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Results of Cotton Variety Tests 1926-1929

By

H. B. Tisdale and J. T. Williamson

AGRICULTURAL EXPERIMENT STATION
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M. J. FUNCHESS, Director
AUBURN

Results of Cotton Variety Tests 1926-1929

Alabama Experiment Station

By
 H. B. TISDALE, Plant Breeder
 and
 J. T. WILLIAMSON, Associate Agronomist

Eleven conclusive variety tests of cotton were conducted in different localities of North, Central, and South Alabama in 1929. The following tables give the results of these tests and the average results of all tests conducted over a period of four (4) years, 1926-1929. Tables 1 and 2 show the average results of 14 tests in North Alabama and 9 tests in Central Alabama conducted over a period of four (4) years, 1926-1929. Table 3 shows the length of staple of each variety in each locality. The five leading varieties with the average yield of lint cotton per acre and the average length of staple (in 1/32 inches) for the four (4) year period are as follows:

North Alabama	Central Alabama
D. P. L. 4-8371—31.3	D. P. L. 4-8467—31.8
Cook 1010 (Williamson).....370—27.1	Dixie Triumph441—28.6
Delfos367—34.2	Cook 1627439—29.1
Trice367—32.0	Cook 588436—28.2
Cook 1627360—29.5	Cleveland Piedmont428—28.4

Table 4 shows the average results of 19 tests of wilt resistant varieties of cotton conducted over a period of four (4) years, 1926-1929. Table 5 gives the length of lint (in 1/32 inches) for each variety in each locality. The five leading wilt resistant varieties with the yield of lint cotton per acre and length of lint (in 1/32 inches) are as follows:

Cook 307 (Rhyne)399—28	Toole Council395—28.4
Dixie Triumph399—28.4	Lewis 63375—28.4
Cook 307 (Bridges)371—27.6	

Only the average results over the period of four (4) years should be considered in determining the merits of any one of the varieties of cotton. The results for 1929 are given as a progress report on new strains and varieties of cotton which are added to the tests each year.

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RESULTS OF COTTON VARIETY TESTS

3

TABLE 1

Average Results of Cotton Variety Tests in North Alabama
1926-1929

Variety	Pounds Lint Cotton Per Acre				
	Sylacauga 1929	Cedar Bluff 1929	Crossville 1929	Average 3 tests 1929	Average 14 tests-4 yrs. 1926-1929
D. P. L. 4-8	302	324	478	368	371
Cook 1010 (Williamson)	323	357	507	396	370
Delfos	314	450	411	392	367
Trice	272	433	381	362	367
Cook 1627	304	417	452	391	360
Bottoms	247	408	418	358	358
Cook 307 (Rhyne)	295	464	437	399	342
Dixie Triumph (Watson)	260	379	403	347	341
Cleveland (Piedmont)	232	312	397	314	340
College No. 1	241	377	393	337	335
Cook 588	250	421	414	362	334
Cleveland (Wannamaker)	222	345	416	328	331
Cleveland (Pedigreed Seed Co.)	272	343	413	343	326
Cook 307 (Bridges)	240	397	398	345	311
Mexican Big Boll	195	321	415	310	310
Acala No. 5	280	269	442	330	307
Webber Delta Type	219	271	353	281	273
Rucker	307	503	475	428	
Addison	294	418	452	388	
Local Variety (Check)	269	425	446	380	
Cook 1010 (Bains)	283	389	464	379	
Half and Half	275	371	482	376	
Cook 1627-52	249	383	434	355	
D. P. L. 6	274	357	419	350	
Cook 2023	186	375	411	324	
Acala (Burdette)	248	321	390	320	
Cleveland No. 5	208	366	380	318	
Express (Burdette)	235	337	369	314	
Cleveland (Neely)	232	287	394	304	
Foster	249	266	386	300	
Cleveland (Wilson)	234	276	389	300	
Wilds No. 2	239	262	390	297	
Cleveland A. E. S.	230	242	390	287	

RESULTS OF COTTON VARIETY TESTS

TABLE 2

Average Results of Cotton Variety Tests in Central Alabama
1926-1929

Variety	Pounds Lint Cotton Per Acre				
	Auburn 1929	Pratt- ville 1929	Alice- ville 1929	Average 3 tests 1929	Average 9 tests-4 yrs. 1926-1929
D. P. L. 4-8	440	453	250	381	467
Dixie Triumph	318	434	215	322	441
Cook 1627	320	464	233	339	439
Cook 588	340	393	198	310	436
Cleveland (Piedmont)	303	395	198	299	428
Bottoms	346	380	199	308	417
Cleveland (Wannamaker)	291	402	210	301	415
Trice	266	355	205	275	415
Cook 307 (Rhyne)	296	404	195	298	414
Cleveland (Ped. Seed Co.)	276	428	177	294	391
Delfos	356	399	223	326	389
Cook 1010 (Williamson)	441	490	222	384	386
Cook 307 (Bridges)	278	372	196	282	368
College No. 1	247	342	219	269	367
Mexican Big Boll	282	333	172	262	361
Webber Delta Type	226	370	131	242	343
Acala No. 5	352	351	207	303	338
Half and Half	400	477	221	366	
Rucker	426	423	204	351	
Addison	306	456	202	321	
Cook 1010 (Bains)	275	429	247	317	
Cook 1627-52	319	422	175	305	
Cleveland (Wilson)	328	385	190	301	
Local Variety (check)	292	397	194	294	
D. P. L. 6	299	382	194	292	
Cleveland No. 5	268	395	199	287	
Foster	318	384	149	284	
Express (Burdette)	303	332	203	279	
Cleveland (Neely)	264	370	193	276	
Cook 2023	283	379	160	274	
Acala (Burdette)	256	363	161	260	
Cleveland A. E. S.	258	367	151	259	
Wilds No. 2	218	360	147	242	
Cook 144	336	401			

RESULTS OF COTTON VARIETY TESTS

5

TABLE 3

Results of Cotton Variety Tests 1929

Variety	Length of Staple in 1/32 inches					Alice-ville
	Syla-cauga	Cedar Bluff	Cross-ville	Auburn	Pratt-ville	
D. P. L. 4-8	30	28	32	32	30	31
Cook 1010 (Williamson)	24	26	28	30	27	28
Delfos	32	34	34	32	33	34
Trice	30	28	33	33	29	31
Cook 1627	28	30	28	30	29	30
Bottoms	28	28	28	29	28	29
Cook 307 (Rhyne)	26	26	28	28	28	28
Dixie Triumph (Watson)	28	28	30	28	28	30
Cleveland (Piedmont)	26	28	28	28	28	28
College No. 1	28	32	30	32	28	32
Cook 588		28	28	29	27	28
Cleveland (Wannamaker)	26	26	28	28	28	29
Cleveland (Ped. Seed Co.)	32		32	33	31	32
Cook 307 (Bridges)	24	28	28	28	27	28
Mexican Big Boll	32	30	32	33	30	32
Acala No. 5	32	33	30	33	30	33
Webber Delta Type	36	34	35	36	35	36
Rucker	24	26	26	28	26	28
Addison	26	28	28	28	26	28
Local Variety (Check)	28	28	28	28	28	30
Cook 1010 (Bains)	26	28	26	28	27	28
Half and Half	24	26	24	27	26	28
Cook 1627-52	28	32	28	30	28	29
D. P. L. 6	33	34	34	36	32	34
Cook 2023	26	30	28	28	28	28
Acala (Burdette)	32	30	34	32	30	32
Cleveland No. 5	30	32	32	32	30	32
Express (Burdette)	32	33	34	34	33	34
Cleveland (Neely)	32	32	32	35	33	33
Foster	33	34	36	36	34	36
Cleveland (Wilson)	28	30	30	29	28	29
Wilds No. 2	35	40	44	37	36	37
Cleveland A. E. S.	28	30	30	30	29	30
Cook 144				34	32	

RESULTS OF COTTON VARIETY TESTS

TABLE 4

Average Results of Wilt Resistant Variety Tests of Cotton 1926-1929

Pounds Lint Cotton Per Acre

Variety	Auburn 1929	Prattville 1929	Andalusia 1929	Brewton 1929	Headland 1929	Average 5 tests 1929	Average 19 tests 4 years 1926-1929
Cook 307 (Rhyne)	304	404	402	110	393	323	399
Dixie Triumph (Watson)	312	434	321	127	363	311	399
Toole (Council)	255	331	322	98	429	287	395
Lewis 63	275	358	342	107	360	288	375
Cook 307 (Bridges)	280	372	308	98	353	282	371
Toole (Petty)	271	367	316	85	437	295	362
Toole (Wilkinson)	252	324	317	108	406	281	350
Cook 588 *	336	393	340	111	338	304	350
Kelly Big Boll	293	366	292	72	316	268	346
Super 7	204	278	210	74	248	203	308
Cleveland (Ped. Seed Co.)	311	346	310	127	470	313	
Cook 307 (Smith)	304	357	315	120	451	309	
Local Variety (Check)	275	382	343	131	385	303	
Dixie Triumph (Wannamaker)	321	370	318	87	364	292	
Dixie Triumph (Marrett)	308	384	316	65	374	289	
D. P. L. 6 *	324	382	296	92	340	287	
Cook W. R. St. 38	269	399	307	89	350	283	
Cleveland (Covington)	321	326	310	95	358	282	
Cook 307 (Spann)	287	366	291	88	354	277	
Miller	291	391	238	110	300	266	
Cook 307 (Ward)	323						

The cotton wilt disease is prevalent in Central and South Alabama, especially on the sandy soils. Nothing but a wilt resistant variety of cotton should be planted on land subject to the wilt disease. The leading wilt resistant varieties of cotton, as shown in Table 4, compare very favorably in yield with the leading non-wilt resistant varieties, when grown together on non-infested soil. The loss from a non-wilt resistant variety of cotton grown on infested land will run from 10 to 100 per cent according to the degree of infestation of the wilt disease.

* Not Wilt resistant.

TABLE 5

Results of Cotton Variety Tests in 1929

Variety	Length of Staple in 1/32 inches				
	Auburn	Prattville	Andalusia	Brewton	Headland
Cook 307 (Rhyne)	28	28	28	29	28
Dixie Triumph (Watson)	29	28	29	28	28
Toole (Council)	29	28	29	28	28
Lewis 63	28	28	29	29	28
Cook 307 (Bridges)	28	27	28	28	27
Toole (Petty)	29	28	29	29	28
Toole (Wilkinson)	29	28	29	29	29
Cook 588 *	28	27	29	28	28
Kelly Big Boll	29	28	29	29	28
Super 7	33	33	36	33	34
Cleveland (Ped. Seed Co.)	30	31	32	32	30
Cook 307 (Smith)	28	28	28	28	27
Local Variety (Check)	27	28	28	27	26
Dixie Triumph (Wannamaker)	29	28	30	30	30
Dixie Triumph (Marrett)	29	28	30	29	28
D. P. L. 6 *	30	32	31	31	28
Cook Strain 38	28	28	29	29	29
Cleveland (Covington)	27	28	28	28	27
Cook 307 (Spann)	27	27	28	28	27
Miller	32	29	32	32	31
Cook 307 (Ward)	28				

* Not Wilt resistant.

It will be seen in Table 5, that the leading wilt resistant varieties of cotton have a staple length of approximately 7/8 of an inch. The Super 7 variety has a staple length of 1 1/32 to 1 1/8 inches, but has a comparatively low yield and is rather hard to pick. The Cleveland (Ped. Seed Company) variety has been run in the variety tests for two years and the results show a very satisfactory yield with a staple length of 15/16 to 1 inch.

The Alabama Experiment Station has no cotton seed for sale. The seed for the variety tests of cotton in 1929 were obtained from the following sources:

D. P. L. 4-8	Delta Pine Land & Development Co., Scott, Miss.
D. P. L. 6	Delta Pine Land & Development Co., Scott, Miss.
Cleveland 884	Pedigreed Seed Company, Hartsville, S. C.
Cleveland 5	Pedigreed Seed Company, Hartsville, S. C.
Webber Delta Type	Pedigreed Seed Company, Hartsville, S. C.
Foster	Pedigreed Seed Company, Hartsville, S. C.
Wilds 2	Pedigreed Seed Company, Hartsville, S. C.
Cleveland Wilt Resistant	Pedigreed Seed Company, Hartsville, S. C.
Super 7	Pedigreed Seed Company, Hartsville, S. C.
Dixie Triumph (Watson)	L. O. Watson Seed Company, Florence, S. C.
Cook 1627	McQueen Smith Farming Co., Prattville, Ala.
Cook 144	McQueen Smith Farming Co., Prattville, Ala.
Cook 307 (Smith)	McQueen Smith Farming Co., Prattville, Ala.
Cook 588	R. E. Hudson, Auburn, Ala.
Cleveland (Piedmont)	J. O. M. Smith, Commerce, Ga.
Bottoms	A. T. Bottoms, Athens, Ala.
Cleveland (Wannamaker)	W. W. Wannamaker, St. Mathews, S. C.
Dixie Triumph (Wannamaker)	W. W. Wannamaker, St. Mathews, S. C.

RESULTS OF COTTON VARIETY TESTS

Trice -----	Mississippi Experiment Station, A. & M. College, Miss.
Miller -----	Mississippi Experiment Station, A. & M. College, Miss.
Delfos -----	Delta Experiment Station, Stoneville, Miss.
Cook 1010 (Williamson) -----	D. N. Williamson Estate, Cedar Bluff, Ala.
Cook 1010 (Bains) -----	A. S. Bains, Oneonta, Ala.
College No. 1 -----	Georgia College of Agriculture, Athens, Ga.
Mexican Big Boll -----	N. C. Experiment Station, Raleigh, N. C.
Addison -----	W. P. Addison, Blackwells, Ga.
Acala 5 -----	Nunn Seed Farms, Porter, Oklahoma
Acala (Burdette) -----	Burdette Plantations, Burdette, Arkansas
Express (Burdette) -----	Burdette Plantations, Burdette, Arkansas
Cook 2023 -----	Alabama Experiment Station, Auburn, Ala.
Cleveland A. E. S. -----	Alabama Experiment Station, Auburn, Ala.
Cook W. R. St. 38 -----	Alabama Experiment Station, Auburn, Ala.
Cleveland (Wilson) -----	Lee Wilson and Company, Wilson, Arkansas
Rucker -----	R. E. Lamb, Altoona, Ala.
Cleveland (Neely) -----	Neely's Pedigreed Seed Company, Waynesboro, Ga.
Half and Half -----	B. F. Summerour, Norcross, Ga.
Cook 307 (Rhyne) -----	Rhyne Brothers, Benton, Ala.
Cook 307 (Bridges) -----	W. J. Bridges, Notasulga, Ala.
Toole (Council) -----	Desoto Seed Farms, Americus, Ga.
Lewis 63 -----	Desoto Seed Farms, Americus, Ga.
Toole (Petty) -----	H. A. Petty, Dawson, Ga.
Toole (Wilkinson) -----	C. F. Wilkinson, Headland, Ala.
Kelly Big Boll -----	S. O. Kelly, Headland, Ala.
Dixie Triumph (Marrett) -----	Marrett Seed Company, Westminster, S. C.
Cleveland (Covington) -----	W. F. Covington, Headland, Ala.
Cook 307 (Spann) -----	Spann Brothers, Dothan, Ala.
Cook 307 (Ward) -----	Ward Brothers, Loachapoka, Ala.