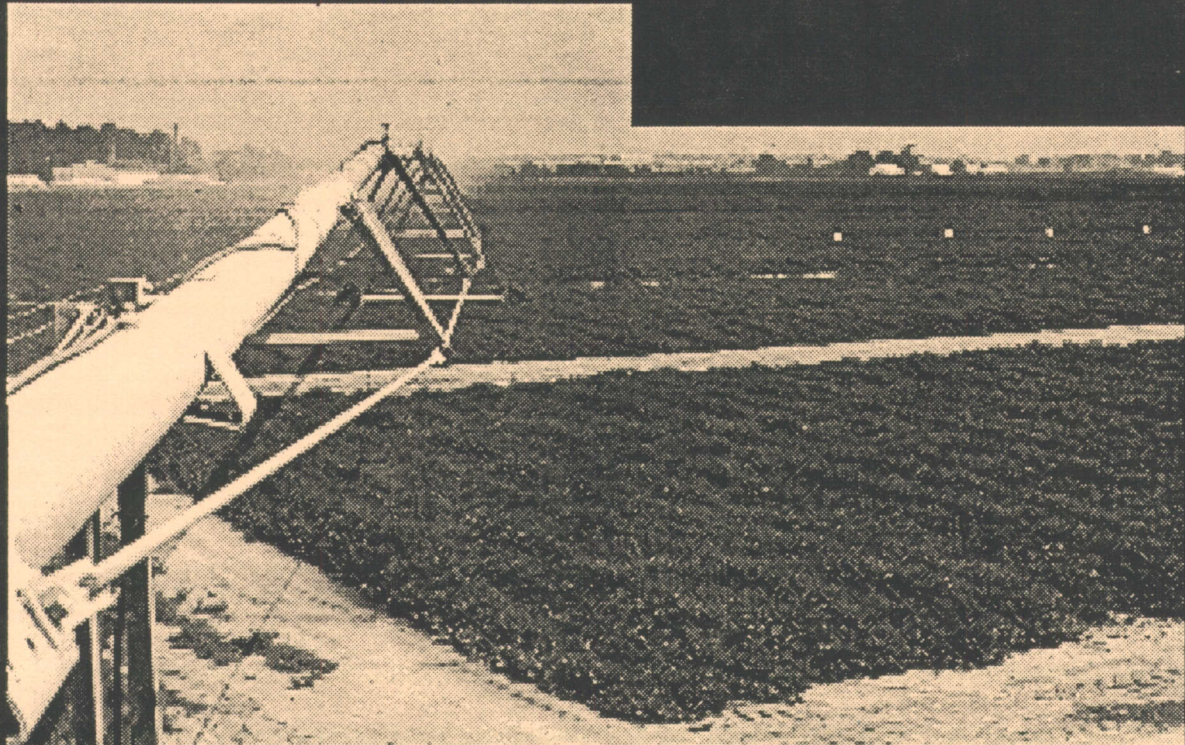


1995 ALABAMA  
PERFORMANCE  
COMPARISON  
OF  
PEANUT  
VARIETIES



Department of Agronomy and Soils Departmental Series No. 193  
Alabama Agricultural Experiment Station Auburn University  
Lowell T. Frobish, Director February 1996



# 1995 ALABAMA PERFORMANCE COMPARISON OF PEANUT VARIETIES

*J.P. Bostick, H.W. Ivey and B.E. Gamble<sup>1</sup>*

## INTRODUCTION

The number of peanut varieties available to Alabama growers has increased in recent years, thus placing greater need for unbiased performance data regarding varietal selection for production.

## PRODUCTION

The 1995 test was conducted at the Wiregrass Substation, Headland, Alabama. The experimental design was a randomized complete block consisting of two row plots, 20 feet long, replicated four times. The test was planted on April 27, 1995 with a cone planter at a rate of six seed/per foot. Recommended agronomic practices were followed regarding fertility, disease, insect, and weed control. The test was conducted under irrigation.

Entries considered to be earlier than Florunner in maturity were dug on September 1, 1995. These entries included AT 120, Andru 93, Marc 1, NC 7, NC V11, and Southwest Runner. All other entries except Southern Runner and Georgia Browne were dug on September 8, 1995. Southern Runner and Georgia Browne, considered to be later in maturity, were dug on September 26, 1995. Information concerning relative maturity was provided by the plant breeder responsible for developing the variety.

---

<sup>1</sup>Adjunct Professor of Agronomy and Soils and Executive Secretary of Alabama Crop Improvement Association; Retired Superintendent and Assistant Superintendent, Wiregrass Substation, respectively.

## DISCUSSION

The information presented here represents data from three years at a single location. Performance comparisons between varieties should be drawn judiciously under these circumstances. Tomato spotted wilt virus occurrence and yield data have been subjected to an analysis of variance and means separated by using Duncan's Multiple Range Test. Means followed by the same letter (A-I) are not significantly different at the 0.05 level of probability. Data is not presented for white mold or limb diseases since visual evaluation revealed none or only slight occurrence.

### SIZE AND GRADE DATA TERMS

Data were collected and averaged on samples from replicates II, III, and IV for size and grade. The derivation of grade factors followed Federal-State Inspection Service procedures for grading farmer-stock peanuts.

#### Terms Used:

**g/100 SMKRS** (Grams 2 per 100 sound mature kernels riding screen)-Weight in grams of 100 sound whole mature kernels from the shelled sample riding a 15/64 x one - inch slotted screen or a 16/64 x one - inch slotted screen for Virginia or Runner varieties respectively.

**Pct. SMKRS** (sound mature kernels riding screen)-Portion of shelled sample as described above.

**Pct. SS** (sound splits)-Portion of shelled sample split or broken but not damaged.

**Pct. TSMK** (total sound mature kernels)-Portion of the shelled sample comprised of sound mature kernels plus sound splits.

**Pct. OK** (other kernels)-Kernels that pass through a 15/64 x one - inch slotted screen or 16/64 x one - inch slotted screen for Virginia or Runner varieties respectively.

**Pct. DK** (damaged kernels)-Kernels which are moldy, decayed, affected by insects or weather conditions resulting in seed coat or cotyledon discoloration or deterioration.

**Pct. TK** (total kernels)-All shelled sample kernels including TSMK, OK, DK.

---

<sup>2</sup>One ounce equals 29 grams.

## ACKNOWLEDGEMENTS

The authors express appreciation to A.K. Hagan, Associate Professor of Plant Pathology for providing the disease evaluation data and to Glenn Wehtje, Associate Professor of Agronomy and Soils for the statistical analysis. Appreciation is also expressed to Sara Casey, Wiregrass Substation for her cooperation.

*Information contained herein is available to all persons regardless of race, color, sex or national origin.*

TABLE 1. YIELD OF PEANUT VARIETIES AT THE WIREGRASS SUBSTATION,  
HEADLAND, ALABAMA, 1995.

Variety or Line	Yield	Duncan grouping
	<i>Lb./ac.</i>	
(R) Ga. Green.....	6,244	A
(R) Ga. Browne.....	6,198	A
(R) Exp. 51-3538....	6,089	A
(R) AT 108.....	5,980	A-C
(R) GK 7.....	5,745	A-D
(V) NC V11.....	5,708	A-D
(V) VA C92R.....	5,708	A-D
(R) Florunner.....	5,518	B-E
(R) SunOleic 95R....	5,481	B-F
(R) So. Runner.....	5,409	C-G
(V) NC 7.....	5,309	D-G
(R) Ga. Runner.....	5,245	D-H
(R) Marc I.....	5,227	D-H
(R) Andru 93.....	4,982	E-I
(R) Okrun.....	4,946	E-I
(V) Florigiant.....	4,891	E-I
(R) AT 120.....	4,882	F-I
(V) NC 10C.....	4,873	F-I
(V) NC 9.....	4,783	G-I
(R) Tamrun 88.....	4,628	H I
(R) So. West Runner.	4,456	I

(R) Runner type  
(V) Virginia type

TABLE 2. TWO-YEAR AVERAGE YIELD OF PEANUT VARIETIES AT THE  
WIREGRASS SUBSTATION, HEADLAND, ALABAMA, 1994-95.

Variety or Line	1994	1995	Avg. yield	Duncan grouping Avg. yield
	<i>Lb./ac.</i>	<i>Lb./ac.</i>	<i>Lb./ac.</i>	
Ga. Browne.....	6,011	6,198	6,105	A
So. Runner.....	6,083	5,409	5,746	A
AT 108.....	5,351	5,980	5,666	A-D
GK 7.....	5,332	5,745	5,539	B-D
Exp. 51-3538.....	4,727	6,089	5,408	C-F
NC V11.....	4,977	5,708	5,343	C-F
Marc I.....	5,286	5,227	5,257	C-G
Florunner.....	4,941	5,518	5,230	C-G
Andru 93.....	5,375	4,982	5,179	C-H
Ga. Runner.....	4,798	5,245	5,022	D-I
VA C92R.....	4,319	5,708	5,014	D-I
Okrun.....	4,833	4,946	4,890	E-I
NC 7.....	4,436	5,309	4,873	F-I
Tamrun 88.....	4,887	4,628	4,758	F-I
NC 9.....	4,479	4,783	4,631	G-I
NC 10C.....	4,336	4,873	4,605	G-I
Florigiant.....	4,195	4,891	4,543	H-I

TABLE 3. THREE-YEAR AVERAGE YIELD OF PEANUT VARIETIES AT THE  
WIREGRASS SUBSTATION, HEADLAND, ALABAMA, 1993-95.

Variety or Line	1993	1994	1995	Avg. yield	Duncan grouping Avg. yield
	<i>Lbs./ac.</i>	<i>Lbs./ac.</i>	<i>Lbs./ac.</i>	<i>Lbs./ac.</i>	
So. Runner...	4,627	6,083	5,409	5,373	A
AT 108.....	4,574	5,351	5,980	5,302	A-B
GK 7.....	4,664	5,332	5,745	5,247	A-C
NC V11.....	4,505	4,977	5,708	5,063	A-D
Florunner....	4,558	4,941	5,518	5,006	A-E
Andru 93.....	4,628	5,375	4,982	4,995	A-E
Marc I.....	4,398	5,286	5,227	4,970	A-E
Exp. 51-3538.	4,079	4,727	6,089	4,965	A-E
NC 7.....	4,752	4,436	5,309	4,832	B-E
Ga. Runner...	4,204	4,798	5,245	4,749	C-E
NC 10C.....	4,822	4,336	4,873	4,677	D-E
Okrun.....	4,238	4,833	4,946	4,672	D-E
NC 9.....	4,699	4,479	4,783	4,654	D-E
Florigiant...	4,753	4,195	4,891	4,613	D-E
Tamrun 88....	3,973	4,887	4,628	4,496	E



TABLE 4. AVERAGE SIZE AND GRADE OF PEANUT VARIETIES AT THE  
WIREGRASS SUBSTATION, HEADLAND, ALABAMA, 1995.

Variety or Line	SMKRS	SMKRS	SS	TSMK	OK	DK	TK
	<i>g/100</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Andru 93.....	59	67	4	71	5	2	78
AT 108.....	63	71	2	73	3	1	77
AT 120.....	65	63	5	68	6	2	76
Exp. 51-3538....	71	69	5	74	4	1	79
Florigiant.....	79	69	2	71	4	1	76
Florunner.....	56	71	4	75	6	1	82
Ga. Browne.....	43	68	4	72	6	1	79
Ga. Green.....	62	71	2	73	3	2	78
Ga. Runner.....	58	68	4	72	5	2	79
GK 7.....	60	72	3	75	4	1	80
Marc I.....	57	67	4	71	6	1	78
NC 7.....	96	68	3	71	2	2	75
NC 9.....	92	66	2	68	3	2	73
NC 10C.....	82	61	2	63	5	2	70
NC V11.....	79	68	2	70	3	1	74
Okrun.....	57	69	3	72	5	2	79
So. Runner.....	56	73	2	75	3	1	79
So. West Runner..	48	64	3	67	7	1	75
SunOleic 95R....	64	67	6	73	5	2	80
Tamrun 88.....	54	71	2	73	6	2	81
VA C92R.....	98	69	3	72	2	2	76

TABLE 5. TWO-YEAR AVERAGE SIZE AND GRADE OF PEANUT VARIETIES AT THE WIREGRASS SUBSTATION, HEADLAND, ALABAMA, 1994-95.

Variety or Line	SMKRS	SMKRS	SS	TSMK	OK	DK	TK
	<i>g/100</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Andru 93.....	59	69	3	72	5	2	77
AT 108.....	65	71	3	74	3	1	78
Exp. 51-3538....	75	71	4	75	4	1	80
Florigiant.....	81	68	3	71	3	1	75
Florunner.....	61	73	3	76	5	1	82
Ga. Browne.....	46	68	3	71	6	1	78
Ga. Runner.....	61	72	3	75	4	2	81
GK 7.....	62	73	3	76	4	1	81
Marc I.....	60	68	3	71	6	1	78
NC 7.....	96	68	3	71	3	2	76
NC 9.....	91	67	3	70	2	3	75
NC 10C.....	82	65	2	67	4	2	73
NC V11.....	82	68	2	70	3	2	75
Okrun.....	61	72	2	74	4	2	80
So. Runner.....	55	72	2	74	4	1	79
Tamrun 88.....	57	73	2	75	4	2	81
VA C92R.....	90	69	3	72	2	2	76

TABLE 6. THREE-YEAR AVERAGE SIZE AND GRADE OF PEANUT VARIETIES AT THE WIREGRASS SUBSTATION, HEADLAND, ALABAMA, 1993-95.

Variety or Line	SMKRS	SMKRS	SS	TSMK	OK	DK	TK
	<i>g/100</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Andru 93.....	64	68	3	71	5	1	77
AT 108.....	66	70	3	73	4	1	78
Exp. 51-3538.....	76	71	3	74	4	2	80
Florigiant.....	82	67	2	69	3	2	74
Florunner.....	61	71	2	73	4	1	78
Ga. Runner.....	61	71	2	73	4	2	79
GK 7.....	63	72	2	74	4	1	79
Marc I.....	60	67	3	70	6	1	77
NC 7.....	99	67	3	70	2	3	75
NC 9.....	92	67	2	69	2	2	73
NC 10C.....	81	65	2	67	3	2	70
NC V11.....	82	68	2	70	2	2	74
Okrun.....	60	71	2	73	4	2	79
So. Runner.....	62	71	2	73	4	1	78
Tamrun 88.....	59	72	3	75	4	2	81

TABLE 7. OCCURRENCE OF TOMATO SPOTTED WILT VIRUS HITS IN THE PEANUT VARIETY TEST AT THE WIREGRASS SUBSTATION, HEADLAND, ALABAMA, 1995.

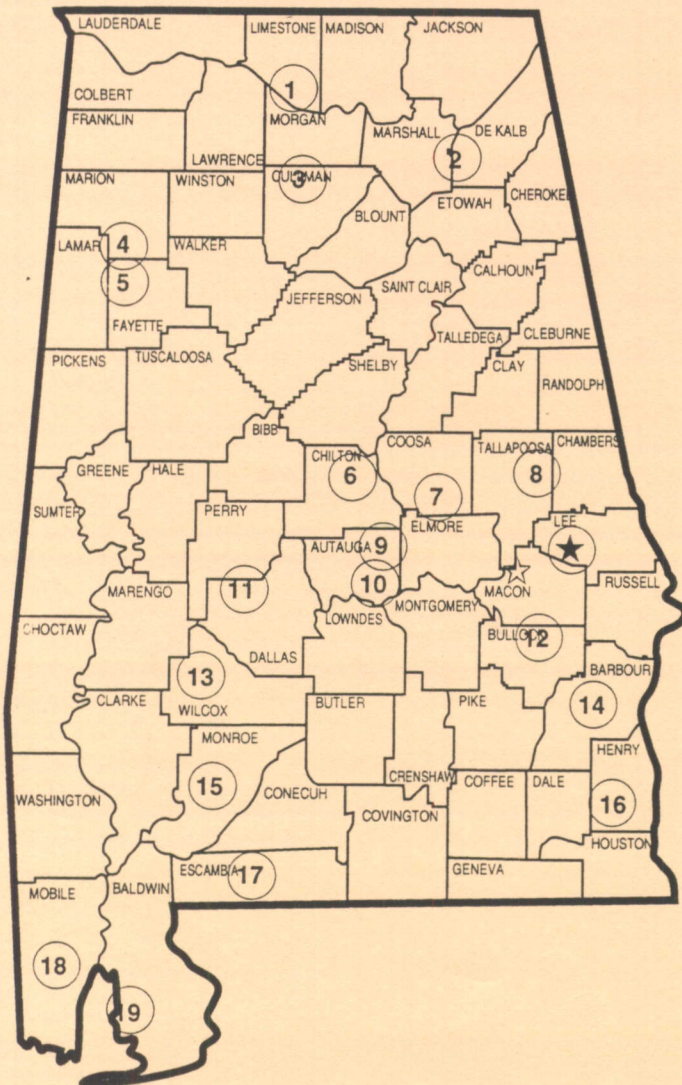
Variety or Line	Average virus infected plants	Duncan grouping
	<i>Pct.</i>	
Tamrun 88.....	10.64	A
AT 108.....	4.71	B
Ga. Runner.....	4.71	B
NC 10C.....	3.82	B-C
Andru 93.....	3.73	B-C
AT 120.....	3.51	B-C
NC 9.....	3.47	B-C
VA C92R.....	3.47	B-C
Florunner.....	3.29	B-C
SunOleic 95R.....	3.18	B-C
Marc I.....	2.85	B-C
GK 7.....	2.85	B-C
Florigiant.....	2.55	B-C
Ga. Green.....	2.52	B-C
Okrun.....	2.43	B-C
NC 7.....	2.08	B-C
NC V11.....	1.97	B-C
So. West Runner.....	1.74	C
Ga. Browne.....	1.54	C
Exp. 51-3538.....	1.21	C
So. Runner.....	1.04	C



# Alabama's Agricultural Experiment Station System AUBURN UNIVERSITY

★ Main Agricultural Experiment Station,  
Auburn.

☆ E. V. Smith Research Center,  
Shorter.



1. Tennessee Valley Substation, Belle Mina.
2. Sand Mountain Substation, Crossville.
3. North Alabama Horticulture Substation, Cullman.
4. Upper Coastal Plain Substation, Winfield.
5. Forestry Unit, Fayette County.
6. Chilton Area Horticulture Substation, Clanton.
7. Forestry Unit, Coosa County.
8. Piedmont Substation, Camp Hill.
9. Forestry Unit, Autauga County.
10. Prattville Experiment Field, Prattville.
11. Black Belt Substation, Marion Junction.
12. The Turnipseed-Ikenberry Place, Union Springs.
13. Lower Coastal Plain Substation, Camden.
14. Forestry Unit, Barbour County.
15. Monroeville Experiment Field, Monroeville.
16. Wiregrass Substation, Headland.
17. Brewton Experiment Field, Brewton.
18. Ornamental Horticulture Substation, Spring Hill.
19. Gulf Coast Substation, Fairhope.