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Cotton experiments, 1924 - varieties and fertilizers

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COTTON EXPERIMENTS, 1924

Varieties and Fertilizers

By

J. F. O'Kelly and Roland Cowart

MISSISSIPPI AGRICULTURAL EXPERIMENT STATION

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COTTON EXPERIMENTS, 1924

CENTRAL STATION

J. F. O'KELLY AND ROLAND COWART

There is no doubt that the careful selection of a variety and the judicious use of fertilizers will contribute more to the income of the cotton grower than any other two factors under his control. This publication reports results on these two phases of cotton production for 1924 and, wherever possible, includes averages of several years in order that the data may be more conclusive. The results reported were obtained at the Central Station, A. & M. College and in counties surrounding Oktibbeha. Hence, they apply only to east central Mississippi.

TABLE I—SEVEN TYPES OF COTTON AT THE CENTRAL STATION

Year	Pounds Lint Cotton per Acre						
	Cook	Cleveland	Trice	Miller	Lone Star	Delfos	Express
1920	366.0	325.0	321.0	271.0	303.0	333.0	274.0
1921	555.0	552.9	470.3	497.3	516.2	443.2	440.1
1922	334.2	315.6	279.0	320.3	308.8	262.8	271.6
1923	303.5	344.4	396.5	323.8	299.2	368.9	263.6
1924	397.6	408.1	337.6	377.9	352.1	306.9	296.4
Average Pounds	391.3	389.2	360.9	358.1	355.9	343.0	309.1
Average Value	$96.61	100.47	109.83	101.70	104.14	109.90	97.88
Average Length	7-8	15-16	1 1-16	1 1-16	1 1-8	1 3-16	1 3-16
Av. Percentage	38.2	35.4	31.2	33.6	34.3	31.9	31.2

VARIETIES

Five Year Averages

There is always greater or less risk in any phase of crop production. The averages presented in Table 1 should eliminate a great part of that risk in the choice of a variety in that section of the state surrounding A. & M. College. Seven types of cotton are represented, each by the best strains the type has produced. The averages indicate that east central Mississippi should continue to grow varieties with short to medium staple. Longer varieties are justified only where the soil type is suitable and where the grower has marketing facilities which enable him to obtain a premium for staple cotton.

Salsbury and Half and Half are not included because the table consists of only those types which have been in the tests five consecutive years or more. Salsbury was not offered the station for testing until 1921 and Half and Half was omitted in 1920 because seed could not be obtained from the originator.

Variety Tests, 1924

The variety tables which follow contain practically every variety which has any promise for Mississippi conditions and many which do not but which were tried in the hope of learning the exact rating of seed being offered in

the state and elsewhere.

*The name of Willis Triumph has been changed to Willis. It has none of the characteristics of ordinary Triumph and confusion would arise from including this word in the name.

The lint prices used in computing values were obtained by averaging November 15 quotations on different lengths of middling cotton received from several dealers in different marketing centers. The seed was valued at $40.00 a ton.

No one needs to be told that the fruiting season of 1924 was the driest the state has experienced for many years, but this fact must be kept constantly in mind in studying 1924 results.

TABLE II—STANDARD VARIETIES—1924

Variety	Pounds per Acre		Lint Data			Dollars per Acre Seed And Lint	Rank In Value	Bolls per lb.
	Seed Cotton	Lint	Percentage	Length	Cents per lb.			
Trice, Miss. Sta.	1026.0	337.6	32.9	1 1-16	25.00	98.17	12	94
Trice, Burdette	771.6	256.2	33.2	1 f	24.75	73.71	22	89
Cleveland, Wan.	975.6	379.5	38.9	7-8	23.75	102.05	9	80
Cleveland, Coker	1082.4	408.1	37.7	15-16	24.25	112.45	1	79
Cleveland, Pied.	1081.2	394.6	36.5	7-8 f	24.00	108.43	5	81
Cleveland 54	1107.6	397.6	35.9	15-16	24.25	110.62	3	81
Half & Half, Lee	889.2	369.9	41.6	13-16	23.50	97.32	13	82
Cook 1346	1024.8	397.6	38.8	7-8	23.75	106.97	6	87
Willis*	1095.6	390.0	35.6	1 f	24.75	110.64	2	82
Miller	1086.0	377.9	34.8	1 1-16	25.00	108.64	4	63
Acala	996.0	375.5	37.7	1 f	24.75	105.35	8	81
D. & P. L. No. 4	970.8	372.8	38.4	1 1-16 f	25.25	106.09	7	79
Lone Star 65	1023.6	352.1	34.4	1 1-16	25.00	101.46	10	73
Lone Star 65-A2	897.6	304.3	33.9	1 1-8	26.00	90.99	18	69
Salsbury	1023.6	342.9	33.5	1 1-16	25.00	99.34	11	93
Webber 49-6	754.8	224.9	29.8	1 3-16	27.75	73.01	23	88
Webber Deltatype	895.2	260.5	29.1	1 1-4	30.00	90.84	19	81
Delfos 631	870.0	287.1	33.0	1 3-16 f	27.75	91.33	17	81
Delfos 911	930.0	306.9	33.0	1 1-8 f	26.50	93.79	15	98
Delfos 6102	907.2	303.0	33.4	1 1-8 f	26.50	92.38	16	100
D. & P. L. No. 5	907.2	296.7	32.7	1 3-16 f	27.75	94.54	14	84
Express, Lightning	822.0	258.9	31.5	1 3-16	27.00	81.16	21	94
Express 782	903.6	296.4	32.8	1 1-8 f	26.50	90.69	20	87

The test reported in Table 2 was planted on April 21 but had to be planted over on May 14 on account of some varieties having a poor stand. Dry weather damage was considerable but weevil damage was negligible. The season was favorable to medium late varieties which are often vigorous growers. The only fertilizer used was stable manure.

Bolls were very small as will be seen in those tables which report bolls per pound. The data were accurately obtained and indicate what each variety will do in a season like the one just past. They do not ,of course, represent what would happen in a normal season—nor does a great part of the

other data, as for that matter.

The sources of all seed used in these tests will be found at the end of this publication and those interested should find the list of addresses helpful.

The test reported in Table 3 is a duplication of that in Table 2 except for the omission of three varieties which had poor stands. It will be observed that no variety produced as much as 172 pounds of lint to the acre

TABLE III—HILL VARIETY TEST—1924

Variety	Pounds per Acre		Lint Data			Dollars Per Acre Seed & Lint	Rank in Value
	Seed Cotton	Lint	Percentage	Length	Cents per lb.		
Trice, Miss. Sta.	285.6	100.5	35.2	1 f	24.75	25.57	10
Trice, Burdette	234.0	82.4	35.2	15-16 f	24.40	23.14	17
Cleveland, Wan.	213.6	79.9	37.4	13-16	23.50	21.45	19
Cleveland, Coker	302.4	115.2	38.1	15-16	24.25	31.68	6
Cleveland, Pied.	336.0	126.3	37.6	7-8	23.75	34.19	4
Cleveland 54	343.2	126.6	36.9	15-16	24.25	35.03	2
Half & Half, Lee	284.4	122.0	42.9	13-16	23.50	31.92	5
Cook 1346	284.4	98.4	39.6	7-8	23.75	26.37	13
Willis	282.0	102.4	36.3	15-16	24.25	28.42	11
Miller	337.2	121.1	35.9	1 f	24.75	34.29	3
D. & P. L. No. 4	391.2	154.9	39	1 f	24.75	43.07	1
Salsbury	294.0	99.7	33.9	1 1-16	25.00	28 82	9
Webber 49-6	259.2	80.1	30.9	1 3-16	27.00	25.21	14
Webber, Deltatype	205.2	62.2	30.3	1 3-16 f	27.75	20.12	20
Delfos 631	295.2	101.5	34.4	1 3-16	27.00	31.28	7
Delfos 911	242.4	82.2	33.9	1 1-8	26.00	24.57	16
Delfos 6102	265.2	92.8	35.0	1 1-8	26.00	27.58	12
D. & P. L. No. 5	278.4	95.2	34.2	1 3-16	27.00	29.36	8
Express Lightning	249.6	82.4	33	1 1-8 f	26.50	25.18	15
Express 782	219.6	74.7	34.0	1 1-8 f	26.50	22.70	18

which is the estimated state average for 1924. The relative rank of the different varieties as to production and value is worth a great deal and the test as a whole is an excellent example of what the cotton farmer should not do. The test was planted on poor hill soil without any fertilizer just as is being done on hundreds of farms in the state every year. This practice holds the state average down more than any other one factor.

Table 4 reports a test comparing standard and new varieties. It was planted April 22 and was injured more by dry weather than any other test being reported. Some stable manure and potash were used but moisture was the limiting factor and vigorous growing varieties had the advantage.

The Central Station has conducted a considerable number of variety tests to compare the relative resistence or tolerance of different cotton varieties to the wilt disease (Fusarium vasinfectum) often called cotton blight. These tests were planted on wilt infected soil which had also been inoculated to insure uniform exposure of the plant roots to the fungus.

TABLE IV—STANDARD AND NEW VARIETIES—1924

Variety	Pounds Per Acre		Lint Data			Dollars Per Acre Seed And Lint	Rank In Value	Bolls Per lb
	Seed Cotton	Lint	Lint Percentage	Length	Cents per lb.			
Trice, Miss. Sta.	554.4	187.9	33.9	1 f	24.75	53.84	20	105
Half & Half, Lee	396.0	184.9	46.7	3-4 f	22.50	45.82	22	89
Half & Half, B. B.	531.6	240.3	45.2	3-4 f	22.50	59.90	13	81
Half & Half, Crook	510.0	215.2	42.2	13-16	23.50	56.47	18	92
Cook 588	638.4	254.1	39.8	13-16 f	23.50	67.40	7	91
Cleveland McL.	583.2	227.4	39.0	13-16	23 50	60.56	12	89
Cleveland 54	739.2	271.3	36.7	7-8	23.75	73.79	5	89
Toole, Wilkinson	554.4	209.6	37.8	7-8	23.75	56.68	17	95
Sol. & Oates B. B.	708.0	269.0	38.0	15-16	24.25	74.01	4	82
McGreer	540.0	199.3	36.9	13-16 f	23.50	53.65	21	78
Willis	580.8	213.7	36.8	7-8	23.75	58.09	14	89
Trice X Triumph	547.2	189.9	34.7	1 1-16	25.00	54.63	19	92
Evans Wonder	614.4	212.0	34.5	13-16 f	23.50	57 87	15	100
Miller, Smith	648.0	232.0	35.8	1 f	24.75	65.74	9	66
Miller	667.2	236.8	35.5	1 f	24.75	67.22	8	75
Miller, Windle	639.6	232.8	36.4	15-16 f	24.40	64.94	10	79
Lone Star, Saun.	688.8	272.1	39.5	1 1-16	25.00	76.36	2	64
Lone Star. Chris.	692.4	283.2	40.9	1 1-16	25.00	78.98	1	62
D. & P. L. No. 7	595.2	223.2	37.5	1 1-16	25.00	63.24	11	73
D. & P. L. No. 8	663.6	278.0	41.9	1	24.50	75.32	3	84
D. & P. L. No. 6	608.4	227.5	37.4	1 1-8 f	26.50	67.91	6	97
Burdette Express	588.0	188.7	32.1	1 1-8	26.00	57.05	16	116

The results obtained from the wilt test in 1924, when the wilt injury was the worst experienced in several years, are given in Table 5. The rank of these varieties in apparent resistance to the disease was: Cook, Rhyne; Cook 307-6; Solomon and Oates Big Boll; Dixie Triumph; Toole, Wilkinson;

TABLE V—TEST FOR WILT RESISTANCE, 1924

Variety	Lbs. per A.		Lint Data			Dollars per Acre Seed & Lint	Rank In Value
	Seed Cotton	Lint	Percentage	Length	Cents per lb.		
Miss. Sta. Trice	468	156.8	33.5	1 f	24.75	45.03	14
Half & Half, Mahon	462	200.0	43.3	3-4 f	22.50	50.24	10
Cook 307.6	672	260.7	38.8	13-16	23.50	69.49	3
Rhyne's Cook	705	274.2	38.9	13-16	23.50	73.06	1
Sol. & Oates B. B.	567	214.9	37.9	7-8 f	24.00	58.62	7
Wilkinson Toole	489	175.6	35.9	15-16 f	24.40	49.12	11
Dixie Triumph	585	212.9	36.4	15-16 f	24.40	59.39	5
Clev'd X Lewis 63	579	218.3	37.7	7-8	23.75	59.06	6
Cleveland 54	582	208.4	35.8	15-16	24.25	58.01	8
Willis	621	222.3	35.8	15-16 f	24.40	62.21	4
Miller	717	245.2	34.2	1 1-16	25.00	70.74	2
Lone Star, Saun.	513	192.9	37.6	1 1-16	25.00	54.63	9
Salsbury	474	158.8	33.5	1 1-16 f	25.25	46.40	12
Delfos 911	450	147.2	32.7	1 1-8 f	26.50	45.07	13

Miller; Cleveland 54; Salsbury; and Willis. Other varieties should be classed as susceptible except the hybrid ClevelandXLewis 63 of which there are no seed for distribution. In other years Covington Toole, Express, and Watson's Long Staple have shown much resistance.

Several of the varieties named have been tested at the different branch stations on soils not infected with wilt and the results have been published in bulletins and circulars already issued by the Experiment Station. The other varieties have been tried only at the Central Station, A. & M. College, and the reader should bear in mind that these results cannot be applied without qualification to other parts of the state.

The fact that a variety is very resistant to wilt is no indication that it will always produce high yields under wilt conditions. In fact, the Station has experienced considerable difficulty in finding resistant varieties which also yield well. Under moderate wilt infection and favorable weather conditions, susceptible varieties have occasionally produced more before being checked by the disease than resistant varieties. Varieties possessing resistance are being improved, however, and the list given contains several varieties which should give satisfactory results.

This Station has no fertilizer results which indicate conclusively that the application of any particular fertilizer will have a fungicidal effect on wilt. It is believed, however, that if the soil is deficient in any particular plant food whether it be phosphorous, nitrogen or potash, supplying the deficient element should aid the plant in resisting disease.

Results were obtained on five cooperative variety tests in as many counties and acknowledgement is here made for the helpful cooperation of county agents and farmers. The yields are given in Table VI.

The Clay County test was planted on the farm of Jack Horner April 2[illegible]. The soil was black sandy loam and 200 pounds nitrate of soda to the acre was applied to the test June 11. Willis and Acala had a poor stand and Delfos had a very poor stand.

The Lowndes County test was planted on the farm of J. H. Hardy May 14. The soil was black bottom prairie and 175 pounds nitrate of soda to the acre was used. This is doubtless as accurate as any test in the group. The fruiting season was nearly ideal, the stand of all varieties was excellent, and there were six replications or series.

The test in Noxubee County was planted on red post oak soil April 28. Fertilizer used was 100 pounds acid phosphate and 100 pounds nitrate of soda to the acre. All varieties had a good stand.

In Lauderdale County the test was planted on sandy loam soil of the short leaf pine area, April 26. The fertilizer used was 400 pounds to the acre of a mixture of two parts acid phosphate and one part nitrate of soda. Cleveland, Wannamaker was reported as having a poor stand.

The Madison County test was planted on the farm of Hugh Winans April 24. The soil was Grenada silt loam and received 450 pounds to the acre of a mixture of 200 pounds acid phosphate, 100 of nitrate of soda, and 50 of kainit.

The list of varieties used in the cooperative tests just reported contains practically everything that deserves consideration in this section of the state. It is hoped this work can be continued with sufficient thoroughness that in a short while the number of varieties for this section can be narrowed to four or five or even less.

TABLE VI—COOPERATIVE VARIETY TESTS—1924

Variety	Pounds Seed Cotton to the Acre County					Lint	
	Clay	Lowndes	Noxubee	Lauderdale	Madison	Length	Percentage
Trice, Miss. Sta.	1205	1510.0	638.2	1095	1209.0	1 1-16	32.9
Half & Half, Lee	1020	1467.5	587.4	1035	930.0	13-16	41.6
Cleveland, Wan.	1200	1532.5	577.9	720	799.8	13-16f	38.9
Cleveland 54	1130	1607.5	568.3	1005	1153.2	15-16	35.9
Cleveland, Pied.	1065	1513.5	616.0	870	1060.2	7-8	36.5
Cleveland, Coker	985	1483.5	562.0	975	967.2	15-16	37.7
Cook 219	1120	1637.5	609.6	930	1041.6	7-8	38.8
Willis	1025	1517.5	590.6	1020	1116.0	1 f	35.6
Miller	1115	1661.0	663.6	795	967.2	1 1-16	34.8
Acala	800	1463.5	577.9	885	985.8	1 f	37.7
Salsbury	1165	1515.0	609.6	900	1153.2	1 1-16	33.5
Delfos 6102	910	1327.5	625.5	915	1023.0	1 1-8f	33.4

Note—The length and percentage figures were taken from the work at A. & M. College and must be treated as approximations.

FERTILIZERS

A test comparing four nitrogen carriers has been conducted for four years and the results are presented in Table VII. Cottonseed meal has always been applied before planting and the other carriers have been applied as side dressings after the cotton was hoed.

TABLE VII—NITROGEN SOURCES TEST

Fifteen Pounds Available Nitrogen to the Acre from:	Pounds Seed Cotton per Acre Increase					Value Less Fertilizer
	1921	1922	1923	1924	Average	Average
Ammonium Sulphate	154.7	91.2	208.8	163.5	154.6	$14.15
Nitrate of Soda	187.0	88.0	270.3	132.0	169.3	14.91
Calcium Cyanamid	173.5	63.6	228.0	44.3	127.4	11.03
Cottonseed Meal	4.7	46.2	118.4	69.0	59.6	2.82

The results indicate very clearly that the best nitrogen carriers will be profitable when applied at the rate of 100 pounds of nitrate of soda to the acre or its equivalent in another form.

Cotton rust is a reaction of the plant to soil conditions unfavorable to normal development, one of these conditions being insufficient potash in the soil. The Station has used potash in the form of kainit for rust control for

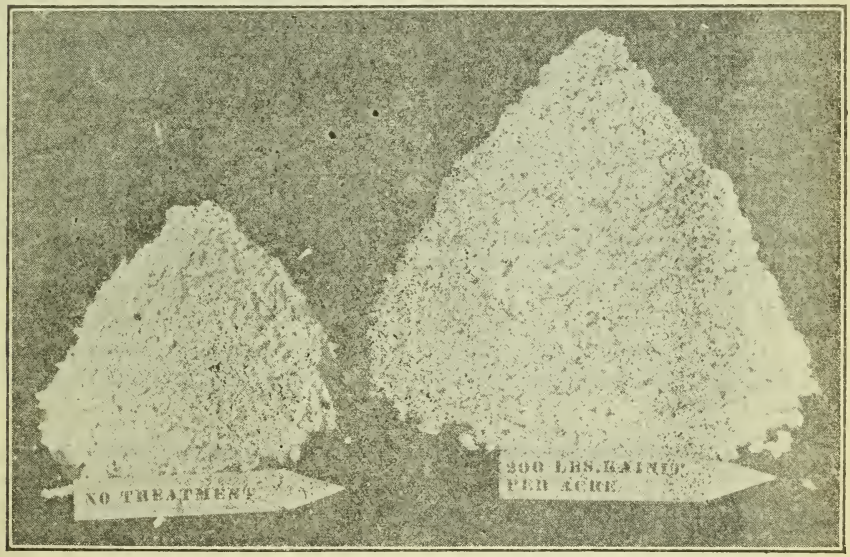
two years and the results are given in Table VIII. Seed cotton was valued at eleven cents a pound in 1923 and eight cents in 1924. Kainit was valued at cost.

Another trial in 1924 compared kainit and kemfert on soil where rust is not extremely severe.Each was applied at the rate of 24 pounds K20 to the acre, the calculated amount being based on 12% kainit and 58% kemfert. The increase was 110.4 pounds seed cotton to the acre for kainit and 109.2 pounds for kemfert. The difference between the two forms is negligible and the increase indicates that potash is profitable even where rust damage is only moderately severe.

TABLE VIII—POTASH FO RUST CONTROL—AVERAGE 1923-24

Treatment	Pounds Seed Cotton per Acre		Value Increase in Dollars	
	Total	Increase	Total	Less Fer.
No Fertilizer	330.3	--	--	--
200 Lbs. Kainit to the Acre	892.5	562.2	55.31	53.65

Experiments indicate that potash in the form of the sulphate or the chloride is as efficient pound for pound of potash as kainit. The form to be used should be determined by first costs, freight rates, and mileage to be hauled from railway delivery point to the farm.



Note—The above cut represents the difference in yield from the use of potash reported in Table VIII. No other fertilizer was used.

For some time it has been known that fertilizers are necessary for profitable cotton production in the short leaf pine area and that the soil in that section responds to the use of fertilizer. There has, however, been some doubt as to the kinds and quantities which would be most profitable. Accordingly, the test reported in Table IX was begun with the object of determining the facts in the case.

When two kinds of fertilizers are required, the rate at which one may prove most profitable depends, to some extent, on the rate at which the other is used. Because of this the rates of phosphorous and nitrogen were varied as indicated in the table. There were four replications on a hillside as nearly uniform as could be found. The corrected yields are based on the average of all check plots and are probably a little more accurate than the actual yields. However, the latter are given for the benefit of those who may want to use them. The columns headed Increase, Per cent Increase, and Values are based on the corrected yields.

TABLE IX—PHOSPHORUS AND NITROGEN TEST—CHOCTAW COUNTY

Fertilizer and Pounds per Acre	Pounds Seed Cotton per Acre			Per Cent Increase	Val. Increase Seed Cotton 8 Cents	
	Actual Yield	Corrected Yield	Increase		Total	Less Fert.
None	215.3	235.5	----	----	----	----
200 Acid phos., 100 Nitrate Soda	684.0	693.1	457.6	194.3	36.61	32.40
300 Acid phos., 100 Nitrate Soda	734.3	693.4	457.9	194.4	36.63	31.69
400 Acid phos., 100 Nitrate Soda	702.0	620.3	384.8	163.4	30.78	25.11
None	283.5	235.5	----	----	----	----
200 Acid phos., 200 Nitrate Soda	643.5	552.9	317.4	134.8	25.39	18.43
300 Acid phos., 200 Nitrate Soda	746.3	663.7	428.2	181.8	34.26	26.57
400 Acid phos., 200 Nitrate Soda	786.0	724.8	489.3	207.8	39.14	30.72
None	246.0	235.5	----	----	----	----
200 Acid phos., 300 Nitrate Soda	789.0	794.7	559.2	237.5	44.74	35.03
300 Acid phos., 300 Nitrate Soda	836.3	888.4	652.9	277.2	52.23	41.79
400 Acid phos., 300 Nitrate Soda	804.8	904.7	669.2	284.2	53.54	42.37
None	197.3	235.5	----	----	----	----

Note—The Farm Management Department under the direction of J. N. Lipscomb rendered valuable assistance in locating this test and in collecting field weights.

There are some inconsistencies in this test, especially in those yields near the second check, but as a whole it is convincing. In every case the fertilizer paid well; in every case it increased the yield more than 100%; and, with the extremely dry season, 700 pounds to the acre, which was the heaviest mixture, was most profitable.

It may be worth while to mention the fact that in each group of three plots where nitrogen was used at the same rate the most profit was obtained

where the mixture approached nearest a ratio of 8% phosphorous and 4% nitrogen. This may be more of an accident than an experimental fact but it has been found true in certain other sections of the South and further trials will settle the question in this case.

Table X reports results from a nitrate rate and dates test conducted in the flatwoods section of Oktibbeha County. The results, as a whole, indicate that the use of nitrogen under such conditions will be profitable. They are, however, too inconsistent for definite conclusions. The inconsistencies are due mainly to a seed bed too low for good drainage early in the season and crop damage by much grass and weeds at first hoeing.

TABLE X—NITRATE RATES TEST—FLATWOODS SECTION

Pounds Nitrate of Soda to the Acre and Time of Application	Pounds Seed Cotton per Acre			Per Cent Increase	Val. Increase Seed Cotton 8 Cents	
	Actual	Corrected Yield	Increase		Total	Less Fert.
None	460.2	481.1	----	----	----	----
100 Before Planting	570.0	592.0	110.9	23.1	8.87	6.12
100 After Hoeing	652.8	673.7	192.6	40.0	15.41	12.66
50 Before Planting and 50 After Hoeing	607.2	622.6	141.5	29.4	11.32	8.57
None	472.2	481.1	----	----	----	----
150 Before Planting	612.6	617.1	136.0	28.3	10.88	6.75
150 After Hoeing	616.2	613.8	132.7	27.6	10.62	6.49
75 Before Planting and 75 After Hoeing	685.8	675.5	194.4	40.4	15.55	11.42
None	493.8	481.1	----	----	----	----
200 Before Planting	713.4	693.5	212.4	44.1	16.99	11.49
200 After Hoeing	664.2	644.4	163.3	33.9	13.06	7.56
100 Before Planting and 100 After Hoeing	661.8	640.6	159.5	33.2	12.76	7.26
None	498.0	481.1	----	---	----	----

SEED SOURCES, 1924

Acala—L. E. Gleeck, Box 334, Memphis, Tenn.
Cleveland, Coker—Pedigreed Seed Co., Hartsville, S. C.
Cleveland, McLendon—C. A. McLendon, Atlanta, Ga.
Cleveland Wannamaker—Model Seed Farms, St. Matthews, S. C.
Cleveland, Piedmont—Piedmont Pedigreed Seed Farms, Commerce, Ga.
Cleveland 54—Miss. Exp. Station, A. and M. College, Mississippi.
Cook, Rhyne—Rhyne Bros., Benton, Alabama.
Cook 1346—E. F. Cauthen, Auburn, Alabama.
Cook, 219—E. F. Cauthen, Auburn, Alabama.
Cook 307-6—Ala. Experiment Station, Auburn, Alabama.
Cook, 588—Robert Hudson, Auburn, Alabama.
D. & P. L. No. 4—Delta Pine Land Co., Scott, Miss.
D. & P. L. No. 5—Delta Pine Land Co., Scott, Miss.
D. & P. L. No. 6—Delta Pine Land Co., Scott, Miss.
D. & P. L. No. 7—Delta Pine Land Co., Scott, Miss.
D. & P. L. No. 8—Delta Pine Land Co., Scott, Miss.
Delfos 631—Delta Branch Experiment Station, Stoneville, Miss.
Delfos 6102—Delta Branch Experiment Station, Stoneville, Miss.
Delfos 911—Delta Branch Experiment Station, Stoneville, Miss.
Dixie Triumph—L. O. Watson, Florence, S. C.
Evans' Wonder—Evans & Evans, Prairie, Miss.
Express, Burdette—Burdette Plantation, Burdette, Ark.
Express, Lightning—Pedigreed Seed Co., Hartsville, S. C.
Express, 782—Delta Branch Experiment Station, Stoneville, Miss.
Half & Half Big Boll—N. E. Cleveland, Stratton, Miss.
Half & Half, Crook—Crook Bros., Luray, Tenn.
Half & Half, Lee—M. B. Lee, Corinth, Miss.
Half & Half, Mahon—H. K. Mahon. Holly Springs, Miss.
Lone Star, Chris.—R. W. Christian, Manchester, N. C.
Lone Star, Saun.—D. A. Saunders, Greenville, Texas.
Lone Star, 65—Mississippi Experiment Station, A. & M. College, Miss.
Lone Star, 65-A2—Stoneville Pedigreed Seed Co., Stoneville, Miss.
McGreer—D. C. McGreer, Decatur, Miss.
Miller—Miss. Experiment Sta., A. and M. College, Miss.
Miller, Smith—Joe Smith, Guntown, Miss.
Miller, Windle—Norton Windle, Blue Springs, Miss.
Salsbury—Delta and Pine Land Co., Scott, Miss.
Sol. & Oates B. B.—Soloman and Oates, Headland, Ala.
Toole, Wilk.—C. F. Wilkinson, Headland, Ala.
Trice, Burdette—Burdette Plantation, Burdette, Ark.
Trice, Miss. Sta.—Miss. Experiment Sta., A. and M. College, Miss.
Trice X Triumph—Stoneville Pedigreed Seed Co., Stoneville, Miss.
Willis—Hinds Co. Farm Bureau, Jackson, Miss.
Webber Deltatype—Pedigreed Seed Co., Hartsville, S. C.
Webber 49-6—Pedigreed Seed Co., Hartsville, S. C.