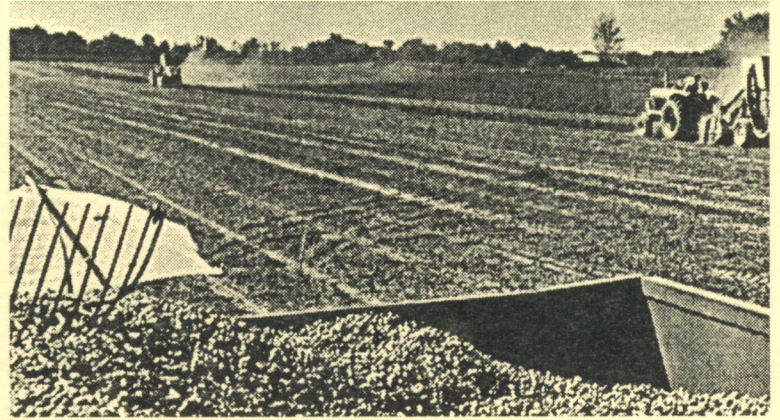


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# 1993 ALABAMA PERFORMANCE COMPARISON OF PEANUT VARIETIES

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## 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

In 1993 the test was conducted at the Wiregrass Substation at Headland, Alabama. The experimental design for the test was a randomized complete block consisting of two row plots, 20 feet long replicated four times. The test was planted on April 30, 1993 with a cone planter at a rate of six seed/ft. Recommended agronomic procedures were followed regarding fertility, disease, and insect control. The test was conducted under irrigation.

Entries considered to be earlier than Florunner in maturity were dug on September 14, 1993. These entries included Marc 1, AgraTech 127, VC 1, and Andru 93. All other entries except Southern Runner were dug on September 17, 1993. Southern Runner, considered to be later in maturity, was dug on October 1, 1993. Information concerning relative maturity was provided by the plant breeder responsible for developing the variety.

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## DISCUSSION

The information presented here represents data for only two years and one location. Under these circumstances, performance trends can not be adequately evaluated, however, performance comparisons between varieties can be judiciously drawn. Yield and disease occurrence data have been subjected to an analysis of variance and means separated by using Duncan's Multiple Range Test. Means followed by the same letters (A-F) are not significantly different from each other at the 0.05 level of probability.

### SIZE AND GRADE DATA TERMS

Data were collected and averaged on samples from replication 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 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 1 inch slotted screen or a 16/64 x 1 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 1 inch slotted screen or 16/64 x 1 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, and DK.

## ACKNOWLEDGMENTS

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*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, 1993.

Variety or Line	Yield <i>lb./ac.</i>	Duncan grouping
(V) NC 10C .....	4,937	A
(V) VC 1 .....	4,918	A
(V) Florigiant .....	4,864	A
(V) NC 7 .....	4,864	A
(V) NC 9 .....	4,810	A
(R) GK 7 .....	4,774	A
(R) Andru 93 .....	4,737	A
(R) So. Runner .....	4,737	A
(R) F 1316 .....	4,682	A
(R) Florunner .....	4,665	A
(V) NC V11 .....	4,610	A
(R) AgraTech 108 .....	4,574	A
(R) Marc 1 .....	4,501	A
(R) AgraTech 127 .....	4,465	A
(R) Okrun .....	4,338	A
(R) Sunrunner .....	4,320	A
(R) Ga. Runner .....	4,302	A
(R) Exp. 51-3538 .....	4,175	A
(R) Tamrun 88 .....	4,066	A
(R) F 1250 .....	4,011	A

(R) Runner Type  
(V) Virginia Type

Table 2. Two-Year Average Yield of Peanut Varieties at the Wiregrass Substation, Headland, Alabama, 1992-93.

Variety	Yield <i>lb./ac.</i>	Duncan grouping
NC V11 .....	4,574	A B C
Marc 1 .....	4,441	A B C
VC 1 .....	4,352	A B C D
NC 7 .....	4,352	A B C D
GK 7 .....	4,345	A B C D
AgraTech 127 .....	4,296	A B C D
Florunner .....	4,235	A B C D
Florigiant .....	4,154	A B C D
NC 9 .....	4,097	A B C D
NC 10C .....	4,092	A B C D
Ga. Runner .....	4,013	B C D
Sunrunner .....	3,993	B C D
Okrun .....	3,961	B C D
So. Runner .....	3,852	B C D
Tamrun 88 .....	3,701	D

Table 3. Size and Grade of Peanut Varieties at the Wiregrass Substation,  
Headland, Alabama, 1993.

Variety or Line	SMKRS <i>g/100</i>	SMKRS <i>Pct.</i>	SS <i>Pct.</i>	TSMK <i>Pct.</i>	OK <i>Pct.</i>	DK <i>Pct.</i>	TK <i>Pct.</i>
NC 10C .....	81.0	67	1	68	2	2	74
VC 1 .....	75.3	66	1	68	3	1	72
Florigiant .....	84.7	66	2	68	2	3	73
NC 7 .....	103.7	67	3	70	1	4	75
NC 9 .....	94.0	67	2	69	2	2	74
GK 7 .....	64.7	71	1	72	4	1	77
Andru 93 .....	75.3	66	2	68	6	2	76
So. Runner .....	76.5	71	1	72	4	1	77
F 1316 .....	66.7	68	2	70	4	2	76
Florunner .....	59.7	69	1	70	4	1	75
NC V11 .....	81.0	67	2	69	2	3	74
AgraTech 108 .....	68.0	68	3	71	5	1	77
Marc 1 .....	59.3	54	2	68	6	2	76
AgraTech 127 .....	66.3	68	3	71	4	1	76
Okrun .....	60.0	69	1	70	5	2	77
Sunrunner .....	61.0	70	1	71	5	1	77
Ga. Runner .....	61.0	69	2	71	4	2	77
Exp. 51-3538 .....	76.6	71	2	73	4	2	79
Tamrun 88 .....	63.0	69	4	73	5	2	80
F 1250 .....	64.7	68	2	70	6	1	77



Table 4. Two-Year Average Grade of Peanut Varieties at the Wiregrass Substation, Headland, Alabama, 1992-93.

Variety	SMKRS <i>Pct.</i>	SS <i>Pct.</i>	TSMK <i>Pct.</i>	OK <i>Pct.</i>	TK <i>Pct.</i>
NC 10C .....	67	1	68	3	71
VC 1 .....	66	1	67	5	72
Florigiant .....	67	2	69	2	71
NC 7 .....	66	3	69	3	72
NC 9 .....	67	2	69	3	72
GK 7 .....	69	2	71	6	77
So. Runner .....	71	3	74	6	80
Florunner .....	68	2	70	5	75
NC V11 .....	67	2	69	3	72
Marc 1 .....	65	2	67	7	74
AgraTech 127.....	68	3	71	5	76
Okrun .....	69	2	71	6	77
Sunrunner .....	69	2	71	5	76
Ga. Runner .....	68	3	71	5	76
Tamrun 88 .....	68	4	72	6	78

Table 5. Occurrence of Southern Blight Hits in the Peanut Variety Test at the Wiregrass Substation, Headland, Alabama, 1993.

Variety or Line	Hits					Total	Avg.	Duncan grouping
	Rep I	Rep II	Rep III	Rep IV				
So. Runner .....	9	7	10	10	36	9.00	A	
Tamrun 88 .....	14	5	8	7	34	8.50	A	
AgraTech 108.....	10	8	9	7	34	8.50	A	
F 1250 .....	7	6	7	12	32	8.00	A	
Ga. Runner .....	3	8	17	3	31	7.75	A	
Okrun .....	4	5	12	10	31	7.75	A	
Marc 1 .....	7	7	12	4	30	7.50	A	
NC V11 .....	8	6	11	5	30	7.50	A	
GK 7 .....	7	10	6	6	29	7.25	A	
NC 7.....	10	5	4	10	29	7.25	A	
Andru 93 .....	3	6	10	10	29	7.25	A	
Sunrunner.....	7	7	4	7	25	6.25	A	
F 1316 .....	10	4	4	6	24	6.00	A	
Exp. 51-3538 .....	5	6	11	2	24	6.00	A	
Florunner .....	8	10	1	5	24	6.00	A	
AgraTech 127.....	10	3	4	6	23	5.75	A	
NC 9.....	0	5	8	9	22	5.50	A	
VC 1.....	7	3	5	6	21	5.25	A	
NC 10C .....	5	2	6	7	20	5.00	A	
Florigiant .....	5	2	2	5	14	3.50	A	

Table 6. Occurrence of Tomato Spotted Wilt Virus Hits in the Peanut Variety Test at the Wiregrass Substation, Headland, Alabama, 1993.

Variety or Line	Hits						Duncan grouping
	Rep I	Rep II	Rep III	Rep IV	Total	Avg.	
Tamrun 88 .....	14	13	10	15	52	13.00	A
Ga. Runner .....	3	1	8	26	38	9.50	A B
NC 9 .....	7	8	17	3	35	8.75	A B
Sunrunner .....	6	2	19	8	35	8.75	A B
Florunner .....	6	7	8	13	34	8.50	A B
VC 1 .....	15	15	2	1	33	8.25	A B
NC 10C .....	3	2	1	27	33	8.25	A B
Andru 93 .....	9	14	8	2	33	8.25	A B
AgraTech 127 .....	12	5	5	10	32	8.00	A B
Okrun .....	6	4	4	16	30	7.50	A B
F 1250 .....	9	8	5	8	30	7.50	A B
Florigiant .....	4	8	15	2	29	7.25	A B
Marc 1 .....	4	7	2	4	17	4.25	A B
AgraTech 108 .....	6	4	1	6	17	4.25	A B
F 1316 .....	4	9	4	0	17	4.25	A B
GK 7 .....	4	1	8	2	15	3.75	A B
NC 7 .....	4	1	3	3	11	2.75	B
Exp. 51-3538 .....	1	3	2	2	8	2.00	B
NC V11 .....	1	0	2	2	5	1.25	B
So. Runner .....	0	1	2	1	4	1.00	B





