# Alabama Performance Comparison of Peanut Varieties 2014

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\* In 2012 the irrigated test data were deemed unreliable due to stand loss from heavy rains and inadequate drainage after planting.

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

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### The 2014 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 2014 tests were conducted at the Wiregrass Research and Extension Center in Headland, AL. During 2014, 16 entries were evaluated under irrigation and dryland conditions.

The experimental design for each test was a randomized complete block consisting of two-row plots, 20 feet long, replicated four times. The dryland and irrigated tests were planted on May 13. Both 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 similar to Georgia Green in maturity were dug on September 30. These entries were C1805-2-9, Flo-Run<sup>™</sup> '107', Georgia-06G, Georgia-07W, Georgia-08V, Georgia-09B, Georgia-13M, Georgia Greener, Tifguard, TIF NV-High O/L, TUFRunner<sup>™</sup> '511', and TUFRunner<sup>™</sup> '727'. Entries moderately later than Georgia Green, Florida 07 and Georgia-11J were dug on October 7. Entries with maturity considerably later than Georgia Green are Georgia-10T, and Georgia-12Y were dug October 21.

The dryland test entries with maturity near the same as Georgia Green were dug on September 25. These entries were C1805-2-9, Flo-Run<sup>™</sup> 107', Georgia-06G, Georgia-07W, Georgia-08V, Georgia-09B, Georgia-13M, Georgia Greener, Tifguard, TIF NV-High O/L, TUFRunner<sup>™</sup> 511', and TUFRunner<sup>™</sup> 727'. Entries moderately later than Georgia Green, Florida 07 and Georgia-11J were dug on October 7. Entries with maturity considerably later than Georgia Green are Georgia-10T, and Georgia-12Y were dug October 21.

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 (0.05) following the

LSD value indicates that the LSD was calculated at the 95 percent level of confidence.

#### 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  $15/64 \times 1$ -inch slotted screen or a  $16/64 \times 3/4$ -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  $21/64 \times 3/4$ -inch slotted screen and riding a  $18/64 \times 3/4$ -inch slotted screen.

-18.0 + 16.0 (Generally considered as the No.1 commercial grade)—Portion of the

SMKRS falling through a  $18/64 \ge 3/4$ -inch slotted screen and riding a  $16/64 \ge 3/4$ -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 Crop, Soil, and Environmental Sciences, for the statistical analysis. Appreciation is also expressed to Susan Morrisette for her contributions.

#### Table 1

Three-Year Average Yield of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2011, 2013 & 2014

Variety or Line	2014 (Ibs/acre)	2 Year Average	3 Year Average
Georgia-11J	6697	5785	
TUFRunner <sup>™</sup> '727'	6461	6334	
TUFRunner™'511'	6334	1	
Georgia-07W	6280	6185	6201
Georgia-10T	6262	6021	6020
Florida 07	6153	5490	5657
C1805-2-9	6062	6139	
Georgia-08V	6026	5658	5829
Georgia-09B	5899	5980	5929
Georgia Greener	5881	6139	6271
Georgia-06G	5844	6357	6389
TIF NV-High O/L <sup>2</sup>	5781	5672	
FloRun™ '107'	5754	5858	5841
Georgia-12Y	5699	6139	
Tifguard	5617	5640	5763
Georgia-13M	5527		
Overall Average	6017	6967	5989
CV (%)	10.1	11.4	10.1
LSD (0.05)	864	671	492
<sup>1</sup> Not Tested			

<sup>2</sup> Formerly known as C1805-3-43

 Table 2

 Average Size and Grade of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2014

Variety or Line	SMKRS (count/lb )	SMKRS (Pct.)	SS (Pct)	TSMK (Pct)	OK (Pct)	DK (Pct)	TK (Pct)	Hulls (Pct)
C1805-2-9	543	72	2	74	1	1	76	24
Florida 07	577	72	2	74	1	1	76	24
Flo-Run <sup>™</sup> '107'	642	74	2	76	1	1	78	22
Georgia-06G	603	75	2	77	1	1	79	21
Georgia-07W	614	74	2	76	1	1	78	22
Georgia-08V	450	74	1	75	1	1	77	23
Georgia-09B	682	74	3	77	2	1	80	20
Georgia-10T	652	74	6	80	1	0	81	19
Georgia-11J	426	72	1	73	0	1	74	26
Georgia-12Y	668	73	1	74	1	0	75	25
Georgia-13M	857	73	3	76	2	1	79	21
Georgia Greener	664	75	2	77	1	1	79	21
TIF NV-High O/L	600	72	3	75	1	1	77	23
Tifguard	622	73	1	74	2	3	77	23
TUFRunner <sup>™</sup> '511'	582	75	2	77	1	0	78	22
TUFRunner <sup>™</sup> '727'	619	73	3	76	1	1	78	22

#### Table 3

Two-Year Average Size and Grade of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2013 - 2014

Variety or Line	SMKRS (count/lb )	SMKRS (Pct.)	SS (Pct)	TSMK (Pct)	OK (Pct)	DK (Pct)	TK (Pct)	Hulls (Pct)
C1805-2-9	566	72	2	74	1	1	76	24
Flo-Run <sup>™</sup> '107'	707	69	3	72	4	1	77	23
Florida 07	636	72	1	73	2	1	76	24
Georgia-06G	623	75	2	77	1	1	79	21
Georgia-07W	645	74	2	76	1	1	78	22
Georgia-08V	438	75	1	76	0	1	77	23
Georgia-09B	686	75	2	77	2	1	80	20
Georgia-10T	663	75	5	80	1	0	81	19
Georgia-11J	406	73	1	74	0	1	75	25
Georgia-12Y	689	74	2	75	2	0	77	23
Georgia Greener	706	75	2	77	1	1	79	21
TIF NV-High O/L	621	71	3	75	2	1	77	23
Tifguard	628	74	1	75	2	1	78	22
TUFRunner <sup>™</sup> '727'	632	74	2	76	2	1	79	21

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Three-Year Average Size and Grade of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2011, 2013, & 2014

Variety or Line	SMKRS (count/lb )	SMKRS (Pct.)	SS (Pct)	TSMK (Pct)	OK (Pct)	DK (Pct)	TK (Pct)	Hulls (Pct)
Florida 07	597	71	2	73	2	1	76	24
Flo-Run <sup>™</sup> '107'	680	72	2	74	3	1	78	22
Georgia-06G	609	74	2	76	2	1	79	21
Georgia-07W	642	73	3	76	2	0	78	22
Georgia-08V	425	74	1	75	1	0	76	24
Georgia-09B	676	74	3	77	2	1	80	20
Georgia-10T	655	75	5	80	1	0	81	19
Georgia Greener	697	75	2	77	2	0	79	21
Tifguard	619	74	1	75	2	1	78	22

Table 5

Average Shelled Seed Size Distribution of Irrigated Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2011, 2013, & 2014

	SMKRS Size Distribution								
Variety or Line		+ 21.0 Jumbo (Pct.)		-	21.0 +18. Medium (Pct.)	0	-'	18.0 +16.0 No. 1 (Pct.)	
	2014	2013	2011	2014	2013	2011	2014	2013	2011
C1805-2-9	67.0	58.0		30.0	37.0		3.0	5.0	
Florida 07	61.5	41.2	55.2	35.6	40.2	32.1	2.9	5.7	4.5
Flo-Run <sup>™</sup> '107'	48.4	27.7	33.1	46.8	62.7	59.1	4.8	9.6	7.6
Georgia-06G	60.5	46.2	57.1	36.4	49.4	38.3	3.1	4.4	5.6
Georgia-07W	55.5	30.0	38.3	41.0	63.8	56.6	3.5	6.2	5.1
Georgia-08V	83.0	77.6	82.5	14.4	19.5	12.6	2.6	2.9	4.9
Georgia-09B	61.0	40.1	57.8	35.8	55.7	38.8	3.2	4.2	3.4
Georgia-10T	58.3	54.2	59.8	38.1	41.3	37.6	3.6	4.5	3.3
Georgia-11J	85.6	91.7		12.4	7.3		2.0	1.0	
Georgia-12Y	58.4	51.1		39.9	44.3		1.7	4.6	
Georgia-13M	26.2			67.8			6.0		
Georgia Greener	55.7	33.7	43.4	40.8	61.0	52.2	3.6	5.3	4.4
TIF NV-High O/L	65.3	57.7		30.8	36.1		3.9	6.2	
Tifguard	61.9	46.6	59.3	35.5	47.0	36.3	2.6	6.4	4.5
TUFRunner <sup>™</sup> '511'	56.2			41.1			2.7		
TUFRunner <sup>™</sup> '727'	56.8	55.3		40.4	38.6		2.8	6.1	

Occurrence of Tomato Spotted Wilt Virus (TSW) Hits, White Mold (WM) Hits, and Leafspot (LS) in the Irrigated Peanut Variety Test at the Wiregrass Research and Extension Center, Headland, Alabama 2014

Variety or Line	TSW <sup>2</sup> (#loci/40ft)	Variety or Line	LS Intensity	Variety or Line	WM1 (#loci/40ft)
TUFRunner™ '727'	7.0 a	TUFRunner™ '511'	4.9 a	Tifguard	1.3 a
Florida 07	5.0 a	Georgia-13M	4.7 ab	Florida 07	1.0 a
Georgia-09B	3.5 ab	Georgia-07W	4.5 abc	Georgia-09B	1.0 ab
TUFRunner™'511'	3.3 abc	Georgia-08V	4.5 abc	Georgia Greener	0.8 abc
Georgia-12Y	1.6 de	Georgia-09B	4.4 a-e	Georgia-06G	0.5 abc
Georgia-07W	1.5 bcd	Georgia Greener	4.4 a-d	TUFRunner <sup>™</sup> '511'	0.5 bc
Georgia-08V	1.5 de	Georgia-10T	4.3 a-e	C1805-2-9	0.3 bc
FloRun™ '107'	1.3 cd	Flo-Run <sup>™</sup> '107'	4.2 a-e	Georgia-08V	0.3 bc
Georgia-06G	0.8 def	Florida 07	4.1 a-e	Georgia-10T	0.3 bc
Georgia-10T	0.8 def	Tifguard	3.9 b-e	Georgia-13M	0.3 bc
Georgia-11J	0.8 def	TIF NV-High O/L	3.9 b-e	TUFRunner <sup>™</sup> '727'	0.3 bc
Georgia Greener	0.8 def	C1805-2-9	3.8 b-e	Georgia-12Y	0.2 bc
TIF NV-High O/L <sup>2</sup>	0.5 def	Georgia-11J	3.7 b-c	Flo-Run <sup>™</sup> '107'	0.0 c
Tifguard	0.3 ef	Georgia-12Y	3.6 cde	Georgia-07W	0.0 c
C1805-2-9	0.0 f	TUFRunner <sup>™</sup> '727'	3.5 de	Georgia-11J	0.0 c
Georgia-13M	0.0 f	Georgia-06G	3.4 e	TIF NV-High O/L	0.0 c

<sup>1</sup> Data supplied by A.K. Hagan, H.L. Campbell, K.L. Bowen, Dept. of Entomology and Plant Pathology, Auburn University, AL <sup>2</sup> Tomato Spotted Wilt (TSW) and stem rot incidence is expressed as the number of disease loci per 40 ft. of row. <sup>3</sup>Leaf spot diseases were rated using the Florida 1 to 10 leaf spot rating scale. <sup>4</sup> Means in each column that are followed by the same letter are not significantly different according Fisher's least significant difference (LSD) test (P≤0.05).

Table 7

Three-Year Yield of Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2012 - 2014.

Variety or Line	2014 Average Yield (Ibs/acre)	2 Year Average Yield (Ibs/acre)	3 Year Average Yield (lb/acre)
Georgia-08V	3966	4429	4640
Georgia-011J	3875	4674	4991
Georgia-06G	3748	4579	5061
TUFRunner™ '727'	3703	4592	
Flo-Run <sup>™</sup> '107'	3621	4152	4365
TUFRunner™ '511'	3603	1	
Georgia-07W	3585	4397	5019
TIF NV-High O/L	3494	4170	4734
Florida 07	3439	4842	5170
C1805-2-9	3331	4538	4858
Tifguard	3258	3907	4535
Georgia-10T	3222	4252	4753
Georgia-09B	3222	4566	4786
Georgia Greener	3131	4202	4622
Georgia-12Y	3113	4542	
Georgia-13M	2986		
Overall Average	3456	4417	4795
CV (%)	11.5	28.8	25.0
LSD (0.05)	568	1256	955
<sup>1</sup> Not Tested			

 Table 8

 Average Size and Grade of Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2014

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Variety or Line	SMKRS (count/lb )	SMKRS (Pct.)	SS (Pct)	TSMK (Pct)	OK (Pct)	DK (Pct)	TK (Pct)	Hulls (Pct)
C1805-2-9	637	67	1	68	2	3	73	27
Florida 07	730	70	1	71	3	2	76	24
Flo-Run <sup>™</sup> '107'	645	66	2	68	2	3	73	27
Georgia-06G	652	70	1	71	2	2	75	25
Georgia-07W	702	70	2	72	2	2	76	24
Georgia-08V	551	67	1	68	1	3	72	28
Georgia-09B	744	71	2	73	2	1	76	24
Georgia-10T	736	70	5	75	2	1	78	22
Georgia-11J	549	70	1	71	1	1	73	27
Georgia-12Y	717	67	2	69	2	1	72	28
Georgia-13M	896	67	2	69	4	1	74	26
Georgia Greener	736	69	2	71	3	2	76	24
TIF NV-High O/L	669	67	2	69	3	1	73	27
Tifguard	664	70	1	71	3	1	75	25
TUFRunner <sup>™</sup> '511'	655	69	1	70	3	2	75	25
TUFRunner™'727'	706	69	2	71	3	1	75	25

Table	9
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A Two-Year Average Size and Grade of Dryland Peanut Varieties at the Wiregrass Research and Extension Center, Headland, Alabama 2013-2014

Variety or Line	SMKRS (count/lb )	SMKRS (Pct.)	SS (Pct)	TSMK (Pct)	OK (Pct)	DK (Pct)	TK (Pct)	Hulls (Pct)
C1805-2-9	600	70	2	72	2	1	75	25
Florida 07	672	71	5	73	2	1	76	24
Flo-Run <sup>™</sup> '107'	667	70	2	72	2	2	76	24
Georgia-06G	646	74	1	75	1	1	77	23
Georgia-07W	674	73	1	74	2	1	77	23
Georgia-08V	490	71	1	72	1	2	75	25
Georgia-09B	702	74	2	76	1	1	78	22
Georgia-10T	711	72	5	77	1	1	79	21
Georgia-11J	472	73	1	74	1	1	76	24
Georgia-12Y	717	70	2	72	2	1	75	25
Georgia Greener	723	73	2	75	2	1	78	22
TIF NV-High O/L	640	70	2	72	2	1	72	25
Tifguard	648	73	1	74	2	1	77	23
TUFRunner <sup>™</sup> '727'	668	72	2	74	2	1	77	23

Table 10
Three-Year Average Size and Grade of Dryland Peanut Varieties at the Wiregrass Research and Extension
Center, Headland, Alabama 2012-2014.

Variety or Line	SMKRS (count/lb )	SMKRS (Pct.)	SS (Pct)	TSMK (Pct)	OK (Pct)	DK (Pct)	TK (Pct)	Hulls (Pct)
C1805-2-9	635	70	4	74	3	0	77	23
Florida 07	731	69	3	72	3	1	76	24
Flo-Run <sup>™</sup> '107'	628	70	3	73	3	0	76	24
Georgia-06G	777	69	2	71	4	0	75	25
Georgia-07W	619	68	5	73	2	1	76	24
Georgia-08V	785	70	5	75	3	1	79	21
Georgia-09B	636	73	3	76	2	0	78	22
Georgia-10T	692	73	3	76	2	0	78	22
Georgia-11J	866	69	3	72	4	0	76	24
Georgia Greener	702	72	4	76	2	0	78	22
TIF NV-High O/L	641	70	2	72	3	1	76	24
Tifguard	650	73	3	76	2	0	78	22

Planting Rate Chart for 36 Inch Rows <sup>1</sup>									
Seed Per Pound	Seed Per Foot	Lbs/ Acre	Seed Per Foot	Lbs/Acre	Seed Per Foot	Lbs/ 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			

<sup>1</sup> Pounds 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.)

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

<u>Seed per foot x linear feet in 1 acre</u> = pounds per acre Seed count per pound

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

43,560 square feet per acre = 14,520 linear feet in 1 acre 3 square feet

(C) Example:

6 <u>seed per foot x 14.520 linear feet</u> = 109 pounds per acre 800 seed per pound

## Tests Duration Daily Rainfall Data Recorded at the Wiregrass Research and Extension Center, Headland, Alabama 2014

DATE	APR (inches)	MAY (inches)	JUNE (inches)	JULY (inches)	AUG (inches)	SEPT (inches)	OCT (inches)
1		0.38					
2		0.07	0.96				
3			0.01			0.17	0.05
4					0.03		
5		0.02				0.19	
6							0.33
7	2.13						
8	2.05				2.14	0.79	
9			1.00				
10							
11			0.03	0.10	0.10		
12		0.28	0.05				
13					1.79		0.16
14				1.33		0.16	3.81
15	0.74	1.82					0.32
16	0.06		0.02	0.37			
17			0.21			0.04	
18	1.41				0.23		
19					0.39		
20					0.43		
21	2.32			0.17			
22				0.02			
23			1.10	0.01			
24							
25			0.42	0.01			
26							
27		1.08					
28		0.02					
29	1.57			0.28		0.01	
30	3.35	0.15				0.11	
31							
TOTALS	13.62	3.82	3.80	2.29	5.38	1.47	4.67
<sup>1</sup> Total dailv	rainfall from A	oril through Oct	ober 2014 = .	35 05 in <sup>.</sup> 201	3 = 42 39 in	2012 = 24 2	p in

#### Tests Duration Daily Maximum Temperatures Recorded at the Wiregrass Research and Extension Center, Headland, Alabama 2014

- Milegia				si, ncuala			
DATE	APR °F	MAY °F	JUNE °F	JULY °F	AUG °F	SEPT °F	OCT °F
1	80	72		95	90		77
2	82	64	87	95		97	86
3	82		79	94		96	89
4	83		81		91	89	
5		86	89		92	93	
6		90	92		95		83
7	/0	86		95	97		
8	72	87		94	98	92	87
9	68	90	93	95		85	89
10	70		93	95		88	92
11	77		92	92	96	89	
12		88	89		92	93	
13		87	87		90		91
14	83	88		92	92		83
15	84	83		94	90	95	78
16	63	68	92	89		92	76
17	64		92	87		89	76
18	68		93	88	93	90	
19		84	94		90	89	
20		85	94		93		83
21	65	86		89	93		79
22	79	88		83	96	90	79
23	80	90	95	87		87	74
24	84		89	92		81	73
25	86		90	92	96	80	
26			89		88	71	
27		94	89		91		84
28	87	87		96	91		88
29	88	89		96	94	82	82
30	74	82	95	87		81	84
31				86			70

Tests Duration Daily Minimum Temperatures Recorded at the Wiregrass Research and Extension Center, Headland, Alabama 2014

DATE	APR °F	MAY °F	JUNE °F	JULY °F	AUG °F	SEPT °F	OCT °F
1	44	57		73	64		62
2	47	55	67	72		70	65
3	51		68	72		71	69
4	58		68		70	72	
5	55	55	69		70	70	
6		59	71		71		46
7	54	56		66	73		
8	49	59		72	73	71	56
9	47	57	68	72		71	64
10	48		73	72		71	65
11	47		70	70	71	71	
12		67	70		72	71	
13		66	70		71		65
14	51	67		71	69		67
15	63	57		75	69	71	54
16	36	49	68	70		73	52
17	38		71	65		68	52
18	50		70	66	68	67	
19		51	72		73	68	
20		63	72		71		50
21	50	65		69	73		51
22	53	66		72	73	63	51
23	59	68	70	71		62	45
24	60		71	71		60	49
25	64		70	72	73	60	
26			73		68	60	
27		67	72		68		47
28	60	68		73	65		56
29	64	69		68	68	71	56
30	64	68	70	62		69	54
31				64			44

#### **Descriptions Of 2014 Peanut Variety Test Entries**

#### 1. C1805-2-9

Breeding line submitted by Dr. Corley Holbrook, USDA-ARS, Tifton, Georgia. Line is resistant to root-knot nematode, high oleic, medium maturity and similar in size to Tifguard.

#### 2. Florida 07

Developed by Dr. 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.

#### **3. Flo-Run<sup>™</sup>'107'**

Developed by Dr. Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2010 and protected 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 a runner type variety with medium maturity and similar to Georgia Greener in seed size, and produces a high percentage of medium size kernels. The variety has demonstrated good resistance to tomato spotted wilt virus and moderate resistance to white mold.

#### 4. 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.

#### 5. 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.

#### 6. Georgia-08V

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 2008 and protected 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 a Virginia-type variety that has large seed and is resistant to tomato spotted wilt virus.

#### 7. Georgia-09B

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 2009 and protected 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 a Runner type that has medium seed size, medium maturity and is resistant to tomato spotted wilt virus.

#### 8. Georgia-10T

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 2010 and protected under the 1994 Amendment of the Plant Variety Protection Act. The variety has large seed size and late maturity. It has demonstrated excellent grades and tomato spotted wilt virus resistance.

#### 9. Georgia-11J

A Virginia type developed by Dr. Bill Branch, University of Georgia. It was released in 2011 under the 1994 Amendment of the Plant Variety Protection Act. It is high oleic with good tomato spotted wilt virus resistance. It has larger pod and kernel size and later maturity than Georgia 08V.

#### 10. Georgia-12Y

A medium seed size runner developed by Dr. Bill Branch, University of Georgia. It was released in 2012 under the 1994 Amendment of the Plant Variety Protection Act. It is not high oleic. It is resistant to tomato spotted wilt virus and tolerant to white mold. It is similar to Georgia-10T in late maturity.

#### 11. Georgia-13M

Developed by Dr. Bill Branch, University of Georgia Agricultural Experiment Station. Released in 2013 and protected under the 1994 Amendment of the Plant Variety Act. Also carries a patent of the high-oleic trait prohibiting non-licensed parties from saving seed for planting. It is a Runner type with medium seed size and a large percentage of medium grade seed. It is medium in maturity and resistant to tomato spotted wilt virus.

#### 12. 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.

### 13. TIF NV-High O/L

Developed by Dr. Corley Holbrook, USDA-ARS, Tifton, Georgia. Released under the 1994 Amendment of the Plant Variety Act. Also carries a patent on the high-oleic trait

prohibiting non-licensed parties from saving seed for planting. It carries resistance to tomato spotted wilt virus and root knot nematode. It is most similar to Tifguard in plant and seed characteristics.

#### 14. 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 tomato spotted wilt virus resistance.

#### **15. TUFRunner<sup>TM</sup> '511'**

Developed by Dr. Barry Tillman, University of Florida Agricultural Experiment Station. Released in 2014 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 planting. Large seeded Runner type with approximately 140 days to maturity. Moderately susceptible to tomato spotted wilt virus.

#### **16. TUFRunner<sup>TM</sup> '727'**

Developed by Dr. Barry Tillman, University of Florida. Released in 2012 under the 1994 Amendment of the Plant Variety Protection Act. It carries a patent for high oleic oil chemistry and seed can not be reproduced without the owner's permission. It has medium seed size with medium maturity, and good resistance to tomato spotted wilt virus, late leafspot and white mold.

### **Seed Sources**

#### Dr. W. D. Branch

University of Georgia Department of Crop and Soil Sciences Coastal Plain Experiment Station Tifton, Georgia 31793 Georgia-06G Georgia-07W Georgia-07W Georgia-08V Georgia-09B Georgia-10T Georgia-11J Georgia-12Y Georgia-13M Georgia Greener

#### Dr. B.L. Tillman

University of Florida North Florida Research & Education Center 3925 Highway 71 Marianna, Florida 32446 Florida 07 FloRun<sup>TM</sup>'107' TUFRunner<sup>TM</sup>'511' TUFRunner<sup>TM</sup>'727'

#### Dr. C.C. Holbrook

USDA-ARS Crop Genetics and Breeding Research Unit Coastal Plain Experiment Station Tifton, Georgia 31793 C1805-2-9 Tifguard TIF NV-High O/L