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Cotton experiments 1914.

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Mississippi Agricultural Experiment Station

BULLETIN No. 169.

COTTON EXPERIMENTS
1914

AGRICULTURAL COLLEGE, MISSISSIPPI
DECEMBER, 1914.

TUCKER PRINTING HOUSE JACKSON MISS

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*In co-operation with U. S. Department of Agriculture.

INTRODUCTION

In this bulletin are given the results from some of the cotton experiments for 1914 from the Central Station at the A. and M. College and two of the branch stations; namely, the Holly Springs Branch Station at Holly Springs, Miss., and the Delta Branch Station at Stoneville, Miss.

The results from similar cotton experiments previous to 1914 are published in Bulletins 155, 161, and 164. These bulletins may be had upon application to the Director of the Experiment Station, Agricultural College, Mississippi.

RESULTS FROM THE CENTRAL STATION.

By E. C. EWING AND J. R. RICKS.

THE WEATHER.

TABLE 1.—Temperatures and Rainfall, 1914.

MONTH.	TEMPERATURES.				RAINFALL.	
	Mini- mum.	Average Mini- mum.	Maxi- mum.	Average Maxi- mum.	Total rainfall inches.	No. of day on which rain fell.
January.....	26	36.5	75	57.4	1.05	4
February.....	20	35	73	56.5	4.22	10
March.....	23	41.2	82	62.4	6.19	13
April.....	31	52.4	88	75.6	5.46	9
May.....	47	60	98	84.4	2.15	7
June.....	68	72.3	103	96.9	5.06	6
July.....	65	72	103	96.5	.85	6
August.....	64	70.5	96	91	7.37	18
September.....	53	63.8	95	87	7.10	7
October.....	29	56	88	77	2.00	12
November.....	15	41.8	85	61	3.00	7
December.....	13	34.8	69	48.6	6.47	15
Total rainfall.....					50.92	114

VARIETY TEST.

In Table 2 are shown the results of comparative field tests with sixteen varieties supposed to have been the most promising varieties of their respective classes. The first four are early short staple varieties; the next eight are medium early, big bodled, short staple varieties; and the last four are long staple varieties. The table shows the yields of seed and lint made by each variety under the same conditions and the value per acre of these products at market prices. The samples were classed at Greenville, Miss., on November 5, 1914, and the values are based on the market of that date.

The samples of each variety were considered as being of strict middling grade and the values assigned are the prices that were being paid for each of the different lengths of staple in strict middling grade at that time.

On the whole the medium early, big balled varieties made the best yields, but some of the long staple varieties returned the greatest money values per acre, due to the premiums paid for these staples at that time.

This field was infested from the first to the last of the season with boll weevils, which did a moderate amount of damage. The weevils were controlled to a considerable extent by picking the adult weevils and the squares and to a large extent by the hot dry weather which occurred in June and July. This cotton was planted April 20th and 21st and got an early start. Boll weevils appeared in considerable numbers early in the season. As soon as squares began to appear and were punctured, these punctured squares were picked and destroyed as were also any adult weevils found. These measures were continued through June and most of July and, together with the effect of the hot dry weather prevailing at that season, permitted a good crop to be made.

Had the weather been rainy and cloudy and had the picking of the punctured squares been relaxed, the relative standing of the varieties would probably have been different and more favorable to the early varieties. The earliest varieties began to square first and as a result were infested first by the weevil. This was a slight disadvantage to them and the artificial and natural control which continued through a large part of the fruiting season was favorable to some of the varieties that are somewhat later. The early maturing varieties have never given the largest yields here without the boll weevil and a dry season is favorable to the medium early big balled varieties. These varieties have more extensive root systems, are more vigorous in their habits of growth, and are consequently more drouth-resistant. It is our opinion that under average conditions on poor thin land or land of medium fertility, with the boll weevil present, these medium early, big balled varieties such as Wannamaker-Cleveland, Cook, Half and Half (a selection from Cook), and Miller will give better results than the very early, quick maturing varieties, which suffer worse from drouth and rust and quit growing early under such conditions. Besides, there does not seem to be as much difference in earliness between the earliest and the latest varieties on thin land as there is between the earliest and the latest varieties on rich land. On rich bottom lands in the presence of the boll weevil, one of the early maturing varieties that does not make too much stalk will be the most satisfactory. In this class there are no better varieties than Trice and Dodd's Prolific. In most tests in this State Trice has given better results than Dodd's Prolific.

We regard Express* as the best available long staple variety for boll weevil conditions. It is an early inch and three-sixteenths cotton that has given splendid results in the Delta. Unknown is another good early variety that runs from an inch and an eighth to an inch and three-sixteenths.

*See circular on Express Cotton published by this Station for a discussion of this variety.

TABLE 2.—VARIETY TEST AT CENTRAL STATION, 1914.

NAME OF VARIETY.	Seed cotton picking.	Seed cotton second picking.	Total Seed cotton per acre.	Per cent lint.	Lint per acre.	Length of staple	Value per pound.	Value of lint per acre.	Seed per acre.	Value of seed per acre at \$12.00 per ton.	Total value of lint and seed per acre.
	lbs. 1096	lbs. 347	lbs. 1443	31	447	Inch. 1 f *	Cents. 7 1-4	\$32.40	996	\$5.95	\$38.35
1. Trice.....	1090	300	1390	34	473	7-8	7	33.10	917	5.50	38.60
2. Simpkins.....	987	300	1287	35	450	7-8	7	31.50	837	5.00	36.50
3. Simpkins Ideal.....	1187	383	1570	32.2	505	1	7 1-8	36.00	1065	6.40	42.40
4. Dodd's Prolific.....	789	789	1578	38.4	606	1 f	7 1-4	43.90	972	5.85	49.75
5. Wannamaker-Cleveland.....	549	754	1303	36.3	473	11-16	8 1-4	39.00	830	5.00	44.00
6. Cleveland.....	668	870	1538	38.0	584	3-4	7	40.90	954	5.70	46.60
7. Cook's Cook.....	982	694	1676	40.0	670	3-4	7	46.90	1006	6.00	52.90
8. Alabama Cook.....	896	637	1533	43.9	673	3-4	7	47.10	860	5.15	52.25
9. Half and Half.....	710	740	1450	38.7	561	1 f	7 1-4	40.65	889	5.30	45.95
10. Triumph.....	745	844	1589	36.5	580	1 1-16	8 1-4	47.85	1009	6.05	53.90
11. Miller.....	1168	399	1567	28.2	442	1 1-8 f	11	48.60	1125	6.75	55.35
12. Express.....	824	606	1430	32.5	465	1 1-8	9 1-2	44.20	965	5.80	50.00
13. Unknown.....	610	544	1154	33.0	381	1 1-8 f	11	41.90	773	4.65	46.55
14. Durango.....	630	694	1324	32.0	424	1 3-16	12 1-2	53.00	900	5.40	58.40
15. Columbia.....	694	528	1222	28.3	346	1 3-8	14 1-2	50.20	876	5.30	55.50
16. Sunflower.....											

*Full

VARIETY TEST ON WILT-INFESTED LAND.

During the past three years we have conducted a variety test each season on land that is moderately infested with the cotton wilt disease, or blight. In these we have used a few varieties susceptible to the disease and some of the wilt-resistant varieties, all short staple varieties.

VARIETY.	Test of 1912.	YIELD OF LINT PER ACRE.
Dixie.....	260
Covington-Toole Wilt-resistant.....	270
Trice.....	216
Peterkin.....	253
Dillon.....	225
Triumph.....	249
	Test of 1913.	
Dixie.....	218
Trice.....	185
Covington-Toole Wilt-resistant.....	238
Simpkins.....	179
	Test of 1914.	
Dixie.....	176
Trice.....	212
Covington-Toole Wilt-resistant.....	206
Simpkins.....	229

In the test of 1912 Dixie, Covington-Toole Wilt-resistant, Peterkin and Dillon are all relatively immune to the disease, while Trice and Triumph are very susceptible. Dixie, Covington-Toole Wilt-resistant, and Dillon have been bred for resistance to this disease and introduced for that quality. In the tests of 1913 and 1914 Dixie and Covington-Toole Wilt-resistant are the resistant varieties and Trice and Simpkins the susceptible varieties.

The soil on which these tests were made is a silt loam. Here the infected plants usually do not die at once from the effects of the disease but most of them continue to develop a fair crop. However, every plant in the rows of susceptible varieties showed some effects of the disease finally, and usually a good many of the plants of the wilt-resistant varieties wilted more or less.

Boll weevils did not affect the crop of 1912; they injured it slightly late in the season of 1913; but weevils were present throughout the summer and fall of 1914 and affected the yields considerably.

The wilt-resistant varieties generally gave the best yields in 1912 and 1913 but fell below the susceptible varieties in 1914. This is on account of the effects of the boll weevil. The wilt-resistant varieties are all late and cannot be successfully grown where weevil damage is heavy. At the same time, the early varieties that we have found all seem to be rather susceptible to wilt, so the combination, where both wilt and weevils are present to a serious extent, makes cotton growing out of the question.

The Covington-Toole Wilt-resistant variety has yielded more cotton than any of the other wilt-resistant varieties in all tests that have been made with it at this Station.

DISTANCE EXPERIMENTS.

TABLE 3.—Width of Rows, 1914.

PLAT.	First picking pounds seed cotton per acre.	Sec. picking pounds seed cotton per acre.	Total yield pounds seed cotton per acre.
3 ft. rows.....	1536	124	1660
3½ ft. rows.....	1184	152	1336
4 ft. rows.....	1068	152	1220
4½ ft. rows.....	992	208	1200
5 ft. rows.....	960	216	1176

TABLE 4.—Distances in the Drift, 1914.

PLAT	First picking pounds seed cotton per acre.	Sec. picking pounds seed cotton per acre.	Total yield pounds seed cotton per acre.
12 inches.....	1105	448	1553
24 inches.....	977	426	1403
36 inches.....	772	381	1153

In the above plats the rows were four feet apart, and the cotton grew to four feet in height. The variety of cotton was Cleveland Big Boll. The weevils seemed to have gotten all of the squares after the 10th of August. No fight was made on the weevils in these plats.

TABLE 5.—Manure and Kainit to Prevent Rust, 1914.

PLAT.	First picking pounds seed cotton per acre.	Sec. picking pounds seed cotton per acre.	Total yield pounds seed cotton per acre.
No treatment.....	476	8	484
Kainit 300 lbs. per acre.....	1504	228	1732
Manure applied in 1911.....	1540	268	1808
Manure applied in 1913.....	1550	280	1830

These plats were on land on which cotton has always rusted badly. An application of 300 pounds of kainit is almost as good as an application of ten tons of barnyard manure, but the kainit must be added each year whereas the manure lasts for several years, as will be seen in the above plats.

RESULTS FROM THE HOLLY SPRINGS BRANCH EXPERIMENT STATION.

By C. T. AMES.

Remarks.—All of the fertilizer plats planted to cotton in 1914 were planted about as early as the weather would permit in this latitude. The growth of the stalk was below normal. The season was excessively dry, and the yield of cotton was above the average for this section.

Under average conditions the early varieties of cotton should be planted on valley land, and the larger big boll and later varieties should be confined principally to hill land. Cleveland-Wannamaker, Trice, and Cooks are most excellent early short staple varieties. Express is also an excellent early variety with staple 1 3-16 inches in length. Cleveland Big Boll is an early variety, and most excellent for the hill lands of this section.

Fertilizers.—The use of both nitrogen and phosphorus, either alone or in combination, has given very satisfactory results. Phosphorus hastens maturity.

The use of potash, either alone or in combination with the other elements, appears to be unnecessary in these soils.

On thin upland the use of 200 to 300 pounds of an equal mixture of cottonseed meal and acid phosphate per acre, placed about three inches deep under the seed, should give very satisfactory results. On the more fertile soils the quantity of phosphorus may be increased to advantage.

After leguminous crops phosphate alone at the rate of from 200 to 400 pounds per acre can be used to profit.

Where leguminous crops are to be grown, from 300 to 400 pounds of rock floats can be used to advantage. Where rock floats is mixed with manure the results are most satisfactory.

If ten pounds of crimson clover seed were sown, per acre, in cotton after a rain in September and covered with a cultivator, rock floats would supply our fertilizer requirements.

HOLLY SPRINGS BRANCH EXPERIMENT STATION—
TABLE 6.—VARIETY TEST WITH COTTON.

Date of Planting.—April 29, 1914. Soil.—Brown loam valley.
Plats.—One row each, repeated four times.

PLATS.	DATES OF PICKING.				Total per Plat.	Per cent lint.	Length of staple.	Pounds per acre Seed cotton.	Pounds of lint per acre.	Pounds of seed per acre.	Value of seed and lint per acre.
	Sept. 10.	Sept. 28.	Oct. 20.	Nov. 5.							
0. Trice.....	199lb	113.5	00.0	3.0	329.5	31.1	1 1-16	1845.2	573.8	1271	\$54.95
1. Trice (College).....	192	131	22	3	348	31.7	1 1-16	1948.8	617.7	1331	58.93
2. Simpkins.....	178.5	134.7	15.7	4.5	332.7	34.8	7-8	1863.1	648.3	1214	53.48
3. Simpkins Ideal.....	174	140.5	14.5	4.5	333	35.1	7-8	1864.8	654.5	1210	53.89
4. Dodd's Prolific.....	208.5	159.2	20	5	392.7	32.5	1	2199.1	714.6	1485	60.70
5. Cleveland Wannamaker.....	153	217.2	46.5	7.5	424.2	37.5	1 f	2375.5	890.8	1484	73.47
6. Cleveland Big Boll.....	118.2	233.5	76.2	10.0	437.9	36.5	1 f	2452.2	895	1557	74.56
7. Cook from Cook.....	101	257	74.5	8	440.5	38.3	3-4	2464	943.7	1521	75.17
8. Cook's Alabama Station.....	151.5	261.5	40	4.5	457.5	40	3-4	2562	1024.8	1538	80.95
9. Half and Half.....	141	235	26	9.5	411.5	44.2	3-4	2304.4	1018.5	1186	78.40
10. Triumph.....	95	189	67.5	15.0	366.5	38.5	1	2052.4	790	1262	64.84
11. Miller.....	130.5	212	69.2	9	420.7	36.1	1 1-8	2355.8	850.4	1405	83.82
12. Express.....	198.5	162.5	32	9.5	402.5	29.1	1 3-16	2254	655.9	1699	92.16
13. Allen's Unknown.....	125	160	41.5	14	340.5	32.7	1 3-16	1906.8	623.3	1283	85.59
14. Durango.....	106.5	214.5	42	14	377	33.5	1 3-16	2111.2	707	1404	96.79
15. Columbia.....	81.7	206.5	69.5	15.5	373.2	32.5	1 3-16	2089.9	679	1410	93.33
16. Sunflower.....	109.7	194.5	69.7	12	385.9	28.7	1 5-16	2161	442	1719	74.40

The following prices were given at Greenville, Miss., Nov. 15, 1914, for strict middling grade: 3-4 inch, 7 cts.; 7-8 inch, 7 1-8 cts.; 1 inch, 7 1-4 cts.; 1 1-16 inch, 8 1-4 cts.; 1 1-8 com., 8 3-4 cts.; 1 1-8 full, 11 cts.; 1 3-16 inch, 12 1-2 cts.; 1 5-16 inch, 14 1-2 cts. Cotton seed were figured at \$12.00 per ton which was the market price on the above date.

Remarks.—Season dry. Yield above the average. Normal differences between price of short and long staple affected results.

TABLE 7—HOLLY SPRINGS BRANCH EXPERIMENT STATION.

Date of Planting.—April 29, 1914.

Variety.—Cleveland Big Boll.

Soil.—Rolling hill land, clay loam.

Plats.—1-20 acre each.

200 lb Fertilizer per Acre.	DATES OF PICKING.			Pounds of Seed of Cotton per plat.	400 lb Fertilizer per Acre.	DATES OF PICKING.			Pounds of Seed of Cotton per Acre.
	Sept. 12.	Oct. 6.	Oct. 28. Plat.			Sept. 12.	Oct. 2.	Oct. 28.	
1. No Fertilizer.....	6.5	15	7	28.5	1½. No Fertilizer.....	5.5	18.5	5	580 lb
2. 200 lb Cottonseed Meal	11	23	13	47	2½. 400 lb Cottonseed Meal..	6.5	20	7	670
3. 200 lb Acid Phosphate..	27	27	4.5	58.5	3½. 400 lb Acid Phosphate....	25	39	3	1340
4. 200 lb Kainit.....	11	21	6	38	4½. 400 lb Kainit.....	7	21	4	640
5. No Fertilizer.....	8	17.5	7	32.5	5½. No Fertilizer.....	0	17	4	420
6. 100 lb Cottonseed Meal 100 lb Acid Phosphate....	29.5	23	3	55.5	6½. 200 lb Cottonseed Meal 200 lb Acid Phosphate....	25	38.5	2	1310
7. 100 lb Cottonseed Meal 100 lb Kainit.....	7.5	21.5	9	38	7½. 200 lb Cottonseed Meal 200 lb Kainit.....	14.5	33	5.5	1060
8. 100 lb Acid Phosphate... 100 lb Kainit.....	21.5	22.5	3.5	47.5	8½. 200 lb Acid Phosphate.... 200 lb Kainit.....	23	27.5	1.5	1040

TABLE 7—HOLLY SPRINGS BRANCH EXPERIMENT STATION.—Continued.

9. 120 lb Acid Phosphate... 40 lb Cottonseed Meal 40 lb Kainit.....	23.5	20.5	3	47	940	9½. 240 lb Acid Phosphate... 80 lb Cottonseed Meal... 80 lb Kainit.....	27	30.5	2	59.5	1190
10. No Fertilizer.....	8.5	15	4.5	28	560	10½. No Fertilizer.....	0	24	3	27	540
11. 150 lb Cottonseed Meal 50 lb Acid Phosphate...	22.5	21	3	46.5	930	11½. 300 lb Cottonseed Meal... 100 lb Acid Phosphate....	25	36.5	2.5	64.2	1280
12. 100 lb Cottonseed Meal 100 lb Acid Phosphate...	22	23	4	49	980	12½. 200 lb Cottonseed Meal... 200 lb Acid Phosphate....	17	31	2.5	50.5	1010
13. 150 lb Acid Phosphate... 50 lb Cottonseed Meal	14.5	21	6.5	42	840	13½. 300 lb Acid Phosphate... 100 lb Cottonseed Meal...	17.5	28	1	46.5	930
14. No Fertilizer.....	6	14	7	27	540	14½. No Fertilizer.....	7	17	1	25	500

Remarks.—All plats were located in the field as indicated in this Table, with only a six foot space between the two sets of plats. Each of the above plats have been fertilized, each year, for the past nine years with the same kind and quantity of fertilizer as indicated in Table. Past season very dry, with yield a little above the average.

HOLLY SPRINGS BRANCH EXPERIMENT STATION.

TABLE 8.—FERTILIZER TEST WITH COTTON.

Date of Planting.—April 30, 1914.

Soil.—Red clay hill land, somewhat irregular in texture and fertility.
Plats.—1-20 acre each.

Plat No.	FERTILIZER.	Yield.	Plat No.	FERTILIZER.	Yield.	Plat No.	FERTILIZER.	Yield.
1.	1000 lb Air slacked lime.....	980 lb	6.	200 lb Acid Phosphate.....	1160 lb	11.	200 lb Cotton seed meal.....	1380 lb
2.	No Fertilizer.....	1070	7.	200 Kainit.....	1180	12.	200 lb Rock Floats.....	1210
3.	100 lb Cottonseed Meal..... 100 lb Acid Phosphate.....	1080	8.	100 Cottonseed Meal..... 100 Acid Phosphate..... 100 Kainit.....	1270	13.	No Fertilizer.....	1280
4.	200 lb Rock Floats.....	950	9.	No Fertilizer.....	1280	14.	100 Cottonseed Meal..... 100 Acid Phosphate..... 100 Kainit.....	1510
5.	200 lb Acid Phosphate.....	1310	10.	200 lb Rock Floats.....	1290	15.	No Fertilizer.....	1670

Remarks.—All plats were located in the field as indicated in table. Plats from one to five are on heavy clay soil which changes gradually into a clay loam in plats 11 to 15.

Plat 1 is on the poorest soil, and plat 15 on the most productive.

Plats 5, 10, and 15, were limed at the rate of 2,000 lb of ground lime stone, and manured at the rate of ten tons of manure, per acre, two years prior to planting in cotton.

MISSISSIPPI EXPERIMENT STATION

HOLLY SPRINGS BRANCH EXPERIMENT STATION.
FERTILIZER TEST WITH COTTON.

Date of Planting.—April 29, 1914. Soil.—Rolling hill land, somewhat irregular in fertility. Plats.—1-20 acre each. Variety.—Cleveland Big Boll.

TABLE 9.—Fertilizer Test with Cotton.

	DATES OF PICKING.			Total per Plat.	Pounds of Seed Cotton per Acre.
	Sept. 10.	Oct. 2.	Oct. 28.		
1. No Fertilizer.....	3.5	21	5.5	30	600lb
2. 200lb Cottonseed Meal.....	14	21.5	7	42.5	850
3. 200lb Acid Phosphate.....	16	19	3	38	760
4. 200lb Kainit.....	7	11.5	6	24.5	490
5. No Fertilizer.....	6.5	15	6	27.5	550
6. 200lb Rock Floats.....	16.5	30	6.5	53	1060
7. 400lb Rock Floats.....	21.5	29	5	55.5	1110
8. 200lb Acid Phosphate.....	24	19.5	3.5	47	940
9. 100lb Cottonseed Meal..... 100lb Acid Phosphate.....	15	29	9.5	53.5	1070
10. 100lb Cottonseed Meal..... 200lb Rock Floats.....	18	30	11.5	59.5	1190
11. No Fertilizer.....	11.5	16	7	34.5	690
12. 100lb Cottonseed Meal..... 200lb Acid Phosphate.....	16	19.5	9	44.5	890
13. 200lb Acid Phosphate.....	21.5	25.5	5	52	1040
14. 400lb Rock Floats.....	16	25	5.5	46.5	930
15. 200lb Kainit.....	14.5	26	10	50.5	1010
16. No Fertilizer.....	8.5	24	10.5	43	860
17. 200lb Rock Floats.....	11	21.5	8.5	41	820

Remarks.—Plats are located in field as indicated in above table.

RESULTS FROM THE DELTA BRANCH STATION.

BY G. B. WALKER.

Variety Test.—In the following table we give a list of the varieties of cotton tested at the Delta Branch Station, at Stoneville, in 1914, with data which gives showing made by each variety.

The cotton in this test was planted on May first, but was destroyed by hail storm on May 4th, and was planted a second time on May 20th, but on account of drought which prevailed at that time, a stand was not secured until June 4th.

The land on which the test was made, was of a loamy nature and in rather a low condition, no fertilizer being used.

Owing to the very late date of securing a stand and to a heavy infestation of boll weevil, the yield per acre is very low, but we consider it a very valuable test from a boll weevil standpoint, as the cotton had only about seventy days to grow and set a crop, since no fruit was set after August 10th. Only the very early cottons had any show at all at making a crop.

The boll weevil made its appearance in this field early in July, but did not get numerous enough to take all forms until after August 4th.

Samples of lint from all the varieties were classed and a value placed on them by the O. B. Crittenden Cotton Co., of Greenville, Mississippi, and our calculations are based on information furnished by this firm.

TABLE 10.—VARIETY TEST—DELTA STATION.

VARIETY.	Pounds Seed cotton per acre.	per cent of lint.	Pounds lint of cotton per acre.	Length of staple.	Price lb strict middling basis Dec.1 market.	Value of lint per acre.	Value seed per acre at \$20.00 per ton.	Total value of lint and seed per acre.	Rank as to money value per acre.
Express.....	640	27	173	1-3-16	12-1-2	\$21.62	\$ 4.67	\$ 26.29	1
Trice.....	752	30	225	1-1-16	8	18.00	5.27	23.27	2
Unknown.....	520	31	161	1-1-8 f	11	17.71	3.59	21.30	3
Miller.....	540	35	189	1-1-8 c	8-1-2	16.06	3.51	19.57	4
Dodd's Prolific.....	600	30	180	1-1-16	8	14.40	4.20	18.60	5
Simpkins' Ideal.....	596	33	196	Short	7	13.72	4.00	17.72	6
Wannamaker-Cleveland.....	524	37	195	1	7-1-4	14.14	3.29	17.43	7
Columbia.....	360	31	112	1-3-16 f	13	14.56	2.48	17.04	8
Dalrymple.....	424	36	153	1-1-8 c	8-1-2	13.00	2.71	15.71	9
Cleveland.....	480	33	158	1-1-16	8	12.64	2.22	14.86	10
Half and Half.....	424	41	174	Short	7	12.18	2.50	14.68	11
Alabama Station Cook.....	448	38	170	Short	7	11.90	2.78	14.68	12
Cook's Cook.....	432	36	155	Short	7	10.85	2.77	13.62	13
Sunflower.....	320	26	81	1-1-4 f	14	11.34	2.19	13.53	14
Triumph.....	344	37	127	1-1-16	8	10.15	2.17	12.32	15
Bates.....	328	38	125	1	7-1-4	9.06	2.03	11.09	16
Durango.....	240	31	74	1-1-8 f	11	8.14	1.66	9.80	17

DELTA BRANCH EXPERIMENT STATION.

TABLE 11.—Second Variety Test, 1914.

NAME OF VARIETY.	First row.	Second row.	Total.	Per cent lint.	Yield of lint.
Re-improved King.....	15.5	16.0	31.5	32.3	10.1
Piedmont.....	19.0	18.0	37.0	29.7	11.0
Ghoulston's Triumph.....	10.5	13.5	24.0	31.0	7.3
Stone and Fort Triumph.....	8.5	10.0	18.5	31.9	5.9
Alabama 6B-97-27.....	7.0	9.0	16.0	32.4	5.2
Alabama Cleveland 316.....	9.0	11.5	20.5	34.0	7.0
Alabama Cleveland 323.....	8.0	7.0	15.0	32.1	4.9
Alabama Cook 675.....	10.0	12.0	22.0	36.5	8.0
Alabama.....	7.0	12.0	19.0	33.4	6.8
Jake's Big Boll.....	12.5	10.0	22.5	33.4	7.5
Wood's Favorite.....	8.5	10.0	18.5	29.6	5.5
Piedmont Long Staple.....	8.0	9.0	17.0	27.5	4.7
Willis' Columbia.....	11.5	13.0	24.5	29.5	7.2
Webber 49.....	12.0	12.5	24.5	32.4	7.9
28-370.....	11.5	14.0	25.5	26.5	6.8

The second variety test is a small test conducted on a small scale in which certain varieties are grown in most cases for the first time. A larger test is made every year of the most promising varieties and the results are published in the Station Bulletins. Our object in conducting the smaller test is to get familiar with these new varieties to see whether they justify testing on a larger scale in the regular variety test. Our opinion is based as much on the result of observation in the field as on the figures for final yield, which are not considered as establishing the relative merit of the different kinds because of the small area devoted to the test. They are submitted here, however, to those making inquiry for whatever they may be worth.