
2011 – 2012 RUNNER vs. VIRGINIA PEANUT TEST RESULTS

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Carolyn Daughtrey, below



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DEFINITION OF GRADE TERMS

- % Fancy Pods --Percentage of in-shell peanuts that ride the 34/64-inch spacing on the pod presizer.
- % TSMK --Percentage of total sound mature kernels equals the % summation of sound mature kernels (SMK) and sound splits (SS).
- % OK -- Percentage of other kernels which pass through the minimum screen size of SMK's.
- % DK -- Percentage of damaged kernels which ride the minimum screen size for SMK's and the defective splits.
- % Meats --Percentage of all kernels in the shelling sample including SMK, SS, OK, and DK's.
- % ELK --Percentage of extra large kernels which ride a 21.5/64 x 1 inch screen for virginia and a 21/64 x 3/4 inch screen for jumbo runner.
- % MED --Percentage of medium kernels which ride a 18/64 x 1 inch screen for virginia and a 18/64 x 1 inch for runner.
- % NO. 1 --Percentage of number one kernels which ride a minimum screen size for SMK's (see chart below).
- g/100 SMK --Weight in grams per 100 sound mature kernels (seed).

U. S. MARKET TYPE

SMK'S

MINIMUM SCREEN SIZES FOR

spanish	15/64 x 3/4 inch
valencia	15/64 x 3/4 inch
runner	16/64 x 3/4 inch
virginia	15/64 x 1 inch

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Plant Material and Test Locations

Elimination of the quota system coupled with rising costs for fuel and pesticides appear to justify expansion of runner production in the VC region in the recent years. For example in 2011, South Carolina produced 91,189 tons of peanuts from which 30% were runners. In the same year North Carolina produced 170,907 tons and Virginia 31,543, from which 11% were runners (USDA-Federal State Inspection Service). In addition to apparently lower production costs, there are several additional advantages for growing runner-type peanut. For example, it is well established that runner peanut grows better than the virginia-type on poorly drained soils, which appears to be an advantage on heavier soils, under conservational tillage, and in rainy years; recently, no-till and strip-till cultivation systems have expanded in Virginia to almost 50% of the peanut acreage. Newly developed runner cultivars have improved yield, high sound mature kernels (SMK) content, disease resistance, and high-oleic fatty acid oil chemistry; virginia-type cultivars with high-oleic fatty acid oil chemistry developed for the VC region are just now becoming available. Some of the recently developed runners have larger pods and kernels than the traditional runners and are comparable for this trait with the virginia-type peanuts. However, the runner-type cultivars are known to have relatively late maturity when compared to the virginia-type for the northern parts of the VC region where early maturity is critical to avoid freeze damage. Their response to disease may also differ because of different disease pressures. Finally, in northern VC region runner-type cultivars may express different yield and grade potentials than in the environments in which they were developed. Therefore, their suitability for the northern VC region needs to be determined by comparison with the virginia-type cultivars that are traditionally grown in this region. Earlier research showed potential for similar economic returns from runners when compared to virginia-type peanut in the VC region. However, direct comparison of the runner and virginia-type cultivars in northern VC region needs to be updated to include cultivars currently grown in this region. The objective of this study was to compare eight runner-type cultivars and eight virginia-type cultivars for yield, grade factors, pod brightness, and gross value with emphasis on Florida 07 runner and Bailey virginia-type, the most popular cultivars currently grown in the VC region.

Each year, several runner and virginia-type peanut cultivars were compared in replicated plots at the Tidewater Agricultural Research and Extension Center in Suffolk, VA in fields under different planting “formulations”. In 2012 testing was extended to include a second location in Southampton County, VA. The planting “formulations” include different soil cultivation (conventional and strip-till) and in-furrow insect and disease control, a total of seven tests. In some fields we used either Metam sodium and Temik or Proline and Orthene, at rates well known by our growers. Cultural practices for high yields were applied so that in general disease was almost absent and thrips were under control.



A picture of the plots in 2011 is shown in Fig. 1. Runners were distinctively with less vine production than virginia-type early in vegetation. However, from mid-July and until harvest vine growth of the runners was adequate and yields were not so different from the virginia-type cultivars. Bailey had the highest average yield among all cultivars but similar (not significantly different) yields were from Georgia 06G, Florida 07, and Georgia Greener. Gregory was the only virginia-type cultivar with an average yield not statistically different from Bailey in this test, probably as a result of plentiful precipitation in 2011 and 2012. Details of this experiment are included in this report.

Figure 1. Virginia (front) and runner peanut (sides) plots at Tidewater Agric. Res. & Ext. Center in Suffolk, VA in 2011.

Plant Material and Test Locations

Table 1. Name and market type of the genotypes evaluated in the Runner vs. Virginia Peanut Test in 2011.

Number	Variety	Market Type
1	AP 4	Runner
2	Florida 07	Runner
3	Florunner	Runner
4	GA 06G	Runner
5	GA 09B	Runner
6	GA Greener	Runner
7	Tifguard	Runner
8	Bailey	Virginia
9	CHAMPS	Virginia
10	Florida Fancy	Virginia
11	Gregory	Virginia
12	Perry	Virginia
13	Phillips	Virginia
14	Sugg	Virginia
15	Titan	Virginia
16	VT 024051	Virginia

Plant Material and Test Locations

Table 2. Cultural practices used in Field 26 at TAREC (Suffolk), VA in 2011.

Planting Date: May 4, 2011

Harvest Date: October 9-10, 2011

Soil Type: Emporia

Soil Test Results:

			ppm				
	pH	P	K	Ca	Mg	Zn	Mn
	6.27	36	56	300	42	0.8	3.0

Cultivation: 6/10; 6/28

Soil Fumigant: 4/14/11 - Metam 8 gal/A

Landplaster: 6/14/11 - Gypsum 1300 lbs/A

Herbicides: 4/14/11 - Acumen @ 1.5 pt/A; Dual @ 1 pt/A
 5/9/11 - Intro @ 1 qt/A
 6/28/11 - Intro @ 1 qt/A

Insecticides: 5/5/11 - Orthene 97 @ 12 oz/A
 5/6/11 - Orthene 97 @ 12 oz/A
 6/3/11 - Orthene 97 @ 8 oz/A
 6/30/11 - Danitol @ 6 oz/A
 7/27/11 - Lorsban @ 13 lbs/A
 7/28/11 - Danitol @ 10 oz/A
 8/18/11 - Danitol @ 10 oz/A

Fertility: 5/9/11 - Boron @ 1 qt/A
 6/30/11 - Manganese @ 1 qt/A
 7/28/11 - Manganese @ 1 qt/A; Boron @ 1 qt/A
 8/18/11 - Manganese @ 1 qt/A

Fungicides: 5/6/11 - Proline @ 5.7 oz.
 6/30/11 - Bravo @ 1 pt.
 7/28/11 - Provost @ 8 oz.
 8/18/11 - Provost @ 8 oz.
 9/14/11 - Bravo @ 1.5 pt.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 3. Peanut emergence in Field 26; stand count was taken on 26 May.

Variety	Stand Counts ¹	
	Proline & Orthene	Vapam & Temik
AP 4	77.6 e ²	80.3 d
Florida 07	110.8 b-e	117.0 a-d
Florunner	84.6 de	93.3 cd
GA 06G	129.5 a-e	152.0 a-c
GA 09B	164.8 a-c	155.5 a-c
GA Greener	88.3 de	107.3 b-d
Tifguard	109.0 c-e	149.5 a-c
Bailey	166.3 a-c	172.0 ab
CHAMPS	171.8 a	179.5 a
Florida Fancy	172.3 ab	167.5 ab
Gregory	175.0 a	173.5 a
Perry	177.3 a	178.8 a
Phillips	171.3 a-c	170.3 ab
Sugg	160.8 a-c	163.8 ab
Titan	141.5 a-d	129.3 a-d
VT 024051	162.5 a-c	161.5 ab
Mean	134.7	140.2
LSD_{0.05}³	62.6	65.1

¹ Total number of emerged plants in two, 30-ft row plots. To get the number of plants/ft, divide stand count by 60.

² Means sharing the same letter(s) are not statistically different.

³ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 4. Effect of variety on yield, value, and grade characteristics of peanut grown in Field 26 with Proline & Orthene in-furrow treatment

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
	%										\$/cwt ¹	lb/A	\$/A ³
AP 4	0.3	1.0	18 i ⁴	8.7	31 f	0.5	7.6	0.6	65 e	74 d	17.05 fg	4650 f-h	793 gh
Florida 07	0.6	0.8	74 e	9.2	41 e	1.1	6.4	0.4	63 f	70 fg	16.63 g	5906 ab	982 b-e
Florunner	0.8	1.2	15 j	9.8	27 fg	0.4	4.2	0.8	69 bc	74 cd	17.65 c-f	4403 h	777 h
GA 06G	0.7	0.7	66 f	8.2	50 a	0.5	3.3	0.8	71 a	76 ab	18.57 a	5932 a	1102 a
GA 09B	0.7	1.1	55 g	9.2	51 a	0.4	3.7	1.0	71 a	76 a	18.55 a	5444 a-d	1013 a-d
GA Greener	0.6	0.7	32 h	8.2	42 de	0.4	5.4	0.6	69 ab	76 a-c	18.05 a-c	5475 a-d	990 a-e
Tifguard	0.6	0.9	58 g	9.0	49 ab	0.1	3.6	0.2	71 a	75 a-d	18.45 ab	5636 a-d	1040 ab
Bailey	0.3	0.8	92 cd	9.2	45 c-e	0.4	2.2	1.0	68 bc	72 ef	17.94 a-d	5674 a-c	1018 a-c
CHAMPS	0.6	1.2	90 c	9.3	44 c-e	0.4	2.3	1.8	67 c-e	71 ef	17.48 c-f	5180 c-f	914 c-f
Florida Fancy	0.3	1.5	96 ab	9.7	48 a-c	0.4	1.7	1.1	66 de	69 g	17.36 c-f	5052 d-g	879 e-h
Gregory	0.3	1.4	93 a-c	9.7	51 a	0.2	1.6	1.8	66 e	69 g	17.26 d-g	5710 a-c	991 a-e
Perry	0.4	1.2	83 d	8.7	43 de	0.5	2.3	1.5	68 b-d	72 e	17.79 b-e	4820 e-h	860 f-h
Phillips	0.3	0.8	91 bc	9.2	50 a	0.5	1.7	1.2	68 bc	72 ef	18.02 a-c	5052 d-g	912 c-f
Sugg	0.3	0.9	90 c	9.2	45 c-e	0.6	3.0	1.7	67 c-e	72 e	17.61 c-f	5312 b-e	942 b-f
Titan	0.6	1.9	98 a	9.0	45 c-e	0.5	1.8	4.6	56 g	63 h	13.46 h	3666 i	544 i
VT 024051	0.4	0.8	96 ab	8.9	46 b-d	1.0	2.1	1.4	65 e	70 g	17.34 c-g	5150 c-f	899 d-g
Mean	0.5	1.0	66	9.1	43	0.5	3.5	1.2	67	72	17.46	5168	911
LSD_{0.05}⁵	0.4	0.5	5	1.0	4	0.6	1.1	1.0	2	1	0.01	619	116

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 5. Average percent and pod brightness¹ of jumbo² and fancy³ pods in Field 26 with Proline & Orthene in-furrow treatment

Variety	Jumbo				Fancy			
	Content	Brightness			Content	Brightness		
	%	Hunter <i>L Score</i>	<i>a</i>	<i>b</i>	%	Hunter <i>L Score</i>	<i>a</i>	<i>b</i>
AP 4	3 f-h ⁴	46.13 a-d	3.18 a	15.67 a-d	19 gh	43.07 a-d	3.25 a	14.31 a-c
Florida 07	20 e	46.19 a-d	2.82 a-c	15.74 a-c	54 a	32.64 f	2.37 a-c	9.94 e
Florunner	4 f-h	43.68 ef	3.15 a	14.53 ef	20 g	40.03 de	2.99 ab	12.89 cd
GA 06G	9 f	47.13 a	2.87 a-c	16.25 a	57 a	19.47 g	0.46 d	5.11 f
GA 09B	9 gh	45.21 b-e	3.05 a-c	15.47 a-d	47 bc	38.63 e	3.08 ab	12.57 d
GA Greener	2 h	47.05 ab	2.74 a-c	15.55 a-d	30 f	42.39 a-d	2.89 ab	13.58 b-d
Tifguard	6 f-h	46.40 a-c	3.07 ab	16.24 a	57 ab	31.25 f	1.16 cd	9.96 e
Bailey	55 c	47.78 a	3.22 a	16.28 a	37 de	44.56 ab	2.67 ab	14.83 ab
CHAMPS	57 c	46.77 ab	2.35 bc	15.56 a-d	33 ef	45.69 a	2.40 a-c	15.03 ab
Florida Fancy	75 b	42.66 f	3.14 a	14.24 f	20 g	40.22 c-e	2.68 ab	13.05 cd
Gregory	80 b	46.05 a-d	2.87 a-c	15.64 a-d	14 h-j	42.46 a-d	2.55 ab	14.02 a-d
Perry	41 d	46.36 a-d	2.62 a-c	15.63 a-d	42 cd	45.83 a	1.97 bc	15.18 a
Phillips	53 c	47.12 a	2.82 a-c	15.81 a-c	38 de	45.78 a	2.94 ab	15.06 a
Sugg	55 c	47.17 a	3.11 ab	16.08 ab	35 ef	44.79 ab	3.07 ab	15.00 ab
Titan	89 a	44.54 de	2.78 a-c	14.86 d-f	9 j	40.41 c-e	2.43 ab	12.99 cd
VT 024051	75 b	46.40 a-c	2.28 c	15.33 b-e	21 g	43.76 a-c	2.63 ab	14.08 a-c
Mean	35	45.87	2.90	15.50	31	40.31	2.57	13.10
LSD_{0.05}⁵	6	1.84	0.77	0.86	6	3.56	1.25	1.48

¹ The higher the number the brighter the pod color.

² Pods that do not pass a 38/64 inch opening on the pre-sizer.

³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 6. Effect of variety on yield, value, and grade characteristics of peanut grown in Field 26 with Metam sodium & Temik in-furrow treatment

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
	%										\$/cwt ¹	lb/A	\$/A ³
AP 4	1.2	0.5	20 g ⁴	6.3	30 f	1.1	6.6	0.8	66 c-e	74 ab	17.27 bc	5240 de	905 c-e
Florida 07	1.4	0.6	77 c	6.2	37 e	1.8	6.1	0.9	62 hi	70 c	16.53 de	5927 ab	980 a-c
Florunner	1.3	0.6	18 g	6.2	18 g	0.9	6.6	1.0	65 c-f	73 b	16.81 cd	4606 f	775 f
GA 06G	2.1	0.4	65 d	6.2	43 a-d	1.0	5.0	0.8	68 ab	75 a	17.97 a	5931 ab	1066 a
GA 09B	2.1	0.6	58 e	6.2	45 a-c	1.0	4.4	1.3	69 a	76 a	18.03 a	5815 a-c	1049 ab
GA Greener	1.8	0.5	33 f	6.2	37 e	1.1	6.5	0.9	67 a-c	75 a	17.61 ab	5809 a-c	1023 ab
Tifguard	2.0	0.5	57 e	6.2	41 c-e	0.8	4.7	0.6	69 a	75 ab	17.97 a	5684 a-d	1021 ab
Bailey	0.8	0.6	90 b	6.2	41 c-e	1.7	2.6	1.8	64 d-g	70 c	17.11 b-d	6054 a	1036 ab
CHAMPS	0.8	0.7	90 b	6.1	41 c-e	1.3	2.5	2.5	64 d-h	70 c	16.75 cd	5426 b-e	908 c-e
Florida Fancy	1.1	0.8	95 ab	6.2	43 a-d	1.9	2.1	2.0	62 g-i	68 d	16.60 c-e	5365 c-e	891 c-e
Gregory	0.7	1.0	96 ab	6.1	47 a	0.8	1.9	2.0	63 f-h	68 d	16.68 cd	5942 ab	992 a-c
Perry	0.7	0.8	90 b	6.2	40 de	0.7	2.6	1.8	66 c-f	71 c	17.17 b-d	4931 ef	847 d-f
Phillips	0.5	0.4	93 ab	6.1	47 ab	1.4	1.7	1.4	66 b-d	71 c	17.68 ab	5400 c-e	955 b-d
Sugg	0.6	0.6	96 ab	6.1	43 a-d	2.0	2.3	2.7	64 e-h	71 c	16.91 cd	5362 c-e	907 c-e
Titan	1.2	1.0	97 a	6.1	42 b-e	1.9	2.6	3.0	55 j	62 e	14.49 f	3908 g	573 g
VT 024051	1.0	0.7	96 ab	6.2	41 c-e	1.9	2.4	2.8	61 i	68 d	15.93 e	5299 c-e	847 ef
Mean	1.2	0.6	67	6.2	38	1.3	4.1	1.5	64	71	16.98	5364	914
LSD_{0.05}⁵	0.5	0.2	6	0.2	5	0.8	1.4	0.9	2	1	0.01	521	108

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 7. Average percent and pod brightness¹ of jumbo² and fancy³ pods in Field 26 with Metam sodium & Temik in-furrow treatment

Variety	Jumbo				Fancy			
	Content		Brightness		Content		Brightness	
	%	Hunter L Score	a	b	%	Hunter L Score	a	b
AP 4	2 h ⁴	46 c-e	4.07 a	15.57 a-c	18 e	43.67 b-e	1.94 a	14.20 a-d
Florida 07	22 f	46 c-e	1.63 ab	14.75 d	55 a	32.70 h	0.42 cd	9.27 h
Florunner	2 h	46 de	1.75 ab	14.83 cd	17 e	41.95 ef	2.05 a	13.14 d-f
GA 06G	10 g	47 a-d	2.05 ab	15.91 a	55 a	26.55 i	-0.47 d	7.37 i
GA 09B	10 g	47 a-d	2.15 ab	15.64 ab	48 b	37.37 g	1.44 a-c	11.35 g
GA Greener	3 h	47 a-e	1.88 ab	15.31 a-d	30 d	40.02 fg	1.83 ab	12.38 fg
Tifguard	5 gh	46 c-e	2.23 ab	15.22 a-d	52 ab	32.47 h	0.59 b-d	9.70 h
Bailey	59 d	48 a-c	1.41 b	15.74 a	32 cd	45.81 a-c	1.26 a-c	14.91 ab
CHAMPS	63 cd	48 a	1.35 b	15.69 a	28 d	45.87 a-c	0.86 a-d	14.46 a-d
Florida Fancy	78 b	45 e	1.90 ab	14.60 d	18 e	42.47 c-f	1.89 ab	13.23 c-f
Gregory	84 a	46 b-e	1.48 b	14.86 b-d	12 ef	42.11 d-f	1.67 a-c	12.71 e-g
Perry	53 e	48 a	1.50 b	15.85 a	37 c	47.37 a	1.65 a-c	15.44 a
Phillips	61 cd	48 ab	1.47 b	15.68 a	32 cd	46.30 ab	1.24 a-c	14.63 a-c
Sugg	65 c	47 a-d	1.98 ab	15.69 a	31 cd	45.59 a-d	1.51 a-c	14.49 a-d
Titan	88 a	45 de	1.99 ab	14.69 d	9 f	43.10 b-f	1.77 ab	13.52 b-f
VT 024051	78 b	46 c-e	2.05 ab	14.69 d	17 e	44.90 a-e	1.49 a-c	13.86 b-e
Mean	38	47	2.04	15.28	29	41.33	1.40	12.89
LSD_{0.05}⁵	5	2	2.55	0.80	6	3.60	1.34	1.44

¹ The higher the number the brighter the pod color

² Pods that do not pass a 38/64 inch opening on the pre-sizer.

³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 8. Cultural practices used in the Runner vs. Virginia Test in Field 63D at TAREC (Suffolk), VA in 2011 with Metam sodium and Orthene in-furrow treatment

Planting Date: May 4, 2011

Harvest Date: October 15, 2011

Soil Type: Nansemond & Emporia

Soil Test Results:

pH	P	ppm				
		K	Ca	Mg	Zn	Mn
6.34	26	84	344	45	0.4	2.2

Cultivation: 6/27/11

Soil Fumigant: 4/15 /11 - Metam 10 gal/A

Landplaster: 6/14/11 - Gypsum 1200 lbs/A

Herbicides: 3/18/11 - Roundup @ 22 oz/A
 4/18/11 - Dual @ 1 pt/A; Round-up Wmax @ 22 oz/A
 4/29/11 - Intro @ 1 qt/A; Round-up Wmax @ 22 oz/A
 6/15/11 - Storm @ 1.5 pt/A
 6/27/11 - Intro 1 qt/A

Insecticides: 4/26/11 - Orthene 97 (in furrow) @ 12 oz/A
 5/6/11 - Orthene 97 @ 12 oz/A
 5/24/11 - Orthene 97 @ 12 oz/A
 5/27/11 - Orthene 97 @ 8 oz/A
 6/30/11 - Danitol @ 6 oz/A
 7/27/11 - Lorsban @ 13 lbs/A
 7/28/11 - Danitol @ 10 oz/A
 8/18/11 - Danitol @ 10 oz/A

Fertility: 4/29/11 - Boron @ 1 qt/A
 6/30/11 - Manganese @ 1 qt/A
 7/28/11 - Manganese @ 1 qt/A; Boron @ 1 qt/A
 8/18/11 - Manganese @ 1 qt/A

Fungicides: 6/30/11 - Bravo @ 1 pt/A
 7/28/11 - Provost @ 8 oz/A
 8/18/11 - Provost @ 8 oz/A
 9/14/11 - Bravo @ 1.5 pt/A

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 9. Peanut emergence in Field 63D; stand count was taken on 26 May.

Variety	Stand Counts ¹
AP 4	162.3 c-f ²
Florida 07	108.0 i
Florunner	186.3 ab
GA 06G	159.0 d-f
GA 09B	152.3 e-g
GA Greener	107.0 j
Tifguard	132.3 gh
Bailey	185.3 ab
CHAMPS	179.7 a-c
Florida Fancy	168.3 b-f
Gregory	172.7 b-e
Perry	199.3 a
Phillips	151.0 fg
Sugg	166.3 b-f
Titan	123.7 hi
VT 024051	173.0 b-d
Mean	149.0
LSD_{0.05}³	20.5

¹ Total number of emerged plants in 2 × 30-ft row plots. To get the number of plants/ft, divide stand count by 60.

² Means sharing the same letter(s) are not statistically different.

³ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 10. Tomato Spotted Wilt virus incidence and thrips injury in Field 63D; disease ratings and thrips injury ratings were taken a few days before digging.

Variety	Tomato spotted	
	wilt virus <i>hit count</i> ¹	Thrips <i>injury rating</i> ²
AP 4	4.7 f-i ³	0.5 g
Florida 07	3.7 g-i	1.1 d-f
Florunner	9.7 cd	2.1 a
GA 06G	3.0 hi	0.7 fg
GA 09B	6.0 e-g	0.5 g
GA Greener	3.7 g-i	0.8 e-g
Tifguard	6.0 e-g	1.2 c-e
Bailey	2.0 i	1.5 b-d
CHAMPS	5.0 f-h	1.9 ab
Florida Fancy	2.3 hi	1.6 bc
Gregory	7.0 d-f	1.5 b-d
Perry	10.0 c	1.5 b-d
Phillips	24.3 a	2.3 a
Sugg	4.3 f-i	1.4 cd
Titan	13.0 b	2.3 a
VT 024051	8.7 c-e	1.9 ab
Mean	6.8	1.4
LSD_{0.05} ⁴	2.9	0.5

¹ Hit count is a one foot row with plants showing symptoms of Tomato spotted wilt virus, Sclerotinia blight.

² Thrips injury rating scale of 1-5 was used, with 1 = no injury and 5 = severe injury to all plants

³ Means sharing the same letter(s) are not statistically different.

⁴ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 11. Effect of variety on yield, support price, value and grade characteristics of peanut in Field 63D.

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
					%						\$/cwt ¹	lb/A	\$/A ³
AP 4	0.8	0.9	22 e ⁴	6.7	32 d	2.1	6.6	2.6	63 a-f	74 bc	16.43 a-c	4901 c-e	825 bc
Florida 07	1.4	0.9	79 bc	6.8	38 cd	2.7	5.7	2.3	59 d-g	70 d	15.83 b-d	5808 ab	937 ab
Florunner	1.0	1.6	28 e	6.8	21 e	1.1	6.0	2.4	64 a-c	73 c	16.30 a-c	3828 g	635 d-f
GA 06G	1.5	0.8	68 c	6.7	47 a	1.9	3.5	2.1	68 a	75 ab	17.87 a	5672 a-c	1024 a
GA 09B	1.7	0.8	70 c	6.8	44 a-c	2.5	3.9	5.4	63 a-d	75 ab	15.08 c-e	5025 b-e	860 ab
GA Greener	2.2	2.5	37 de	6.7	38 cd	2.3	5.8	2.2	66 ab	76 a	17.24 ab	5046 b-e	886 ab
Tifguard	2.4	1.0	43 d	6.7	38 cd	1.5	6.6	1.6	63 b-e	73 c	16.69 a-c	4656 d-g	783 b-e
Bailey	0.9	0.8	94 ab	6.8	47 ab	1.8	1.9	3.7	63 b-d	70 d	16.38 a-c	6030 a	1028 a
CHAMPS	0.8	1.4	91 ab	6.6	38 cd	1.5	3.1	5.3	60 c-g	70 d	14.19 d-f	3819 g	618 ef
Florida Fancy	1.0	1.5	96 a	6.8	42 a-c	2.3	2.7	3.8	58 e-g	67 f	15.13 c-e	5244 a-d	841 bc
Gregory	0.4	1.6	96 a	6.5	45 a-c	1.4	1.6	5.2	58 fg	66 f	14.16 d-f	5259 a-d	824 bc
Perry	0.4	1.5	90 ab	6.6	38 cd	2.1	2.4	3.6	62 b-e	71 d	16.39 a-c	4688 d-g	792 b-e
Phillips	0.5	0.9	94 ab	6.5	44 a-c	2.4	1.7	3.8	61 b-g	69 de	15.78 b-e	4802 c-f	804 b-d
Sugg	0.7	1.0	95 a	6.7	42 a-c	2.2	2.8	4.0	61 b-g	70 d	16.17 a-d	5096 b-e	856 ab
Titan	1.0	1.9	98 a	6.8	44 a-c	2.5	1.1	6.6	52 h	62 g	12.25 f	3900 fg	565 f
VT 024051	1.0	1.2	94 a	6.5	39 b-d	2.4	2.2	5.8	57 g	68 ef	13.76 ef	4243 e-g	662 c-f
Mean	1.1	1.3	69	6.7	38	2.0	3.9	3.6	61	71	15.69	4819	800
LSD_{0.05}⁵	0.7	1.2	15	0.2	8	1.1	2.9	2.0	5	2	0.02	904	181

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2011

Table 12. Average percent and pod brightness¹ of jumbo² and fancy³ pods in Field 63D.

Variety	Jumbo				Fancy			
	Content	Brightness			Content	Brightness		
	%	Hunter L Score	a	b	%	Hunter L Score	a	b
AP 4	3 g ⁴	40.99 b-f	2.35 ab	11.80 b-e	19 c-f	38.42 b-e	1.85 a	10.64 b-e
Florida 07	22 e	41.27 b-f	2.00 a-c	11.90 b-e	57 a	26.25 f	0.54 b	6.54 f
Florunner	3 g	40.33 ef	1.97 bc	11.37 de	25 b-d	37.05 c-e	1.97 a	10.14 c-e
GA 06G	10 f	43.64 a	2.73 a	13.28 a	58 a	25.26 f	0.52 b	6.08 f
GA 09B	17 e	41.06 b-f	2.30 a-c	12.19 b-e	53 a	34.46 e	1.78 a	9.28 e
GA Greener	3 g	42.60 ab	2.27 a-c	12.64 a-c	34 b	36.58 c-e	1.99 a	10.37 c-e
Tifguard	5 fg	40.37 d-f	2.07 a-c	11.65 c-e	38 b	28.19 f	0.81 ab	6.71 f
Bailey	68 c	42.04 a-d	1.77 bc	12.69 ab	26 b-d	43.12 a	1.96 a	13.36 a
CHAMPS	65 c	42.12 a-c	1.72 bc	12.14 b-e	25 b-d	40.30 a-c	1.86 a	11.42 a-d
Florida Fancy	80 b	40.13 f	1.61 c	11.22 e	16 c-e	38.10 b-e	1.78 a	10.24 c-e
Gregory	86 b	42.02 a-d	1.85 bc	12.50 a-c	10 ef	39.68 a-e	1.69 ab	11.42 a-d
Perry	56 d	41.93 b-e	1.90 bc	12.31 a-d	35 b	42.22 ab	1.88 a	12.51 ab
Phillips	70 c	41.11 b-f	1.79 bc	11.98 b-e	24 b-e	39.94 a-d	1.63 ab	11.21 b-e
Sugg	65 c	41.40 b-f	1.93 bc	12.32 a-d	30 bc	40.92 a-c	1.77 a	11.92 a-c
Titan	93 a	41.32 b-f	1.74 bc	12.42 a-c	5 f	35.32 de	1.35 ab	9.45 de
VT 024051	81 b	40.44 c-f	1.99 bc	11.23 e	14 d-f	39.54 a-d	1.58 ab	10.93 b-e
Mean	41	41.34	2.01	12.04	29	36.71	1.60	10.17
LSD_{0.05}⁵	6	1.69	0.73	1.00	14	4.70	1.21	1.98

¹ The higher the number the brighter the pod color

² Pods that do not pass a 38/64 inch opening on the pre-sizer.

³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Plant Material and Test Locations - 2012

Table 13. Name and market type of the genotypes evaluated in the Runner vs. Virginia Peanut Test in 2012.

Number	Variety	Market Type
1	AP 4	Runner
2	Florida 07	Runner
3	Florun 107	Runner
4	Florunner	Runner
5	GA 06G	Runner
6	GA 07	Runner
7	GA 09B	Runner
8	GA Greener	Runner
9	Tifguard	Runner
10	Bailey	Virginia
11	Florida Fancy	Virginia
12	Gregory	Virginia
13	Perry	Virginia
14	Phillips	Virginia
15	Titan	Virginia
16	VT 024051	Virginia

Plant Material and Test Locations - 2012

Table 14. Cultural practices used in the Runner vs. Virginia Peanut Test in Field 2 at TAREC (Suffolk), VA in 2012 – Treatment 1 (Proline & Orthene in-furrow treatment).

Planting Date:	May 3, 2012						
Harvest Date:	October 22, 2012						
Soil Type:	Dragston, Eunola						
Soil Test Results:			<u>ppm</u>				
	pH	P	K	Ca	Mg	Zn	Mn
	6.35	27	96	390	42	0.6	2.8
Cultivation:	Conventional						
Soil Fumigant:							
Landplaster:	6/16/12	-	Gypsum 420 @ 1200 lbs/A				
Herbicides:	4/17/12	-	Dual Magnum @ 1 pt/A				
	5/10/12	-	Intro @ 1 qt/A; Gramoxone @ 20 oz/A				
	7/3/12	-	Storm @ 1.5 pt/A; Basagran @ 1 pt/A				
	7/11/12	-	Select @ 1 pt/A				
	7/19/12	-	Intro @ 1 qt/A				
Insecticides:	5/3/12	-	Orthene @ 12 oz/A (in furrow)				
	5/29/12	-	Orthene @ 6 oz/A (broadcast)				
	7/24/12	-	Danitol @ 8 oz/A				
Fertility:	5/10/12	-	Boron 9 @ 1 qt/A				
	7/24/12	-	Manganese 7 @ 1 qt/A				
	8/8/12	-	Boron 9 @ 1 qt/A; Manganese 7 @ 1 qt/A				
Fungicides:	5/3/12	-	Proline @ 5.7 oz/A (in furrow)				
	7/24/12	-	Provost @ 8 oz/A				
	8/8/12	-	Provost @ 8 oz/A; Omega @ 1 pt/A; Asana @ 6 oz/A				

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 15. Emergence of peanut in Field 2 at TAREC (Suffolk), VA in 2012 - Treatment 1 (Proline & Orthene in-furrow treatment)

Variety	Stand Counts¹
<i>Date Taken</i>	<i>5/23/2012</i>
AP 4	190 a-c ²
Florida 07	184 b-d
Florun 107	176 de
Florunner	191 a-c
GA 06G	194 ab
GA 07	163 f-h
GA 09B	196 a
GA Greener	193 a-c
Tifguard	188 a-c
Bailey	162 g-i
Florida Fancy	165 e-g
Gregory	175 d-f
Perry	181 cd
Phillips	184 b-d
Titan	153 hi
VT 024051	151 i
Mean	178
LSD_{0.05}³	12

¹ Total number of emerged plants in 2 × 30-ft row plots. To get the number of plants/ft, divide stand count by 60.

² Means sharing the same letter(s) are not statistically different.

³ Fisher's least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 16. Effect of variety on yield, value, and grade characteristics in Field 2 at TAREC (Suffolk), VA in 2012 with Proline & Orthene in-furrow.

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
	%										\$/cwt ¹	lb/A	\$/A ³
AP 4	1.5	0.3	10 h ⁴	7.2	43 fg	2.5	3.4	2.3	69 b-e	77 bc	18.13 a-c	5111 ab	942 ab
Florida 07	1.2	0.6	11 h	7.6	34 h	2.5	4.1	2.0	68 c-f	77 c	17.93 a-c	5863 a	1061 a
Florun 107	0.9	0.6	11 h	7.5	34 h	2.0	3.9	1.5	69 b-e	77 c	18.10 a-c	5170 ab	942 ab
Florunner	3.5	0.6	22 g	7.6	40 gh	1.5	2.8	2.8	72 ab	79 a	18.43 ab	4927 ab	923 ab
GA 06G	2.6	0.5	65 d	7.2	52 b-e	3.5	2.3	3.1	70 a-e	79 a	18.63 a	5463 ab	1038 a
GA 07	3.3	0.8	53 e	6.9	42 fg	2.7	2.4	2.6	70 a-e	77 bc	18.25 a-c	5070 ab	947 ab
GA 09B	3.1	0.8	41 f	7.2	48 d-f	1.7	2.7	2.3	70 a-e	77 c	18.24 a-c	4662 ab	867 ab
GA Greener	3.2	0.8	64 d	7.3	48 c-f	1.6	2.1	1.9	73 a	78 ab	18.92 a	4709 ab	903 ab
Tifguard	2.4	1.0	66 d	7.2	46 e-g	1.8	2.9	3.0	66 f	74 ef	17.14 c	4933 ab	862 ab
Bailey	1.3	0.3	87 c	7.6	49 c-f	1.8	1.3	2.4	69 b-e	75 d	18.31 a-c	5151 ab	959 ab
Florida Fancy	1.2	0.4	99 a	7.8	53 b-d	1.5	1.2	2.7	67 ef	73 f	17.78 a-c	5053 ab	916 ab
Gregory	1.5	0.5	98 a	7.5	60 a	0.7	0.8	3.8	68 d-f	73 f	17.40 bc	4935 ab	895 ab
Perry	1.1	0.5	92 bc	7.7	57 ab	1.2	1.1	2.0	71 a-d	75 d	18.68 a	5351 ab	1010 a
Phillips	1.3	0.5	95 ab	7.4	61 a	1.2	0.9	2.2	71 a-c	75 d	18.92 a	5197 ab	993 ab
Titan	0.9	0.7	99 a	7.5	55 a-c	1.5	1.1	4.6	62 g	69 g	15.54 d	4508 b	753 b
VT 024051	1.5	0.3	98 a	7.3	54 a-d	1.5	0.9	3.4	68 c-f	74 de	17.74 a-c	5100 ab	937 ab
Mean	1.9	0.6	63	7.4	49	1.8	2.1	2.7	69	76	18.01	5075	934
LSD_{0.05}⁵	1.0	0.3	6	0.5	7	1.1	0.9	1.7	3	2	0.01	1231	247

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 17. Average percent and pod brightness¹ of jumbo² and fancy³ pods in Field 2 at TAREC (Suffolk), VA in 2012 - Treatment 1(Proline & Orthene in-furrow treatment).

Variety	Jumbo				Fancy			
	Content		Brightness		Content		Brightness	
	%	Hunter L Score	a	b	%	Hunter L Score	a	b
AP 4	2 i ⁴	40.79 a-d	1.71 ab	11.61 a-c	8 f	41.03 ab	2.05 ab	11.63 a-c
Florida 07	2 i	41.44 a-c	2.05 ab	11.81 a-c	9 f	39.26 bc	1.95 ab	11.83 cd
Florun 107	2 i	41.38 a-c	1.62 b	11.87 ab	9 f	39.40 bc	1.63 ab	11.19 b-d
Florunner	2 i	40.14 b-d	1.56 b	11.22 bc	20 e	38.99 b-d	1.57 ab	10.73 c-e
GA 06G	8 g	40.59 a-d	1.94 ab	11.55 a-c	56 ab	37.68 c-e	1.50 ab	10.48 de
GA 07	3 hi	41.10 a-c	2.00 ab	11.84 a-c	50 bc	34.99 ef	1.34 b	9.72 ef
GA 09B	5 g-i	40.55 a-d	2.32 ab	11.66 a-c	36 d	39.00 b-d	2.08 ab	10.98 cd
GA Greener	3 hi	40.55 a-d	2.07 ab	11.55 a-c	61 a	36.03 d-f	1.60 ab	9.70 ef
Tifguard	7 gh	40.54 a-d	1.85 ab	11.39 a-c	59 a	37.42 c-e	1.60 ab	10.24 d-f
Bailey	27 f	41.33 a-c	2.10 ab	11.96 ab	60 a	41.18 ab	1.92 ab	12.12 ab
Florida Fancy	81 c	39.85 cd	2.20 ab	11.33 a-c	18 e	38.56 b-d	2.06 ab	10.94 cd
Gregory	87 b	41.62 ab	1.99 ab	12.02 a	11 f	37.73 c-e	1.86 ab	10.27 d-f
Perry	44 e	41.16 a-c	2.46 a	12.09 a	48 c	40.19 a-c	2.56 a	11.67 a-c
Phillips	47 e	41.89 a	2.04 ab	12.07 a	48 c	42.75 a	1.94 ab	12.34 a
Titan	93 a	39.25 d	1.89 ab	11.06 c	6 f	34.23 f	1.69 ab	9.18 f
VT 024051	76 d	40.57 a-d	1.78 ab	11.39 a-c	23 e	38.55 b-d	1.85 ab	10.68 c-e
Mean	31	40.80	1.97	11.66	33	38.56	1.82	10.81
LSD_{0.05}⁵	5	1.73	0.79	0.80	7	3.00	1.07	1.11

¹ The higher the number the brighter the pod color

² Pods that do not pass a 38/64 inch opening on the pre-sizer.

³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 18. Cultural practices for the Runner vs. Virginia Peanut Test Field 2 at TAREC (Suffolk), VA in 2012 – Treatment 2 (Metam sodium & Temik in-furrow treatment).

Planting Date:	May 3, 2012						
Harvest Date:	October 22, 2012						
Soil Type:	Dragston, Eunola						
Soil Test Results:			ppm				
	pH	P	K	Ca	Mg	Zn	Mn
	6.35	27	96	390	42	0.6	2.8
Cultivation:	Conventional						
Soil Fumigant:	4/16/12	-	Sectagon (Metam) @ 8 gal/A				
Landplaster:	6/16/12	-	Gypsum 420 @ 1200 lbs/A				
Herbicides:	4/17/12	-	Dual Magnum @ 1 pt/A				
	5/10/12	-	Intro @ 1 qt/A; Gramoxone @ 20 oz/A				
	7/3/12	-	Storm @ 1.5 pt/A; Basagran @ 1 pt/A				
	7/11/12	-	Select @ 1 pt/A				
	7/19/12	-	Intro @ 1 qt/A				
Insecticides:	5/3/12	-	Temik @ 7 lbs/A				
	5/29/12	-	Orthene @ 6 oz/A (broadcast)				
	7/24/12	-	Danitol @ 8 oz/A				
Fertility:	5/10/12	-	Boron 9 @ 1 qt/A				
	7/24/12	-	Manganese 7 @ 1 qt/A				
	8/8/12	-	Boron 9 @ 1 qt/A; Manganese 7 @ 1 qt/A				
Fungicides:	7/24/12	-	Provost @ 8 oz/A				
	8/8/12	-	Provost @ 8 oz/A; Omega @ 1 pt/A; Asana @ 6 oz/A				

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 19. Peanut emergence in Field 2 at TAREC (Suffolk), VA in 2012 - Treatment 2 (Metam sodium & Temik in-furrow treatment)

Variety	Stand Counts ¹
<i>Date Taken</i>	<i>5/23/2012</i>
AP 4	193 a-d ²
Florida 07	184 b-e
Florun 107	194 a-d
Florunner	197 ab
GA 06G	195 a-c
GA 07	182 c-e
GA 09B	200 a
GA Greener	199 a
Tifguard	196 ab
Bailey	181 de
Florida Fancy	166 fg
Gregory	178 ef
Perry	179 e
Phillips	173 ef
Titan	156 g
VT 024051	158 g
Mean	183
LSD_{0.05}³	13

¹ Total number of emerged plants in 2 × 30-ft row plots. To get the number of plants/ft, divide stand count by 60.

² Means sharing the same letter(s) are not statistically different.

³ Fisher's least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 20. Yield and grade characteristics of peanut in Field 2 at TAREC (Suffolk), VA in 2012 - Treatment 2 (Metam sodium & Temik in-furrow treatment)

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
	%										\$/cwt ¹	lb/A	\$/A ³
AP 4	1.1	0.4	38 ef ⁴	7.1	36 gh	5.1	3.0	2.9	66 ef	77 c	17.86 a-d	5387 c-e	983 c-e
Florida 07	0.7	0.5	12 g	7.3	33 h	1.8	4.0	3.0	67 c-f	76 de	17.31 b-d	5298 de	932 ef
Florun 107	0.7	0.5	10 g	7.4	32 h	2.9	4.6	1.7	66 ef	76 d-f	17.56 a-d	5514 a-e	978 de
Florunner	2.2	0.7	23 fg	7.3	39 g	2.0	2.4	3.9	69 a-d	78 bc	17.05 b-d	5359 c-e	976 de
GA 06G	1.8	0.4	69 bc	7.2	54 a-c	5.7	3.7	3.4	68 b-e	79 a	18.57 ab	5536 a-e	1063 a-c
GA 07	1.8	0.7	53 c-e	7.1	45 ef	4.1	2.8	2.0	69 b-e	77 bc	18.48 a-c	5385 c-e	1005 c-e
GA 09B	2.0	0.6	43 d-f	7.2	48 d-f	1.5	2.5	1.6	70 ab	76 d	18.33 a-c	5284 de	977 de
GA Greener	2.0	0.6	65 cd	7.3	52 b-d	2.4	1.8	1.9	72 a	78 ab	19.07 a	5888 ab	1133 a
Tifguard	1.5	0.7	69 bc	7.6	44 f	2.5	2.6	3.6	64 fg	73 ij	16.50 d	5490 b-e	942 ef
Bailey	0.6	0.3	89 ab	7.6	50 c-e	2.9	1.3	3.2	67 d-f	74 gh	17.78 a-d	5977 a	1089 ab
Florida Fancy	1.4	0.4	97 a	7.3	46 ef	3.9	1.7	3.9	63 g	72 j	16.90 cd	5076 ef	883 f
Gregory	1.4	0.5	98 a	7.3	57 a	1.5	0.8	3.7	66 ef	72 j	16.96 b-d	5892 ab	1044 b-d
Perry	0.5	0.6	91 ab	7.2	51 cd	2.0	1.5	4.8	66 d-f	75 e-g	16.99 b-d	5806 a-c	1045 b-d
Phillips	0.5	0.3	95 a	7.2	57 ab	1.5	0.9	2.5	70 a-c	75 fg	18.50 a-c	5888 ab	1103 ab
Titan	1.1	0.7	98 a	7.3	48 d-f	3.4	1.0	5.7	57 h	69 k	13.33 e	4769 f	761 g
VT 024051	1.3	0.3	99 a	7.1	53 a-c	3.6	1.1	4.5	64 fg	73 hi	16.64 d	5593 a-d	999 c-e
Mean	1.3	0.5	66	7.3	47	2.9	2.2	3.3	67	75	17.36	5509	995
LSD_{0.05}⁵	0.4	0.3	22	0.5	5	1.7	1.5	2.0	3	1	0.02	477	83

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 21. Average percent and pod brightness¹ of jumbo² and fancy³ pods in Field 2 at TAREC (Suffolk), VA in 2012 -Treatment 2 (Metam sodium & Temik in-furrow treatment)

Variety	Jumbo				Fancy			
	Content	Brightness			Content	Brightness		
	%	Hunter L Score	a	b	%	Hunter L Score	a	b
AP 4	18 d ⁴	42.35 a-c	1.83 a	12.95 ab	21 d	41.95 ab	1.68 a	12.60 a-c
Florida 07	2 e	41.52 a-d	1.36 a-c	12.45 a-c	8 d	40.43 a-c	1.70 a	11.96 b-e
Florun 107	2 e	42.44 a-c	1.69 ab	12.71 ab	10 d	41.39 ab	1.42 a-c	12.25 a-d
Florunner	1 e	41.54 a-d	1.19 bc	12.15 a-c	22 d	40.45 a-c	1.21 a-c	11.69 c-f
GA 06G	8 de	42.26 a-c	1.57 ab	12.64 ab	61 ab	36.61 d-f	1.17 a-c	10.40 fg
GA 07	3 e	41.25 b-d	1.45 a-c	12.32 a-c	50 a-c	36.14 ef	0.75 cd	10.49 fg
GA 09B	3 e	40.61 cd	1.42 a-c	12.09 a-c	40 c	37.37 c-e	1.46 ab	10.82 ef
GA Greener	2 e	41.95 a-d	1.31 a-c	12.63 ab	63 a	33.20 f	0.38 d	9.24 g
Tifguard	5 e	40.97 b-d	1.32 a-c	12.03 bc	64 a	36.89 de	0.80 b-d	10.56 fg
Bailey	30 c	43.03 ab	1.37 a-c	13.02 a	59 ab	42.48 ab	1.75 a	12.70 a-c
Florida Fancy	77 a	39.82 d	1.57 ab	11.59 c	20 d	37.26 c-e	1.38 a-c	10.61 f
Gregory	87 a	41.50 a-d	1.18 bc	12.36 a-c	11 d	39.29 b-e	1.65 a	11.17 d-f
Perry	36 bc	42.16 a-c	1.40 a-c	12.85 ab	55 a-c	43.20 a	1.39 a-c	13.41 a
Phillips	48 b	42.35 a-c	1.39 a-c	12.82 ab	48 bc	43.06 a	1.24 a-c	13.03 ab
Titan	88 a	41.55 a-d	1.67 ab	12.33 a-c	11 d	39.59 b-d	1.25 a-c	11.42 c-f
VT 024051	83 a	43.60 a	0.92 c	12.93 ab	16 d	41.67 ab	1.36 a-c	12.20 b-d
Mean	31	41.81	1.41	12.49	35	39.44	1.29	11.53
LSD_{0.05}⁵	12	2.14	0.60	0.98	14	3.41	0.69	1.34

¹ The higher the number the brighter the pod color² Pods that do not pass a 38/64 inch opening on the pre-sizer.³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.⁴ Means sharing the same letter(s) are not statistically different.⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 22. Cultural practices used for the Runner vs. Virginia Peanut Test in Field 63A at TAREC (Suffolk), VA in 2012, with Metam sodium and Orthene in-furrow treatment

Planting Date: May 3, 2012

Harvest Date: October 24, 2012

Soil Type: Emporia, Nansemond

Soil Test Results:

pH	P	ppm				
		K	Ca	Mg	Zn	Mn
6.17	26	61	295	34	0.4	2.6

Cultivation: Strip Till

Soil Fumigant: 4/14/12 - Sectagon (Metam) @ 8 gal/A

Landplaster: 6/16/12 - Gypsum 420 @ 1200 lbs/A

Herbicides: 4/17/12 - Dual Magnum @ 1 pt/A
 5/10/12 - Intro @ 1 qt/A; Gramoxone @ 20 oz/A
 7/3/12 - Storm @ 1.5 pt/A; Basagran @ 1 pt/A
 7/11/12 - Select @ 1 pt/A
 7/19/12 - Intro @ 1 qt/A

Insecticides: 5/3/12 - Orthene @ 12 oz/A (in furrow)
 5/29/12 - Orthene @ 6 oz/A (broadcast)
 7/24/12 - Danitol @ 8 oz/A

Fertility: 5/3/12 - Optimize Lift @ 16 oz/A
 5/10/12 - Boron 9 @ 1 qt/A
 7/24/12 - Manganese 7 @ 1 qt/A
 8/8/12 - Boron 9 @ 1 qt/A; Manganese 7 @ 1 qt/A

Fungicides: 7/24/12 - Provost @ 8 oz/A
 8/8/12 - Provost @ 8 oz/A; Omega @ 1 pt/A;
 Asana @ 6 oz/A

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 23. Peanut emergence in Field 63A at TAREC (Suffolk), VA in 2012.

Variety	Stand Counts¹
<i>Date Taken</i>	<i>5/22/2012</i>
AP 4	191.3 a-c ²
Florida 07	185.7 b-d
Florun 107	178.3 cd
Florunner	189.7 a-d
GA 06G	204.0 a
GA 07	174.7 d
GA 09B	189.0 a-d
GA Greener	200.0 ab
Tifguard	190.0 a-d
Bailey	178.0 cd
Perry	183.0 cd
Phillips	177.3 cd
Titan	157.3 e
VT 024051	155.3 e
Gregory	179.3 cd
Florida Fancy	176.7 cd
Mean	181.9
LSD_{0.05}³	15.4

¹ Total number of emerged plants in 2 × 30-ft row plots. To get the number of plants/ft, divide stand count by 60.

² Means sharing the same letter(s) are not statistically different.

³ Fisher's least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 24. Yield and grade characteristics of peanut in Field 63A at TAREC (Suffolk), VA in 2012.

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
	%										\$/cwt ¹	lb/A	\$/A ³
AP 4	0.9	1.2	7 f ⁴	6.4	40 d	5.3	2.9	4.0	65 a-c	78 a	17.35 ab	4423 a-d	792 bc
Florida 07	0.8	0.5	12 f	6.4	29 e	3.5	4.9	5.9	61 c-f	75 de	14.08 d-h	4285 b-d	707 cd
Florun 107	0.9	0.5	8 f	6.7	33 e	3.5	4.9	3.6	64 b-d	76 cd	16.58 a-e	4457 a-c	769 b-d
Florunner	2.6	1.1	21 e	6.7	33 e	2.9	3.8	6.4	64 bc	77 ab	14.90 b-g	3160 f	545 fg
GA 06G	1.8	0.6	64 c	6.6	40 d	9.3	3.5	9.8	55 g	78 a	11.66 h	4310 b-d	720 cd
GA 07	2.6	0.7	46 d	6.4	43 b-d	5.5	2.7	4.7	64 bc	77 a-c	16.77 a-d	4367 b-d	779 bc
GA 09B	2.4	0.9	47 d	6.6	48 ab	2.4	2.6	2.7	68 a	76 b-d	17.99 a	4370 b-d	799 bc
GA Greener	2.6	1.8	65 c	6.6	48 ab	4.0	2.6	4.4	67 ab	78 a	17.28 a-c	4823 ab	880 ab
Tifguard	1.6	0.8	66 c	6.6	39 d	4.1	4.7	5.2	58 e-g	72 g	14.58 c-g	4804 ab	778 bc
Bailey	0.6	0.6	87 b	7.1	51 a	3.0	1.8	3.1	67 ab	75 de	18.06 a	5010 a	923 a
Florida Fancy	1.1	0.6	93 ab	7.0	48 a-c	2.9	1.3	4.6	64 c	73 fg	16.25 a-f	4270 b-d	748 cd
Gregory	1.0	0.6	96 a	6.9	51 a	3.3	1.1	6.7	61 c-f	72 g	14.25 d-h	3847 de	654 d-f
Perry	0.6	0.5	90 ab	7.0	42 cd	4.9	1.7	9.3	59 e-g	75 de	12.68 gh	4538 a-c	764 b-d
Phillips	0.9	0.4	92 ab	6.8	49 a	3.5	1.4	7.5	62 c-e	74 ef	13.81 f-h	3974 c-e	681 c-e
Titan	1.1	1.1	97 a	6.9	48 a-c	3.9	1.4	6.1	57 fg	69 h	14.00 e-h	3144 f	509 g
VT 024051	1.6	0.5	96 a	7.0	45 a-d	4.0	1.2	8.4	60 d-f	73 fg	12.67 gh	3405 ef	570 e-g
Mean	1.5	0.8	60	6.7	43	3.9	2.7	5.5	63	75	15.39	4160	720
LSD_{0.05}⁵	0.8	0.9	8	0.5	6	1.9	1.3	2.8	4	1	0.03	594	118

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 25. Average percent and pod brightness¹ of jumbo² and fancy³ pods in Field 63A at TAREC (Suffolk), VA in 2012

Variety	Jumbo				Fancy			
	Content		Brightness		Content		Brightness	
	%	Hunter L Score	a	b	Hunter L Score	a	b	
AP 4	2 g ⁴	40.50 c-f	1.74 cd	12.87 ab	5 f	41.80 ab	1.64 ab	13.13 ab
Florida 07	1 g	41.79 a-d	2.01 a-d	12.89 ab	11 ef	39.14 c-e	1.82 ab	11.93 cd
Florun 107	1 g	41.69 a-e	1.55 d	12.88 ab	7 f	40.37 a-c	1.72 ab	12.29 bc
Florunner	1 g	42.81 ab	1.63 d	13.24 ab	20 de	38.28 c-e	1.92 ab	11.66 c-e
GA 06G	5 g	38.99 f	2.67 a	12.47 b	59 a	35.15 fg	2.16 a	10.78 e
GA 07	2 g	41.89 a-d	2.04 a-d	13.21 ab	44 bc	37.99 c-e	1.61 ab	11.72 c-e
GA 09B	4 g	39.68 ef	1.84 b-d	12.49 b	42 bc	37.10 ef	1.66 ab	11.62 c-e
GA Greener	3 g	41.65 a-e	1.84 b-d	13.07 ab	62 a	32.86 g	0.97 b	9.73 f
Tifguard	5 g	40.95 b-f	1.69 d	12.38 b	61 a	37.78 de	1.36 ab	11.21 de
Bailey	22 f	42.00 a-c	2.20 a-d	13.42 a	65 a	41.93 ab	1.87 ab	13.86 ab
Florida Fancy	76 bc	39.38 f	1.69 d	12.47 b	17 de	37.86 c-e	2.25 a	11.70 c-e
Gregory	83 ab	40.77 b-f	2.41 a-c	12.77 ab	13 ef	39.47 b-e	1.91 ab	12.21 b-d
Perry	42 e	43.18 a	2.07 a-d	13.62 a	48 b	42.92 a	2.20 a	14.09 a
Phillips	55 d	43.14 a	2.01 a-d	13.46 a	37 c	40.40 a-c	2.17 a	12.34 bc
Titan	84 a	39.91 d-f	2.45 ab	12.37 b	13 ef	37.73 de	1.90 ab	11.44 c-e
VT 024051	73 c	41.77 a-d	1.99 a-d	12.99 ab	24 d	39.93 b-d	2.05 a	12.12 cd
Mean	29	41.26	1.95	12.89	30	38.70	1.79	11.87
LSD_{0.05}⁵	7	2.07	0.68	0.88	9	2.55	0.95	1.00

¹ The higher the number the brighter the pod color

² Pods that do not pass a 38/64 inch opening on the pre-sizer.

³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 26. Cultural practices used in Runner vs. Virginia Test at Newsoms, VA in 2012.

Planting Date:	May 14, 2012
Harvest Date:	October 25, 2012
Cultivation:	Conventional
Soil Fumigant:	Sectagon (Metam) 8 gal/A
Landplaster:	Gypsum 420 @ 1000 lbs/A
Cracking Stage:	1 pt/A Dual, 2 oz./A Pursuit, ½ rate Strongarm
1 st Leafspot:	10 oz/A Provost, 4 oz/A Asana, 1 qt/A Boron, 1 qt/A Manganese
2 nd Leafspot:	12 oz/A Abound, 1 qt/A Boron, 1 qt/A Manganese
3 rd Leafspot:	10 oz/A Provost, 4 oz/A Asana
4 th Leafspot:	1 ½ pt/A Bravo

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 27. Yield and grade characteristics of peanut at Newsoms, VA in 2012.

Variety	LSK	FM	Fancy	Water	ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ²	Value
	%										\$/cwt ¹	lb/A	\$/A ³
AP 4	0.4	1.0	15 e ⁴	5.9	20 d-f	1.5	5.7	1.3	67 c-e	76 a	17.45 a-c	4897 c-e	858 d-f
Florida 07	0.7	1.5	14 e	6.1	17 ef	1.8	3.8	1.4	69 a-e	76 a	17.69 a-c	4204 e	746 f
Florun 107	0.3	4.4	12 e	6.0	12 f	1.9	5.5	0.9	67 c-e	76 a	17.37 a-c	4469 de	779 ef
Florunner	0.6	0.9	17 e	5.8	21 c-f	1.2	2.5	1.0	73 a	78 a	18.60 a	5058 b-e	946 b-e
GA 06G	1.1	3.7	52 c	6.0	29 b-d	2.8	4.5	1.0	67 c-e	76 a	17.73 a-c	5440 a-d	973 a-d
GA 07	1.5	4.7	44 cd	5.9	17 ef	1.3	3.9	1.2	70 a-d	76 a	17.76 a-c	5161 b-e	920 b-f
GA 09B	0.7	1.7	39 d	5.9	25 b-e	0.6	3.8	0.8	71 a-c	76 a	18.06 ab	5013 c-e	905 b-f
GA Greener	1.2	1.2	37 d	5.9	28 b-d	0.9	3.0	1.1	73 ab	78 a	18.59 a	5626 a-c	1048 a-c
Tifguard	0.8	4.9	55 c	5.9	19 d-f	1.1	6.0	0.9	64 e-g	72 bc	16.49 cd	5258 b-d	873 c-f
Bailey	0.7	0.9	82 ab	6.0	29 b-d	1.7	1.6	1.8	68 c-e	73 b	17.63 a-c	6413 a	1141 a
Florida Fancy	0.4	0.7	83 ab	6.1	27 b-e	1.5	2.2	3.1	64 e-g	71 bc	16.46 cd	4890 c-e	825 d-f
Gregory	0.7	2.1	94 a	6.2	39 a	0.9	1.5	3.0	65 d-g	71 bc	16.84 b-d	5671 a-c	975 a-d
Perry	0.2	1.5	76 b	6.1	26 b-e	1.3	2.6	3.2	65 c-f	72 b	16.78 b-d	6248 a	1079 ab
Phillips	0.5	1.2	84 ab	6.2	32 ab	1.0	1.5	2.0	68 b-e	72 b	17.50 a-c	5995 ab	1064 ab
Titan	0.7	3.8	86 ab	6.2	30 a-c	1.1	2.2	3.6	60 g	67 d	14.98 e	4969 c-e	773 ef
VT 024051	0.5	2.5	91 a	6.2	25 b-e	1.4	2.5	4.0	62 fg	70 c	15.45 de	5508 a-c	905 b-f
Mean	0.7	2.3	55	6.0	25	1.4	3.3	1.9	67	74	17.21	5297	926
LSD_{0.05}⁵	0.4	2.9	12	0.3	9	1.2	2.2	1.5	5	2	0.01	977	183

¹ Support price represents the market value based on the loan rate.

² All yields are net, adjusted to 7 % standard moisture and foreign material is deducted.

³ Value is calculated from yields and support price after premium and deductions were applied to yield based on grade factors: SMK, ELK, SS, OK, DK

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.

Comparisons of Runner- and Virginia-type Peanuts - 2012

Table 28. Average percent and pod brightness¹ of jumbo² and fancy³ pods at Newsoms, VA in 2012.

Variety	Jumbo				Fancy			
	Content		Brightness		Content		Brightness	
	%	Hunter L Score	a	b	%	Hunter L Score	a	b
AP 4	3 e ⁴	45.43 b	2.62 ab	15.31 c	12 g	45.22 a-d	2.51 a-d	15.17 b-e
Florida 07	3 e	46.49 ab	2.53 ab	15.93 a-c	11 g	45.09 a-d	2.44 a-d	15.29 a-e
Florun 107	0 e	46.18 ab	2.95 ab	15.37 bc	12 g	45.58 ab	2.69 a-d	15.11 c-e
Florunner	1 e	45.69 ab	2.65 ab	15.16 bc	16 fg	45.39 a-c	2.48 a-d	15.15 c-e
GA 06G	10 e	45.29 b	2.72 ab	15.15 c	41 ab	44.75 a-d	3.11 a	14.80 c-e
GA 07	4 e	46.65 ab	3.03 ab	16.16 a-c	40 a-c	44.96 a-d	2.87 a-c	15.16 c-e
GA 09B	4 e	45.90 ab	3.17 a	15.92 a-c	35 a-d	43.81 b-d	3.13 a	14.68 c-e
GA Greener	5 e	46.22 ab	2.60 ab	16.06 a-c	32 b-e	45.44 a-c	2.55 a-d	15.54 a-d
Tifguard	10 e	45.75 ab	2.76 ab	15.09 c	45 a	44.64 a-d	2.92 ab	14.51 c-e
Bailey	41 cd	46.76 ab	2.28 b	16.69 ab	41 ab	46.91 a	2.10 b-d	16.64 a
Florida Fancy	55 bc	44.20 b	2.35 b	15.46 bc	28 c-f	42.82 cd	2.03 d	14.29 de
Gregory	72 a	45.60 ab	2.29 b	16.32 a-c	22 d-g	43.63 b-d	2.14 b-d	15.03 c-e
Perry	34 d	46.06 ab	2.25 b	16.37 a-c	42 ab	45.55 ab	2.09 b-d	15.82 a-c
Phillips	43 cd	48.12 a	2.42 ab	17.21 a	41 a-c	47.05 a	2.67 a-d	16.61 ab
Titan	65 ab	45.69 ab	2.37 b	15.41 bc	21 e-g	43.34 b-d	2.03 cd	14.74 c-e
VT 024051	64 ab	44.99 b	2.27 b	15.41 bc	26 d-f	42.58 d	2.36 a-d	14.00 e
Mean	26	45.94	2.58	15.84	29	44.78	2.51	15.16
LSD_{0.05}⁵	16	2.63	0.78	1.35	13	2.66	0.84	1.44

¹ The higher the number the brighter the pod color

² Pods that do not pass a 38/64 inch opening on the pre-sizer.

³ Pods that fell through a 38/64 inch opening but do not pass a 34/64 inch opening on the pre-sizer.

⁴ Means sharing the same letter(s) are not statistically different.

⁵ Fisher's protected least significant difference (LSD) at P = 0.05.