

2008 Alabama Performance Comparison of Peanut Varieties

February 2009

Agronomy and Soils Departmental Series No. 299

Alabama Agricultural Experiment Station

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Auburn, Alabama

Printed in cooperation with the Alabama Cooperative Extension System (Alabama A&M University and Auburn University)

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*Information contained herein is available to all persons regardless of race,
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The 2008 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 and Discussion

The 2008 tests were conducted at the Wiregrass Research and Extension Center in Headland, AL. During 2008, 21 entries were evaluated under irrigation and dryland.

The experimental design for each test was a randomized complete block consisting of two-row plots, 20 feet long, replicated four times. The dryland tests were planted on May 20, and irrigated tests were planted on May 9. All tests were planted with a cone planter at a rate of six seed per foot of row. Recommended agronomic practices were followed regarding fertility, disease, insect, and weed control in all tests.

The irrigated test entries considered to be earlier than Georgia Green in maturity were dug on September 15. These entries were Andru II and AT 215. Entries with maturity near the same as Georgia Green were dug on September 26. These entries were AP-4, AT 3-1114, AT 3085RO, C724-19-25, Exp 27-1516, Florida Fancy, Georgia-03L, Georgia-06G, Georgia-07W, Georgia Green, Georgia Greener, McCloud, and Tifguard. Entries moderately later than Georgia Green, AP-3, C-99 R, Florida 07, Georgia-02C, Georgia-05E and York, were dug on October 3.

The dryland test entries considered to be earlier than Georgia Green were dug on September 26. These entries were Andru II and AT 215. Entries with maturity near the same as Georgia Green were dug on October 10. These entries were AP-4, AT 3-1114, AT 3085RO, C 724-19-25, EXP 27-1516, Florida Fancy, Georgia-03L, Georgia-06G, Georgia-07W, Georgia Green, Georgia Greener, McCloud and Tifguard. Entries moderately later than Georgia Green, AP-3, C-99 R, Tifguard, Florida 07, Georgia-02C, Georgia-05E, and York were dug on October 22.

The information presented here represents data from three years at one location. Yield and disease occurrence data have been subjected to an analysis of variance. This statistical evaluation determined the overall averages for all varieties, coefficient of variation (CV) and the least significant differences (LSD). The LSD values represent the difference required for the averages of two varieties to be considered statistically different. The (.05) following the LSD value indicates that the LSD was calculated at the 95 percent level of confidence.

The CV, which is expressed as a percentage, is a relative measure of variation within a set of data. CV values of 8-12 percent are generally considered acceptable for yield data of agronomic crops. CV values in the disease data are considerably higher than this. However, this is expected due to random occurrence of disease in the field.

¹ Bostick is an adjunct professor of the Auburn University Department of Agronomy and Soils and Executive Vice President of Alabama Crop Improvement Association; Wells is Director and Gamble is Associate Director of the Wiregrass Research and Extension Center.

Size and Grade Data Terms

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

Terms Used

SMKRS count/lb. (number per pound of sound mature kernels riding screen)—Number of sound whole mature kernels from 1 pound of the shelled sample riding a 15/64 x 1-inch slotted screen or a 16/64 x 3/4-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 3/4-inch slotted screen for Virginia or Runner varieties, respectively.

Pct. DK (damaged kernels)—Kernels that 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.

Pct. Hulls —All hulls from the shelled sample.

+21.0 (Generally considered as the Jumbo commercial grade)—Portion of SMKRS riding a 21/64 x 3/4-inch slotted screen.

-21.0 + 18.0 (Generally considered as the Medium commercial grade)—Portion of the SMKRS falling through a 21/64 x 3/4-inch slotted screen and riding a 18/64 x 3/4-inch slotted screen.

-18.0 + 16.0 (Generally considered as the No.1 commercial grade)—Portion of the SMKRS falling through a 18/64 x 3/4-inch slotted screen and riding a 16/64 x 3/4-inch slotted screen.

Acknowledgements

The authors express appreciation to Austin K. Hagan, Professor of Plant Pathology, for providing the disease evaluation data and to Glenn Wehtje, Professor of Agronomy and Soils, for the statistical analysis. Appreciation is also expressed to Amy Balkcom, Wiregrass Research and Extension Center, for her cooperation.

Table 1. Three-Year Average Yield of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2006-2008

Variety or Line	2008 <i>lb/a</i>	2 Year Avg.	3 Year Avg.
Georgia-05E ³	6104	---- ¹	----
AP-3	6078	5681	5802
Georgia-02C	6069	5831	5599
Georgia-07W	5858	----	----
C-99R	5816	5804	5596
York	5763	5362	5564
Georgia-06G	5707	6389	----
C 724-19-25	5636	5840	5708
Florida 07	5597	6044	6086
Georgia-03L	5529	5699	5712
Georgia Greener	5307	5799	----
Tifguard ²	5139	5132	5409
AP-4	5050	5218	----
Andru II	4877	4923	4994
Florida Fancy ³	4864	4982	----
AT 215	4622	----	----
McCloud	4580	5123	5037
Georgia Green	4526	4842	4831
AT 3085RO ⁴	4491	5368	5515
Exp 27-1516	4429	5318	5421
AT 3-1114 ³	4180	----	----
Overall Average.....	5,248	5,471	5,481
CV (%).....	11.29	13.09	11.98
LSD (.05).....	838	706	529

¹ Not tested

² Formerly tested as C 724-19-15

³ Virginia Type

⁴ Formerly tested as Exp 3085 A

Table 2. Average Size and Grade on Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2008

Variety or Line	SMKRS <i>count/lb</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>	Hulls <i>pct</i>
Andru II	796	67	2	69	5	0	74	26
AP-3.....	668	69	1	70	3	0	73	27
AP-4	590	70	3	73	4	0	77	23
AT 3-1114 ³	449	68	1	69	2	1	72	28
AT 215	554	72	2	74	3	0	77	23
AT 3085RO ¹	568	68	2	70	3	1	74	26
C 724-19-25.....	561	71	2	73	3	0	76	24
C-99R	597	71	1	72	2	0	74	26
Exp 27-1516	605	70	3	73	3	0	76	24
Florida 07	561	70	1	71	2	0	74	26
Florida Fancy ³	432	69	1	70	1	1	72	28
Georgia-02C	710	75	2	77	2	0	79	21
Georgia-03L	613	69	2	71	2	0	73	27
George-05E ³	463	72	2	74	0	0	74	26
Georgia-06G	590	74	2	76	2	1	79	21
Georgia-07W	613	72	3	75	2	0	77	23
Georgia Green.....	698	74	2	76	2	0	78	22
Georgia Greener	668	73	3	76	3	0	79	21
McCloud.....	582	70	3	73	3	0	76	24
Tifguard ³	597	72	2	74	3	0	77	23
York	811	67	1	68	4	0	72	28

¹ Formerly tested as Exp 3085 A

² Formerly tested as C 724-19-15

³ Virginia Type

Table 3. Two-Year Average Size and Grade on Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2007 - 2008

Variety or Line	SMKRS <i>count/lb</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>	Hulls <i>pct</i>
Andru II	796	65	4	69	5	0	74	26
AP-3	663	69	2	71	3	0	74	26
AP 4	606	70	4	74	4	0	78	22
AT 3085RO ¹	623	68	3	71	3	1	75	25
C 724-19-25	566	71	3	74	3	0	77	23
C-99R.....	601	71	3	74	2	1	77	23
Exp 27-1516	652	68	5	73	4	0	77	23
Florida 07	565	68	5	73	3	1	77	23
Florida Fancy	443	68	3	71	1	1	73	27
Georgia-02C	716	73	4	77	2	1	80	20
Georgia-03L	646	68	3	71	3	1	75	25
Georgia-06G	598	72	4	76	3	1	80	20
Georgia Green.....	741	72	2	74	3	1	78	22
Georgia Greener	659	71	4	75	3	1	79	21
McCloud	611	68	5	73	4	0	77	23
Tifguard ²	590	72	4	76	2	1	79	21
York	784	67	3	70	3	1	74	26

¹ Formerly tested as Exp 3085 A

² Formerly tested as C 724-19-15

Table 4. Three-Year Average Size and Grade on Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2006 - 2008

Variety or Line	SMKRS <i>count/lb</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>	Hulls <i>pct</i>
Andru II	816	64	4	68	5	0	73	27
AP-3	671	67	3	70	3	0	73	27
AT 3085RO ¹	626	67	3	70	3	1	74	26
C724-19-25	571	70	3	73	3	1	77	23
C-99R.....	602	69	4	72	3	0	75	25
EXP 27-1516	657	67	4	71	4	0	75	25
Florida 07	596	64	7	71	3	1	75	25
Georgia-02C	738	71	4	75	3	0	78	22
Georgia-03L	671	67	3	70	3	1	74	26
Georgia Green.....	774	69	4	73	4	0	77	23
McCloud	626	67	4	71	4	0	75	25
Tifguard ²	637	70	4	74	3	0	77	23
York	793	66	4	70	4	0	74	26

¹ Formerly tested as Exp 3085 A

² Formerly tested as C 724-19-15

Table 5. Average Shelled Seed Size Distribution of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2006 - 2008

Variety or Line	SMKRS Size Distribution								
	+21.0			-21.0 +18.0			-18.0 +16.0		
	Jumbo			Medium			No.1		
	<i>pct</i>			<i>pct</i>			<i>pct</i>		
	2008	2007	2006	2008	2007	2006	2008	2007	2006
Andru II.....	21.7	25.7	25.3	68.9	62.5	60.9	9.4	11.8	13.8
AP-3.....	53.5	60.9	61.9	42.5	34.4	32.8	4.0	4.7	5.3
AP-4	54.3	61.3	---	40.6	33.0	---	5.1	5.7	---
AT3-1114	59.5	---	---	35.3	---	---	5.2	---	---
AT 215	50.7	---	---	44.3	---	---	5.0	---	---
AT 3085RO.....	56.4	60.8	60.6	37.5	32.8	33.2	6.1	6.4	6.2
C 724-19-25.....	60.0	65.8	65.6	35.4	29.7	29.9	4.6	4.5	4.5
C-99R.....	56.7	61.4	60.7	39.1	34.1	64.0	4.2	4.5	5.3
Exp 27-1516	52.7	55.6	56.9	42.5	38.3	36.5	4.8	6.1	6.6
Florida 07	49.9	59.0	57.5	44.5	35.0	35.9	5.6	6.0	6.6
Florida Fancy	74.3	72.3	---	21.0	22.1	---	4.7	5.6	---
Georgia-02C.....	60.5	63.1	58.8	35.4	31.5	34.7	4.1	5.4	6.5
Georgia-03L	56.0	59.9	56.9	40.1	30.2	34.2	3.9	4.9	5.9
Georgia-05E	87.5	---	---	8.9	---	---	3.6	---	---
Georgia-06G	62.3	67.1	---	33.2	27.8	---	4.5	5.1	---
Georgia 07W	52.9	---	---	42.1	---	---	5.0	---	---
Georgia Green	37.7	43.2	40.6	57.9	49.8	51.2	4.4	7.0	8.2
Georgia Greener	51.3	57.0	---	44.9	37.6	---	3.8	5.4	---
McCloud	50.1	56.6	55.7	44.9	37.0	37.8	5.0	6.4	6.5
Tifguard.....	58.6	65.4	63.4	37.1	29.9	30.9	4.3	4.7	5.7
York	29.1	36.3	36.5	62.7	55.5	54.5	8.2	8.2	9.0

1 Not tested

Table 6. Occurrence of Tomato Spotted Wilt Virus (TSWV) Hits, White Mold (WM) Hits, and Leafspot (LS) in the Irrigated Peanut Variety Test at the Wiregrass Research and Extension Center, Headland, Alabama 2008

Variety or Line	Avg. TSWV ¹ Hits/Plot	Variety or Line	Avg. WM Hits/Plot	Variety or Line	Avg. LS ² Ratings/Plot
AT 3-1114 ⁴	30.00	Exp 27-1516	7.75	AP-3	4.63
Georgia Green	20.67	AT 215	7.50	Georgia-02C	4.50
McCloud	19.75	AT 3085RO	6.75	Florida 07	4.25
AT 3085RO ³	17.50	Florida Fancy	5.00	AT 3-1114	4.00
AT 215	13.50	Georgia Greener	4.25	Georgia Green	3.75
C-99R	12.50	Tifguard	3.75	York	3.75
Georgia-05E ⁴	11.75	Georgia Green	3.50	C-99R	3.63
AP-4	11.25	AP-3	3.25	Georgia-05E	3.63
Georgia Greener	11.25	Georgia-05E	3.25	AT 3085RO	3.50
AP-3	10.75	AT 3-1114	3.00	AP-4	3.25
Florida 07	10.25	C-99R	3.00	Exp 27-1516	3.25
Georgia-07W	10.25	C-724-19-25	2.75	Andru II	3.13
Florida Fancy ⁴	10.00	Georgia 06G	2.75	Florida Fancy	3.00
Andru II	9.75	Florida 07	2.50	Georgia-03L	3.00
Georgia-03L	9.50	McCloud	2.50	Georgia-06G	3.00
Georgia-06G	9.25	Georgia-03L	2.00	McCloud	3.00
York	9.00	Andru II	1.75	AT 215	2.88
Exp 27-1516	8.50	AP-4	1.50	Georgia-07W	2.88
C-724-19-25	8.00	Georgia-02C	0.25	Tifguard	2.88
Georgia-02C	7.75	Georgia-07W	0.25	Georgia Greener	2.75
Tifguard ⁵	4.75	York	0.25	C 724-19-25	2.63
Overall Average	12.2		3.2		3.4
CV (%).	29.9		74.0		12.8
LSD (.05).....	5.16		3.34		0.62

¹ Hits equal length of row up to one linear foot with severely diseased plants.

² Rating 1 (lowest) to 10 (highest)

³ Formerly tested as Exp 3085A

⁴ Virginia Type

⁵ Formerly tested as C-724-19-15

Table 7. Three-Year Yield of Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2006 - 2008

Variety or Line	2008 Avg. Yield lb/a	2 Year Avg. Yield lb/a	3 Year Avg. Yield lb/a
Georgia-07W	5663	---- ¹	----
Georgia-06G	5527	5023	----
Georgia-05E ³	5527	----	----
Georgia Greener	5354	4792	----
York	5146	4084	4535
Georgia-03L	5127	4442	4698
Florida 07	5127	4832	5070
C 724-19-25	5082	4746	4834
Tifguard ²	5073	4519	4692
AP-4	5028	4383	----
C-99R	5019	4456	4692
Georgia-02C	5019	4179	4435
Florida Fancy ³	5000	4111	----
McCloud	4955	4519	4674
AT 3085RO ⁴	4819	4542	4504
AP-3	4719	4152	4341
Exp 27-1516	4710	4188	4441
Georgia Green	4528	3839	3990
AT 215	4347	----	----
AT 3-1114 ³	4102	----	----
Andru II	4029	3353	3905
Overall Average	4948	4,362	4,524
CV (%)	9.42	18.83	17.35
LSD (.05).....	659	814	634

¹ Not tested

² Formerly tested as C 274-19-15

³ Virginia Type

⁴ Formerly tested Exp 3085 A

Table 8. Average Size and Grade on Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2008

Variety or Line	SMKRS <i>count/lb</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>	Hulls <i>pct</i>
Andru II	841	66	4	70	3	0	73	27
AP-3	631	70	4	74	2	0	76	24
AP-4.....	613	74	3	77	1	0	78	22
AT 3-1114 ²	499	71	2	73	2	0	75	25
AT215	698	71	2	73	4	0	77	23
AT 3085RO ¹	678	70	3	73	3	0	76	24
C 724-19-25.....	568	73	2	75	2	0	77	23
C-99R.....	590	71	5	76	2	0	78	22
Exp 27-1516	720	73	2	75	2	0	77	23
Florida 07.....	582	72	3	75	1	0	76	24
Florida Fancy ²	493	69	3	72	1	0	73	27
Georgia-02C	720	71	8	79	2	0	81	19
Georgia-03L	698	70	2	72	2	0	74	26
Georgia-05E ²	568	66	6	72	1	0	73	27
Georgia-06G	640	74	3	77	2	0	79	21
Georgia-07W	649	76	2	78	2	0	80	20
Georgia Green.....	811	74	3	77	2	0	79	21
Georgia Greener	698	74	4	78	2	0	80	20
McCloud.....	605	72	4	76	2	0	78	22
Tifguard ³	622	75	1	76	2	0	78	22
York	678	68	6	74	2	0	76	24

¹ Formerly tested as Exp 3085 A

² Virginia Type

³ Formerly tested as C 724-19-15

Table 9. Two-Year Average Size and Grade on Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2007-2008

Variety or Line	SMKRS <i>count/lb</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>	Hulls <i>pct</i>
Andru II	875	63	4	67	6	1	74	26
AP-3.....	655	68	4	72	3	1	76	24
AP-4	661	72	3	75	3	1	79	21
AT 3085RO ¹	711	67	3	70	5	1	76	24
C 724-19-25	609	71	2	73	3	1	77	23
C-99R.....	629	70	5	75	3	1	79	21
Exp 27-1516	781	69	2	71	4	1	76	24
Florida 07	611	68	5	73	2	1	76	24
Florida Fancy	511	65	4	69	2	1	72	28
Georgia-02C	773	70	7	77	3	0	80	20
Georgia-03L	715	68	3	71	3	0	74	23
Georgia-06G	669	72	3	75	3	1	79	21
Georgia Green.....	826	71	3	74	3	1	78	22
Georgia Greener.....	704	72	4	76	3	1	80	20
McCloud	642	69	4	73	3	1	77	23
Tifguard ²	627	73	3	76	2	1	79	21
York	731	66	6	72	3	1	76	24

¹ Formerly tested as Exp 3085RO

² Formerly tested as C 724-19-15

Table 10. Three-Year Average Size and Grade on Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2006 - 2008

Variety or Line	SMKRS <i>count/lb</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>	Hulls <i>pct</i>
Andru II	863	63	4	67	6	0	73	27
AP-3.....	669	68	4	72	2	0	74	26
AT 3085RO ¹	731	67	2	70	5	1	75	25
C724-19-25	628	70	3	73	3	0	76	24
C-99R.....	645	71	4	75	3	0	78	22
Exp 27-1516	777	69	2	71	4	0	75	25
Florida 07	619	68	5	73	2	1	76	24
Georgia-02C	790	71	6	77	3	0	80	20
Georgia-03L	717	67	3	70	3	1	74	26
Georgia Green.....	866	69	3	72	4	0	76	24
McCloud	660	68	4	72	4	1	77	23
Tifguard ²	650	73	3	76	2	0	78	22
York	739	66	6	72	3	0	75	25

¹ Formerly tested as Exp 3085 A

² Formerly tested as C 724-19-15

Table 11. Occurrence of Tomato Spotted Wilt Virus (TSWV) Hits, White Mold (WM) Hits, and Leafspot (LS) in the Dryland Peanut Variety Test at the Wiregrass Research and Extension Center, Headland, Alabama 2008

Variety or Line	Avg. TSWV ¹ Hits/Plot	Variety or Line	Avg. WM Hits/Plot	Variety or Line	Avg. LS ² Ratings/Plot
AT3-1114 ³	21.50	AT3-1114	6.00	Andru II	2.750
AT215	10.75	Georgia Green	3.50	Florida 07	2.625
Georgia Green	10.00	Georgia Greener	3.25	Georgia-02C	2.625
McCloud	9.75	Florida Fancy	3.00	C-99R	2.500
AP-4	9.50	Georgia-06G	2.75	Georgia Green	2.375
C99-R	8.50	AT 3085RO	2.25	AP-3	2.375
Andru II	8.00	McCloud	2.25	York	2.250
Florida Fancy ³	7.50	Tifguard	2.25	AP-4	2.125
AP-3	7.25	Florida 07	1.50	Exp 27-1516	2.125
Georgia-02C	7.25	AT215	1.25	Georgia Greener	2.125
AT 3085RO ⁴	6.75	Georgia-02C	1.00	Florida Fancy	2.125
Georgia 05E ³	6.50	Exp 27-1516	1.00	Georgia-06G	2.125
York	6.00	Georgia-07W	0.75	Tifguard	2.125
Georgia-07W	5.50	AP-3	0.50	AT215	2.000
Georgia-03L	5.25	Georgia-03L	0.50	AT 3085RO	2.000
Exp 27-1516	4.75	York	0.50	AT3-1114	1.875
Georgia Greener	4.25	Andru II	0.25	C 724-19-25	1.875
C724-19-25	4.00	Georgia-05E	0.25	McCloud	1.875
Florida 07	3.50	AP-4	0.25	Georgia-05E	1.750
Georgia-06G	3.25	C 724-19-25	0.25	Georgia-03L	1.750
Tifguard ⁵	2.50	C-99R	0.00	Georgia-07W	1.625
Overall Average	7.3		1.6		2.1
CV (%)....	35.3		88.4		24.0
LSD (.05).....	3.62		1.98		0.73

¹ Hits equal length of row up to one linear foot with severely diseased plants.

² Rating 1 (lowest) to 10 (highest)

³ Virginia Type

⁴ Formerly tested as Exp 3085RO

⁵ Formerly tested as C 724-19-15

¹PLANTING RATE CHART
36-inch rows

Seed per pound	Seed per foot	Lbs. per acre	Seed per foot	Lbs. per acre	Seed per foot	Lbs. per acre
600	5	121	6	145	7	178
625	5	116	6	140	7	171
650	5	112	6	134	7	164
675	5	108	6	129	7	158
700	5	104	6	124	7	152
725	5	100	6	120	7	147
750	5	97	6	116	7	142
775	5	94	6	112	7	138
800	5	91	6	109	7	133
825	5	88	6	106	7	129
850	5	85	6	102	7	125
875	5	83	6	100	7	122
900	5	81	6	97	7	118
925	5	78	6	94	7	115
950	5	76	6	92	7	112
975	5	74	6	89	7	109
1000	5	73	6	87	7	107
1025	5	71	6	85	7	104
1050	5	69	6	83	7	102
1075	5	68	6	81	7	99
1100	5	66	6	79	7	97

¹Pounds of peanut seed at various seed count per pound required to plant 1 acre at five, six or seven seed per foot of row with single row width spacing. (For twin-rows at 36-inch centers, divide seed per foot for single row by two to determine seed per foot for each twin-row.)

To determine pounds per acre at 36-inch row spacing, use the following formula:

(A)
$$\frac{\text{Seed per foot} \times \text{linear feet in 1 acre}}{\text{Seed count per pound}} = \text{pounds per acre}$$

(B) To determine linear feet in one acre at 36-inch row spacing:

$$\frac{43,560 \text{ square feet per acre}}{3 \text{ square feet}} = 14,520 \text{ linear feet in 1 acre}$$

(C) Example:

$$\frac{6 \text{ seed per foot} \times 14,520 \text{ linear feet}}{800 \text{ seed per pound}} = 109 \text{ pounds per acre}$$

Tests Duration Daily Rainfall Data Recorded at the Wiregrass Research
and Extension Center, Headland, Alabama 2008

DATE	APR <i>in</i>	MAY <i>in</i>	JUNE <i>in</i>	JULY <i>in</i>	AUG <i>in</i>	SEPT <i>In</i>	OCT <i>in</i>
1							
2					0.25		
3						0.02	
4		0.06					
5	1.00						
6	2.54			1.10			
7	0.04			0.12			
8							0.38
9							0.58
10			0.08				
11							
12	0.23		0.59	0.90	0.19		
13	0.08			0.95	0.79		0.02
14				0.10	0.65	1.02	
15			0.28	0.02		0.39	
16		0.10	0.23				
17		0.56					
18					0.05		0.10
19	0.27						
20							
21							
22			0.80	0.31			
23			0.81	0.03	1.45		
24				0.68	4.03		1.82
25					0.91		0.32
26	0.02		0.14		1.79		
27			0.03		0.18		0.01
28	0.07		0.03				
29	0.15			0.48	---- ¹		
30		0.26	0.64	0.26			
31				0.02			
² TOTALS	4.40	0.98	3.63	4.95	10.29	1.43	3.30

¹ Not recorded

²Total daily rainfall from April through October, 2008 = 28.98 in; 2007 = 25.61 in; 2006 =28.14 in .

Tests Duration Daily Maximum Temperatures Recorded at the Wiregrass
 Research and Extension Center, Headland, Alabama 2008

DATE	APR °F	MAY °F	JUNE °F	JULY °F	AUG °F	SEPT °F	OCT °F
1	67	80	94	85	94	87	88
2	80	86	95	88	94	90	80
3	87	85	96	90	91	88	79
4	87	77	98	91	93	86	84
5	87	86	96	93	94	92	84
6	69	82	97	93	95	89	84
7	68	86	98	90	98	94	86
8	81	90	98	90	97	91	79
9	74	87	100	91	91	91	76
10	76	91	98	91	91	91	80
11	81	91	95	93	92	90	78
12	87	93	96	89	80	92	73
13	67	81	92	93	80	91	77
14	70	85	92	91	84	93	80
15	70	84	89	89	89	92	82
16	64	79	88	87	90	92	86
17	72	75	93	91	84	81	86
18	77	80	96	91	88	81	86
19	79	89	91	92	85	79	72
20	76	89	92	94	90	83	68
21	84	92	95	96	90	80	72
22	80	93	93	98	88	85	74
23	82	87	84	96	81	85	77
24	83	87	91	92	76	79	66
25	84	92	95	92	84	79	68
26	84	90	93	92	81	79	70
27	85	88	93	94	86	85	73
28	81	89	93	91	89	86	64
29	75	93	92	93	91	86	56
30	75	89	90	93	91	88	61
31		91		93	91		68

Tests Duration Daily Minimum Temperatures Recorded at the Wiregrass
Research and Extension Center, Headland, Alabama 2008

DATE	APR °F	MAY °F	JUNE °F	JULY °F	AUG °F	SEPT °F	OCT °F
1	48	48	71	68	74	76	60
2	48	48	71	65	74	75	51
3	48	58	73	69	72	71	52
4	61	54	73	69	71	69	56
5	67	55	71	72	72	69	58
6	62	53	72	69	73	69	65
7	62	56	72	70	76	71	65
8	59	63	73	70	71	72	66
9	56	65	71	70	66	73	66
10	57	65	71	70	66	72	63
11	60	74	71	75	70	72	66
12	62	54	70	72	71	75	64
13	46	53	70	71	69	72	64
14	40	62	70	72	70	70	64
15	36	64	70	71	70	71	60
16	38	70	67	70	70	65	59
17	38	54	69	69	71	63	61
18	46	54	70	70	68	65	53
19	50	70	64	72	70	66	48
20	53	65	65	73	71	66	44
21	55	70	74	75	71	65	44
22	55	72	70	74	73	66	48
23	55	70	67	72	72	65	49
24	58	68	70	70	73	60	55
25	61	70	73	70	72	53	52
26	61	64	68	73	71	53	46
27	68	64	68	71	71	53	53
28	60	68	71	74	72	53	35
29	49	71	73	74	72	64	33
30	46	68	71	74	69	64	33
31		68		74	69		38

DESCRIPTIONS OF 2008 PEANUT VARIETY TEST ENTRIES

1. **Andru II**

Developed by Dr. Dan Gorbet, University of Florida Agricultural Experiment Station. Released in 2002 under the 1994 Amendment of the Plant Variety Protection Act. Also carries a patent on the high oleic trait prohibiting non-licensed parties from saving seed for replanting. Andru II has early maturity (130+ days) in Florida studies, but not quite as early as Andru 93 or ViruGard. It has excellent tomato spotted wilt virus resistance (equal to or better than Georgia Green), with excellent pod yields, good grades, and high oleic oil chemistry (80+% oleic fatty acid). Andru II has some white mold resistance equal to or better than Georgia Green. Its growth habit is intermediate to semi-runner with seed size similar to Georgia Green. Its pod yields have been equal to Georgia Green. Andru II should be an excellent choice for southeastern U.S. production, being the most productive early maturity high oleic cultivar currently available. Birdsong Peanut Company has the marketing contract on this variety.

2. **AP-3**

Developed by Dr. Dan Gorbet, University of Florida Agricultural Experiment Station. Released in 2003 under the 1994 Amendment of the Plant Variety Protection Act. AP-3 does not carry the high oleic trait and is medium (135 - 140 days) in maturity. It is resistant to tomato spotted wilt virus and white mold with some resistance to cylindrocladium black rot. Seed and pod size are similar to Florunner. Growth habit is intermediate with lighter green foliage than most varieties.

3. **AP-4**

Developed by Drs. Dan Gorbet and Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2007 under the 1994 Amendment of the Plant Variety Protection Act. The oleic/linoleic fatty acid ratio is normal. The maturity range is medium with pod and seed size larger than Florunner. AP-4 carries good tomato spotted wilt virus resistance and tolerance to white mold. Not as resistant to white mold as AP-3. AP-4 has shown good grade characteristics.

4. **AT 3-1114**

An advanced Virginia type breeding line developed by Dr. Ernest Harvey of the Auburn University and USDA National Peanut Laboratory breeding program. Does not carry resistance to tomato spotted wilt virus.

5. **AT 215**

Developed by Dr. Ernest Harvey, Golden Peanut Co., Ashburn, GA. Similar to GK 7 in growth habit with early maturity. Large pod and seed size with high oleic seed chemistry with moderate resistance to tomato spotted wilt virus.

6. **AT 3085RO**

Developed by Dr. Ernest Harvey, Golden Peanut Company and released in 2007 under the 1994 Amendment of the Plant Variety Protection Act. Also carries a patent on the high oleic trait prohibiting non-licensed parties from saving seed for replanting. Similar to GK7 in growth habit with medium (135 - 140 days) maturity. Seed and pod size are also similar to GK7 and it is resistant to tomato spotted wilt virus.

7. **C 724-19-25**

A breeding line developed by Dr. Corley Holbrook, USDA- ARS, Tifton, Georgia. C 724-19-25 is medium in maturity with tomato spotted wilt virus resistance. Carries normal oleic oil chemistry.

8. C-99R

Developed by Dr. Dan Gorbet, Florida Agricultural Experiment Station. Released in 1999 with variety protection applied for under the 1994 Amendment of the Plant Variety Protection Act. The maturity range is 10 to 14 days later than Florunner with large seed and pod size and normal oleic/linoleic fatty acid ratio. Runner growth habit with resistance to late leafspot, white mold, and tomato spotted wilt virus. Other characteristics include good yields and grades with multiple disease resistance (as noted); similar to Florida MDR 98 but more normal oleic fatty acid content (55 to 59%) with somewhat darker green foliage.

9. Exp 27-1516

Advanced breeding lines developed by Dr. Ernest Harvey, Golden Peanut Co., Ashburn, GA. They are medium in maturity with erect mainstems and seed and pod size similar to GK 7. They carry resistance to tomato spotted wilt virus.

10. Florida 07

Developed by Drs. Dan Gorbet and Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2006 under the 1994 amendment of the Plant Variety Protection Act. Also carries a patent on the high oleic trait prohibiting non-licensed parties from saving seed for replanting. Florida 07 is medium-late (140 – 145 days) in maturity, about 5 days later than Florunner with runner growth habit and pod and seed size larger than Florunner. Florida 07 carries resistance to tomato spotted wilt virus and white mold and tolerance to leafspot.

11. Florida Fancy

Developed by Drs. Dan Gorbet and Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2007 under the 1994 amendment of the Plant Variety Protection Act. Florida Fancy is a Virginia type with medium maturity, pod and seed size similar to Gregory. Tomato spotted wilt virus resistance is good and the oleic/linoleic fatty acid ratio is high.

12. Georgia-02C

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Maturity range is 7 - 10 days later than Florunner with seed and pod size slightly larger than Florunner. High oleic/linoleic fatty acid ratio with runner growth habit and vine growth were more consistent with Florunner than Georgia Green. Resistant to tomato spotted wilt virus and cylindrocladium black rot.

13. Georgia-03L

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released under the 1994 Amendment of the Plant Variety Protection Act. Mid-maturity range with normal oleic/linoleic fatty acid ratio with significantly larger pod and seed size than Georgia Green. Resistant to tomato spotted wilt virus and cylindrocladium black rot.

14. Georgia-05E

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. It is a Virginia type and was released in 2005 under the 1994 Amendment of the Plant Variety Protection Act. Also carries a patent on the high oleic trait prohibiting non-licensed parties from saving seed for replanting. It is medium-late (140 – 145 days) in maturity with spreading runner growth habit. It carries resistance to tomato spotted wilt virus, white mold and leafspot.

15. Georgia-06G

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 2006 under the 1994 Amendment of the Plant Variety Protection Act. Medium maturity, normal oleic/linoleic fatty acid ratio, with larger pod and seed size than Georgia Green and resistant to tomato spotted wilt virus.

16. Georgia-07W

Developed by Drs. Bill Branch and Tim Brenneman, University of Georgia Agricultural Experiment Station. Released in 2007 under the 1994 Amendment of the Plant Variety Protection Act. Medium maturity with resistance to white mold and tomato spotted wilt virus. It is a large seeded runner with normal oleic/linoleic oil chemistry.

17. Georgia Green

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 1995 and protected under the 1994 Amendment of the Plant Variety Protection Act. Same maturity range as Florunner with seed and pod size similar to or slightly more round than Florunner. Normal oleic/linoleic fatty acid ratio with intermediate growth habit and considerable less vine growth than Florunner. Resistant to tomato spotted wilt virus, but carries no known insect resistance. Georgia Green has proven to have yield stability across a wide range of different environments under both irrigated and non-irrigated conditions and in both single and twin row patterns.

18. Georgia Greener

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 2006 under the 1994 Amendment of the Plant Variety Protection Act. Medium maturity, normal oleic/linoleic fatty acid ratio, with larger pod and seed size than Georgia Green and resistant to tomato spotted wilt virus. Generally darker green foliage than Georgia Green.

19. McCloud

Developed by Drs. Dan Gorbet and Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2006 under the 1994 Amendment of the Plant Variety Protection Act. Also carries a patent on the high oleic trait prohibiting non-licensed parties from saving seed for replanting. McCloud is medium in maturity (135 – 140 days) with runner growth habit and seed and pod size larger than Florunner. It is resistant to tomato spotted wilt virus.

20. Tifguard

Developed by Dr. Corley Holbrook, USDA- ARS, Tifton, Georgia and released in 2007. Has normal oil chemistry. Is mid-season in maturity and carries root-knot nematode and TSWV resistance.

21. York

Developed by Drs. Dan Gorbet and Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2006 under the 1994 Amendment of the Plant Variety Protection Act. Also carries a patent on the high oleic trait prohibiting non-licensed parties from saving seed for replanting. York is in the late maturity range (approximately 150 days) with runner growth habit and seed and pod size similar to Florunner. It carries resistance to tomato spotted wilt virus, white mold and leafspot.

SOURCES OF SEED

Dr. W. D. Branch
University of Georgia
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Coastal Plain Experiment Station
Tifton, Georgia 31793

Georgia-02C
Georgia-03L
Georgia-05E
Georgia-06G
Georgia-07W
Georgia Green
Georgia Greener

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Andru II
AP-3
AP-4
C-99R
Florida 07
Florida Fancy
McCloud
York

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AT 3-1114
Exp 27-1516