

# Peanut Variety Performance in Florida, 2006–2009<sup>1</sup>

B.L. Tillman, M.W. Gomillion, J. McKinney, G. Person, and W.D. Thomas<sup>2</sup>

Variety choice is a critical management decision in producing a peanut crop. Several good peanut varieties are available to choose from, so it is essential to know the attributes of each variety, as well as how various varieties might fit into a farm plan.

When trying a new peanut variety for the first time, plant a relatively small test plot (20-50 acres) that will allow you to see the differences between varieties firsthand. Be aware, however, that comparing varieties planted in different fields, or even in different parts of the same field, can be misleading due to the potentially confounding differences between fields such as soil type, irrigation/rainfall, soil borne diseases, and planting date. UF | IFAS publication AG341 / SS-AGR-331 Methods for On-Farm Testing of Peanut Varieties in Florida with Results from 2005–2009 http://edis.ifas.ufl.edu/AG341 outlines methods of on-farm testing of new varieties on this scale; these methods will more accurately determine variety differences and minimize the confounding effects mentioned above. When choosing which varieties to plant, consider pod yields and grades, but also consider a variety's disease resistance, maturity, seed supply, and anticipated planting dates.

Growers planting more than 100 acres of peanuts should plant at least two varieties. Planting more than one variety can help to spread risk of losses from weather, reduce opportunities for disease, and limit delays in harvest operations. For example, if a field has a history of white mold, use varieties that have a better resistance to that disease compared to other varieties. Use the *Peanut Disease Risk Index* to evaluate variety disease resistance http://www.caes.uga.edu/commodities/fieldcrops/ peanuts/2009peanutupdate/peanutrx.html. Your county agent can provide other useful resources. A summary table from the *Peanut 2010 Disease Risk Index* is included in this article (Table 5).

The potentially devastating effects of tomato spotted wilt virus (TSWV) in the southeastern United States are another reason variety choice is very important. Severity of TSWV varies from year to year, and scientists are unable to predict disease levels for a coming crop season. Because TSWV is unpredictable, planting a peanut variety with good resistance to TSWV can significantly reduce the risk of losses from that disease.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Millie Ferrer-Chancy, Interim Dean

<sup>1.</sup> This document is SS-AGR-330, one of a series of the Agronomy Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date March 2010. Visit the EDIS Web site at http://edis.ifas.ufl.edu.

<sup>2.</sup> Barry Tillman, assistant professor, Agronomy Department, North Florida Research and Education Center (NFREC) – Marianna, FL; Mark Gomillion, biological scientist, NFREC – Marianna, FL; George Person, senior biological scientist, NFREC – Quincy, FL; Justin McKinney, senior biological scientist, Agronomy Department, Research and Demonstration Site – Citra, FL; and, Bill Thomas, agronomy extension agent IV, Columbia County Extension Office, Lake City, FL; Institute of Food and Agricultural Sciences, University of Florida; Gainesville 32611.

Among the sites in Florida where peanut varieties have been tested, TSWV is usually most severe in Marianna, so variety performance in that location will give a good indication of the TSWV resistance of a given variety. Results often are very different between Marianna, Gainesville, and Jay, depending on TSWV pressure, other disease pressure within those areas, and environmental conditions, including soil type and rainfall. Table 5 includes summarized data for variety resistance to TSWV.

This report provides data from University of Florida trials conducted in Florida at IFAS research centers located in Gainesville (Citra), Marianna, and Jay from 2006–2009. Tests in Marianna and Gainesville were grown with irrigation. The tests at Jay were not irrigated. All tests were managed for optimum production, including the use of pesticides to control various diseases, insects, and weeds. In-furrow insecticides (aldicarb [Temik] or phorate [Thimet]) were used in Gainesville and Jay throughout the trials, and were used in 2008 and 2009 in Marianna.

# Peanut Varieties in the Southeastern United States

Historically, peanut acreage in the southeastern United States has been dominated by one variety during a given period. For about 20 years, from the early 1970s and continuing through the early 1990s, 'Florunner' was the dominant peanut variety grown in this region of the United States. In the mid-1990s, however, TSWV began to cause severe losses in Florunner as well as in other varieties used at the time that did not have TSWV resistance. Since the late 1990s, 'Georgia Green' has been the dominant cultivar planted in this region, rising quickly in popularity for its moderate resistance to TSWV, good grades, and good pod yield—when it was released in 1996, it was the only medium-maturity runner variety with resistance to TSWV.

Nevertheless, as the TSWV epidemic of the 1990s had demonstrated, the practice of relying heavily on one cultivar at a time is dangerous for the peanut industry. Like Florunner before it, Georgia Green in 2005 occupied about 75 percent of the certified seed acreage in Alabama, Florida, and Georgia (Figure 1). In the 10 or more years before 2005, Georgia Green had also occupied at least that amount of acreage in these states. In 2006, however, other peanut varieties began to displace Georgia Green in certified seed acreage in this region. By 2009, Georgia Green occupied only about 10 percent of the seed acreage in Alabama, Florida, and Georgia (Figure 2).



Figure 1. Certified seed acreage in Alabama, Florida, and Georgia in 2005.



Figure 2. Certified seed acreage in Alabama, Florida, and Georgia in 2009.

Clearly, on an industry-wide scale, it seems preferable that no one variety occupy more than 50 percent of the certified seed acreage. Diversity in peanut varieties planted can reduce the risk of losses from disease and provide a buffer against differential environmental impacts on a given variety. Considering that the seed-increase ratio of peanuts is low, having several varieties in seed production at significant levels allows a much quicker shift to different varieties if needed. Using the information on variety performance provided below, it is possible to

devise a plan that uses several varieties to spread risk of losses from disease. This information also helps in choosing varieties based on their relative maturity and disease resistance to help spread harvest and planting operations over a longer period.

# **Recently Released Varieties**

Several new runner varieties were released in 2007 and 2008. University of Florida released 'Florida-07', 'McCloud', and 'AP-4'. Florida-07 is a medium- to medium-late maturing, large-seeded runner with excellent resistance to TSWV, good resistance to white mold, and some tolerance to leaf spots. Florida-07 has high oleic oil chemistry, and it has demonstrated excellent yield potential and good grades. McCloud is a medium-maturity, large-seeded runner with high oleic oil chemistry. McCloud has better TSWV resistance than Georgia Green, but is similar to Georgia Green in its resistance to other diseases. McCloud has demonstrated good yield potential and excellent grades. Seed of Florida-07 should be readily available for the 2010 season. Seed quantities of McCloud will be limited in 2010.

AP-4 is a large-seeded runner with good resistance to TSWV and moderate resistance to white mold. AP-4 outperforms Georgia Green in both of these important measures. AP-4 has also demonstrated excellent pod yield and very good grades. AP-4 has normal oleic oil chemistry. Seed of AP-4 should be available for the 2010 season.

The new Virginia-type variety, 'Florida Fancy', was released by University of Florida in 2007. Florida Fancy has high oleic oil chemistry and standard Virginia-type pod and seed size. Florida Fancy has demonstrated very good yield potential, and it has among the best resistance to TSWV available in a Virginia-type variety. Seed of Florida Fancy should be available for the 2010 season.

University of Georgia has three new runner varieties: 'Georgia-06G', released in 2006, and 'Georgia Greener' and 'Georgia-07W', both released in 2007. All three of these varieties have normal oleic oil chemistry, excellent grades, medium maturity, and competitive pod yield. Georgia-06G is a large-seeded runner with good TSWV resistance. Georgia Greener has smaller seed than Georgia-06G and very good resistance to TSWV. Georgia-07W has large seed and very good resistance to TSWV and white mold. Seed of Georgia-06G should be generally available for the 2010 season, whereas seed of Georgia Greener should be available in 2010, and seed of Georgia-07W should be generally available in 2011.

The U.S. Department of Agriculture (USDA) released a new runner variety in 2007—'Tifguard'. It is a medium-maturing, large-seeded runner, and the first variety to combine resistance to TSWV and a high level of resistance to root-knot nematode. That combination of resistance to disease and nematodes will allow growers in the southeastern United States to take advantage of the same root-knot nematode resistance as in 'NemaTam', a peanut variety developed in Texas and released in 2002. Seed of Tifgaurd should be generally available for the 2010 season. Growers who normally use 1,3-D (Telone) to control nematodes should be able to cultivate Tifguard on nematode-infested sites without using Telone.

Golden Peanut Company released two runner types—'AT215' and 'AT3085RO'. AT215 is a large-seeded runner type with early relative maturity, similar to 'Andru II' and 'Virugard', and with high oleic oil chemistry. AT215 is susceptible to TSWV, so is not a candidate for early planting. However, AT215's early maturity could be a benefit in situations that require planting in late May or early June. Seed of AT215 should be available in 2010.

AT3085RO is a medium-maturity, large-seeded runner with good resistance to TSWV and high oleic oil chemistry. Seed quantity of AT3085RO will be limited in 2010.

#### 2009 Results

Table 1 details pod yields, total sound mature kernels percentage (TSMK), maturity and TSWV ratings for tests at three locations in Florida in 2009. Each entry was harvested (dug) at its apparent optimum-maturity stage, i.e., E = 125-130 days after planting (DAP); M = 133-139 DAP; L = 145-155DAP. Ratings for TSWV were on a 1–10 scale, where 1 = no disease, and 10 = all plants with severe damage or dying.

Spotted wilt was nearly non-existent in 2009, and yields were relatively very good. Among the medium-maturity varieties tested, Florida-07, Georgia -06G, Georgia-07W, AP-3, Georgia Greener, and AP-4 had similar pod yield that was greater than the other medium-maturity varieties. Among the Virginia-type varieties, 'Bailey' and 'Georgia-08V' had the highest pod yield.

Results from any single year should not be used to determine variety performance for the purpose of variety selection. Rather, the results from 2009 presented here are simply a reflection of the growing season that occurred in that year and how varieties performed. The multi-year results are better suited for comparison of the performance of varieties year over year.

## Multi-Year Results

Averaging over two or more years and locations is a powerful method of determining how a peanut variety will perform over a wide array of environments. The performance of runner market-type peanut varieties in Florida over the past four years (2006-2009) is shown in Table 2.

Among the medium-maturity cultivars tested during 2008–2009, Florida-07, AP-4, Georgia-06G, Georgia-07W, and Georgia Greener had the highest pod yield. Georgia-07W, AT215, Georgia-06G, and Georgia Greener had the highest TSMK grade among the medium-maturity types. Among the medium-maturity varieties tested for the three-year period (2007-2009), Florida-07, AP-4, Georgia-06G, and Georgia Greener had the highest pod yield. Among medium-maturity varieties tested for four years (2006-2009), Florida-07 had the highest pod yield. With the exception of Georgia Green and AT215, the resistance to TSWV among the medium-maturity group is very good. Spotted wilt was less severe in 2008 and 2009 than in 2006 and 2007. For more a accurate representation of spotted wilt reaction, see Table 5.

Pod yield among the late-maturing varieties tested from 2006–2009 was similar. The grade of York was less than the other three late-maturing varieties. High TSMK is a strength of Georgia-02C, and TSMK percentage, averaged over 2006–2009, was around 79 percent. Acreage of York has been limited because of poor seed quality, a problem shared by several late-maturing varieties.

The performance of Virginia-type market varieties in Florida over the four-year period 2006–2009 is shown in Table 3. Most of these varieties are more susceptible to TSWV than the popular runner varieties. If these TSWV-susceptible varieties contracted the disease, yield losses could be substantial. Three new Virginia-type varieties-'Georgia-08V', 'Bailey', and Florida Fancy—appear to have better TSWV resistance than the others. Florida Fancy and Georgia-08V have high oleic oil chemistry, which is a significant benefit for Virginia-types when prepared by salting/roasting in-shell. This preparation method significantly hastens oxidation and rancidity of normal oleic types, but high oleic types do not oxidize as quickly, thus preserving their flavor longer.

## **Location Results**

The pod yield of peanut cultivars grown at three Florida locations is shown in Table 4. In general, the highest-yielding entries in one location also did well in the other locations. Yields are generally lower in Jay because the peanuts there were not irrigated. Pod yields in Gainesville are generally higher because TSWV is very mild in this area. In Marianna, yields can be severely limited by TSWV. For that reason, varieties that are most resistant to TSWV usually have the highest yield in Marianna. In Marianna, TSWV pressure was much lower in 2006, 2008, and 2009 compared to 2007.

## Varieties with the Best Resistance to TSWV and Other Diseases

Disease resistance is a very important factor in choosing a peanut variety. The reaction of most varieties to the most prevalent peanut diseases in Florida is detailed in Table 5. To optimize the disease-resistance benefits of these varieties, choose varieties based on their disease resistance in relation to diseases known to be problematic, or suspected of being problematic, in a particular field or farm.

Use Table 5 to find a variety with the right disease package for your situation. If white mold is a problem in some of your fields, the following varieties would be good choices: AP-3, AP-4, C-99R, Florida-07, Tifguard, York, Georgia- 07W, or Georgia-02C. For another example, York, C-99R, Tifgruard, and Georgia-07W are varieties with good leaf spot resistance. Use of these varieties in fields with a history of leaf spot could allow for a reduction in the frequency of fungicide sprays needed for leaf-spot control compared to the need for use of such sprays with leaf-spot susceptible varieties. The new variety, Tifguard, has resistance to root-knot nematode, and so would be a good choice in fields with a history of that pest; AP-3 has also demonstrated tolerance to root-knot nematode. Varieties that have enough resistance to TSWV to be planted relatively early include the following: AP-3, Florida-07, Georgia-06G, Tifguard, Georgia-07W, and York.

## Summary

Variety choice is clearly a critical management decision for peanut production. Many varieties with good to excellent resistance to TSWV are suitable for production in the southeastern United States. Additionally, several of these TSWV-resistant varieties also have resistance to other diseases. Growing disease-resistant varieties can reduce risk and production cost. The varieties C-99R and York have considerable resistance to leaf spot. Use of these varieties— in combination with good crop rotation—might allow for reduced use of fungicide sprays and, therefore, lower production costs.

Some of the cultivars—Florida-07, Georgia-07W, AP-4, Georgia-03L, C-99R, and AP-3—have good resistance to soil-borne diseases, such as white mold (*S. rolfsii*). Additionally, Georgia 02C and Georgia Greener have some resistance to *Cylindrocladium* black rot (CBR). Choosing varieties based on their strength relative to disease resistance can help to reduce the risk of yield loss, and perhaps reduce production costs.

6

**Table 1.** Performance of peanut varieties in three locations in Florida in 2009, with varieties sorted by market type, maturity, and then yield, in descending order.

	Market			Pod Yiel	d (lbs./A)	)	TS	SWV (1-	10 ratinç	g***)	г	آSMK (۶	%)
	Туре	Maturity*	MR	GV	JY	AVG.	MR	GV	JY	AVG.	MR	GV	AVG.
Georgia-06G	R	М	5626	7614	5221	6154	1.3	1.3	1.3	1.3	78.5	79.8	79.2
Florida-07**	R	М	5605	6741	5313	5886	1.7	1.0	1.0	1.2	75.5	73.6	74.6
Georgia-07W	R	М	5837	7134	4441	5804	1.7	1.0	1.0	1.2	79.5	80.1	79.8
AP-4	R	М	4873	6686	5566	5708	2.0	1.0	1.0	1.3	76.2	78.7	77.5
AP-3	R	М	5308	6450	5298	5685	1.3	1.0	1.0	1.1	73.9	73.8	73.9
Georgia Greener	R	М	5355	6795	4888	5679	1.3	1.3	1.3	1.3	77.9	80.5	79.2
AT3085RO**	R	М	5353	6399	4988	5580	2.0	1.3	1.0	1.4	76.0	75.3	75.7
McCloud**	R	М	4866	6489	4931	5429	2.0	1.0	1.3	1.4	78.4	76.9	77.7
Georgia Green	R	Μ	4185	7151	3937	5091	2.7	1.3	2.7	2.2	78.2	76.4	77.3
Tifguard	R	М	4843	5932	4248	5008	1.3	1.0	1.0	1.1	76.9	75.0	76.0
AT215	R	М	4585	6363	4018	4989	3.0	1.0	1.7	1.9	78.0	79.0	78.5
Georgia-03L	R	М	4091	6615	3285	4664	1.7	1.0	1.0	1.2	73.5	75.3	74.4
York**	R	L	5076	5782	4973	5277	1.0	1.3	1.0	1.1	75.3	73.6	74.5
Georgia-02C**	R	L	4562	6227	4537	5109	1.0	1.0	1.0	1.0	79.8	81.6	80.7
C-99R	R	L	5269	5537	4230	5012	1.3	1.0	2.0	1.4	77.8	76.6	77.2
NCV11	V	E	5440	6875	4204	5506	2.7	1.3	1.0	1.7	74.8	74.8	74.8
Gregory	V	ME	5260	6709	3526	5165	3.7	1.0	1.0	1.9	72.9	74.4	73.7
Perry	V	Е	3930	6284	5263	5159	4.3	1.0	1.3	2.2	77.9	74.2	76.1
Brantley**	V	Е	4127	6285	3213	4542	5.3	1.0	1.0	2.4	69.7	74.8	72.3
Bailey	V	М	5605	6982	6099	6229	1.0	1.0	1.3	1.1	74.4	74.6	74.5
Georgia-08V	V	М	5824	6637	5185	5882	2.3	1.0	1.0	1.4	72.0	78.1	75.1
Florida Fancy**	V	М	5182	6166	4650	5333	2.3	1.0	1.0	1.4	71.6	73.2	72.4
C.V.	· · · · ·		10	5	17	12	0.9	0.4	41.1	48.7	2.5	1.4	2.3
LSD			674	449	1049	498	29.7	29.6	0.7	0.6	3.2	1.8	2.1

\* E = 125–130 days after planting, DAP; M = 133–139 DAP; L = 145–155 DAP

\*\* High Oleic

\*\*\* Ratings for TSWV were on a 1–10 scale, where 1 = no disease, and 10 = all plants severely diseased or dying.

Table 2. Performance of runner market-type peanut varieties in 2–3 Florida locations over four years, 2006–2009, with entries sorted by maturity and four-year average yield, in descending order.

				(lbs./acre)			TSMK	(%)			TSWV (	1-10)***	
Name	Maturity*	2009	2-YR <sup>†</sup>	3-YR <sup>††</sup>	4-YR	2009	2-YR	3-YR	4-YR	2009	2-YR	3-YR	4-YR
Florida-07**	Þ	5886	5725	5336	5317	74.5	75.3	75.6	76.3	1.2	1.6	1.7	1.8
AP-4	Σ	5708	5582	5174	4984	77.4	77.2	77.1	77.5	1.3	1.5	2.0	2.1
AT3085RO**	Σ	5580	5334	4801	4762	75.7	75.7	75.6	75.8	1.4	1.3	2.4	2.4
AP-3	Σ	5685	5354	4770	4674	73.8	74.2	74.5	74.2	1.1	1.3	2.0	2.0
McCloud**	Σ	5428	5287	4659	4543	77.6	77.3	77.5	76.5	1.4	4. 4.	2.1	2.3
Georgia-03L	Σ	4663	4822	4339	4381	74.4	74.6	75.6	76.2	1.2	1. 4.	2.2	2.4
Georgia Green	Σ	5091	4993	4516	4322	77.3	78.1	78.0	77.7	2.2	2.0	2.7	3.1
Georgia-06G	Σ	6154	5993	5314		79.2	79.9	79.9		1.3	1.6	2.1	
Georgia Greener	Σ	5679	5515	5135		79.2	79.2	79.5		1.3	1.6	2.0	
Georgia-07W	Σ	5804	5793			79.8	79.1			1.2	1.3		
Tifguard	Σ	5008				75.9				1.1			
AT215	Σ	4989				78.5				1.9			
C-99R	_	5012	4941	4748	4653	77.2	77.4	77.8	76.9	1.4	1.6	2.0	2.1
York**		5277	4978	4600	4580	74.4	74.9	74.8	74.9	1.1	1.2	1.6	1.6
Georgia-02C**	_	5109	4867	4507	4514	80.7	80.7	80.6	80.8	1.0	1.3	1.8	1.8
C.V.		12	12	13	13	2.3	2.2	1.9	2.6	48.7	43.8	43.2	40.2
LSD		498	493	373	295	2.1	2.0	1.3	1.4	0.6	0.4	0.4	0.4
* E = 125–130 days ; **High oleic † Average of 2008 ar †† Average of 2006 ††† Average of 2006	after planting, nd 2009 test d 2008, and 200 i, 2007, 2008,	DAP; M = - ata. 99 test data and 2009 te	133–139 D/- ⊦ ∋st data.	NP; L = 145–1	55 DAP								

Table 3. Performance of Virginia-type market peanut varieties in 2–3 Florida locations over four years, 2006–2009, with entries sorted by maturity and the four-year average yield, in descending order.

			7	IELD			TSN	ž			TSW	V***	
			sdl	./acre			%				- - -	0	
Name	Maturity*	2009	2-YR <sup>†</sup>	3-YR <sup>††</sup>	4-YR	2009	2-YR	3-YR	4-YR	2009	2-YR	3-YR	4-YR
Gregory	ME	5165	4950	4674	4537	73.6	72.8	72.6	72.2	1.9	1.8	2.9	2.7
NCV11	Ш	5506	5102	4302	4213	74.8	73.6	73.2	73.4	1.7	1.7	2.9	3.0
Brantley**	ш	4542	4579	3957		72.2	72.6	72.3		2.4	2.2	3.4	
Perry	ш	5159				76.0				2.2			
Florida Fancy**	Σ	5333	5398	4877	4731	72.4	73.9	73.5	73.0	1.4	1.5	2.2	2.3
Bailey	Σ	6229				74.5				<del>.</del> .			
Georgia-08V	Σ	5882				75.1				4.			
C.V.		12	12	13	13	2.3	2.2	1.9	2.6	48.7	43.8	43.2	40.2
LSD		498	493	373	295	2.1	2.0	1.3	1.4	0.6	0.4	0.4	0.4
* E = 125–130 days afte **High oleic † Average of 2008 and 2 †† Average of 2007, 200 ††† Average of 2006, 20	er planting, DA 2009 test data 08, and 2009 t 007, 2008, and	<ul> <li>N = 13:</li> <li>N = 13:</li></ul>	3–139 DAP t data.	; L = 145–1{	55 DAP	j							

Table 4. Pod yield of peanut varieties in three Florida locations over four years, 2006–2009, with entries sorted by market type, maturity, and the overall average yield, in descending order.

									od Yiel	d (Ibs./ac	:re)							
				2	larianna	(MR)				Jay (J	۲)			Ū	ainesville	e (GV)		
Name	Maturity	Market-	2006	2007	2008	2009	MR	2006	2007	2008	2009	۲	2006	2007	2008	2009	GV	Overall
Florida-07**	Σ	type R	5915	4456	5779	5605	Averade 5439	4424	3924	4650	5313	Averade 4578	5440	5295	6260	6741	Averade 5934	Average 5317
AP-4	Σ	¥	5308	4111	5343	4873	4909	3175	3982	5215	5566	4485	4762	4985	5808	6686	5560	4985
AT3085RO**	Σ	ĸ	5660	2810	5004	5353	4707	3340	3272	4569	4988	4042	4934	5124	5689	6399	5537	4762
AP-3	Σ	۲	5595	3472	5076	5308	4863	3333	3185	5185	5298	4250	4221	4153	4808	6450	4908	4674
McCloud**	Σ	¥	5027	2497	5434	4866	4456	3372	3114	4332	4931	3937	4188	4598	5669	6489	5236	4543
Georgia-03L	Σ	¥	4860	2530	5014	4091	4124	3985	3907	5669	3285	4212	4675	3688	4256	6615	4809	4381
Georgia Green	Σ	ĸ	4107	2204	4830	4185	3832	2578	3491	4575	3937	3645	4540	4989	5279	7151	5490	4322
Georgia-06G	Σ	2		2946	5960	5626	4844		3672	5484	5221	4792		5247	6053	7614	6305	5314
Georgia Greener	Σ	ĸ		4214	5653	5355	5074		3988	5060	4888	4645		4921	5337	6795	5684	5135
Georgia-07W	Σ	ĸ	•		5934	5837	5886			5292	4441	4867			6118	7134	6626	5793
Tifguard	Σ	۲		I		4843	4843				4248	4248				5932	5932	5008
AT215	Σ	R			ĺ	4585	4585				4018	4018				6363	6363	4989
C-99R	_	ĸ	4747	3049	4966	5269	4508	3633	ł	4147	4230	4003	4818	5285	5498	5537	5285	4599
York	-	ĸ	5037	3669	4682	5076	4616	3930	3350	4229	4973	4121	4598	4508	5127	5782	5004	4580
Georgia-02C**	-	ĸ	4882	3656	4588	4562	4422	3491	3023	4049	4537	3775	5240	4676	5240	6227	5346	4514
Gregory	ME	>	4869	3130	5498	5260	4689	3627	4093	3523	3526	3692	3878	5143	5182	6079	5228	4537
NCV11	ш	>	4824	1339	5379	5440	4246	2791	1985	3652	4204	3158	4226	4779	5063	6875	5236	4213
Brantley**	ш	>		1378	5253	4127	3586		2554	3125	3213	2964		4204	5472	6285	5320	3957
Perry	ш	>				3930	3930				5263	5263				6284	6284	5159
Florida Fancy**	Σ	>	4533	3356	5298	5182	4592	3078	3252	4968	4650	3987	5272	4892	6125	6166	5614	4731
Georgia-08V	Σ	>				5824	5824				5185	5185				6637	6637	5882
Bailey	Σ	>				5605	5605				6609	6609	ĺ		ĺ	6982	6982	6229
C.V.			12	21	ø	10	12	14	11	11	17	13	12	6	12	S	0	13
LSD			794	861	561	674	362	612	493	696	1049	366	756	546	836	449	329	295
**High oleic																		

თ

Variety <sup>1</sup>	Spotted Wilt	Leaf Spot	Soilborne Di	sease Points
	Points	Points		·
			White mold	Limb rot
Flavorunner 458 <sup>2</sup>	50	unknown	unknown	unknown
NC-V 11	35	30	30	25
AT-215* <sup>.2</sup>	30	30	30	unknown
Georgia Green	30	20	25	15
Florida Fancy* <sup>,2</sup>	25	20	20	unknown
McCloud <sup>2</sup>	20	25	20	unknown
AP-4*	20	20	15	unknown
C-99R <sup>4</sup>	20	15	15	25
AT 3085RO <sup>2</sup>	15	30	25	unknown
Georgia-05E	15	20	25	unknown
Georgia Greener* <sup>3</sup>	15	20	20	unknown
Georgia-02C <sup>2,3,5</sup>	15	20	10	20
Georgia-03L <sup>5</sup>	15	15	10	20
AP-3 <sup>4</sup>	10	25	10	25
Georgia-06G	10	25	25	unknown
Florida-07 <sup>2</sup>	10	20	15	unknown
Georgia-07W*	10	15	10	unknown
Tifguard <sup>6</sup>	10	15	10	unknown
York <sup>2</sup>	10	10	5	unknown
Georganic	5	10	10	unknown

**Table 5.** Disease resistance of major peanut varieties in the southeastern United States (Adapted from the 2010 Peanut Rx, compiled by the University of Georgia, the University of Florida and Auburn University. Fewer points mean better resistance.)

\*Data for these new varieties is limited and risk ratings will undergo changes as needed in the future.

<sup>1</sup>Adequate research data is not available for all varieties with regards to all diseases. Additional varieties will be included as data to support the assignment of an index value are available.

<sup>2</sup>High oleic variety.

<sup>3</sup>Varieties Georgia-02C and Georgia Greener have increased resistance to Cylindrocladium black rot (CBR) than do other varieties commonly planted in Georgia.

<sup>4</sup> Varieties AP-3 and C-99R are less resistant to CBR and are not recommended for fields where this disease is a problem.

<sup>5</sup> The malady referred to as "funky" or "irregular" leaf spot tends to be more severe in Georgia-02C and Georgia-03L than in other varieties. Although this condition can look like early leaf spot (Cercospora arachidicola), the cause of "funky" leaf spot is unknown. Disease losses are not typically associated with funky leaf spot.

<sup>6</sup>The new variety Tifguard has excellent resistance to the peanut root-knot nematode