6	132.9	131.5	---
Macoupin	120.9	121.2	124.2	108.7	117.0	123.2	118.7	131.5	123.9	120.3
Arkan	125.3	126.9	132.2	121.2	126.7	130.1	121.1	132.6	125.8	122.9
P.I. 86974	131.5	134.5	136.0	131.5	134.0	136.6	129.9	135.7	134.7	---
Boone	115.2	116.6	118.2	108.2	111.4	121.2	115.8	129.3	121.9	115.7
Rokusun 25A	127.4	133.3	132.3	---	133.8	133.9	126.8	130.3	128.4	129.9
Mean	129.6	132.0	132.9		131.4	134.5	127.5	134.2		

[1] Not included in the mean.

Table 26. Analysis of variance for yield of seed from 26 locations for the Uniform Test, Group V, Upper South, 1943.

Source of Variation	Degrees of Freedom	Mean Square
Locations	25	3576.7322**
Varieties	24	892.2554**
Locations x varieties	600	57.5086**
Error	1950	11.6328

**Highly significant.

Table 27. "F" values as determined by analysis of variance for agronomic and chemical data for the Uniform Test, Group V, Upper South, 1943.

Source of Variation	Degrees of Freedom	"F" Values			
		Seed Size	Percent Protein	Percent Oil	I2 No. of Oil
Locations	25	15.41**	59.82**	174.10**	19.09**
Varieties	24	94.91**	23.37**	232.35**	79.41**
Error	600				

**Highly significant.

Table 28. Mean response of the varieties in Group V of the Uniform Test to Location, 1943.

Location	Rainfall June, July, & Aug.	Mean Temp. July & Aug.	Date Planted	Mean of All Varieties: Plant Height (In.)	Yield (Bu. per A.)	Wt. of 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
Knoxville, Tenn.	14.3	78.5	4/29	45.3	20.2	13.2	42.9	18.6	133.0
Columbia, Tenn.	15.2	80.2	4/22	26.7	15.9	13.0	42.6	18.0	133.8
Jackson, Tenn.	6.9	81.2	4/21	37.8	16.6	12.4	41.5	19.0	131.8
Williamsburg, Va.	12.7	77.2	5/18		21.3	13.9	44.7	18.2	134.2
McCullers, N.C.	18.4	79.2	4/9	37.2	23.0	14.3	44.6	18.7	131.3
Wenona, N.C.	11.6	77.5	5/4	41.0	18.8	13.0	43.7	19.4	130.5
Willard, N.C.	19.9	78.9	6/17	24.8	18.9	15.2	45.4	17.7	132.1
Statesville, N.C.	13.6	78.4	5/6	37.6	12.2	13.0	43.4	17.5	132.0
Stillwater, Okla.	3.4	85.0	4/28	31.7	5.1	10.4	49.2	15.3	131.4
Wagoner, Okla.	7.7	86.8	6/12	27.9	11.6	12.9	47.1	16.5	135.3
Heavener, Okla.	2.9	86.7	6/11	21.8	6.9	14.0	46.0	17.7	132.9
Fayetteville, Ark.	6.4	82.5	5/3	28.4	4.3	12.5	45.8	16.5	134.5
Keiser, Ark.	4.6		4/23			12.2	40.6	19.2	130.4
Clarkedale, Ark.	4.1		5/7	42.6	13.1	11.8	43.4	18.3	130.7
Marianna, Ark.	2.9	83.5	5/8	32.2	7.0	11.2	39.2	19.4	132.0
Stuttgart, Ark.	2.3	83.6	5/14	32.2	10.6	13.4	48.1	16.7	129.9
Winchester, Ark.	5.2	85.7	5/21		8.8	11.8	43.0	18.4	129.6
Hope, Ark.	4.1	84.4	5/10	36.4		11.0	41.7	18.7	127.5
Stoneville, Miss.	7.8	83.3	4/24	40.2	27.5	12.8	43.4	19.0	131.0
Auburn, Ala.	10.4	81.7	4/8	25.0	13.6	13.6	46.2	19.0	128.6
Fairhope, Ala.	21.9	82.5	5/24		11.2	10.6	47.6	17.0	130.1
Watkinsville, Ga.	17.0	79.3	5/5	28.5	18.6	13.0	46.2	18.1	130.0
Experiment, Ga.	11.6	79.6	5/6	27.7	11.2	13.8	45.1	19.2	129.4
Millen, Ga.	15.7	82.3	5/4	24.2	14.7	13.4	44.5	18.6	127.9

Table 28. (continued)

Location	Rainfall June, July, & Aug.	Mean Temp. July & Aug.	Date Planted	Mean of All Varieties					
				Plant Height (In.)	Yield (Bu. per A.)	Wt. of 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
Richmond Hill, Ga.	25.5	81.3	5/11	22.6	14.7	13.0	44.8	19.5	128.2
Tifton, Ga.	16.0	81.7	4/22	22.0	13.4	12.0	44.8	18.7	129.3
Sandersville, Ga.	13.5	81.3	5/3	36.5	4.7	10.8	45.7	16.1	127.5
Clemson, S.C.	16.4	79.8	5/7	38.1	24.7	14.2	43.7	19.5	130.3
Florence, S.C.	13.1	79.7	4/27	36.4	16.3	13.3	46.5	18.1	128.9
Hartsville, S.C.(A)	12.4	78.2	5/28		14.0	13.5	45.5	18.0	129.6
Hartsville, S.C.(B)	12.4	78.2	6/30		14.2	14.2	43.3	18.9	130.5
Lonetta, S.C.	13.4	79.5	4/27	32.0	11.4	13.0	48.2	18.0	128.7
Blackville, S.C.	15.3	81.0	5/4	30.9	6.6	13.0	46.5	16.6	127.6
Baton Rouge, La.	10.5	82.9	4/20	22.8	11.4	14.4	45.5	19.4	131.6

In the Lower South, eight Uniform Tests were completed of Group V. A number of the tests in this region were incomplete because of disease and insect injury. Serious infections of bacterial pustule and blight, southern root rot or blight caused by the fungus Sclerotium rolfsii, Sacc., and root knot nematodes have to a certain extent reduced yields at all locations. The velvet bean caterpillar and, to a limited extent, the fall army worm, have reduced yields and the reliability of the results at many locations.

The agronomic and chemical data summarized by varieties for all completed tests are given in table 29. Summary of agronomic and chemical composition data for all varieties by locations follow in tables 30 to 40. Analysis of the data by analysis of variance is given in tables 41 and 42.

It will be noted from the summary table that in addition to lower yields, this group of varieties in the Lower South was in general shorter, shattered more and produced smaller seed of inferior quality to similar tests in the Upper South. The percentage of oil and iodine number of the oil were low while the percentage of protein was high. The grain types and the vining or hay types reacted somewhat differently in the two sections. Many of the higher yielding grain types in the Upper South were much shorter and less productive farther south. Ogden in the Upper South had an average yield of 21.4 bushels with an average height of 32.4 inches but yielded only 14 bushels with a height of 19 inches in the Lower South. Ralsoy, Arksoy, Delsoy, and Volstate were similar to Ogden in this respect. In contrast, yields and plant height of such varieties as Tennessee Non-pop, Auburn #2, Monetta and P.I. 89775A were not greatly different in the two sections.

The extreme variability of the yield data from the locations in this region should be noted. It should be noted from table 31 that not one of the varieties ranked consistently high at all locations. The variation in yields at each location as reflected in the coefficients of variability indicate that the differences in yield between varieties are questionable. Differences in the severity of disease and insect injury are largely responsible for the high variability at most locations.

Table 29. Summary of agronomic and chemical data for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Yield (Bu. per A.)	Lodging	Shattering	Height (In.)	Maturity*	Seed Quality	Weight 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
No. of Tests	8	5	6	11	8	3	8	8	8	8
P.I. 89775A	15.1	2.4	1.6	35.3	+15.9	3.7	11.1	44.7	17.5	131.5
Monetta	14.5	2.0	1.9	27.6	+16.8	3.0	11.5	46.2	15.2	134.3
Ogden	14.0	1.2	1.9	19.0	+ 6.6	3.0	13.0	45.1	18.9	131.3
Auburn #2	13.1	3.1	2.4	35.2	+17.4	3.3	9.4	45.7	17.1	131.0
Tenn. Non-pop	12.9	2.6	1.8	39.7	+28.5	3.7	15.3	45.6	17.7	134.6
Ralsoy	12.5	1.2	1.5	17.3	+ 1.6	2.7	11.3	46.8	18.6	131.0
Arksoy	12.5	1.2	1.6	17.5	+ 1.4	3.3	11.0	46.3	18.6	131.4
S100	12.1	1.8	1.5	28.9	-21.5	4.0	11.9	46.8	18.2	125.1
Arksoy 2913	12.1	1.2	1.5	16.5	0.0	3.0	12.0	45.9	19.1	130.8
Volstate	11.9	1.4	1.6	21.4	+21.6	3.3	13.1	43.1	19.6	133.4
Mamredo	11.9	1.3	2.2	23.3	0.0	3.3	12.1	43.5	19.1	124.1
P.I. 97066	11.6	3.2	2.2	36.1	+ 1.1	3.0	10.8	46.4	17.8	127.5
Georgia 723	11.3	2.2	1.9	27.5	-11.1	4.7	11.9	47.3	16.8	128.4
Boone	11.1	1.6	1.9	25.0	-29.8	5.0	12.6	46.0	19.7	116.8
Delsoy	11.0	1.2	2.7	19.3	+ 6.6	3.0	12.9	46.6	16.2	130.8
Macoupin	10.4	1.6	1.3	26.8	-29.4	4.3	12.6	43.5	20.8	122.8
Magnolia	10.2	2.9	2.7	34.1	+ 6.9	4.0	12.6	45.4	19.1	126.2
Tokyo	10.1	1.9	3.9	25.4	+28.1	3.7	17.5	45.2	17.2	134.0
Georgia 731	9.5	2.9	1.6	33.4	+ 3.3	4.7	13.1	47.2	18.3	124.2
P.I. 84642	9.4	3.1	3.5	41.2	+10.1	3.0	8.8	47.9	16.8	129.4
Wood's Yellow	9.3	1.9	3.1	27.0	+33.9	4.3	19.4	45.7	16.3	132.0
P.I. 86974	8.8	3.3	3.2	40.8	+ 7.1	2.7	7.8	48.5	16.6	132.2
Mammoth Yellow	8.0	1.6	3.5	25.7	+24.5	4.3	14.8	46.9	16.7	131.5
Arkan	7.7	1.1	1.9	14.6	- 8.5	3.0	11.9	45.7	19.6	119.9
Rokusun 25A	4.4	1.0	2.1	11.8	- 8.3	4.3	14.9	47.2	18.4	127.2
Dif.Req.for Sig. (5% level)	4.4						1.6	1.7	0.8	2.8

*Days earlier (-) or later (+) than Arksoy 2913. Arksoy 2913 required 146 days to mature.

Table 30. Summary of yields in bushels per acre for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 8 Tests	Milen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Crowley La.[1]	Hamburg La.[1]
P.I. 89775A	15.1	21.9	26.9	19.0	9.1	16.2	12.5	8.7	7.0	3.0	2.7
Monetta	14.5	24.1	25.1	19.1	5.4	22.2	8.7	6.7	4.6	6.7	-
Ogden	14.0	16.2	17.5	13.8	24.5	6.0	18.4	7.2	8.3	11.4	23.6
Auburn #2	13.1	17.6	19.6	24.0	9.6	14.6	14.1	4.5	1.2	8.1	3.0
Tenn. Non-pop	12.9	22.0	27.3	12.2	6.1	15.5	7.0	8.9	4.2	11.6	-
Ralsoy	12.5	21.8	12.2	14.5	13.8	13.4	10.7	7.9	5.6	4.8	12.0
Arksoy	12.5	20.4	15.6	14.7	11.2	12.1	8.2	9.3	8.4	4.8	8.6
S100	12.1	10.7	8.5	13.3	16.6	9.2	10.9	13.8	13.8	-	30.9
Arksoy 2913	12.1	22.9	12.0	14.1	8.0	12.2	11.8	7.4	8.4	4.2	7.3
Volstate	11.9	19.1	20.7	10.8	8.8	13.5	8.8	10.0	3.9	13.2	-
Mamredo	11.9	17.3	12.7	12.2	24.8	11.6	9.9	3.5	3.3	-	17.9
P.I. 97066	11.6	15.1	21.3	15.1	15.8	11.5	7.4	3.5	3.3	5.1	5.8
Georgia 723	11.3	11.0	16.2	12.5	10.2	12.8	15.4	7.2	5.3	-	13.2
Boone	11.1	4.7	4.3	13.8	19.5	7.9	15.2	11.9	11.8	-	21.5
Delsoy	11.0	20.5	13.8	10.6	14.7	12.4	12.0	3.8	.5	7.2	10.4
Macoupin	10.4	6.0	7.9	10.4	10.4	7.9	15.9	13.6	11.0	-	20.3
Magnolia	10.2	16.4	14.9	12.7	12.3	6.2	13.5	3.0	2.7	7.4	16.2
Tokyo	10.1	9.4	18.1	13.2	4.3	15.7	13.3	4.7	2.1	14.8	-
Georgia 731	9.5	15.3	14.8	13.8	10.6	7.2	11.5	2.5	.6	3.2	12.5
P.I. 84642	9.4	5.5	13.4	15.7	12.3	14.8	5.7	5.2	2.6	7.3	-
Wood's Yellow	9.3	12.7	13.9	12.5	3.7	14.7	9.7	5.6	1.6	7.2	-
P.I. 86974	8.8	12.0	9.5	12.6	13.3	12.7	7.4	2.1	.9	3.9	6.6
Mammoth Yellow	8.0	3.8	17.9	10.5	7.6	7.2	13.5	2.5	.9	9.4	-
Arkan	7.7	15.0	1.8	11.8	6.6	4.4	11.6	8.0	2.8	2.5	6.8
Rokusun 25A	4.4	6.6	1.6	3.2	6.4	3.8	7.3	4.1	2.3	-	4.4
Mean yield	11.0	14.7	14.7	13.4	11.4	11.4	11.2	6.6	4.7		
Coef. of var.	35.6%	18.9%	29.1%	15.7%	47.4%	24.4%	49.7%	35.6%	92.9%		
Dif.nec.for sig. (5% level)	4.4	3.9	6.0	3.0	7.6	3.9	7.9	3.3	6.1		

[1]Not included in the mean.

Table 31. Yield rank for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.
P.I. 89775A	4	2	3	16	2	9	7	7
Monetta	1	3	2	23	1	19	13	10
Ogden	12	9	9	2	23	1	11	6
Auburn #2	9	6	1	15	7	5	17	21
Tenn. Non-pop	3	1	18	22	4	24	6	11
Ralsoy	5	18	7	7	9	15	9	8
Arksoy	7	11	6	11	14	20	5	4
S100	19	21	12	4	17	14	1	1
Arksoy 2913	2	19	8	18	13	11	10	4
Volstate	8	5	21	17	8	18	4	12
Mamredo	10	17	18	1	15	16	20	13
P.I. 97066	14	4	5	5	16	21	20	13
Georgia 723	18	10	16	14	10	3	11	9
Boone	24	23	9	3	18	4	3	2
Delsoy	6	15	22	6	12	10	19	25
Macoupin	22	22	24	13	18	2	2	3
Magnolia	11	12	14	9	22	6	22	16
Tokyo	20	9	13	24	3	8	16	19
Georgia 731	13	13	9	12	20	13	23	24
P.I. 84642	23	16	4	9	5	25	15	17
Wood's Yellow	16	14	16	25	6	17	14	20
P.I. 86974	17	20	15	8	11	21	25	22
Mammoth Yellow	25	8	23	19	20	6	23	22
Arkan	15	24	20	20	24	12	8	15
Rokusun 25A	21	25	25	21	25	23	18	18

Table 32. Summary of lodging notes for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 5 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Blackville S.C.	Sandersville Ga.
P.I. 89775A	2.4	2.5	2.5	1.0	3.0	2.8
Monetta	2.0	2.0	2.3	1.0	3.0	1.8
Ogden	1.2	1.0	1.0	1.0	1.5	1.3
Auburn #2	3.1	3.3	3.8	1.0	3.5	3.8
Tenn. Non-pop	2.6	3.0	3.0	1.0	3.0	3.0
Ralsoy	1.2	1.0	1.0	1.0	1.8	1.3
Arksoy	1.2	1.3	1.0	1.0	1.8	1.0
S100	1.8	1.5	1.8	1.0	2.0	2.5
Arksoy 2913	1.2	1.0	1.0	1.0	1.8	1.0
Volstate	1.4	1.0	1.8	1.0	1.8	1.3
Mamredo	1.3	1.0	1.0	1.0	1.5	1.8
P.I. 97066	3.2	3.8	3.8	1.0	3.5	3.8
Georgia 723	2.2	1.8	2.0	1.0	2.8	3.3
Boone	1.6	1.0	1.5	1.0	1.8	2.5
Delsoy	1.2	1.0	1.0	1.0	1.5	1.5
Macoupin	1.6	1.0	1.8	1.0	1.5	2.5
Magnolia	2.9	4.0	3.3	1.0	3.0	3.0
Tokyo	1.9	2.0	2.0	1.0	2.3	2.3
Georgia 731	2.9	4.0	3.3	1.0	3.0	3.3
P.I. 84642	3.1	3.8	3.5	1.0	3.5	3.8
Wood's Yellow	1.9	2.0	2.0	1.0	2.8	1.8
P.I. 86974	3.3	4.0	4.0	1.0	3.8	3.8
Mammoth Yellow	1.6	1.5	2.3	1.0	2.0	1.3
Arkan	1.1	1.0	1.0	1.0	1.5	1.0
Rokusun 25A	1.0	1.0	1.0	1.0	1.0	1.0

Table 33. Summary of shattering notes for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 6 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.
P.I. 89775A	1.6	1.0	1.3	2.0	2.0	1.8	1.5
Monetta	1.9	2.0	1.3	1.3	2.0	3.0	1.5
Ogden	1.9	2.7	2.0	1.3	1.0	3.0	1.3
Auburn #2	2.4	1.5	3.3	2.0	2.0	3.3	2.0
Tenn. Non-pop	1.8	1.0	1.5	2.0	3.0	2.3	1.0
Ralsoy	1.5	1.3	1.0	1.5	2.0	2.0	1.3
Arksoy	1.6	1.3	1.0	1.8	2.0	2.0	1.5
S100	1.5	1.5	1.3	2.0	1.0	1.3	1.7
Arksoy 2913	1.5	1.0	1.0	1.3	2.0	2.3	1.5
Volstate	1.6	1.3	1.0	2.0	2.0	2.3	1.0
Mamredo	2.2	1.8	1.0	2.0	3.0	3.3	2.0
P.I. 97066	2.2	1.8	1.3	1.5	3.0	4.3	1.5
Georgia 723	1.9	2.3	1.0	1.5	3.0	1.8	1.5
Boone	1.9	1.8	2.5	1.3	2.0	1.5	2.0
Delsoy	2.7	3.3	3.8	2.3	2.0	3.3	1.3
Macoupin	1.3	1.0	1.5	1.0	1.0	1.8	1.5
Magnolia	2.7	3.8	1.8	4.0	2.0	3.3	1.5
Tokyo	3.9	5.0	3.8	4.3	3.0	4.0	3.3
Georgia 731	1.6	1.0	1.3	1.3	2.0	2.8	1.0
P.I. 84642	3.5	4.8	5.0	3.5	3.0	3.3	1.3
Wood's Yellow	3.1	3.0	4.3	4.5	2.0	4.0	1.0
P.I. 86974	3.2	2.0	5.0	3.8	3.0	3.5	1.8
Mammoth Yellow	3.5	5.0	2.0	4.0	3.0	4.5	2.5
Arkan	1.9	2.8	1.0	2.0	2.0	2.0	1.3
Rokusun 25A	2.1	3.3	1.5	2.0	3.0	1.5	1.3

Table 34. Summary of plant height in inches for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 11 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Blackville S.C.	Sandersville Ga.	Crowley La.	Hamburg La.	Opelousas La.	Melrose La.
P.I. 89775A	35.3	33	35	37	31	42	41	42	29	32	36	30
Monetta	27.6	22	23	19	21	34	36	40	29	24	36	20
Ogden	19.0	16	13	14	21	27	21	29	19	20	20	9
Auburn #2	35.2	35	34	38	22	40	41	47	28	40	40	22
Tenn. Non-pop	39.7	38	37	42	44	38	42	49	29	42	38	38
Ralsoy	17.3	19	11	11	14	25	22	26	20	13	16	13
Arksoy	17.5	19	12	14	14	26	21	26	20	12	16	12
S100	28.9	21	27	24	27	35	32	42	26	34	36	14
Arksoy 2913	16.5	17	9	12	12	24	23	26	19	13	14	12
Volstate	21.4	16	22	12	17	28	24	31	25	26	25	9
Mamredo	23.3	18	16	19	22	32	21	32	24	24	34	14
P.I. 97066	36.1	33	25	26	35	38	42	48	36	36	40	38
Georgia 723	27.5	25	23	14	22	30	32	42	26	27	34	28
Boone	25.0	19	20	13	29	28	30	37	20	25	34	15
Delsoy	19.3	17	12	12	15	25	23	29	20	20	24	15
Macoupin	26.8	15	24	23	26	30	30	41	22	30	40	14
Magnolia	34.1	33	33	26	23	40	40	41	29	36	36	38
Tokyo	25.4	23	25	20	16	32	28	33	27	28	25	22
Georgia 731	33.4	33	28	34	22	40	39	44	30	32	40	25
P.I. 84642	41.2	38	38	41	35	52	48	49	36	36	42	38
Wood's Yellow	27.0	26	22	21	19	32	35	37	24	24	36	21
P.I. 86974	40.8	42	40	35	36	48	49	44	34	40	44	37
Mammoth Yellow	25.7	22	24	17	24	28	25	36	26	29	30	22
Arkan	14.6	15	6	11	10	14	16	22	14	17	20	16
Rokusun 25A	11.8	10	6	9	12	13	12	19	12	14	14	9
Mean	26.8	24.2	22.6	22.0	22.8	32.0	30.9	36.5	25.0	27.0	30.8	21.2

Table 35. Summary of maturity* notes for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Hamburg La.[1]
P.I. 89775A	+15.9	+ 8	+20	+15	+47	+12	+12	+ 6	+ 7	- 6
Monetta	+16.8	+ 8	+20	+23	+47	+18	+12	0	+ 6	--
Ogden	+ 6.6	+ 8	+20	0	+ 7	+ 0	+12	+ 3	+ 3	- 6
Auburn #2	+17.4	+ 8	+20	+13	+47	+25	+12	0	+14	+ 7
Tenn. Non-pop	+28.5	+22	+30	+26	+47	+25	+32	+27	+19	--
Ralsoy	+ 1.6	0	+ 3	+ 3	+ 7	0	0	0	0	0
Arksoy	+ 1.4	0	+ 3	+ 5	+ 7	0	0	- 4	0	0
S100	-21.5	-22	- 8	-18	-20	-28	0	-44	-32	-42
Arksoy 2913	0.0	0	0	0	0	0	0	0	0	0
Volstate	+ 21.6	+ 22	+ 20	+ 21	+ 47	+ 21	+ 12	+ 11	+ 19	--
Mamredo	0.0	- 8	+ 3	0	+ 7	+ 2	0	- 7	+ 3	- 6
P.I. 97066	+ 1.1	- 4	+ 3	- 5	+ 7	+ 2	0	- 4	+10	- 6
Georgia 723	-11.1	- 7	- 8	-20	0	-18	0	-23	-13	-26
Boone	-29.8	-35	-12	-30	-15	-30	-20	-55	-41	-42
Delsoy	+ 6.6	+ 8	+16	+ 1	+16	+ 2	0	- 4	+14	+ 7
Macoupin	-29.4	-36	- 8	-30	-15	-30	-20	-55	-41	-42
Magnolia	+ 6.9	+ 8	+11	+ 3	+ 9	+12	0	0	+12	- 6
Tokyo	+ 28.1	+ 22	+ 30	+ 28	+ 47	+ 25	+ 32	+ 16	+ 25	--
Georgia 731	+ 3.3	- 7	+ 3	- 2	+ 7	- 5	0	+ 16	+ 14	-30
P.I. 84642	+ 10.1	+ 8	+ 20	+ 6	+ 19	+ 12	+ 12	- 4	+ 8	--
Wood's Yellow	+ 33.9	+ 37	+ 33	+ 31	+ 47	+ 27	+ 49	+ 16	+ 31	--
P.I. 86974	+ 7.1	- 6	+ 20	+ 4	+ 14	+ 12	+ 12	- 7	+ 8	+ 7
Mammoth Yellow	+ 24.5	+ 22	+ 20	+ 23	+ 47	+ 23	+ 32	+ 10	+ 19	--
Arkan	- 8.5	-12	- 2	- 8	-20	-10	0	-19	+ 3	-26
Rokusun 25A	- 8.3	- 3	- 3	-20	-10	-13	0	-23	+ 6	- 6
Arksoy 2913 matured		10/5	9/22	9/12	8/25	9/23	9/27	10/20	10/15	10/1
Date planted		5/4	5/11	4/22	4/20	4/27	5/24	5/4	5/3	4/30

*Days earlier (-) or later (+) than Arksoy 2913.

[1]Not included in the mean.

Table 36. Summary of seed quality notes for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 3 Tests	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Crowley La.[1]	Hamburg La.[1]
P.I. 89775A	3.7	5	3	3	5	5
Monetta	3.0	5	1	3	2	-
Ogden	3.0	2	4	3	3	4
Auburn #2	3.3	3	3	4	2	2
Tenn. Non-pop	3.7	5	2	4	2	-
Ralsoy	2.7	2	3	3	4	3
Arksoy	3.3	3	4	3	4	4
S100	4.0	3	4	5	-	3
Arksoy 2913	3.0	3	3	3	4	4
Volstate	3.3	5	2	3	2	-
Mamredo	3.3	3	4	3	-	4
P.I. 97066	3.0	2	4	3	4	4
Georgia 723	4.7	5	4	5	-	4
Boone	5.0	5	5	5	-	5
Delsoy	3.0	3	3	3	3	4
Macoupin	4.3	4	5	4	-	3
Magnolia	4.0	3	5	4	4	4
Tokyo	3.7	5	2	4	2	-
Georgia 731	4.7	4	5	5	5	5
P.I. 84642	3.0	3	3	3	3	-
Wood's Yellow	4.3	5	3	5	3	-
P.I. 86974	2.7	2	3	3	3	5
Mammoth Yellow	4.3	5	4	4	4	-
Arkan	3.0	2	3	4	4	4
Rokusun 25A	4.3	4	4	5	-	5

[1]Not included in the mean.

Table 37. Summary of seed size, grams per 100 seed, for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Crowley La.[1]	Hamburg La.[1]
P.I. 89775A	11.1	12	11	10	13	11	9	14	9	16	10
Monetta	11.5	14	11	11	11	12	10	13	10	13	--
Ogden	13.0	14	15	14	16	11	9	15	10	16	12
Auburn #2	9.4	10	10	9	10	10	8	10	8	10	6
Tenn. Non-pop	15.3	19	17	13	16	17	11	16	13	17	--
Ralsoy	11.3	12	12	12	13	12	10	11	8	13	12
Arksoy	11.0	12	11	12	13	11	9	11	9	13	11
S100	11.9	12	13	10	16	12	11	10	11	--	15
Arksoy 2913	12.0	13	12	12	14	12	10	12	11	14	12
Volstate	13.1	13	14	10	15	15	10	15	13	14	--
Mamredo	12.1	13	12	15	13	13	8	14	9	--	11
P.I. 97066	10.8	11	11	12	11	11	9	11	10	13	10
Georgia 723	11.9	13	12	8	18	12	10	11	11	--	15
Boone	12.6	12	13	11	17	13	12	12	11	--	16
Delsoy	12.9	13	13	12	17	13	11	13	11	14	12
Macoupin	12.6	12	13	11	15	13	12	12	13	--	15
Magnolia	12.6	13	13	15	14	12	11	13	10	15	13
Tokyo	17.5	22	18	13	18	21	12	19	17	20	--
Georgia 731	13.1	13	14	16	16	11	12	13	10	16	12
P.I. 84642	8.8	9	8	9	8	10	7	10	9	9	--
Wood's Yellow	19.4	22	23	18	16	24	19	20	13	20	--
P.I. 86974	7.8	8	7	8	8	9	6	9	7	10	6
Mammoth Yellow	14.8	16	15	13	15	16	15	15	13	16	--
Arkan	11.9	11	12	13	16	10	10	12	11	16	12
Rokusun 25A	14.9	15	15	13	20	15	15	14	12	--	--
Mean	12.5	13.4	13.0	12.0	14.4	13.0	10.6	13.0	10.8		

[1]Not included in the mean.

Table 38. Summary of percentage of protein for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Crowley La.[1]	Hamburg La.[1]
P.I. 89775A	44.7	41.8	43.8	44.3	45.1	45.7	45.9	45.0	46.3	47.7	47.9
Monetta	46.2	44.1	43.0	48.3	47.9	45.7	47.5	45.8	47.5	48.4	--
Ogden	45.1	45.3	43.2	42.2	42.2	49.6	45.8	45.3	47.0	44.8	43.4
Auburn #2	45.7	42.7	45.6	45.9	46.9	48.2	47.1	46.0	43.3	47.4	46.8
Tenn. Non-pop	45.6	44.4	43.2	44.7	46.9	47.5	47.4	44.0	46.3	46.3	--
Ralsoy	46.8	46.4	45.2	46.2	43.9	48.9	46.5	48.7	48.8	52.1	45.0
Arksoy	46.3	45.7	44.7	44.0	43.6	49.0	47.0	50.3	45.8	50.5	44.1
S100	46.8	45.3	46.8	45.5	47.1	49.3	50.2	44.4	45.9	--	47.1
Arksoy 2913	45.9	44.8	45.4	42.2	43.2	49.3	47.3	50.3	45.0	51.7	45.4
Volstate	43.1	38.7	40.9	43.0	44.2	45.3	46.4	42.0	44.5	43.5	--
Mamredo	43.5	42.1	41.1	45.5	39.7	46.0	44.2	43.9	45.2	--	40.7
P.I. 97066	46.4	44.8	44.8	42.9	43.6	49.6	47.7	48.7	49.1	52.3	47.2
Georgia 723	47.3	49.5	44.4	43.4	48.7	48.5	48.3	49.1	46.1	--	48.5
Boone	46.0	45.6	46.0	46.6	46.8	49.2	46.6	44.7	42.2	--	46.5
Delsoy	46.6	44.6	45.7	44.5	46.5	47.7	49.7	48.5	45.5	50.2	46.9
Macoupin	43.5	41.2	43.9	44.2	44.3	46.7	43.8	43.2	40.8	--	42.6
Magnolia	45.4	44.1	43.9	40.9	43.4	50.7	47.6	47.8	44.4	51.1	46.3
Tokyo	45.2	44.6	43.4	46.5	46.3	46.7	46.9	42.6	44.2	45.9	--
Georgia 731	47.2	45.8	47.3	45.4	45.2	51.0	48.5	49.3	45.0	51.5	48.6
P.I. 84642	47.9	45.5	46.5	46.5	46.9	49.3	50.2	48.6	49.5	50.7	--
Wood's Yellow	45.7	44.5	44.7	44.7	49.7	44.8	48.2	43.9	44.7	44.8	--
P.I. 86974	48.5	44.8	48.6	45.7	48.2	51.1	51.1	50.4	48.3	53.0	49.5
Mammoth Yellow	46.9	45.7	45.4	44.2	48.1	48.2	50.6	46.5	46.5	48.1	--
Arkan	45.7	43.6	44.8	46.4	45.0	49.0	47.2	46.2	43.4	48.0	46.6
Rokusun 25A	47.2	46.4	46.6	47.3	43.8	48.6	48.9	48.0	47.9	--	43.4
Mean	46.0	44.5	44.8	44.8	45.5	48.2	47.6	46.5	45.7		

[1]Not included in the mean.

Table 39. Summary of percentage of oil for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Crowley La.[1]	Hamburg La.[1]
P.I. 89775A	17.5	18.2	18.6	19.8	18.6	17.9	15.5	16.6	14.9	17.1	16.6
Monetta	15.2	15.6	16.8	17.5	16.0	14.9	14.0	13.8	12.9	14.4	--
Ogden	18.9	19.4	20.5	20.0	21.4	17.5	17.4	18.1	16.9	17.5	19.9
Auburn #2	17.1	18.4	18.6	19.2	17.1	17.0	15.4	16.3	14.8	15.5	16.9
Tenn. Non-pop	17.7	18.4	20.3	18.3	17.9	17.7	15.6	17.3	16.4	18.0	--
Ralsoy	18.6	19.1	19.9	19.0	20.4	19.7	18.6	16.3	15.9	14.4	19.7
Arksoy	18.6	19.1	20.2	19.3	21.0	19.2	18.0	16.0	15.9	15.8	20.1
S100	18.2	18.2	19.1	17.2	19.5	18.6	18.2	17.2	17.7	--	18.8
Arksoy 2913	19.1	19.7	20.6	19.5	21.3	19.7	18.4	16.6	17.1	15.0	20.3
Volstate	19.6	21.8	21.2	20.4	20.4	19.5	16.4	19.8	17.2	19.0	--
Mamredo	19.1	19.9	20.2	19.8	21.4	18.9	17.5	17.2	17.5	--	20.9
P.I. 97066	17.8	18.5	18.8	19.5	19.3	18.1	17.1	15.3	15.5	14.0	18.3
Georgia 723	16.8	16.2	18.6	16.4	17.9	17.5	17.3	15.0	15.3	--	17.7
Boone	19.7	19.2	20.5	19.9	20.5	19.2	20.2	18.9	19.3	--	20.2
Delsoy	16.2	17.3	17.8	16.4	17.2	17.3	15.1	15.1	13.6	14.2	16.1
Macoupin	20.8	21.3	21.9	19.3	21.3	20.8	21.4	20.0	20.0	--	22.3
Magnolia	19.1	19.7	21.1	19.9	21.5	18.0	18.7	17.2	16.9	16.2	20.3
Tokyo	17.2	17.4	19.2	18.4	18.3	16.9	16.1	15.7	15.5	16.7	--
Georgia 731	18.3	19.2	20.4	19.3	20.4	17.9	17.9	16.1	14.8	15.5	18.6
P.I. 84642	16.8	18.0	17.5	18.2	17.8	16.7	14.4	16.2	15.9	14.8	--
Wood's Yellow	16.3	15.9	18.4	17.5	16.8	16.4	16.0	15.3	13.9	16.9	--
P.I. 86974	16.6	18.4	16.7	17.7	17.6	16.6	14.2	15.9	15.4	14.9	16.4
Mammoth Yellow	16.7	17.8	18.7	17.6	18.2	15.7	15.2	15.0	15.5	16.4	--
Arkan	19.6	19.7	21.0	20.4	21.1	19.1	19.2	18.0	18.3	17.8	20.5
Rokusun 25A	18.4	18.3	20.5	18.2	21.1	19.0	18.3	16.2	15.8	--	21.3
Mean	18.0	18.6	19.5	18.7	19.4	18.0	17.0	16.6	16.1		

[1]Not included in the mean.

Table 40. Summary of iodine number of oil for the strains in the Uniform Test, Group V, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Baton Rouge La.	Monetta S.C.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Crowley La.[1]	Hamburg La.[1]
P.I. 89775A	131.5	133.0	130.8	127.2	131.5	132.1	133.9	134.3	129.3	132.1	129.9
Monetta	134.3	135.3	134.6	126.4	134.5	137.7	136.7	134.7	134.4	135.7	---
Ogden	131.3	128.3	133.7	129.5	137.2	133.1	132.3	126.4	129.8	133.2	135.0
Auburn #2	131.0	132.9	131.7	127.2	129.1	129.3	135.7	131.1	131.2	137.2	125.1
Tenn. Non-pop	134.6	134.7	133.4	132.5	137.2	133.6	138.7	132.7	134.0	133.8	---
Ralsoy	131.0	129.4	130.5	133.6	136.6	131.5	132.3	124.2	129.7	129.2	134.5
Arksoy	131.4	129.2	130.9	134.4	136.4	132.1	132.3	126.5	129.4	129.2	135.2
S100	125.1	122.9	123.8	131.6	128.0	123.5	125.8	123.2	122.3	---	126.5
Arksoy 2913	130.8	128.8	129.9	134.3	136.4	131.2	132.0	124.9	129.2	128.6	133.4
Volstate	133.4	134.6	134.0	130.9	135.8	134.0	135.7	130.6	131.7	134.1	---
Mamredo	124.1	120.6	127.5	121.1	132.5	121.7	128.3	121.5	119.2	---	128.9
P.I. 97066	127.5	126.8	128.0	129.3	133.7	125.2	126.1	127.5	123.3	133.0	126.6
Georgia 723	128.4	123.8	127.7	135.0	127.7	128.8	128.8	128.2	127.5	---	129.7
Boone	116.8	116.5	112.9	124.3	113.5	117.5	118.2	117.4	114.1	---	114.6
Delsoy	130.8	131.5	130.2	131.7	135.2	128.3	130.3	128.8	130.7	131.6	133.1
Macoupin	122.8	124.0	118.9	129.8	124.1	120.2	123.8	122.7	118.9	---	123.8
Magnolia	126.2	127.3	124.1	126.4	129.2	127.9	124.6	124.5	125.9	130.8	126.3
Tokyo	134.0	135.4	135.1	134.7	137.2	125.0	137.3	133.7	133.9	134.1	---
Georgia 731	124.2	118.8	124.1	120.9	126.9	125.5	124.2	126.9	126.4	132.5	125.9
P.I. 84642	129.4	129.2	130.3	126.5	131.2	129.8	133.3	129.8	124.7	132.4	---
Wood's Yellow	132.0	132.9	127.7	131.4	131.5	133.2	131.3	132.9	134.8	132.1	---
P.I. 86974	132.2	130.3	133.7	130.3	135.1	130.9	136.9	130.9	129.1	134.7	130.9
Mammoth Yellow	131.5	132.1	129.9	126.4	133.3	133.5	131.1	133.2	132.3	131.0	---
Arkan	119.9	116.5	117.5	125.2	123.8	123.2	116.7	117.3	118.6	126.3	123.8
Rokusun 25A	127.2	123.3	124.9	132.1	130.2	129.3	125.9	125.8	126.3	---	129.8
Mean	128.9	127.9	128.2	129.3	131.6	128.7	130.1	127.6	127.5		

[1]Not included in the mean.

Table 41. Analysis of variance for yield of seed from 8 locations of the Uniform Test, Group V, Lower South, 1943.

Source of Variation	Degrees of Freedom	Mean Square
Locations	7	1331.0602**
Varieties	24	177.1167**
Locations x varieties	168	80.8807**
Error	600	17.1595

**Highly significant.

Table 42. "F" values as determined by analysis of variance for agronomic and chemical data for the Uniform Test, Group V, Lower South, 1943.

		"F" Values			
Source of Variation	Degrees of Freedom	Seed Size	Percent Protein	Percent Oil	I_2 No. of Oil
Locations	7	16.17**	16.75**	60.11**	6.19**
Varieties	24	19.23**	4.91**	21.44**	21.58**
Error	168				

**Highly significant.

Uniform Test, Group VI

Uniform Test, Group VI, is composed of 18 named varieties and 7 strains. The origin of these varieties and strains is as follows:

Variety or strain	Originating Agency	Origin
Arisoy		P.I. 86736 from Konosu,Japan,1930
Auburn #1	Ala.Agr. Exp. Sta.	
Avoyelles		Selection from Otootan
Biloxi	U. S. D. A.	P.I. 23211 from Tangsi,China,1908
Burnette		
Charlee	U. S. D. A.	P.I. 71663 from Nanking,China,1927
Clemson	U. S. D. A.	P.I. 71659 from Nanking,China,1927
Delsta	Delta Exp.Sta.,Stoneville	Station selection #6677, 1935
Hayseed	U. S. D. A.	P.I. 71525 from Nanking, China,1927
La. 40-290	La. Agr. Exp. Sta.	
La. 40-293	La. Agr. Exp. Sta.	
La. 40-399	La. Agr. Exp. Sta.	
La. 40-400	La. Agr. Exp. Sta.	
Pelican #1	La. Agr. Exp. Sta.	
Pelican #2	La. Agr. Exp. Sta.	
Mamloxi	Delta Exp.Sta.,Stoneville	Selection from a cross(Mam.Yellow x Biloxi)
Mammoth Yel.	Unknown	Grown in North Carolina since 1880
Mamotan 6640	Delta Exp.Sta.,Stoneville	Selection from a cross (Mam. Yellow x Otootan)
Missoy	U. S. D. A.	P.I. 71664 from Nanking,China,1927
Nanda	U. S. D. A.	P.I. 95727 from Shariin,Chosen,1932
Ogden	Tenn. Agr. Exp. Sta.	Sel. from a cross (Tokyo x P.I. 53610)
Palmetto	U. S. D. A.	P.I. 71587 from Nanking,China,1927
Seminole	U. S. D. A.	P.I. 93058 from Hangshow,China,1931
White Biloxi	Delta Exp.Sta.,Stoneville	Selection from a natural hybrid,1925
Yelredo	Coker Pedigreed Seed Co.	Selection from a cross (Mam. Yellow x Laredo)

Four replications of the Uniform Test, Group VI, arranged as a simple lattice were planted at 28 locations, 14 in the Upper South area and 14 in the Lower South. The varieties of Group VI yielded consistently less than those of Group V. Disease and insect injury was severe on these varieties. Many varieties at a number of locations were partly or wholly defoliated by diseases during the long growing season.

In the Upper South fifteen tests were completed in Group VI. Summarized results of agronomic and chemical data for the varieties of Group VI, Upper South, are given in tables 43 to 56. The mean response of all varieties to location along with rainfall and temperature records for the months of July, August, and September are given in table 57.

Ogden, entered as a variety for comparison with Group V, led the test in yield of seed in this region. It will be noted, however, that Ogden

yielded consistently less in Group VI at all but one location where Groups V and VI were grown than in Group V. Competition between Ogden and the taller growing later maturing varieties of Group VI for light and moisture is undoubtedly responsible for this response.

Comparative yields of the top ranking varieties of this group indicate little difference in yielding ability of these late maturing strains. However, when lodging, shattering, and the chemical composition is considered, Mamotan 6640, Delsta, La. 40-400, Pelican #1, and Mamloxi, appear to be the better strains of the group for this region. All of these varieties are susceptible to one or more diseases which have seriously reduced yields. The development of a high yielding, disease resistant variety is essential before late maturing strains can be grown profitably for seed in this region.

The analysis of variance of yield of seed for these varieties is given in table 55. The mean squares for locations, varieties, and the location X variety interaction were all highly significant. The variance due to location was much greater than that due to varieties. The "F" values as determined from analysis of seed size and chemical composition data are given in table 56. It will be noted from this table that seed size and per cent oil are varietal characteristics and are less affected by location. The per cent protein, and to a less extent, the iodine number of the oil has been affected more by location. These results are similar to those of Group V, Upper South.

Table 43. Summary of agronomic and chemical data for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Yield (Bu. per A.)	Lodging	Shattering	Height (In.)	Maturity*	Seed Quality	Weight 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
No. of Tests	15	14	9	14	12	11	16	16	16	16
Ogden	19.6	1.2	2.7	27.9	-17.8	2.3	13.9	43.9	19.4	132.6
Mamotan 6640	15.0	1.8	1.6	37.2	+10.7	2.9	14.6	43.0	17.2	138.3
Burnette	14.9	1.4	3.1	34.6	+10.5	3.2	19.9	43.3	17.0	132.1
Delsta	14.8	1.8	2.2	40.7	+12.6	3.0	16.8	43.4	16.8	133.6
Nanda	14.1	1.5	3.2	35.9	+ 9.9	3.1	16.9	43.8	17.3	132.2
Auburn #1	13.4	3.1	3.7	36.4	- 3.0	2.1	11.9	44.6	15.4	135.2
La. 40-400	12.4	2.7	1.3	48.5	+12.1	2.7	10.0	43.7	17.9	136.8
Pelican #1	12.3	2.5	1.1	50.6	+12.9	2.7	9.9	43.6	18.3	137.5
Mamloxi	12.3	1.5	1.8	38.4	+ 6.4	2.8	17.0	46.3	16.4	134.0
La. 40-399	12.2	2.6	1.6	48.4	+12.1	2.7	10.1	43.6	17.9	137.5
Missoy	12.2	3.2	2.6	47.2	+ 4.9	2.4	10.4	43.6	17.5	133.7
Charlee	12.0	3.1	2.9	47.1	+ 3.8	2.5	10.1	43.7	17.4	134.4
Mammoth Yellow	11.7	1.1	4.5	31.7	0.0	2.4	15.7	45.7	17.2	133.1
La. 40-290	11.7	2.7	1.6	49.0	+12.8	2.8	10.1	43.1	18.1	137.3
Pelican #2	11.5	2.6	1.4	50.1	+13.0	2.8	10.1	44.2	18.1	138.2
La. 40-293	11.4	2.8	1.4	50.5	+13.1	2.8	10.0	42.9	18.1	137.6
Palmetto	11.2	2.7	4.1	49.6	+ 2.4	2.4	10.8	45.6	16.0	134.1
Clemson	10.6	2.8	4.9	44.3	- 1.6	2.4	11.6	44.9	16.4	132.9
Hayseed	10.6	4.7	3.4	43.2	- 9.9	2.7	8.9	44.7	18.3	132.1
Seminole	9.4	2.8	2.4	41.3	+10.6	3.1	19.4	46.3	16.6	135.9
Yelredo	9.4	3.3	2.2	42.4	- 1.6	2.7	8.9	44.8	17.2	134.8
Arisoy	9.2	5.0	3.5	36.7	+11.5	3.7	10.7	44.7	17.2	132.1
Avoyelles	8.5	3.7	2.2	45.0	+15.2	2.9	9.0	43.8	15.3	140.1
Biloxi	8.1	1.7	1.5	44.7	+12.8	3.1	16.1	48.6	16.2	135.9
White Biloxi	7.5	2.0	2.2	48.5	+14.1	3.0	15.3	46.9	16.1	135.2
Dif.Req.for Sig. (5% level)	2.9						1.0	0.9	0.7	0.9

*Days earlier (-) or later (-) than Mammoth Yellow. Mammoth Yellow required 168 days to mature.

Table 44. Summary of yields in bushels per acre for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 15 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Watkins-ville Ga.	Experi-ment Ga.
Ogden	19.6	35.7	22.7	26.8	29.3	36.6	17.3	12.2
Mamotan 6640	15.0	30.8	30.9	21.3	28.5	23.2	12.9	12.0
Burnette	14.9	34.0	23.6	28.9	32.5	18.6	15.4	14.3
Delsta	14.8	35.5	32.4	25.4	24.2	14.2	13.0	13.8
Nanda	14.1	31.5	33.0	24.4	28.7	13.5	11.6	12.6
Auburn #1	13.4	30.1	20.1	17.9	20.5	20.9	12.7	9.5
La. 40-400	12.4	20.2	27.2	17.6	29.1	8.8	10.0	10.6
Pelican #1	12.3	20.3	31.4	18.5	24.9	6.0	12.7	9.2
Mamloxi	12.3	26.6	23.3	18.4	17.0	15.5	12.9	12.7
La. 40-399	12.2	21.6	28.6	20.6	25.0	7.7	7.1	11.5
Missoy	12.2	20.5	21.6	18.9	14.2	15.8	11.1	13.6
Charlee	12.0	20.2	26.1	19.4	17.7	13.1	11.4	11.6
Mammoth Yellow	11.7	26.2	10.3	17.3	14.5	31.4	13.4	7.2
La. 40-290	11.7	22.5	28.5	19.0	22.2	8.7	13.6	10.5
Pelican #2	11.5	19.3	23.8	17.3	23.7	6.3	11.1	12.9
La. 40-293	11.4	21.0	27.4	15.4	23.1	5.7	11.2	11.1
Palmetto	11.2	19.9	20.0	22.1	16.0	18.8	14.1	9.6
Clemson	10.6	20.7	17.5	16.9	16.3	11.1	14.8	7.2
Hayseed	10.6	13.9	9.9	14.4	12.0	15.0	6.8	4.8
Seminole	9.4	19.9	15.5	17.6	14.3	10.3	9.3	12.1
Yelredo	9.4	22.0	2.3	5.2	14.3	21.0	10.0	9.0
Arisoy	9.2	17.9	8.1	17.9	12.6	8.9	8.6	15.3
Avoyelles	8.5	19.6	26.9	18.5	13.9	2.9	3.4	9.6
Biloxi	8.1	10.5	21.0	16.9	11.8	8.1	11.4	12.1
White Biloxi	7.5	12.2	16.0	15.2	8.5	9.3	9.1	9.1
Mean Yield	11.8	22.9	21.9	18.9	19.8	14.0	11.4	11.0
Coef. of Var.	23.4%	18.2%	22.1%	14.1%	17.6%	24.1%	25.3%	19.5%
Bu.Nec.for Sig. (5% level)	2.9	5.9	6.8	3.8	4.9	4.8	4.1	3.0

Table 44. (continued)

Strain	Harts-ville S.C.(A)	Harts-ville S.C.(B)	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-chester Ark.	Stutt-gart Ark.
Ogden	17.1	14.9	11.7	16.9	17.4	10.2	11.6	14.4
Mamotan 6640	12.0	16.0	9.9	8.3	8.5	7.2	2.5	.8
Burnette	8.5	14.5	11.6	7.5	4.7	6.2	1.7	1.9
Delsta	11.9	16.0	11.6	6.9	4.7	9.5	2.4	1.0
Nanda	7.6	13.3	10.6	10.0	4.1	8.8	1.5	.5
Auburn #1	7.3	16.2	7.3	12.4	6.9	6.6	8.0	5.1
La. 40-400	11.2	13.5	10.6	8.1	7.6	4.0	4.5	2.6
Pelican #1	9.5	15.5	9.1	7.1	8.5	3.4	4.9	4.2
Mamloxi	8.5	10.4	8.0	9.3	10.3	5.8	2.4	2.9
La. 40-399	10.0	15.4	8.0	8.3	8.5	4.7	4.5	1.5
Missoy	8.6	13.1	8.4	11.6	11.9	6.2	4.4	3.4
Charlee	7.5	14.1	8.1	9.5	8.9	5.9	4.4	3.0
Mammoth Yellow	10.5	10.1	4.9	11.0	3.3	7.7	4.8	2.9
La. 40-290	7.2	10.7	10.8	7.0	8.6	2.8	3.3	.8
Pelican #2	8.4	14.9	12.2	5.6	7.8	3.3	4.2	1.8
La. 40-293	8.2	12.6	12.9	5.8	9.2	3.0	3.8	.3
Palmetto	3.8	12.9	3.7	10.4	3.6	5.9	5.6	2.4
Clemson	6.0	12.6	3.0	11.9	2.7	6.2	6.5	5.6
Hayseed	10.3	11.6	9.8	13.2	9.9	7.9	9.0	10.2
Seminole	6.3	12.5	6.6	3.7	8.7	2.4	1.7	.4
Yelredo	7.4	11.1	7.6	7.8	6.4	3.3	7.9	5.9
Arisoy	6.1	12.3	7.5	6.1	4.0	5.5	6.1	1.7
Avoyelles	4.0	13.7	6.6	1.8	2.8	2.9	1.0	.2
Biloxi	4.4	10.6	4.2	2.0	5.9	1.3	.9	.2
White Biloxi	6.7	10.1	4.4	2.2	5.8	2.3	1.2	.3
Mean Yield	8.3	13.1	8.3	8.2	7.2	5.3	4.3	2.9
Coef. of Var.	22.4%	23.4%	26.7%	19.8%	27.4%	31.1%	27.0%	52.6%
Bu.Nec.for Sig. (5% level)	2.6	4.3	3.1	2.3	2.8	2.3	1.6	2.2

(A)Early planting. (B)Late planting.

Table 45. Yield rank for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Stone-ville Miss.	Wil-lard N.C. (A)	Wil-lard N.C. (B)	McCul-lers N.C.	Clem-son S.C.	Wat-kins-ville Ga.	Ex-peri-ment Ga.	Harts-ville S.C. (A)	Harts-ville S.C. (B)	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-ches-ter Ark.	Stutt-gart Ark.
Ogden	1	14	2	2	1	1	8	1	6	3	1	1	1	1	1
Mamotan 6640	5	4	6	5	3	8	11	2	2	9	11	9	6	17	18
Burnette	3	12	1	1	7	2	2	10	8	4	15	18	8	20	13
Delsta	2	2	3	8	11	7	3	3	2	4	18	18	2	18	17
Nanda	4	1	4	4	12	12	7	14	12	7	8	20	3	22	20
Auburn #1	6	17	14	12	5	10	19	17	1	18	3	14	7	3	5
La. 40-400	16	8	16	3	18	18	15	4	11	7	13	13	16	10	11
Pelican #1	15	3	11	7	23	10	20	8	4	11	16	9	17	8	6
Mamloxi	7	13	13	14	9	8	6	10	23	14	10	3	13	18	9
La. 40-399	11	5	7	6	21	23	13	7	5	14	11	9	15	10	16
Missoy	14	15	10	20	8	16	4	9	13	12	5	2	8	12	7
Charlee	16	10	8	13	13	13	12	15	9	13	9	6	11	12	8
Mammoth Yel.	8	22	18	17	2	6	23	5	24	21	6	23	5	9	9
La. 40-290	9	6	9	11	19	5	16	18	21	6	17	8	22	16	18
Pelican #2	21	11	18	9	22	16	5	12	6	2	21	12	18	14	14
La. 40-293	12	7	22	10	24	15	14	13	15	1	20	5	20	15	22
Palmetto	18	18	5	16	6	4	17	25	14	24	7	22	11	7	12
Clemson	13	19	20	15	14	3	23	22	15	25	4	25	8	5	4
Hayseed	23	23	24	23	10	24	25	6	19	10	2	4	4	2	2
Seminole	18	21	16	18	15	20	9	20	17	19	22	7	23	20	21
Yelredo	10	25	25	18	4	18	22	16	20	16	14	15	18	4	3
Arisoy	22	24	14	22	17	22	1	21	18	17	19	21	14	6	15
Avoyelles	20	9	11	21	25	25	17	24	10	19	25	24	21	24	24
Biloxi	25	16	20	24	20	13	9	23	22	23	24	16	25	25	24
Wh. Biloxi	24	20	23	25	16	21	21	19	24	22	23	17	24	23	22

(A)Early planting.
(B)Late planting.

Table 46. Summary of lodging notes for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 14 Tests	Stone-ville Miss.	Wil-lard N.C. (A)	Wil-lard N.C. (B)	McCul-lers N.C.	Clem-son S.C.	Wat-kins-ville Ga.	Ex-peri-ment Ga.	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-ches-ter Ark.	Stutt-gart Ark.	Hope Ark.
Ogden	1.2	2.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0
Mamotan 6640	1.8	3.6	2.0	1.0	2.0	5.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	2.0
Burnette	1.4	3.0	1.0	1.5	2.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0
Delsta	1.8	3.5	2.0	2.0	2.0	2.0	1.0	1.0	1.0	3.0	1.0	2.0	1.0	2.0	1.0
Nanda	1.5	3.3	1.0	1.0	2.0	3.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	1.0
Auburn #1	3.1	3.4	3.0	3.0	4.0	5.0	5.0	1.0	2.0	4.0	1.0	4.0	2.0	5.0	1.0
La. 40-400	2.7	4.0	3.2	2.5	3.5	5.0	1.0	1.0	2.0	3.0	2.0	2.0	2.5	3.0	3.0
Pelican #1	2.5	3.4	4.0	2.0	3.0	4.0	1.0	1.0	1.0	3.0	1.5	3.0	2.5	3.0	2.0
Mamloxi	1.5	1.8	1.0	1.5	2.0	2.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	2.0
La. 40-399	2.6	4.1	4.0	2.5	3.5	5.0	1.0	1.0	2.0	4.0	1.0	2.0	2.0	2.0	2.0
Missoy	3.2	4.5	3.0	3.0	4.5	5.0	2.0	1.0	4.0	4.0	1.5	3.0	2.5	4.0	3.0
Charlee	3.1	4.5	4.0	3.5	5.0	5.0	3.0	1.0	4.0	4.0	1.0	2.0	2.0	3.0	2.0
Mammoth Yel.	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	1.0	1.0	1.0
La. 40-290	2.7	3.9	4.0	2.5	3.5	5.0	2.0	1.0	4.0	3.0	2.0	2.0	1.5	3.0	1.0
Pelican #2	2.6	3.8	4.0	2.5	4.0	4.0	1.0	1.0	2.0	3.0	1.5	2.0	2.0	4.0	2.0
La. 40-293	2.8	3.8	4.0	3.0	3.5	5.0	2.0	1.0	4.0	2.0	2.5	2.0	2.0	3.0	2.0
Palmetto	2.7	5.0	4.0	2.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	1.5	3.0	2.0
Clemson	2.8	4.3	4.0	2.0	4.0	5.0	3.0	4.0	2.0	2.0	1.0	3.0	2.5	2.0	1.0
Hayseed	4.7	4.5	5.0	4.5	5.0	5.0	5.0	4.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0
Seminole	2.8	3.5	3.0	3.0	4.0	5.0	1.0	1.0	2.0	4.0	1.0	1.0	2.0	4.0	4.0
Yelredo	3.3	4.0	5.0	4.0	4.5	5.0	3.0	1.0	4.0	3.0	3.0	2.0	2.0	4.0	2.0
Arisoy	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Avoyelles	3.7	3.9	5.0	3.0	5.0	5.0	4.0	4.0	2.0	5.0	2.0	5.0	2.5	4.0	2.0
Biloxi	1.7	3.1	3.0	3.0	2.0	2.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0	1.0
Wh. Biloxi	2.0	3.4	3.0	2.5	4.0	2.0	1.0	1.0	2.0	2.0	1.0	2.0	1.5	1.0	2.0

(A)Early planting.
(B)Late planting.

Table 47. Summary of shattering notes for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 9 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Experi-ment Ga.	Au-burn Ala.	Stutt-gart Ark.	Hope Ark.
Ogden	2.7**	3.0	-	4.0	-	3.0	5.0	1.0	2.0	1.0
Mamotan 6640	1.6	1.0	1.0	1.0	1.0	3.0	1.0	2.0	1.0	3.0
Burnette	3.1	1.0	3.0	3.0	4.0	4.0	4.0	5.0	1.0	3.0
Delsta	2.2	1.0	2.0	1.0	3.0	1.0	3.0	5.0	1.0	3.0
Nanda	3.2	1.0	4.0	2.5	3.0	5.0	4.0	5.0	1.0	3.0
Auburn #1	3.7	2.7	5.0	4.0	4.0	4.0	5.0	1.5	3.0	4.0
La. 40-400	1.3	1.0	1.0	1.0	1.0	3.0	1.0	2.0	1.0	1.0
Pelican #1	1.1	1.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	1.0
Mamloxi	1.8	1.0	3.5	2.5	3.0	2.0	1.0	1.5	1.0	1.0
La. 40-399	1.6*	-	1.0	1.0	1.0	3.0	1.0	2.0	1.0	3.0
Missoy	2.6	2.0	3.0	3.0	2.0	4.0	3.0	2.0	1.0	3.0
Charlee	2.9	3.0	4.0	4.0	2.0	3.0	3.0	2.0	2.0	3.0
Mammoth Yel.	4.5	4.8	5.0	5.0	5.0	3.0	5.0	5.0	4.0	4.0
La. 40-290	1.6*	-	1.0	1.0	1.0	3.0	1.0	2.0	1.0	3.0
Pelican #2	1.4	1.0	1.0	1.0	1.0	2.0	1.0	2.0	1.0	3.0
La. 40-293	1.4	1.0	1.0	1.0	1.5	3.0	1.0	2.0	1.0	1.0
Palmetto	4.1	3.3	5.0	5.0	5.0	5.0	5.0	5.0	1.0	3.0
Clemson	4.9	4.8	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Hayseed	3.4	2.0	5.0	5.0	3.0	3.0	5.0	2.0	2.0	4.0
Seminole	2.4*	-	1.0	2.0	2.5	3.0	3.0	4.0	1.0	3.0
Yelredo	2.2	2.0	1.0	1.0	1.5	3.0	4.0	1.0	2.0	4.0
Arisoy	3.5	2.7	5.0	5.0	4.5	3.0	1.0	5.0	1.0	4.0
Avoyelles	2.2	1.0	4.0	3.5	3.5	2.0	1.0	2.5	1.0	1.0
Biloxi	1.5	1.0	1.2	1.0	1.0	3.0	1.0	1.0	1.0	3.0
Wh. Biloxi	2.2	1.0	3.0	2.5	2.0	3.0	3.0	1.0	1.0	3.0

*Only 8 tests included in the mean.
**Only 7 tests included in the mean.
(A)Early planting.
(B)Late planting.

Table 48. Summary of plant height in inches for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 14 Tests	Stone-ville Miss.	Wil-lard N.C. (A)	Wil-lard N.C. (B)	McCul-lers N.C.	Clem-son S.C.	Wat-kins-ville Ga.	Ex-peri-ment Ga.	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-ches-ter Ark.	Stutt-gart Ark.	Hope Ark.
Ogden	27.9	31	34	20	34	36	24	24	25	40	18	27	22	22	28
Mamotan 6640	37.2	43	38	30	40	42	36	34	36	48	28	34	36	32	44
Burnette	34.6	41	34	28	38	42	36	32	36	43	22	32	34	31	36
Delsta	40.7	49	58	32	40	42	40	36	46	47	30	39	32	37	42
Nanda	35.9	41	42	28	38	36	36	32	36	45	24	34	35	33	43
Auburn #1	36.4	43	40	25	42	36	36	38	32	46	20	36	36	35	44
La. 40-400	48.5	55	64	35	64	42	40	44	56	56	49	42	45	41	46
Pelican #1	50.6	58	66	40	60	54	46	46	50	59	52	40	44	43	50
Mamloxi	38.4	47	42	25	42	42	36	36	46	46	27	35	36	35	43
La. 40-399	48.4	58	60	38	62	42	48	46	46	48	48	42	48	41	50
Missoy	47.2	53	60	35	56	48	40	50	56	53	40	41	42	39	48
Charlee	47.1	56	62	34	52	72	36	38	55	54	38	41	39	42	40
Mammoth Yel.	31.7	36	28	24	28	36	36	28	33	39	19	33	36	28	40
La. 40-290	49.0	57	66	36	64	42	48	44	51	56	50	39	50	43	40
Pelican #2	50.1	58	66	35	64	54	46	48	46	58	51	38	44	42	52
La. 40-293	50.5	59	66	40	64	42	48	46	56	54	52	42	46	42	50
Palmetto	49.6	56	66	38	56	60	40	56	48	51	45	43	42	41	52
Clemson	44.3	54	64	33	48	60	36	36	37	52	42	41	35	37	45
Hayseed	43.2	57	72	30	60	48	36	32	37	48	40	38	40	39	28
Seminole	41.3	45	48	28	44	60	36	44	36	44	31	38	40	37	47
Yelredo	42.4	54	56	28	47	48	30	44	38	46	42	37	39	40	45
Arisoy	36.7*	42	--	--	--	48	40	30	33	48	36	26	36	35	30
Avoyelles	45.0	52	63	36	60	42	36	44	36	46	42	41	48	39	45
Biloxi	44.7	53	63	34	52	48	40	40	45	49	40	38	38	38	48
Wh. Biloxi	48.5	57	64	34	58	52	40	50	50	55	44	41	43	41	50
Mean	42.8	50.2	55.1	31.9	50.5	47.0	38.6	39.9	42.6	49.2	37.2	37.5	39.4	37.3	43.4

*Only 11 tests included in the mean.
(A)Early planting.
(B)Late planting.

Table 49. Summary of the maturity* notes for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 12 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Watkins-ville Ga.	Experi-ment Ga.	Au-burn Ala.	Mari-anna Ark.	Win-chester Ark.	Stutt-gart Ark.	Hope Ark.
Ogden	-17.8	-20	-18	- 2	-15	- 6	-14	-20	-36	-22	+ 1	-17	-45
Mamotan 6640	+10.7	+13	+ 7	+12	+ 7	+11	+ 9	+11	+ 7	0	+28	+18	+ 5
Burnette	+10.5	+13	+ 6	+10	+10	+11	+ 6	+10	+ 7	0	+28	+18	+ 7
Delsta	+12.6	+13	+ 8	+13	+18	+11	+ 7	+10	+16	0	+28	+18	+ 9
Nanda	+ 9.9	+13	+ 7	+12	+10	+ 5	+ 7	+ 7	+ 7	0	+28	+18	+ 5
Auburn #1	- 3.0	- 8	- 7	+ 1	- 3	+ 5	- 7	0	0	-22	0	0	+ 5
La. 40-400	+ 12.1	+ 13	+ 10	+ 16	+ 24	+ 11	+ 9	0	+ 7	0	+ 28	+ 18	+ 9
Pelican #1	+ 12.9	+ 13	+ 10	+ 15	+ 24	+ 11	+ 9	+ 11	+ 7	0	+ 28	+ 18	+ 9
Mamloxi	+ 6.4	0	+ 6	+ 5	+ 9	+ 5	+ 6	0	0	0	+ 28	+ 18	0
La. 40-399	+ 12.1	+ 13	+ 10	+ 16	+ 24	+ 11	+ 9	0	+ 7	0	+ 28	+ 18	+ 9
Missoy	+ 4.9	0	+ 5	+ 6	+ 10	+ 11	0	0	0	0	0	+ 18	+ 9
Charlee	+ 3.8	0	+ 5	+ 6	+ 7	+ 5	0	0	0	0	0	+ 18	+ 5
Mammoth Yel.	0.0	0	0	0	0	0	0	0	0	0	0	0	0
La. 40-290	+ 12.8	+13	+10	+ 16	+ 24	+ 11	+ 10	+ 11	+ 7	0	+ 28	+ 18	+ 5
Pelican #2	+ 13.0	+13	+10	+ 15	+ 24	+ 11	+ 10	+ 11	+ 7	0	+ 28	+ 18	+ 9
La. 40-293	+ 13.1	+13	+10	+ 16	+ 24	+ 11	+ 10	+ 11	+ 7	0	+ 28	+ 18	+ 9
Palmetto	+ 2.4	0	+ 1	+ 2	+ 2	+ 5	0	0	0	0	+ 1	+ 18	0
Clemson	- 1.6	0	- 2	0	+ 2	+ 5	- 7	0	0	-22	0	0	+ 5
Hayseed	- 9.9	-20	-10	+ 2	-10	+ 2	- 7	- 3	-25	-22	+ 1	-17	-10
Seminole	+ 10.6	+19	+ 5	+ 13	+ 10	+ 5	+ 6	+ 11	+ 7	0	+ 28	+ 18	+ 5
Yelredo	- 1.6	0	- 6	0	+ 4	+ 5	0	0	0	-22	0	0	0
Arisoy	+11.5	+13	+ 6	+ 16	+ 21	+ 5	+ 9	+ 10	+ 7	0	+ 28	+ 18	+ 5
Avoyelles	+15.2	+19	+14	+ 19	+ 28	+ 11	+ 9	+ 11	+ 16	0	+ 28	+ 18	+ 9
Biloxi	+12.8	+16	+10	+ 16	+ 24	+ 11	+ 7	+ 7	+ 7	0	+ 28	+ 18	+ 9
Wh. Biloxi	+14.1	+19	+10	+ 19	+ 28	+ 11	+ 9	+ 11	+ 7	0	+ 28	+ 18	+ 9
Mammoth Yel. Matured		10/27	10/22	10/22	10/18	10/21	10/16	10/18	10/19	11/19	10/14	10/29	11/15
Date Planted		4/24	4/13	6/17	4/9	5/7	5/5	5/6	4/8	5/8	5/21	5/14	5/10

*Days earlier (-) or later (+) than Mammoth Yellow. (A) Early planting. (B) Late planting.

Table 50. Summary of seed quality notes for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 11 Tests	Stone-ville Miss.	Wil-lard N.C. (A)	Wil-lard N.C. (B)	McCul-lers N.C.	Clem-son S.C.	Wat-kins-ville Ga.	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-ches-ter Ark.	Stutt-gart Ark.[1]	Hope Ark.[1]
Ogden	2.3	2.8	2.0	2.0	2.0	2.0	2.0	3.0	2.5	3.0	2.0	2.3	2.5	3.0
Mamotan 6640	2.9	3.3	2.8	2.0	2.0	4.0	3.0	3.0	3.0	3.0	2.0	4.0	2.5	2.5
Burnette	3.2	2.8	2.5	2.0	2.0	5.0	4.0	4.0	3.0	4.0	1.5	4.8	2.0	3.0
Delsta	3.0	2.5	2.5	2.0	2.0	5.0	3.0	4.0	3.0	4.0	1.5	3.5	3.0	3.5
Nanda	3.1	3.3	2.0	2.0	2.0	4.0	4.0	4.0	2.5	4.0	1.5	4.5	-	2.0
Auburn #1	2.1	2.8	2.0	2.0	2.0	1.0	2.0	3.0	2.0	1.0	1.5	3.8	3.0	1.5
La. 40-400	2.7	3.5	2.0	2.0	2.0	5.0	4.0	3.0	2.5	1.0	1.5	2.8	3.0	1.5
Pelican #1	2.7	2.8	2.0	2.0	2.0	5.0	4.0	3.0	2.0	2.5	1.5	2.5	2.0	1.5
Mamloxi	2.8	2.0	2.5	3.0	2.0	4.0	2.0	4.0	2.0	3.0	2.0	3.8	2.5	2.0
La. 40-399	2.7	3.5	2.0	2.0	2.0	5.0	4.0	3.0	2.0	1.5	1.5	2.8	3.0	1.5
Missoy	2.4	3.0	2.0	2.0	2.0	3.0	3.0	3.0	2.5	1.0	1.5	3.3	2.0	2.0
Charlee	2.5	2.5	2.0	2.0	2.0	4.0	3.0	3.0	2.5	2.0	1.0	3.0	2.0	2.0
Mammoth Yel.	2.4	1.5	3.0	2.0	2.0	1.0	2.0	4.0	2.5	3.0	2.0	3.0	4.0	2.5
La. 40-290	2.8	3.0	2.0	2.0	2.0	5.0	4.0	3.0	2.0	3.0	1.5	3.5	3.0	1.5
Pelican #2	2.8	3.0	2.0	2.0	2.0	5.0	4.0	3.0	2.0	3.0	1.5	2.8	3.0	1.5
La. 40-293	2.8	3.0	2.0	2.0	2.0	5.0	4.0	3.0	2.5	3.0	1.5	2.5	-	1.5
Palmetto	2.4	3.3	2.0	2.0	2.0	2.0	3.0	3.0	2.5	2.0	1.5	3.3	2.5	2.5
Clemson	2.4	3.0	2.0	2.0	2.0	2.0	2.0	4.0	2.5	2.5	1.5	2.8	3.0	2.0
Hayseed	2.7	3.5	4.0	2.0	3.0	2.0	2.0	4.0	2.0	3.0	1.5	2.5	2.5	2.5
Seminole	3.1	3.8	2.0	2.0	2.0	5.0	4.0	4.0	2.0	3.0	2.0	4.5	2.0	2.0
Yelredo	2.7	2.5	3.0	3.0	2.0	3.0	3.0	4.0	2.5	2.0	2.5	2.5	4.0	2.0
Arisoy	3.7	3.8	4.0	2.0	4.0	5.0	4.0	5.0	3.0	4.0	1.5	4.0	2.0	2.0
Avoyelles	2.9	2.3	2.0	2.0	2.0	5.0	4.0	4.0	4.0	1.5	2.0	3.0	-	4.0
Biloxi	3.1	3.3	2.5	2.5	2.0	5.0	4.0	4.0	2.0	3.0	2.0	4.0	-	-
Wh. Biloxi	3.0	2.8	2.0	2.0	3.0	5.0	3.0	4.0	3.0	3.0	1.5	3.5	-	-

(A)Early planting.
(B)Late planting.
[1]Not included in the mean.

Table 51. Summary of seed size, grams per 100 seed, for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 16 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Watkins-ville Ga.	Experi-ment Ga.
Ogden	13.9	14	14	16	14	16	12	13
Mamotan 6640	14.6	15	19	16	17	14	14	15
Burnette	19.9	19	25	21	24	21	22	21
Delsta	16.8	18	21	20	20	15	17	18
Nanda	16.9	17	21	17	20	17	17	19
Auburn #1	11.9	12	13	12	12	12	14	13
La. 40-400	10.0	10	12	11	11	6	10	12
Pelican #1	9.9	10	12	11	10	6	9	11
Mamloxi	17.0	18	20	18	18	15	18	20
La. 40-399	10.1	10	12	11	11	6	9	12
Missoy	10.4	11	12	11	11	10	12	11
Charlee	10.1	10	12	11	11	11	12	10
Mammoth Yellow	15.7	15	19	16	17	17	18	17
La. 40-290	10.1	10	12	12	11	6	9	11
Pelican #2	10.1	10	12	10	11	6	10	12
La. 40-293	10.0	10	12	11	10	6	8	12
Palmetto	10.8	11	12	11	12	11	13	10
Clemson	11.6	12	13	12	12	11	14	12
Hayseed	8.9	8	9	11	8	9	8	10
Seminole	19.4	23	20	21	19	11	20	22
Yelredo	8.9	8	12	8	9	10	10	10
Arisoy	10.7	10	13	12	12	8	12	12
Avoyelles	9.0	9	11	9	8	5	8	10
Biloxi	16.1	19	20	19	16	13	16	19
White Biloxi	15.3	16	18	17	15	19	15	19
Mean	12.8	13.0	15.0	13.8	13.6	11.2	13.1	14.0

(A)Early planting. (B) Late planting.

Table 51. (continued)

Strain	Hartsville S.C.(A)	Hartsville S.C.(B)	Florence S.C.	Clarkedale Ark.	Auburn Ala.	Marianna Ark.	Winchester Ark.	Stuttgart Ark.	Hope Ark.
Ogden	12	16	12	16	13	15	15	14	10
Mamotan 6640	13	15	15	8	16	10	13	17	16
Burnette	20	22	20	15	19	13	17	22	17
Delsta	17	18	17	11	18	13	15	16	15
Nanda	16	18	16	12	19	13	15	17	17
Auburn #1	12	13	13	10	11	9	11	12	11
La. 40-400	10	10	11	6	12	6	9	12	12
Pelican #1	10	10	11	7	12	7	8	12	12
Mamloxi	17	19	18	11	17	12	16	19	16
La. 40-399	10	10	12	6	13	6	8	12	13
Missoy	10	10	11	7	12	8	10	11	10
Charlee	10	10	11	7	11	6	9	10	11
Mammoth Yellow	15	17	15	12	14	13	14	16	16
La. 40-290	11	10	11	6	14	7	9	11	12
Pelican #2	11	10	12	6	11	7	10	11	12
La. 40-293	11	10	12	6	13	6	8	12	13
Palmetto	10	11	11	8	12	8	9	12	11
Clemson	10	13	11	10	12	9	11	13	11
Hayseed	7	10	8	9	9	9	10	10	8
Seminole	22	20	21	15	24	14	17	21	20
Yelredo	9	9	9	6	10	6	8	10	8
Arisoy	12	11	11	6	12	5	8	13	14
Avoyelles	10	9	9	5	13	8	8	11	11
Biloxi	16	17	16	10	16	12	16	16	17
White Biloxi	17	15	15	8	18	11	12	14	15
Mean	12.7	13.3	13.1	8.9	14.0	9.3	11.4	13.8	13.1

(A)Early planting.
(B)Late planting.

Table 52. Summary of percentage of protein for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 16 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Watkins-ville Ga.	Experi-ment Ga.
Ogden	43.9	42.2	45.4	43.9	43.8	43.0	46.1	44.6
Mamotan 6640	43.0	40.1	44.1	42.7	39.6	39.9	42.9	45.5
Burnette	43.3	41.3	45.5	43.5	43.2	41.3	43.1	41.6
Delsta	43.4	43.0	44.1	43.8	43.6	41.5	42.9	43.1
Nanda	43.8	42.8	44.1	43.5	43.5	43.2	43.0	43.2
Auburn #1	44.6	42.8	46.1	43.5	42.7	41.6	45.1	44.1
La. 40-400	43.7	43.0	44.3	44.3	43.5	42.7	44.8	41.3
Pelican #1	43.6	43.3	45.0	45.7	43.2	43.3	43.7	40.4
Mamloxi	46.3	45.7	47.5	46.8	45.8	46.2	45.3	48.5
La. 40-399	43.6	41.9	44.7	44.4	43.8	41.6	44.2	43.5
Missoy	43.6	43.2	46.1	43.5	44.7	41.8	45.1	42.8
Charlee	43.7	42.8	46.2	44.2	44.6	42.5	44.2	40.9
Mammoth Yellow	45.7	43.1	47.2	44.5	45.1	43.1	46.6	50.8
La. 40-290	43.1	42.9	44.7	45.0	42.4	41.6	42.5	38.3
Pelican #2	44.2	43.3	45.9	46.5	44.2	43.9	42.3	41.7
La. 40-293	42.9	43.1	43.8	44.6	42.1	42.3	42.8	41.1
Palmetto	45.6	45.0	47.2	45.5	45.5	44.5	45.6	44.0
Clemson	44.9	43.5	47.7	44.8	43.9	41.8	45.1	46.4
Hayseed	44.7	43.2	46.3	43.1	46.6	42.5	45.3	48.2
Seminole	46.3	45.4	46.2	45.8	46.5	43.6	46.5	45.4
Yelredo	44.8	42.1	47.8	45.4	45.3	43.2	43.9	44.2
Arisoy	44.7	43.6	46.8	44.5	45.1	43.8	42.3	44.4
Avoyelles	43.8	41.9	43.8	43.9	43.9	41.0	43.4	44.3
Biloxi	48.6	48.5	49.2	49.5	49.6	48.0	48.2	48.3
White Biloxi	46.9	47.1	47.5	47.4	46.6	46.7	45.1	46.8
Mean	44.5	43.4	45.9	44.8	44.4	43.0	44.4	44.1

(A)Early planting.
(B)Late planting.

Table 52. (continued)

Strain	Hartsville S.C.(A)	Hartsville S.C.(B)	Florence S.C.	Clarkedale Ark.	Auburn Ala.	Marianna Ark.	Winchester Ark.	Stuttgart Ark.	Hope Ark.
Ogden	45.7	41.5	44.8	42.4	46.6	39.9	42.8	47.2	41.8
Mamotan 6640	45.8	42.0	46.8	39.7	43.9	38.2	45.2	47.8	44.2
Burnette	44.4	41.8	46.8	41.9	45.5	38.8	43.7	46.8	43.2
Delsta	43.9	42.2	44.4	41.9	44.9	41.8	45.0	46.0	42.7
Nanda	44.8	41.9	46.4	42.8	44.8	41.0	45.2	47.8	42.1
Auburn #1	47.3	42.4	48.5	43.7	44.8	43.4	44.6	49.6	43.2
La. 40-400	44.5	42.8	44.9	41.8	45.5	38.3	43.7	48.6	44.9
Pelican #1	44.2	41.2	46.0	41.2	46.6	40.3	43.0	47.9	42.7
Mamloxi	45.9	45.3	47.7	44.9	46.9	42.0	46.5	49.9	45.5
La. 40-399	45.3	42.0	46.1	41.3	45.5	38.7	42.6	48.7	43.9
Missoy	45.1	42.6	47.3	41.7	43.4	40.1	44.1	45.0	41.7
Charlee	45.8	43.1	47.1	41.2	43.9	40.5	43.0	46.8	41.6
Mammoth Yellow	47.5	43.6	48.7	44.2	49.5	38.8	43.2	51.8	44.1
La. 40-290	44.1	40.9	45.4	41.9	45.6	39.4	43.6	47.3	43.3
Pelican #2	46.9	41.2	45.6	42.5	46.4	39.6	43.8	48.7	44.2
La. 40-293	45.0	40.5	44.2	40.9	45.6	37.2	41.8	48.0	42.8
Palmetto	48.2	43.7	49.9	44.8	45.4	41.5	43.6	49.4	46.3
Clemson	45.4	44.1	48.6	44.0	45.9	41.6	43.2	48.7	43.8
Hayseed	47.4	42.9	46.4	43.7	47.1	36.6	41.8	48.6	45.0
Seminole	48.2	43.9	48.8	45.9	46.1	42.5	49.4	49.4	46.9
Yelredo	47.4	43.5	47.1	41.5	46.6	41.9	42.9	51.9	42.0
Arisoy	46.6	41.4	49.1	42.1	46.5	39.7	44.3	48.6	46.4
Avoyelles	45.7	42.4	45.8	43.1	44.4	41.1	46.0	46.5	43.3
Biloxi	47.0	48.0	49.9	45.3	49.0	48.5	50.2	50.2	47.7
White Biloxi	47.3	47.0	47.4	44.5	47.7	44.1	48.7	50.9	45.2
Mean	46.0	42.9	46.9	42.8	45.9	40.6	44.5	48.5	43.9

(A)Early planting.
(B)Late planting.

Table 53. Summary of percentage of oil for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 16 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Watkins-ville Ga.	Experi-ment Ga.
Ogden	19.4	21.2	19.1	18.8	19.8	20.9	18.6	19.3
Mamotan 6640	17.2	19.4	17.8	17.4	19.2	18.1	16.2	17.6
Burnette	17.0	18.8	17.0	17.6	17.3	17.8	16.7	17.2
Delsta	16.8	18.3	17.5	17.0	17.1	16.4	16.3	16.9
Nanda	17.3	18.9	17.7	17.5	17.6	18.0	16.5	17.8
Auburn #1	15.4	16.4	15.1	16.2	15.8	15.6	15.4	16.1
La. 40-400	17.9	19.3	18.1	17.9	17.5	17.8	16.8	19.3
Pelican #1	18.3	19.2	18.8	18.0	18.1	17.8	17.4	20.3
Mamloxi	16.4	17.8	16.7	16.5	16.4	16.4	16.0	16.5
La. 40-399	17.9	19.2	18.2	17.6	17.4	17.6	17.0	19.1
Missoy	17.5	18.6	17.9	17.3	16.8	17.6	16.8	18.1
Charlee	17.4	18.4	16.5	17.4	17.2	18.1	17.2	18.8
Mammoth Yellow	17.2	18.7	16.8	17.0	17.2	17.8	16.4	17.2
La. 40-290	18.1	19.5	18.2	17.7	18.1	18.0	17.4	20.5
Pelican #2	18.1	19.5	18.8	17.5	17.7	17.7	17.7	19.8
La. 40-293	18.1	19.0	18.4	17.9	18.3	17.7	17.0	19.7
Palmetto	16.0	17.5	16.1	16.5	16.3	16.6	16.2	16.5
Clemson	16.4	17.3	16.0	16.6	16.9	17.2	16.4	17.0
Hayseed	18.3	18.6	18.1	19.0	17.5	18.8	17.7	18.0
Seminole	16.6	18.2	17.1	16.5	16.8	17.1	16.2	17.1
Yelredo	17.2	18.5	16.1	16.1	17.2	18.0	17.7	17.6
Arisoy	17.2	18.2	16.8	17.7	17.2	19.0	17.3	18.4
Avoyelles	15.3	17.0	16.2	15.8	15.8	15.4	14.5	15.6
Biloxi	16.2	17.5	17.1	16.2	15.9	16.7	16.1	17.2
White Biloxi	16.1	16.5	16.4	15.6	15.5	18.3	16.1	16.1
Mean	17.2	18.5	17.3	17.2	17.2	17.6	16.7	17.9

(A)Early planting. (B) Late planting.

Table 53. (continued)

Strain	Harts-ville S.C.(A)	Harts-ville S.C.(B)	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-chester Ark.	Stutt-gart Ark.	Hope Ark.
Ogden	16.5	20.7	18.6	19.1	19.7	20.4	19.3	18.7	19.8
Mamotan 6640	16.6	18.0	16.2	16.7	18.5	16.4	15.1	15.6	16.5
Burnette	17.3	17.5	16.2	16.5	17.0	16.9	15.0	16.1	16.5
Delsta	17.4	17.2	16.3	16.4	16.6	16.5	15.1	16.2	16.8
Nanda	17.5	17.9	15.8	17.2	17.9	17.0	15.7	16.2	17.3
Auburn #1	14.8	16.2	14.3	16.0	15.9	15.1	14.3	13.6	15.6
La. 40-400	18.0	18.9	17.2	17.0	18.3	17.9	17.0	16.9	17.8
Pelican #1	18.9	20.0	17.1	17.3	18.5	17.5	17.6	17.3	18.8
Mamloxi	17.3	16.5	15.1	15.9	16.9	16.6	15.9	15.3	16.4
La. 40-399	17.4	18.8	17.1	17.4	18.4	17.7	17.5	17.0	18.6
Missoy	16.9	17.6	16.6	17.3	18.9	17.1	17.1	17.0	17.9
Charlee	16.9	17.8	16.5	17.6	18.0	16.5	17.1	16.3	18.0
Mammoth Yellow	16.8	17.8	16.4	16.9	16.5	18.1	18.2	16.4	16.8
La. 40-290	18.2	19.5	17.2	16.9	18.6	17.5	17.4	16.5	18.2
Pelican #2	18.2	19.9	17.7	17.0	17.5	18.0	17.7	17.2	18.3
La. 40-293	17.9	19.7	17.7	16.8	18.2	18.5	17.8	16.4	18.2
Palmetto	15.3	16.3	13.9	15.7	16.1	15.7	16.5	14.8	15.7
Clemson	15.7	16.9	15.2	16.4	16.0	16.9	16.7	15.2	16.4
Hayseed	16.1	20.1	17.1	18.4	17.9	20.3	18.7	17.4	18.4
Seminole	17.5	17.6	16.2	15.7	18.1	15.7	14.9	15.5	15.4
Yelredo	17.0	17.9	16.0	16.5	17.0	16.8	17.8	16.9	18.4
Arisoy	17.0	18.7	16.4	16.4	17.8	17.0	15.9	15.5	16.1
Avoyelles	14.2	15.8	14.8	14.0	15.2	16.1	14.0	14.5	15.4
Biloxi	17.1	16.6	15.5	16.3	16.2	15.0	14.6	15.1	15.5
White Biloxi	17.1	16.6	16.3	15.1	16.7	15.2	14.4	15.6	16.3
Mean	16.9	18.0	16.3	16.7	17.5	17.1	16.5	16.1	17.2

(A)Early planting. (B) Late planting.

Table 54. Summary of iodine number of the oil for the strains in the Uniform Test, Group VI, Upper South, 1943.

Strain	Mean of 16 Tests	Stone-ville Miss.	Wil-lard N.C.(A)	Wil-lard N.C.(B)	McCul-lers N.C.	Clem-son S.C.	Watkins-ville Ga.	Experi-ment Ga.
Ogden	132.6	131.4	134.2	135.3	134.3	135.1	131.6	130.9
Mamotan 6640	138.3	137.8	136.9	138.8	138.3	142.6	141.5	139.1
Burnette	132.1	131.7	130.9	132.0	133.7	134.6	131.7	132.1
Delsta	133.6	132.4	132.2	133.2	134.6	136.6	132.9	134.0
Nanda	132.2	132.1	131.1	132.1	133.5	133.4	133.2	131.5
Auburn #1	135.2	134.7	136.5	137.4	137.7	137.7	132.8	135.0
La. 40-400	136.8	136.3	135.6	137.2	137.8	141.3	140.5	137.2
Pelican #1	137.5	133.7	135.9	138.3	138.0	145.9	140.4	138.3
Mamloxi	134.0	133.4	133.4	135.2	135.4	139.3	135.1	133.1
La. 40-399	137.5	136.3	136.0	137.8	138.0	145.9	140.8	136.9
Missoy	133.7	133.4	133.2	135.7	134.7	138.1	134.0	134.3
Charlee	134.4	133.2	133.2	136.1	135.4	137.3	134.7	136.0
Mammoth Yellow	133.1	134.5	130.9	133.7	134.8	134.2	133.2	130.9
La. 40-290	137.3	135.4	135.6	137.7	137.4	145.0	140.2	138.0
Pelican #2	138.2	136.6	136.1	138.6	139.1	145.0	140.8	138.6
La. 40-293	137.6	136.0	135.6	137.5	138.0	146.2	141.4	138.0
Palmetto	134.1	132.4	130.2	135.7	134.7	136.9	132.8	135.0
Clemson	132.9	132.1	132.9	135.7	135.1	135.4	132.1	132.6
Hayseed	132.1	132.3	131.5	134.1	133.7	134.0	129.4	130.3
Seminole	135.9	133.7	134.4	136.5	136.6	141.4	136.4	136.6
Yelredo	134.8	135.9	132.3	136.9	136.3	135.7	134.7	136.0
Arisoy	132.1	133.4	131.3	132.5	131.7	133.7	131.7	132.3
Avoyelles	140.1	138.0	136.8	140.3	141.0	148.6	140.5	141.4
Biloxi	135.9	133.4	134.3	136.3	137.2	141.1	137.9	135.1
White Biloxi	135.2	133.7	134.3	135.7	135.3	136.8	137.2	135.4
Mean	135.1	134.2	133.8	136.0	136.1	139.3	135.9	135.1

(A)Early planting. (B) Late planting.

Table 54. (continued)

Strain	Harts-ville S.C.(A)	Harts-ville S.C.(B)	Flor-ence S.C.	Clarke-dale Ark.	Au-burn Ala.	Mari-anna Ark.	Win-chester Ark.	Stutt-gart Ark.	Hope Ark.
Ogden	136.6	134.2	133.1	133.2	130.3	134.6	129.8	129.9	127.7
Mamotan 6640	136.3	134.5	135.7	138.8	134.3	140.2	139.6	138.4	139.4
Burnette	128.8	129.4	130.6	134.5	129.8	134.8	133.0	132.3	133.2
Delsta	130.9	131.7	132.9	134.0	131.5	136.7	135.6	133.9	134.4
Nanda	130.0	130.3	131.3	133.7	129.1	135.1	132.9	133.7	132.7
Auburn #1	131.8	132.6	132.8	136.0	131.6	139.4	136.9	135.1	135.1
La. 40-400	134.7	132.6	135.4	136.2	132.6	140.1	137.6	136.6	136.3
Pelican #1	134.6	136.9	136.0	136.9	132.1	140.5	138.3	137.6	136.8
Mamloxi	130.9	130.4	132.8	135.4	129.4	136.9	134.7	134.6	134.3
La. 40-399	135.4	136.6	135.7	136.7	132.9	140.2	137.8	136.6	137.0
Missoy	130.9	130.3	130.5	133.8	128.6	138.8	135.1	133.4	133.7
Charlee	131.5	134.3	132.1	134.5	129.7	138.6	136.0	134.6	133.2
Mammoth Yellow	133.1	137.4	130.2	133.7	131.1	136.6	132.1	130.9	132.2
La. 40-290	134.5	136.0	135.1	136.6	131.7	141.1	138.3	137.3	137.2
Pelican #2	135.6	136.9	136.0	137.3	134.5	141.6	138.2	137.8	138.5
La. 40-293	134.7	136.3	135.6	135.7	133.4	140.2	138.5	138.3	136.6
Palmetto	132.1	136.9	134.0	134.5	128.3	139.4	135.4	134.5	132.9
Clemson	130.6	130.9	130.6	133.6	127.2	138.0	134.5	133.2	132.3
Hayseed	132.6	132.1	126.7	134.5	129.3	136.9	133.3	133.0	129.5
Seminole	133.1	135.0	133.2	136.3	132.1	138.5	136.0	137.7	137.6
Yelredo	133.4	133.4	133.8	135.7	132.3	139.5	136.3	130.5	133.8
Arisoy	128.7	130.6	128.6	133.3	128.5	136.0	133.7	133.7	133.2
Avoyelles	136.9	138.6	137.3	140.2	136.6	142.8	142.2	140.2	140.2
Biloxi	132.1	133.5	135.5	134.7	133.2	139.4	136.3	137.4	137.5
White Biloxi	132.1	135.7	133.4	135.1	130.8	139.3	135.3	136.6	135.7
Mean	132.9	133.9	133.2	135.4	131.2	138.6	135.9	135.1	134.8

(A)Early planting.
(B)Late planting.

Table 55. Analysis of variance for yield of seed from 15 locations for the Uniform Test, Group VI, Upper South, 1943.

Source of Variation	Degrees of Freedom	Mean Square
Locations	14	4149.8529**
Varieties	24	411.7887**
Locations x varieties	336	64.1362**
Error	1125	8.0268

**Highly significant.

Table 56. "F" values as determined by analysis of variance for agronomic and chemical data for the Uniform Test, Group VI, Upper South, 1943.

Source of Variation	Degrees of Freedom	"F" Values			
		Seed Size	Percent Protein	Percent Oil	I_2 No. of Oil
Locations	15	31.33**	55.69**	9.07**	64.70**
Varieties	24	85.13**	19.62**	14.91**	55.29**
Error	360				

**Highly significant.

The agronomic and chemical data for the varieties and strains of soybeans of the Uniform Test, Group VI, in the Lower South, are summarized in tables 58 to 69. Only eight tests were completed. While tests in Florida made excellent growth, they failed to set any appreciable amount of seed. At other locations, severe infections of root knot nematode, Sclerotium rolfsii, bacterial pustule and blight, singly and in combination, seriously reduced yields.

The velvet bean caterpillar at some locations defoliated the varieties. A few of the strains appeared to have some resistance to one of the diseases, and are being used in crosses to develop more disease resistant strains.

The analysis of variance of yield of seed is given in table 70. Yields are extremely variable between locations with none of the varieties ranking consistently high. Coefficients of variability ranged from 20 to 53 per cent. All of the higher yielding varieties were tall growing and lodged more than is desirable in a seed bean. Charlee, Missoy, La. 40-290, La. 40-293, Seminole, and Auburn, appeared to be the more promising varieties in this section. It is of interest to note that Ogden in this region ranked 20th in Group VI in the Lower South.

The mean squares for yield as given in table 70 for locations, varieties, and the location x variety interaction were all highly significant. The "F" values as given in table 71 for seed size and chemical data for location and variety are also all highly significant. The "F" values indicate that locations have affected the per cent protein and per cent oil more than varietal differences. Seed size in all of the varietal groups has been more of a varietal characteristic and has not been affected to the same extent by location.

Table 57. Mean response of the varieties in Group VI of the Uniform Test to Location, 1943.

Location	Rainfall July, Aug., & Sept.	Mean Temp. July, Aug., & Sept.	Date Planted	Mean of All Varieties: Plant Height (In.)	Yield (Bu. per A.)	Wt. of 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
McCullers, N.C.	12.5	76.3	4/9	50.5	19.8	13.6	44.4	17.2	136.1
Willard, N.C.(A)	18.5	76.0	4/13	55.1	21.9	15.0	45.9	17.3	133.8
Willard, N.C.(B)	18.5	76.0	6/17	31.9	18.9	13.8	44.8	17.2	136.0
Clarkedale, Ark.	8.3	78.6	5/7	49.2	8.2	8.9	42.8	16.7	135.4
Marianna, Ark.	6.8	79.0	5/8	37.5	5.3	9.3	40.6	17.1	138.6
Stuttgart, Ark.	3.5	79.7	5/14	37.3	2.9	13.8	48.5	16.1	135.1
Winchester, Ark.	4.9	81.5	5/21	39.4	4.3	11.4	44.5	16.5	135.9
Hope, Ark.	4.2	80.5	5/10	43.4		13.1	43.9	17.2	134.8
Stoneville, Miss.	7.2	79.8	4/24	50.2	22.9	13.0	43.4	18.5	134.2
Auburn, Ala.	12.1	83.0	4/8	37.2	7.2	14.0	45.9	17.5	131.2
Fairhope, Ala.	21.2	55.0	5/24		9.6	13.8	49.1	16.2	134.0
Watkinsville, Ga.	12.3	75.9	5/5	38.6	11.4	13.1	44.4	16.7	135.9
Experiment, Ga.	13.2	76.7	5/6	39.9	11.0	14.0	44.1	17.9	135.1
Millen, Ga.	15.7	79.5	5/4	39.8	14.5	15.2	44.7	16.9	134.1
Richmond Hill, Ga.	19.6	78.6	5/11	29.2	14.3	14.0	44.7	18.9	133.3
Tifton, Ga.	11.6	79.5	4/22	37.0	12.3	12.6	45.1	18.5	131.8
Sandersville, Ga.	10.1	78.2	5/3	47.2	3.8	10.2	45.5	15.0	135.5
Clemson, S.C.	16.0	77.2	5/7	47.0	14.0	11.2	43.0	17.6	139.3
Florence, S.C.	11.7	76.9	4/27	42.6	8.3	13.1	46.9	16.3	133.2
Hartsville, S.C.(A)	10.9	75.4	5/28		8.3	12.7	46.0	16.9	132.9
Hartsville, S.C.(B)	10.9	75.4	6/30		13.1	13.3	42.9	18.0	133.9
Monetta, S.C.	11.0	76.0	4/27	51.3	13.7	14.6	45.1	16.8	134.4
Blackville, S.C.	12.3	78.4	5/4	43.6	4.9	13.1	44.2	16.2	133.9
Crowley, La.	17.9	80.4	5/29	34.5	10.6	13.8	47.1	17.1	134.5

Table 58. Summary of agronomic and chemical data for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Yield (Bu. per A.)	Lodging	Shattering	Height (In.)	Maturity*	Seed Quality	Weight 100 Seed (Grams)	% Protein	% Oil	I_2 No. of Oil
No. of Tests	8	6	6	10	7	5	8	8	8	8
Charlee	13.4	2.8	1.6	44.1	+ 2.3	3.0	10.8	45.5	17.0	133.4
Missoy	13.0	2.6	1.9	44.7	+ 2.9	3.0	10.8	45.0	17.2	133.1
La. 40-290	13.0	2.4	1.2	47.2	+10.0	2.6	10.9	44.4	18.4	135.5
La. 40-293	12.9	2.4	1.2	47.4	+10.0	2.8	11.6	44.7	18.3	135.7
Palmetto	12.0	2.4	2.9	46.8	+ 2.1	3.2	11.3	47.4	15.6	133.0
Delsta	11.8	1.7	2.4	34.3	+15.0	3.6	18.4	44.6	16.6	132.5
Seminole	11.8	2.0	1.6	35.2	+13.7	3.3	21.6	46.4	17.1	134.7
Auburn #1	11.7	1.8	1.7	27.0	- 1.3	2.8	11.5	45.9	15.1	135.3
Mamotan 6640	11.6	1.4	1.3	33.3	+14.1	3.0	15.4	44.3	16.8	137.5
Pelican #2	11.5	2.4	1.3	47.8	+ 9.9	2.2	10.5	44.9	18.4	136.9
Nanda	11.0	1.3	2.7	29.0	+12.4	3.4	17.4	44.5	17.2	131.2
Biloxi	10.9	1.9	1.3	43.1	+12.3	3.3	17.8	48.1	16.7	134.3
Mamloxi	10.6	1.4	1.7	33.0	+ 7.1	3.7	16.9	46.7	16.2	133.1
Pelican #1	10.4	2.2	1.2	49.2	+ 8.9	2.6	10.5	44.9	18.2	136.1
Burnette	10.4	1.2	2.9	27.9	+15.0	3.4	21.4	45.1	16.7	131.0
Yelredo	9.8	2.6	1.1	41.3	+ 1.0	3.4	9.4	46.1	16.8	134.5
Clemson	9.4	2.4	3.3	44.4	- .4	3.6	11.4	46.6	15.7	132.6
La. 40-400	9.2	2.1	1.3	47.0	+ 8.4	2.2	10.9	45.5	17.7	136.5
Arisoy	9.2	3.6	3.4	38.6	+ 7.7	3.2	11.1	45.5	17.4	131.1
Ogden	8.7	1.1	1.7	18.2	- 2.8	3.5	13.6	46.5	17.7	132.4
Avoyelles	8.6	3.1	2.1	42.9	+12.7	2.2	10.6	43.1	16.1	135.9
White Biloxi	8.3	1.9	1.4	44.9	+16.1	3.5	16.5	47.1	16.2	133.7
La. 40-399	8.0	2.1	1.2	47.3	+ 9.9	2.4	10.8	45.8	17.7	136.4
Hayseed	7.4	3.2	2.0	42.7	- 4.7	4.2	9.4	46.9	17.1	130.8
Mammoth Yellow	7.1	1.1	3.4	25.6	+ 0.0	4.0	15.3	47.0	16.3	131.4
Dif.Nec.for Sig. (5% level)	3.3						1.4	1.4	0.8	1.4

*Days earlier (-) or later (+) than Mammoth Yellow. Mammoth Yellow required 168 days to mature.

Table 59. Summary of yields in bushels per acre for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Opelousas La.[1]	Baton Rouge La.[1]
Charlee	13.4	18.2	19.9	15.0	17.8	11.8	11.5	8.1	5.2	7.4	--
Missoy	13.0	16.3	19.1	15.3	17.5	13.1	10.7	7.3	5.0	6.4	7.4
La. 40-290	13.0	21.1	17.4	15.7	12.6	9.8	13.0	7.0	7.2	17.3	--
La. 40-293	12.9	24.3	14.9	13.6	12.1	11.7	12.5	7.1	6.8	19.0	10.0
Palmetto	12.0	3.2	24.7	20.1	15.2	9.9	14.7	2.5	5.7	8.5	--
Delsta	11.8	19.3	17.2	14.9	10.6	10.7	13.6	4.3	3.5	6.0	--
Seminole	11.8	15.5	16.4	13.8	17.5	15.2	9.5	3.4	3.2	4.7	--
Auburn #1	11.7	22.9	15.5	17.6	16.5	7.8	8.2	3.1	2.1	--	2.7
Mamotan 6640	11.6	9.9	13.4	21.8	8.8	15.5	12.1	7.8	3.7	15.1	--
Pelican #2	11.5	19.8	15.2	14.3	9.7	9.5	10.2	5.1	8.1	16.0	8.3
Nanda	11.0	14.0	14.9	14.6	12.4	10.3	12.5	6.6	2.8	6.6	2.9
Biloxi	10.9	17.6	16.4	13.6	13.7	10.7	8.8	3.1	3.3	6.9	--
Mamloxi	10.6	18.4	11.0	13.7	14.3	10.2	7.9	5.3	3.6	--	--
Pelican #1	10.4	15.3	10.4	16.2	9.4	10.8	9.4	5.7	6.1	18.2	--
Burnette	10.4	11.8	12.7	14.1	12.7	9.8	14.8	5.2	2.4	--	--
Yelredo	9.8	19.6	15.1	11.6	12.0	6.3	5.6	6.3	2.2	--	--
Clemson	9.4	9.7	9.1	16.7	15.0	9.8	10.0	2.5	2.6	8.6	9.9
La. 40-400	9.2	6.7	12.8	16.0	7.1	13.1	5.4	6.3	6.1	21.7	--
Arisoy	9.2	15.6	16.6	11.9	4.9	9.7	6.0	6.5	2.4	9.8	9.5
Ogden	8.7	12.8	14.2	5.1	13.7	7.1	12.8	3.4	.6	--	21.5
Avoyelles	8.6	7.5	11.2	12.9	7.5	17.4	7.6	2.5	2.1	17.2	--
White Biloxi	8.3	13.2	6.7	10.5	9.7	12.4	7.0	3.6	3.2	7.2	--
La. 40-399	8.0	6.9	4.7	15.6	8.7	10.8	5.9	5.2	6.5	21.9	9.8
Hayseed	7.4	12.9	14.6	4.1	16.3	3.4	6.3	1.5	.3	--	3.6
Mammoth Yellow	7.1	10.6	12.9	4.3	12.6	7.2	5.1	3.0	1.2	--	9.6
Mean Yield	10.5	14.5	14.3	13.7	12.3	10.6	9.6	4.9	3.8		
Coef. of Var.	34.2%	33.4%	35.4%	20.3%	21.0%	26.6%	53.9%	32.0%	34.5%		
Bu.Nec.for Sig. (5% level)	3.3	6.8	7.1	3.9	3.6	4.0	7.3	2.2	1.9		

[1]Not included in the mean.

Table 60. Yield rank for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.
Charlee	8	2	10	1	7	9	1	8
Missoy	10	3	9	2	4	10	3	9
La. 40-290	3	4	7	12	16	4	5	2
La. 40-293	1	12	17	15	8	6	4	3
Palmetto	25	1	2	6	15	2	22	7
Delsta	6	5	11	17	11	3	15	12
Seminole	12	7	15	2	3	13	17	14
Auburn #1	2	9	3	4	21	16	19	21
Mamotan 6640	20	16	1	21	2	8	2	10
Pelican #2	4	10	13	18	20	11	14	1
Nanda	14	12	12	14	13	6	6	16
Biloxi	9	7	17	9	11	15	19	13
Mamloxi	7	21	16	8	14	17	11	11
Pelican #1	13	22	5	20	9	14	10	5
Burnette	18	19	14	11	16	1	12	18
Yelredo	5	11	21	16	24	23	8	20
Clemson	21	23	4	7	16	12	22	17
La. 40-400	24	18	6	24	4	24	8	5
Arisoy	11	6	20	25	19	21	7	18
Ogden	17	15	23	9	23	5	17	24
Avoyelles	22	20	19	23	1	18	22	21
White Biloxi	15	24	22	18	6	19	16	14
La. 40-399	23	25	8	22	9	22	12	4
Hayseed	16	14	25	5	25	20	25	25
Mammoth Yellow	19	17	24	12	22	25	21	23

Table 61. Summary of lodging notes for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 6 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Blackville S.C.	Sandersville Ga.
Charlee	2.8	2.5	2.3	3.0	2.8	3.0	3.0
Missoy	2.6	2.8	2.0	3.0	2.0	2.5	3.0
La. 40-290	2.4	2.3	2.0	4.0	1.5	2.0	2.5
La. 40-293	2.4	2.3	2.0	4.0	1.5	2.0	2.3
Palmetto	2.4	2.8	2.3	2.5	1.0	2.8	3.0
Delsta	1.7	2.0	2.0	1.0	1.0	2.0	2.0
Seminole	2.0	2.0	1.3	2.5	1.0	2.3	2.8
Auburn #1	1.8	1.5	1.0	2.0	1.0	2.5	2.5
Mamotan 6640	1.4	1.5	1.0	1.0	1.0	2.0	1.8
Pelican #2	2.4	2.3	2.0	4.0	1.5	2.0	2.5
Nanda	1.3	1.3	1.0	1.0	1.0	2.0	1.5
Biloxi	1.9	1.8	2.0	3.0	1.3	2.0	1.5
Mamloxi	1.4	1.5	1.3	1.0	1.0	2.0	1.8
Pelican #1	2.2	2.0	2.0	3.0	1.3	2.0	2.8
Burnette	1.2	1.0	1.0	1.0	1.0	2.0	1.3
Yelredo	2.6	2.5	2.0	2.5	2.8	3.0	3.0
Clemson	2.4	2.5	2.0	2.0	1.8	3.0	2.8
La. 40-400	2.1	2.0	2.0	3.0	1.3	2.0	2.3
Arisoy	3.6	3.0	3.0	5.0	4.3	3.0	3.0
Ogden	1.1	1.0	1.0	1.0	1.0	1.0	1.3
Avoyelles	3.1*	2.8	2.0	4.5	-	3.0	3.0
White Biloxi	1.9	1.5	1.8	3.5	1.3	2.0	1.3
La. 40-399	2.1	2.0	2.0	3.0	1.5	2.0	2.0
Hayseed	3.2	3.0	3.0	5.0	2.0	3.0	3.0
Mammoth Yellow	1.1	1.0	1.0	1.0	1.0	1.5	1.3

*Only 5 tests included in the mean.

Table 62. Summary of shattering notes for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 6 Tests	Millen Ga.	Richmond Hill Ga.	Tifton Ga.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.
Charlee	1.6	1.8	1.0	1.5	2.0	1.8	1.3
Missoy	1.9	1.8	1.7	1.5	2.0	2.3	2.0
La. 40-290	1.2	1.0	1.0	1.0	2.0	1.0	1.0
La. 40-293	1.2	1.0	1.0	1.3	2.0	1.0	1.0
Palmetto	2.9	5.0	1.3	2.0	2.0	4.5	2.5
Delsta	2.4	1.8	2.8	2.3	3.0	3.0	1.5
Seminole	1.6	2.0	2.0	1.8	2.0	1.0	1.0
Auburn #1	1.7	1.0	1.3	1.0	1.0	3.5	2.3
Mamotan 6640	1.3	1.0	1.3	1.0	2.0	1.3	1.0
Pelican #2	1.3	1.0	1.0	1.5	2.0	1.3	1.0
Nanda	2.7	3.0	3.5	4.0	2.0	2.3	1.5
Biloxi	1.3	1.8	1.0	1.5	1.0	1.5	1.0
Mamloxi	1.7	1.0	1.8	1.3	3.0	1.8	1.0
Pelican #1	1.2	1.0	1.0	1.0	2.0	1.0	1.3
Burnette	2.9	2.3	3.8	3.5	3.0	3.0	1.5
Yelredo	1.1	1.0	1.0	1.0	1.0	1.0	1.3
Clemson	3.3	1.8	2.5	4.0	4.0	4.8	2.5
La. 40-400	1.3	1.0	1.0	1.5	2.0	1.3	1.0
Arisoy	3.4	1.0	5.0	4.7	5.0	2.5	2.0
Ogden	1.7	1.0	1.8	1.5	1.0	3.8	1.0
Avoyelles	2.1*	4.0	1.0	-	2.0	2.0	1.3
White Biloxi	1.4	1.3	1.3	1.8	1.0	1.3	1.5
La. 40-399	1.2	1.0	1.0	1.0	2.0	1.0	1.0
Hayseed	2.0	1.3	1.3	1.8	3.0	3.5	1.3
Mammoth Yellow	3.4	3.0	3.0	4.0	5.0	4.3	1.3

*Only 5 tests included in the test.

Table 63. Summary of plant height in inches for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 10 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Blackville S.C.	Sandersville Ga.	Opelousas La.	Baton Rouge La.	Melrose La.
Charlee	44.1	46	34	55	49	36	50	51	42	40	38
Missoy	44.7	47	35	60	45	40	50	55	40	37	38
La. 40-290	47.2	48	34	63	48	48	48	54	46	45	38
La. 40-293	47.4	47	34	63	47	47	50	53	48	47	38
Palmetto	46.8	51	37	63	48	40	53	54	44	40	38
Delsta	34.3	40	28	42	32	27	35	48	30	27	34
Seminole	35.2	38	25	45	31	31	44	44	29	27	38
Auburn #1	27.0	25	20	45	23	25	37	37	25	22	11
Mamotan 6640	33.3	35	21	36	21	33	39	42	36	34	36
Pelican #2	47.8	45	33	63	47	44	50	55	50	47	44
Nanda	29.0	31	23	36	24	22	37	37	28	28	24
Biloxi	43.1	44	32	55	44	36	41	49	46	44	40
Mamloxi	33.0	35	23	40	27	30	40	44	36	34	23
Pelican #1	49.2	46	33	63	48	48	54	52	52	50	46
Burnette	27.9	26	20	36	20	25	33	36	30	31	22
Yelredo	41.3	43	33	48	43	36	47	51	40	36	36
Clemson	44.4	47	32	60	46	36	52	55	40	38	38
La. 40-400	47.0	46	31	63	45	48	49	52	50	48	38
Arisoy	38.6*	29	39	60	32	26	44	45	--	36	36
Ogden	18.2	17	12	30	13	12	22	27	19	20	10
Avoyelles	42.9	46	33	60	45	30	43	48	44	42	38
White Biloxi	44.9	44	31	58	44	40	45	53	48	42	44
La. 40-399	47.3	45	31	63	45	46	48	52	52	49	42
Hayseed	42.7	52	38	45	41	33	54	54	38	36	36
Mammoth Yellow	25.6	25	18	30	18	24	26	33	30	30	22
Mean	39.3	39.8	29.2	51.3	37.0	34.5	43.6	47.2		37.2	33.9

*Only 9 tests included in the mean.

Table 64. Summary of maturity[2] notes for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 7 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.
Charlee	+ 2.3	+ 7	+ 6	0	+ 8	0	0	- 5
Missoy	+ 2.9	+ 7	+10	0	+ 8	0	0	- 5
La. 40-290	+10.0	+ 7	+13	+11	+22	0	+22	- 5
La. 40-293	+10.0	+ 7	+13	+11	+22	0	+22	- 5
Palmetto	+ 2.1	+ 7	0	+ 6	+ 7	0	0	- 5
Delsta	+15.0	+26	+13	+ 7	+16	+17	+22	+ 4
Seminole	+13.7	+26	+10	+ 3	+14	+17	+22	+ 4
Auburn #1	- 1.3	- 7	0	- 2	+ 5	0	0	- 5
Mamotan 6640	+14.1	+26	+13	+ 6	+21	0	+22	+11
Pelican #2	+ 9.9	+ 7	+13	+11	+21	0	+22	- 5
Nanda	+12.4	+16	+13	+ 5	+14	+17	+15	+ 7
Biloxi	+12.3	+21	+13	+11	+19	0	+11	+11
Mamloxi	+ 7.1	+ 7	+10	+ 5	+14	0	+11	+ 3
Pelican #1	+ 8.9	+ 7	+13	+11	+21	0	+15	- 5
Burnette	+15.0	+21	+13	+ 7	+14	+17	+22	+11
Yelredo	+ 1.0	+ 7	0	- 3	+ 8	0	0	- 5
Clemson	- .4	0	0	0	+ 2	0	0	- 5
La. 40-400	+ 8.4	+ 7	+ 10	+ 11	+21	0	+15	- 5
Arisoy	+ 7.7	+ 7	+ 13	+ 7	+22	0	+ 5	0
Ogden	- 2.8*	0	0	--	+12	-20	+11	+4
Avoyelles	+ 12.7*	+ 26	+ 13	+ 11	--	0	+ 22	+4
White Biloxi	+ 16.1	+ 21	+ 13	+ 11	+ 21	+17	+ 22	+ 8
La. 40-399	+ 9.9	+ 7	+ 13	+ 11	+ 21	0	+ 22	- 5
Hayseed	- 4.7	- 4	- 4	+ 2	- 2	-20	0	- 5
Mammoth Yellow	0.0	0	0	0	0	0	0	0
Mammoth Yellow matured		10/21	10/12	10/18	9/29	10/29	10/26	11/4
Date planted		5/4	5/11	4/27	4/22	5/24	5/4	5/3

[2]Days earlier (-) or later (+) than Mammoth Yellow.
*Only 6 tests included in the mean.

Table 65. Summary of seed quality notes for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 5 Tests	Monetta S.C.	Crowley La.	Fairhope Ala.	Opelousas La.	Baton Rouge La.
Charlee	3.0	1	3	2	4	5
Missoy	3.0	2	2	3	4	4
La. 40-290	2.6	2	2	2	3	4
La. 40-293	2.8	2	3	2	3	4
Palmetto	3.2	1	3	3	5	4
Dolsta	3.6	3	4	3	4	4
Seminole	3.3*	2	3	3	5	-
Auburn #1	2.8*	2	2	3	-	4
Mamotan 6640	3.0	3	2	3	3	4
Pelican #2	2.2	2	2	2	2	3
Nanda	3.4	2	3	3	4	5
Biloxi	3.3*	2	2	4	5	-
Mamloxi	3.7**	3	4	4	-	-
Pelican #1	2.6	2	3	3	2	3
Burnette	3.4	3	3	3	3	5
Yelredo	3.4	2	3	3	4	5
Clemson	3.6	2	3	3	5	5
La. 40-400	2.2	2	3	2	2	2
Arisoy	3.2	2	2	4	4	4
Ogden	3.5*	4	3	4	-	3
Avoyelles	2.2	2	1	2	2	4
White Biloxi	3.5*	3	4	3	4	-
La. 40-399	2.4	2	2	3	2	3
Hayseed	4.2	4	5	5	4	3
Mammoth Yellow	4.0*	4	3	4	-	5

*Only 4 tests included in the mean.
**Only 3 tests included in the mean.

Table 66. Summary of seed size, grams per 100 seed, for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Opelousas La.[1]	Baton Rouge La.[1]
Charlee	10.8	13	11	12	9	11	12	10	8	12	11
Missoy	10.8	13	12	12	10	11	10	10	8	12	--
La. 40-290	10.9	11	11	11	10	11	13	11	9	12	13
La. 40-293	11.6	13	12	12	11	12	13	12	8	12	13
Palmetto	11.3	13	12	13	10	11	13	10	8	13	12
Delsta	18.4	20	19	20	18	19	19	19	13	19	18
Seminole	21.6	25	23	25	20	23	21	21	15	25	--
Auburn #1	11.5	14	11	14	11	12	12	11	7	--	11
Mamotan 6640	15.4	17	17	18	14	16	14	15	12	19	16
Pelican #2	10.5	13	11	10	10	10	12	10	8	12	12
Nanda	17.4	20	19	20	15	18	18	17	12	20	14
Biloxi	17.8	21	19	19	17	17	18	18	13	18	--
Mamloxi	16.9	21	18	20	15	15	18	16	12	--	--
Pelican #1	10.5	12	11	10	9	11	12	11	8	11	13
Burnette	21.4	23	24	26	20	18	24	21	15	26	16
Yelredo	9.4	10	9	10	6	11	10	10	9	11	10
Clemson	11.4	13	12	13	10	13	12	10	8	13	13
La. 40-400	10.9	13	11	11	9	11	11	11	10	11	13
Arisoy	11.1	13	11	12	11	11	12	10	9	12	13
Ogden	13.6	13	13	13	16	16	9	15	14	--	14
Avoyelles	10.6	11	10	10	12	11	13	10	8	12	13
White Biloxi	16.5	19	18	17	18	18	15	15	12	16	--
La. 40-399	10.8	12	11	12	8	11	11	11	10	12	13
Hayseed	9.4	10	9	9	11	13	7	8	8	12	11
Mammoth Yellow	15.3	18	15	16	14	16	16	15	12	--	15
Mean	13.4	15.2	14.0	14.6	12.6	13.8	13.8	13.1	10.2		

[1]Not included in the mean.

Table 67. Summary of percentage of protein for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Fairhope La.	Blackville S.C.	Sandersville Ga.	Opelousas La.[1]	Baton Rouge La.[1]
Charlee	45.5	44.7	44.1	44.2	44.6	46.8	49.1	44.9	45.8	48.5	49.9
Missoy	45.0	44.2	43.7	45.1	43.0	45.0	49.5	43.8	45.4	49.0	48.0
La. 40-290	44.4	43.1	44.6	42.6	46.0	46.5	47.7	40.6	44.0	47.4	48.0
La. 40-293	44.7	44.4	45.4	41.8	44.3	47.8	48.0	41.6	44.2	46.3	48.1
Palmetto	47.4	45.8	45.3	46.5	45.5	49.7	50.9	48.5	46.8	50.5	48.4
Delsta	44.6	43.9	44.9	43.7	45.9	45.5	48.1	40.9	43.7	46.8	47.4
Seminole	46.4	47.0	43.6	47.2	43.9	46.4	49.7	46.2	47.4	49.5	--
Auburn #1	45.9	43.1	43.6	46.3	45.0	48.8	50.3	46.0	44.2	--	47.3
Mamotan 6640	44.3	43.7	43.0	44.2	43.5	43.6	48.5	42.2	45.6	44.4	44.1
Pelican #2	44.9	44.1	46.3	43.5	45.3	46.6	47.7	41.8	44.2	45.9	46.2
Nanda	44.5	43.1	42.1	44.5	44.8	45.3	48.0	44.1	44.4	46.9	47.7
Biloxi	48.1	48.1	44.5	49.0	45.9	49.4	51.5	48.6	47.9	51.1	--
Mamloxi	46.7	45.5	44.5	47.3	45.5	47.8	50.3	46.0	46.4	--	--
Pelican #1	44.9	44.1	46.3	42.1	44.7	47.4	47.9	42.1	44.6	45.8	46.0
Burnette	45.1	43.8	45.0	43.5	46.8	45.9	47.6	43.1	45.2	46.0	48.9
Yelredo	46.1	44.2	43.9	46.7	45.5	48.2	49.8	44.7	46.1	46.7	48.9
Clemson	46.6	45.6	44.6	45.5	44.1	48.5	50.0	46.1	48.0	50.0	47.7
La. 40-400	45.5	45.8	46.2	41.9	44.9	48.0	48.7	43.2	45.1	46.7	45.5
Arisoy	45.5	42.8	44.2	46.2	46.5	45.1	51.8	43.7	43.9	48.0	45.6
Ogden	46.5	45.1	42.9	48.0	47.0	49.3	48.2	44.7	46.8	--	42.2
Avoyelles	43.1	39.2	42.8	42.1	44.4	42.9	46.8	43.4	43.0	43.1	44.2
White Biloxi	47.1	47.4	47.2	46.7	45.1	49.3	49.5	46.1	45.5	48.0	--
La. 40-399	45.8	47.2	49.0	42.2	44.9	47.4	48.8	41.1	45.4	46.8	45.2
Hayseed	46.9	46.3	43.3	48.9	45.2	48.4	48.7	46.7	47.7	47.9	45.2
Mammoth Yellow	47.0	44.6	45.5	48.1	45.5	48.5	51.1	46.0	46.4	--	48.7
Mean	45.7	44.7	44.7	45.1	45.1	47.1	49.1	44.2	45.5		

[1]Not included in the mean.

Table 68. Summary of percentage of oil for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Opelousas La.[1]	Baton Rouge La.[1]
Charlee	17.0	17.3	18.8	16.8	18.8	17.2	15.9	16.3	15.2	16.1	16.2
Missoy	17.2	17.0	18.6	17.2	18.9	17.8	15.8	16.9	15.0	16.2	16.9
La. 40-290	18.4	18.0	20.0	18.7	19.1	18.1	18.2	18.0	17.1	17.8	16.8
La. 40-293	18.3	18.3	19.6	18.8	18.7	18.2	18.0	18.3	16.3	18.7	17.6
Palmetto	15.6	15.0	18.3	15.8	17.4	15.6	14.7	14.3	13.7	14.8	16.1
Delsta	16.6	15.5	19.1	16.3	19.0	17.0	16.5	15.0	14.4	16.2	17.4
Seminole	17.1	16.8	20.2	16.4	19.7	17.2	15.8	15.8	15.2	16.4	--
Auburn #1	15.1	15.7	16.8	14.4	17.0	18.7	12.9	13.8	11.4	--	13.6
Mamotan 6640	16.8	14.9	18.8	16.8	18.7	17.8	16.8	16.6	13.7	17.7	17.4
Pelican #2	18.4	17.7	19.8	18.8	18.5	18.5	18.3	18.4	17.0	19.0	19.4
Nanda	17.2	17.3	19.6	16.9	19.4	16.8	17.0	15.7	14.6	16.5	18.2
Biloxi	16.7	16.4	19.0	16.4	18.2	16.8	16.2	16.0	14.8	16.2	--
Mamloxi	16.2	16.1	19.1	16.1	18.6	15.8	15.2	14.8	13.8	--	--
Pelican #1	18.2	18.8	18.9	18.7	18.6	17.8	17.7	17.9	17.0	18.3	19.3
Burnette	16.7	16.0	19.3	16.2	18.1	17.5	17.0	15.4	14.2	16.6	17.3
Yelredo	16.8	18.1	17.9	16.8	16.6	17.3	16.0	16.4	15.2	17.2	17.7
Clemson	15.7	16.4	17.9	15.9	17.7	15.3	15.0	14.3	12.7	15.1	15.8
La. 40-400	17.7	17.2	18.9	18.8	18.1	17.2	17.4	17.5	16.7	17.6	18.5
Arisoy	17.4	18.5	19.1	17.8	18.2	17.6	15.2	17.3	15.8	17.3	17.9
Ogden	17.7	17.8	21.1	15.8	20.6	16.7	17.0	17.5	15.4	--	21.3
Avoyelles	16.1	15.9	17.5	15.5	17.0	17.3	16.5	14.8	14.6	17.8	17.2
White Biloxi	16.2	15.6	18.1	15.9	18.0	16.1	15.5	15.5	14.7	16.4	--
La. 40-399	17.7	17.4	17.8	18.5	18.8	17.7	16.8	17.5	17.0	18.3	19.1
Hayseed	17.1	17.5	19.7	16.1	19.8	16.6	15.7	16.2	15.5	17.0	19.2
Mammoth Yellow	16.3	17.8	18.8	14.7	18.7	15.8	14.9	15.3	14.4	--	18.3
Mean	17.0	16.9	18.9	16.8	18.5	17.1	16.2	16.2	15.0		

[1]Not included in the mean.

Table 69. Summary of iodine number of the oil for the strains in the Uniform Test, Group VI, Lower South, 1943.

Strain	Mean of 8 Tests	Millen Ga.	Richmond Hill Ga.	Monetta S.C.	Tifton Ga.	Crowley La.	Fairhope Ala.	Blackville S.C.	Sandersville Ga.	Opelousas La.[1]	Baton Rouge La.[1]
Charlee	133.4	133.5	134.2	134.0	130.0	133.8	132.5	134.5	134.5	131.8	128.0
Missoy	133.1	132.9	132.7	133.7	131.6	134.0	132.7	133.3	133.8	131.5	130.2
La. 40-290	135.5	136.0	136.2	134.5	134.0	136.6	134.3	135.4	136.6	135.6	132.9
La. 40-293	135.7	136.4	136.0	134.8	135.0	136.0	135.4	135.1	136.9	135.7	133.3
Palmetto	133.0	133.2	132.3	133.7	130.2	132.9	131.2	134.4	136.0	131.0	127.2
Delsta	132.5	132.9	129.7	132.9	131.3	132.1	133.1	132.6	135.3	132.4	134.3
Seminole	134.7	135.7	132.9	136.3	131.5	133.3	134.7	135.5	137.7	133.3	---
Auburn #1	135.3	135.7	135.4	137.7	129.4	135.7	136.3	134.3	137.7	---	137.6
Mamotan 6640	137.5	138.0	135.1	136.8	137.4	138.6	136.3	137.2	140.5	136.7	138.0
Pelican #2	136.9	136.4	136.5	135.6	136.6	138.6	136.8	136.9	137.7	136.7	133.8
Nanda	131.2	131.1	128.6	131.5	130.3	131.5	130.3	132.1	134.2	131.0	131.2
Biloxi	134.3	134.3	132.9	134.7	131.7	135.1	134.7	134.4	136.3	136.4	---
Mamloxi	133.1	132.8	130.3	133.7	129.4	134.3	133.3	134.3	136.3	---	---
Pelican #1	136.1	136.4	135.9	135.1	136.3	137.5	135.7	135.7	136.4	136.8	134.3
Burnette	131.0	131.6	126.9	131.5	130.0	132.1	129.4	131.7	134.7	134.2	132.9
Yelredo	134.5	136.3	136.1	135.4	131.6	133.1	134.0	134.5	135.1	132.2	128.6
Clemson	132.6	132.7	132.1	132.6	128.2	131.5	133.1	134.3	136.3	130.9	130.3
La. 40-400	136.5	136.9	136.5	135.1	137.3	137.6	136.9	136.0	135.4	135.7	133.2
Arisoy	131.1	131.6	130.9	130.9	129.8	133.2	133.0	129.5	129.7	132.9	132.3
Ogden	132.4	129.4	133.7	136.3	128.7	133.8	133.6	129.2	134.7	---	136.7
Avoyelles	135.9	137.2	135.9	135.8	133.3	137.6	136.1	135.7	135.7	129.8	135.0
White Biloxi	133.7	134.3	131.7	133.9	131.7	133.8	135.0	133.8	135.4	133.5	---
La. 40-399	136.4	136.6	136.4	135.1	136.6	137.9	136.6	135.9	136.3	136.0	134.7
Hayseed	130.8	130.9	133.0	134.5	125.2	131.5	133.7	128.3	129.2	131.6	131.8
Mammoth Yellow	131.4	130.7	129.4	134.3	127.2	131.5	131.2	132.6	134.6	---	133.5
Mean	133.9	134.1	133.3	134.4	131.8	134.5	134.0	133.9	135.5		

[1]Not included in the mean.

Table 70. Analysis of variance for yield of seed from 8 locations for the Uniform Test, Group VI, Lower South, 1943.

Source of Variation	Degrees of Freedom	Mean Square
Locations	7	1722.3930**
Varieties	24	107.3156**
Locations x varieties	168	43.9604**
Error	600	15.9554

**Highly significant.

Table 71. "F" values as determined by analysis of variance for agronomic and chemical data for the Uniform Test, Group VI, Lower South, 1943.

Source of Variation	Degrees of Freedom	"F" Values			
		Seed Size	Percent Protein	Percent Oil	I_2 No. of Oil
Locations	7	29.43**	35.21**	62.31**	14.05**
Varieties	24	55.86**	5.80**	10.06**	16.07**
Error	168				

**Highly significant.

UNIFORM DATES OF PLANTING TESTS

Five Uniform Dates of Planting Tests were conducted over the region. Each test consisted of 6 dates of planting of four varieties; Arksoy, Ogden, Magnolia, and Mammoth Yellow planted in triplicate at three-week intervals beginning April 1. Each replication of the varieties at each date were planted together, each test being a split plot randomized block design. The tests were conducted at McCullers, North Carolina, Stoneville, Mississippi, Baton Rouge, Louisiana, Auburn, Alabama, and Tifton, Georgia.

The agronomic and chemical data from all tests are summarized in tables 72 to 81. The highest yields at McCullers, North Carolina, were obtained on all varieties through the June 24 planting with the exception of Ogden. The yield of Ogden was lower when planted June 3 and later. The highest yields of Arksoy, Magnolia, and Mammoth Yellow were obtained from June plantings. At Stoneville the better yields were obtained from the plantings of April 1 to June 3, inclusive, with the planting of May 31 being the most productive. Yields from Baton Rouge are very interesting. While the highest yields were obtained from the April 1 planting, the yields from the July 15 planting are but slightly lower than those of the April 22 and May 13 planting. The higher yields at Auburn were obtained from the April and May plantings. The yields at Tifton were all very low as none of the varieties under test were adapted to this location.

The effect of date of planting on date of maturity at the different locations is of particular interest. The spread in maturity in days between the April 1 planting and the last date of planting at McCullers, Stoneville, and Auburn, was relatively wide (21 to 32 days) for the early maturing varieties, Arksoy and Ogden, and only 5 to 7 days for the later variety, Mammoth Yellow. In contrast, at Baton Rouge, the average spread in maturity of Arksoy and Ogden was 72 days and 75 days for Mammoth Yellow. Apparently, the normal photoperiod at Baton Rouge has been altered sufficiently to shorten the vegetative period of growth of these varieties. The climatological records from the five locations are of interest in this connection. The temperatures at the five locations varied, but were not strikingly different. The number of wholly cloudy days per month from June to September inclusive was as follows:

Locations	Number of cloudy days				
	June	July	August	September	Av.
McCullers, N. Car.	11	17	12	8	12.0
Stoneville, Miss.	2	1	0	9	3.0
Auburn Alabama	10	23	13	18	16.0
Tifton, Georgia	3	11	6	4	6.0
Baton Rouge, Louisiana	22	23	22	23	22.5

It is suggested that the very large number of cloudy days at Baton Rouge may possibly have affected earlier initiation of flowering and subsequent maturity. It is realized that the character of day, whether cloudy, partly cloudy or clear, is left to the judgment of the observer at each location and, hence, may contain errors in judgment.

In general, slightly higher quality seed was obtained from later plantings. Earlier plantings at McCullers and at Stoneville usually produced the larger seed. In contrast to this, the last two planting dates at Baton Rouge produced the larger seed. The results at Auburn and Tifton were intermediate, although the July 15 planting at Tifton produced distinctively larger seed of Ogden and Mammoth Yellow.

The higher per cent protein was found in the varieties planted April 22 at McCullers, Stoneville, Auburn, and Tifton. At Baton Rouge the per cent protein of all varieties except Ogden generally increased up to and including the June 24 planting. Varieties planted April 1 in general were higher in oil than later plantings, although the differences at many locations were small. The varieties at Baton Rouge progressively declined in per cent oil beginning with the first date of planting. The oil content of seed varieties planted July 15 was consistently low.

The iodine number of the oil increased with date of planting at McCullers and to a slight extent at Stoneville and Baton Rouge. Differences at other locations were less consistent. The oil of seed of later plantings of Ogden and Magnolia consistently had a higher iodine number. Results at Tifton were at variance with those of the other locations in that the iodine number of oil from seed of the early and latest plantings were higher.

Table 72. Summary of agronomic and chemical data for the five Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		Bushels Per Acre[1]					
Arksoy	10.0	13.7	12.1	12.5	8.6	9.6	3.3
Ogden	14.2	19.9	17.6	19.2	12.8	10.4	5.4
Magnolia	9.5	11.2	13.3	11.3	8.8	7.4	4.4
Mammoth Yellow	8.7	11.2	10.2	10.4	8.2	8.5	3.5
Mean		14.0	13.3	13.5		9.0	
		Plant Height in Inches					
Arksoy	17.8	18.8	20.8	20.4	19.8*	16.2	11.0*
Ogden	17.8	19.4	19.6	21.0	20.8*	15.2	10.5*
Magnolia	29.1	30.2	37.8	37.2	32.3*	20.8	16.0**
Mammoth Yellow	21.2	20.6	21.6	25.8	24.3*	20.4	14.3*
Mean		22.3	25.0	26.1		18.2	
		Days to Maturity					
Arksoy	131.7	167	153	136	126*	112	96*
Ogden	134.2	166	150	136	130*	117	106*
Magnolia	136.3	169	157	138	135*	117	101**
Mammoth Yellow	149.0	189	175	158	142*	123	107*
Mean		172.8	158.8	142.0		117.3	
		Seed Quality*					
Arksoy	2.8	3.1	2.8	3.0	3.0**	2.3	2.3**
Ogden	2.5	2.4	2.7	2.3	2.9**	2.6	2.0**
Magnolia	3.0	3.1	3.7	3.0	2.8**	3.0	2.5***
Mammoth Yellow	3.4	3.3	3.5	3.8	3.0**	3.5	3.0**
Mean		3.0	3.2	3.0		2.9	

[1]Dif. required for sig. (5% level) between varieties, 0.8; between dates, 4.1.

Table 72. (continued)

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		Seed Size, Grams Per 100 Seed					
Arksoy	11.8	12.2	12.1	11.5	11.4*	11.4	12.3*
Ogden	14.2	14.0	13.8	14.2	14.2*	13.6	15.3*
Magnolia	14.2	13.5	13.5	14.0	14.1*	14.4	15.7***
Mammoth Yellow	15.1	15.1	14.7	15.2	15.4*	14.9	15.0*
Mean		13.7	13.5	13.7		13.6	
		Percent Protein					
Arksoy	45.8	45.2	46.5	46.0	45.6*	45.6	46.1*
Ogden	43.8	44.0	45.2	44.1	43.6*	43.1	43.0*
Magnolia	44.7	43.9	45.8	44.5	44.1*	44.5	45.6***
Mammoth Yellow	46.4	46.6	47.3	46.6	46.3*	46.3	45.3*
Mean		44.9	46.2	45.3		44.9	
		Percent Oil					
Arksoy	18.9	19.9	19.1	19.4	18.8*	18.4	17.7*
Ogden	19.9	20.6	19.9	20.2	19.7*	19.7	19.1*
Magnolia	20.1	21.0	20.2	20.8	20.2*	19.8	18.4***
Mammoth Yellow	17.3	18.4	17.4	17.3	17.2*	17.1	16.6*
Mean		20.0	19.2	19.4		18.8	
		I_2 No. of Oil					
Arksoy	131.8	132.9	132.3	131.0	131.2*	131.5	131.8*
Ogden	133.0	132.9	131.9	131.0	132.7*	134.5	134.9*
Magnolia	127.6	126.4	125.0	125.3	127.7*	129.4	131.8**
Mammoth Yellow	132.5	131.8	131.8	131.3	132.9*	132.6	134.5*
Mean		131.0	130.3	129.7		132.0	

*Mean of 4 locations.
**Mean of 3 locations.
***Mean of 2 locations.

Table 73. Summary of yields in bushels per acre for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
McCullers, N.C.							
Arksoy	15.9	17.8	10.7	14.0	20.0	24.5	8.4
Ogden	25.2	32.4	30.3	30.2	23.5	19.8	14.8
Magnolia	18.5	18.4	19.5	18.9	21.2	19.2	14.0
Mammoth Yellow	14.6	14.0	15.6	14.7	16.2	18.3	8.8
Mean		20.6	19.0	19.4	20.2	20.5	11.5
Dif. req. for sig. (5% level) between varieties, 2.5; between dates, 7.9.							
Stoneville, Miss.							
Arksoy	13.5	16.7	15.2	20.0	16.9	12.2	0.0
Ogden	21.1	27.9	24.4	26.5	27.7	20.3	0.0
Magnolia	11.8	9.6	16.1	17.8	16.7	10.9	0.0
Mammoth Yellow	14.9	18.3	18.5	20.5	18.3	13.7	0.0
Mean		18.1	18.5	21.2	19.9	14.3	0.0
Dif. req. for sig. (5% level) between varieties, 3.2; between dates, 13.3.							
Baton Rouge, La.							
Arksoy	7.4	11.7	10.7	7.4	4.5	4.3	6.0
Ogden	11.4	13.1	10.8	16.6	10.4	7.2	10.5
Magnolia	6.8	6.0	9.4	7.1	5.8	4.5	8.1
Mammoth Yellow	6.3	11.3	3.7	3.9	5.5	5.7	8.0
Mean		10.5	8.6	8.7	6.6	5.4	8.1
Dif. req. for sig. (5% level) between varieties, 3.0; between dates, 4.0.							
Auburn, Ala.							
Arksoy	10.0	19.3	20.2	14.2	0.0	4.8	1.6
Ogden	10.4	21.7	19.1	16.3	1.5	2.1	1.8
Magnolia	6.2	15.1	13.9	7.8	0.0	0.5	0.0
Mammoth Yellow	4.4	8.9	6.5	7.8	0.0	2.6	0.4
Mean		16.2	14.9	11.5	0.4	2.5	0.9
Dif. req. for sig. (5% level) between varieties, 1.3; between dates, 5.5.							
Tifton, Ga.							
Arksoy	2.9	3.2	3.4	6.7	1.5	2.2	0.5
Ogden	3.0	4.2	3.4	6.6	1.2	2.6	0.1
Magnolia	4.0	6.8	7.7	7.4	0.3	1.9	0.0
Mammoth Yellow	3.1	3.5	6.6	7.2	0.9	2.2	0.2
Mean		4.4	5.3	6.5	1.0	2.2	0.2
Dif. req. for sig. (5% level) between varieties, 1.5; between dates, 3.0.							

Table 74. Summary of plant height in inches for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		McCullers, N.C.					
Arksoy	24.8	28	32	30	26	18	15
Ogden	24.2	30	30	30	27	15	13
Magnolia	35.5	40	44	44	37	26	22
Mammoth Yellow	27.3	28	31	34	29	24	18
Mean		31.5	34.3	34.5	29.8	20.8	17.0
		Stoneville, Miss.					
Arksoy	24.0	23	28	27	25	17	--
Ogden	24.4	24	25	27	27	19	--
Magnolia	32.8	35	39	35	32	23	--
Mammoth Yellow	28.0	26	28	31	30	25	--
Mean		27.0	30.0	30.0	28.5	21.0	
		Baton Rouge, La.					
Arksoy	16.8	14	15	16	19	22	15
Ogden	16.0	14	14	17	19	20	12
Magnolia	31.5	22	38	41	44	24	20
Mammoth Yellow	20.5	18	16	23	26	22	18
Mean		17.0	20.8	24.3	27.0	22.0	16.3
		Auburn, Ala.					
Arksoy	18.0	18	20	20	--	14	8*
Ogden	17.5	18	20	20	--	12	12*
Magnolia	29.5	34	35	34	--	15	--
Mammoth Yellow	20.5	19	21	23	--	19	13*
Mean		22.3	24.0	24.3		15.0	
		Tifton, Ga.					
Arksoy	9.0	11	9	9	9	10	6
Ogden	9.3	11	9	11	10	10	5
Magnolia	20.5	20	33	32	16	16	6
Mammoth Yellow	12.3	12	12	18	12	12	8
Mean		13.5	15.8	17.5	11.8	12.0	6.3

*Not included in the mean.

Table 76. Summary of seed quality notes for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		McCullers, N.C.					
Arksoy	2.5	3.0	3.0	3.0	2.0	2.0	2.0
Ogden	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Magnolia	2.2	2.0	3.0	2.0	2.0	2.0	2.0
Mammoth Yellow	2.5	3.0	3.0	3.0	2.0	2.0	2.0
Mean		2.5	2.8	2.5	2.0	2.0	2.0
		Stoneville, Miss.					
Arksoy	2.7	4.0	3.3	2.3	2.0	2.0	--
Ogden	2.7	3.0	3.3	2.3	2.7	2.3	--
Magnolia	2.9	4.0	3.3	2.0	2.3	3.0	--
Mammoth Yellow	2.7	2.0	2.0	2.3	3.0	4.0	--
Mean		3.3	3.0	2.2	2.5	2.8	
		Baton Rouge, La.					
Arksoy	3.5	3.0	3.0	5.0	5.0	3.0	2.0
Ogden	3.2	3.0	3.0	3.0	4.0	4.0	2.0
Magnolia	4.2	4.0	5.0	5.0	4.0	4.0	3.0
Mammoth Yellow	4.0	5.0	5.0	5.0	4.0	3.0	2.0
Mean		3.8	4.0	4.5	4.3	3.5	2.3
		Auburn, Ala.					
Arksoy	2.0	2.5	2.0	1.5	--	2.0	3.0*
Ogden	2.0	1.5	2.5	2.0	--	2.0	2.0*
Magnolia	3.0	2.5	3.5	3.0	--	3.0	--
Mammoth Yellow	4.3	3.0	4.0	5.0	--	5.0	5.0*
Mean		2.4	3.0	2.9		3.0	

*Not included in the mean.

Table 77. Summary of seed size, grams per 100 seed, for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		McCullers, N.C.					
Arksoy	13.2	13.5*	13.7	13.0	13.0	13.7	12.0*
Ogden	15.8	16.5*	16.3	17.3	16.7	15.0	13.0*
Magnolia	15.6	16.5*	15.7	15.0	15.3	16.0	15.0*
Mammoth Yellow	16.9	18.0*	18.7	18.0	17.0	15.7	14.0*
Mean		16.1	16.1	15.8	15.5	15.1	13.5
		Stoneville, Miss.					
Arksoy	10.3	10.3	10.7	10.0	10.7	10.0	--
Ogden	13.6	12.3	13.7	14.3	14.7	13.0	--
Magnolia	13.7	12.7	13.7	14.3	14.3	13.7	--
Mammoth Yellow	14.0	14.3	15.0	14.0	13.7	13.0	--
Mean		12.4	13.3	13.2	13.4	12.4	
		Baton Rouge, La.					
Arksoy	12.9	13.7	12.3	12.0	12.0	13.0	14.3
Ogden	14.4	15.7	13.0	12.7	13.3	14.3	17.3
Magnolia	14.6	13.5*	13.3	15.0	14.0	15.7	16.3
Mammoth Yellow	17.1	17.0	14.0*	17.3	17.7	18.7	17.7
Mean		15.0	13.2	14.3	14.3	15.4	16.4
		Auburn, Ala.					
Arksoy	11.2	11.0	11.3	11.0	--	11.7	11.0
Ogden	12.7	12.0	11.3	12.3	--	14.3	13.5*
Magnolia	13.3	13.0	12.3	14.0	--	13.7	--
Mammoth Yellow	14.1	14.0	13.3	15.0	--	15.3	13.0
Mean		12.5	12.1	13.1		13.8	
		Tifton, Ga.					
Arksoy	11.2	12.7	12.3	11.7	9.7	8.5*	12.0*
Ogden	13.9	13.3	14.7	14.3	12.0	11.5*	17.5*
Magnolia	12.4	12.0	12.7	11.7	12.7	13.0*	--
Mammoth Yellow	12.8	12.3	12.3	11.7	13.0	12.0*	15.3
Mean		12.6	13.0	12.4	11.9	11.3	

*Only 2 replications.

Table 78. Summary of percent of protein for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		McCullers, N.C.					
Arksoy	44.6	45.2*	46.8	45.4	43.1	43.7	43.4*
Ogden	42.1	44.2*	43.3	42.9	41.5	40.2	40.7*
Magnolia	43.3	44.7*	44.9	43.6	41.2	42.1	43.3*
Mammoth Yellow	43.5	45.1*	44.8	43.8	42.5	42.5	42.3*
Mean		44.8	45.0	43.9	42.1	42.1	42.4
		Stoneville, Miss.					
Arksoy	44.9	45.5	46.0	44.4	45.5	43.2	--
Ogden	41.9	41.0	42.5	42.4	42.2	41.3	--
Magnolia	44.1	45.3	45.1	43.3	43.8	43.2	--
Mammoth Yellow	44.8	44.7	44.5	43.7	44.4	46.5	--
Mean		44.1	44.5	43.5	44.0	43.6	
		Baton Rouge, La.					
Arksoy	46.4	42.9	45.1	46.2	47.6	49.0	47.7
Ogden	44.4	42.8	45.3	44.5	44.4	45.8	43.7
Magnolia	46.4	41.6*	46.5	47.0	46.9	48.3	47.8
Mammoth Yellow	48.2	47.0	49.3*	48.2	48.9	49.0	46.6
Mean		43.1	46.6	46.5	47.0	48.0	46.5
		Auburn, Ala.					
Arksoy	45.1	45.1	46.3	45.4	--	44.1	44.6*
Ogden	43.1	43.7	45.9	43.9	--	41.5	40.3*
Magnolia	43.9	43.6	45.0	43.1	--	43.7	--
Mammoth Yellow	46.3	46.4	48.5	48.0	--	45.2	43.6*
Mean		44.7	46.4	45.1		43.6	
		Tifton, Ga.					
Arksoy	47.8	47.2	48.1	48.7	46.0	48.0*	48.7*
Ogden	47.5	48.2	49.1	47.0	46.3	46.8*	47.3*
Magnolia	45.4	44.3	47.3	45.4	44.6	45.4*	--
Mammoth Yellow	49.2	50.0	49.4	49.2	49.5	48.3*	48.8*
Mean		47.4	48.5	47.6	46.6	47.1	

*Only 2 replications.

Table 79. Summary of percent of oil for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
		McCullers, N.C.					
Arksoy	18.9	19.4*	18.4	18.7	19.4	19.3	18.0*
Ogden	19.9	20.3*	20.6	20.0	19.6	20.1	18.5*
Magnolia	20.3	20.9*	20.2	20.0	20.5	20.9	19.4*
Mammoth Yellow	17.3	17.4*	17.1	17.1	17.6	17.6	16.8*
Mean		19.5	19.1	19.0	19.3	19.5	18.2
		Stoneville, Miss.					
Arksoy	18.4	18.8	18.3	18.5	17.9	18.7	--
Ogden	20.5	21.4	21.0	20.7	20.0	19.6	--
Magnolia	20.0	19.3	19.7	20.5	20.2	20.3	--
Mammoth Yellow	17.8	17.9	18.0	18.5	17.6	17.1	--
Mean		19.4	19.3	19.6	18.9	18.9	
		Baton Rouge, La.					
Arksoy	18.8	21.4	19.7	20.2	17.8	16.4	17.2
Ogden	19.3	21.3	19.0	19.2	18.6	18.3	19.6
Magnolia	19.2	22.3*	19.5	20.3	18.1	17.6	17.4
Mammoth Yellow	16.8	20.0	17.1*	15.8	15.1	16.0	16.7
Mean		21.3	18.8	18.9	17.4	17.1	17.7
		Auburn, Ala.					
Arksoy	19.1	19.6	19.5	19.5	--	19.3	17.8*
Ogden	19.9	19.9	19.1	19.8	--	20.3	20.2*
Magnolia	20.2	20.2	19.8	20.9	--	19.8	--
Mammoth Yellow	16.8	18.3	16.7	16.0	--	16.9	16.3*
Mean		19.5	18.8	19.1		19.1	
		Tifton, Ga.					
Arksoy	19.3	20.3	19.6	19.9	20.0	18.5*	17.6*
Ogden	20.0	19.9	19.9	21.1	20.7	20.2*	18.2*
Magnolia	21.7	22.2	21.9	22.1	21.8	20.3*	--
Mammoth Yellow	18.1	18.3	18.2	19.2	18.4	18.1*	16.6
Mean		20.2	19.9	20.6	20.2	19.3	

*Only 2 replications.

Table 80. Summary of iodine number of the oil for the varieties in the Uniform Dates of Planting Tests, 1943.

Variety	Mean	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
			McCullers, N.C.				
Arksoy	133.2	132.3	130.6	131.5	132.6	135.6	136.5
Ogden	135.7	134.5	134.0	133.5	135.6	136.7	139.6
Magnolia	132.2	128.6	128.7	131.7	133.8	134.5	136.1
Mammoth Yellow	135.6	134.6	134.8	134.6	135.1	135.6	139.0
Mean		132.5	132.0	132.8	134.3	135.6	137.8
			Stoneville, Miss.				
Arksoy	133.1	132.3	132.3	133.1	133.6	134.1	--
Ogden	132.5	131.2	129.2	131.1	134.2	137.0	--
Magnolia	127.7	125.6	126.6	128.3	128.1	129.7	--
Mammoth Yellow	133.4	133.0	133.3	133.3	133.4	134.2	--
Mean		130.5	130.4	131.5	132.3	133.8	
			Baton Rouge, La.				
Arksoy	134.1	134.7	135.3	135.3	133.2	132.4	133.8
Ogden	135.9	134.6	135.0	136.4	136.1	137.4	135.8
Magnolia	129.0	128.1	127.7	126.3	129.2	130.0	132.7
Mammoth Yellow	133.2	132.4	132.3	134.4	133.7	132.7	133.8
Mean		132.5	132.6	133.1	133.1	133.1	134.0
			Auburn, Ala.				
Arksoy	132.1	133.7	133.0	131.3	--	129.4	133.3
Ogden	132.0	132.2	131.2	130.2	--	132.6	134.0
Magnolia	126.6	126.4	125.2	124.9	--	129.8	--
Mammoth Yellow	130.5	128.2	130.1	129.8	--	130.4	134.0
Mean		130.1	129.9	129.1		130.6	
			Tifton, Ga.				
Arksoy	126.7	131.6	130.4	123.6	125.3	125.9*	123.6*
Ogden	128.3	132.1	129.9	123.9	124.8	129.0*	130.3*
Magnolia	120.9	123.5	117.0	115.5	119.5	123.0	126.6
Mammoth Yellow	129.0	130.9	128.6	124.3	129.2	130.0	131.1
Mean		129.5	126.5	121.8	124.7	127.0	127.9

*Only 2 replications.

Table 81. Summary of agronomic and chemical data for the five locations of the Uniform Dates of Planting Tests, 1943.

Location	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
			Bushels Per Acre			
McCullers, N.C.	20.6	19.0	19.4	20.2	20.5	11.5
Stoneville, Miss.	18.1	18.5	21.2	19.9	14.3	0.0
Baton Rouge, La.	10.5	8.6	8.7	6.6	5.4	8.1
Auburn, Ala.	16.2	14.9	11.5	0.4	2.5	0.9
Tifton, Ga.	4.4	5.3	6.5	1.0	2.2	0.2
Mean	14.0	13.3	13.5	9.6	9.0	4.1
			Plant Height in Inches			
McCullers, N.C.	31.5	34.3	34.5	29.8	20.8	17.0
Stoneville, Miss.	27.0	30.0	30.0	28.5	21.0	--
Baton Rouge, La.	17.0	20.8	24.3	27.0	22.0	16.3
Auburn, Ala.	22.3	24.0	24.3	--	15.0	--
Tifton, Ga.	13.5	15.8	17.5	11.8	12.0	6.3
Mean	22.3	25.0	26.1		18.2	
			Days to Maturity			
McCullers, N.C.	190.8	169.8	153.0	137.3	117.3	104.0
Stoneville, Miss.	186.0	167.8	152.8	140.0	122.3	--
Baton Rouge, La.	144.0	143.5	135.0	128.0	118.3	111.8
Auburn, Ala.	182.3	161.3	140.3	--	117.0	--
Tifton, Ga.	161.0	148.3	129.5	128.5	110.5	92.5
Mean	172.8	158.1	142.1		117.1	
			Seed Quality			
McCullers, N.C.	2.5	2.8	2.5	2.0	2.0	2.0
Stoneville, Miss.	3.3	3.0	2.2	2.5	2.8	--
Baton Rouge, La.	3.8	4.0	4.5	4.3	3.5	2.3
Auburn, Ala.	2.4	3.0	2.9	--	3.0	--
Mean	3.0	3.2	3.0		2.8	

Table 81. (continued)

Location	Date Planted 4-1	4-22	5-13	6-3	6-24	7-15
	Seed Size, Grams Per 100 Seed					
McCullers, N.C.	16.1	16.1	15.8	15.5	15.1	13.5
Stoneville, Miss.	12.4	13.3	13.2	13.4	12.4	--
Baton Rouge, La.	12.5	12.1	13.1	--	13.8	--
Auburn, Ala.	15.0	13.2	14.3	14.3	15.4	16.4
Tifton, Ga.	12.6	13.0	12.4	11.9	11.3	--
Mean	13.7	13.5	13.8		13.6	
	Percent Protein					
McCullers, N.C.	44.8	45.0	43.9	42.1	42.1	42.4
Stoneville, Miss.	44.1	44.5	43.5	44.0	43.6	--
Baton Rouge, La.	43.1	46.6	46.5	47.0	48.0	46.5
Auburn, Ala.	44.7	46.4	45.1	--	43.6	--
Tifton, Ga.	47.4	48.5	47.6	46.6	47.1	--
Mean	44.8	46.2	45.3		44.9	
	Percent Oil					
McCullers, N.C.	19.5	19.1	19.0	19.3	19.5	18.2
Stoneville, Miss.	19.4	19.3	19.6	18.9	18.9	--
Baton Rouge, La.	21.3	18.8	18.9	17.4	17.1	17.7
Auburn, Ala.	19.5	18.8	19.1	--	19.1	--
Tifton, Ga.	20.2	19.9	20.6	20.2	19.3	--
Mean	20.0	19.2	19.4		18.8	
	Iodine No. of Oil					
McCullers, N.C.	132.5	132.0	132.8	134.3	135.6	137.8
Stoneville, Miss.	130.5	130.4	131.5	132.3	133.8	--
Baton Rouge, La.	132.5	132.6	133.1	133.1	133.1	134.0
Auburn, Ala.	130.1	129.9	129.1	--	130.6	--
Tifton, Ga.	129.5	126.5	121.8	124.7	127.0	127.9
Mean	131.0	130.3	129.7		132.0	