**SS-AGR-323** 



## Peanut Variety Performance in Florida, 2005 – 2008<sup>1</sup>

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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 and 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) to make sure you see the differences between varieties first-hand. 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 Disease Risk Index is included in Table 5.

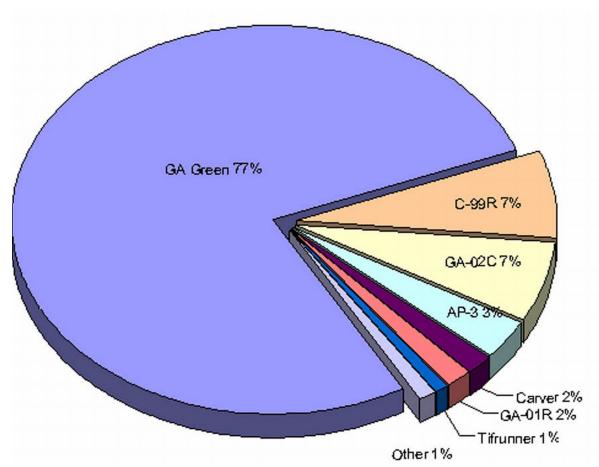
The potentially devastating effects of tomato spotted wilt virus (TSWV) in the southeastern United States are another reason variety choice is very important. Severity of TSWV varies from year to year, and scientists are unable to predict disease levels for a coming crop season. Because TSWV is unpredictable,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

Among the sites in Florida where peanut-variety resistance to TSWV has 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. Variety resistance to TSWV is summarized in Table 5, which is from the 2009 Peanut Disease Risk Index.

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This report provides data from University of Florida trials conducted in Florida at IFAS research centers located in Gainesville (Citra), Marianna, and Jay from 2005-2008. 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 (Temik or Thimet) were used in Gainesville and Jay and were used in 2008 in Marianna.



**Figure 1.** Certified Seed Acreage in Alabama, Florida, and Georgia in 2005. Credits: Chart developed by Barry Tillman with data from the Southern Seed Certification Association and the Georgia Crop Improvement Association.

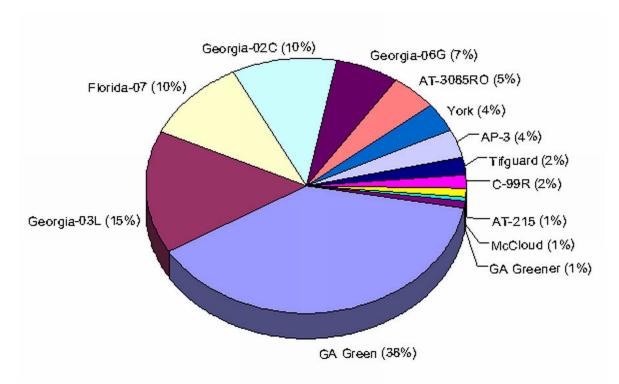
# Peanut Varieties in the Southeastern United States

Historically, peanut acreage in the southeastern United States has been dominated by one variety during a given time 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 and 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. The main reasons for the popularity of Georgia Green were its moderate resistance to TSWV, good grades and good pod yield. In 1996, when Georgia Green was released, it was the

only medium-maturity runner variety with resistance to TSWV.

As the TSWV epidemic of the 1990s 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 2008, Georgia Green occupied about 38 percent of the seed acreage in Alabama, Florida and Georgia (Figure 2).



**Figure 2.** Certified Seed Acreage in Alabama, Florida, and Georgia in 2008. Credits: Chart developed by Barry Tillman with data from the Southern Seed Certification Association and the Georgia Crop Improvement Association.

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 so 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 of time.

### **Recently Released Varieties**

Several new runner varieties were released in 2007 and 2008. The University of Florida released 'Florida-07', 'McCloud', 'York' 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 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 and is similar to Georgia Green in its resistance to other diseases. McCloud has demonstrated good yield potential and excellent grades. York is a late-maturing runner with typical runner seed size, similar to Georgia Green. York has an excellent disease-resistance package with a high level of resistance to TSWV, white mold and leaf spots. York has high oleic oil chemistry and has demonstrated excellent yield potential and good grades. Seed of Florida-07, York and McCloud should be readily available for the 2009 season.

AP-4 is a large-seeded runner with good resistance to TSWV and moderate resistance to white mold. AP-4 is better than 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 variety, 'Florida Fancy', was released by the University of Florida in 2007. Florida Fancy has high oleic oil chemistry and standard virginia pod and seed size. Florida Fancy has demonstrated very good yield potential and has among the best resistance to TSWV available in a virginia variety. Seed of Florida Fancy should be available for the 2010 season.

The University of Georgia has three new runner varieties, 'Georgia-06G', which was released in 2006, and 'Georgia Greener' and 'Georgia-07W', which were 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 very good

TSWV resistance. Georgia Greener has normal runner size seed 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 2009 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 Telone to control nematodes should be able to use Tifguard on nematode-infested site 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 and beyond.

AT3085RO is a medium-maturity, large-seeded runner with good resistance to TSWV and high oleic oil chemistry. Seed of AT3085RO should be generally available for the 2009 season.

#### 2008 Results

Table 1 details pod yields, total sound mature kernels percentage (TSMK), maturity and TSWV ratings for tests at three locations in Florida in 2008. 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 = 145-155 DAP. 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 2008, and yields were relatively high compared to previous years (Table 2). Only two early-maturing varieties were tested, Andru II and Virugard, and yields of these varieties were similar. Among the medium-maturity varieties tested, Florida-07, Georgia -06G, Georgia-07W, 'Carver' and AP-4 had a statistically greater yield that year than did Georgia Green.

Georgia-06G had the highest average yield, and Florida-07, Gerogia-07W, Carver, AP-4 and AT3085RO were not statistically lower in yield. Among the virginia varieties, VAC92R, 'Gregory', Florida Fancy, and 'Georgia-05E' had the highest pod yield in 2008.

#### **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 (2005-2008) is shown in Table 2.

Among the medium-maturity cultivars tested during 2007 - 2008, Florida-07, AP-4, Georgia-06G, Georgia-07W and Georgia Greener had the highest pod yield. Georgia-06G and Georgia Greener had the highest TSMK grade among the medium maturity types. In the three-year (2006-2008) and four-year (2005-2008) test averages, Florida-07 had the highest pod yield. With the exception of Georgia Green, the resistance to TSWV among the medium maturity group is very good.

Pod yield among the late-maturing varieties tested from 2005-2008 was similar. The grade of York was less than the other three late-maturing varieties. High TSMK is a strength of both Georgia-01R and Georgia-02C, and TSMK percentage, averaged over 2005 – 2008, was around 79 percent for those varieties. Acreage of Georgia-01R has been limited because of poor seed quality, a problem shared by several late-maturing varieties.

The performance of virginia market-type varieties in Florida over the four-year period 2005-2008 is shown in Table 3. Most of these varieties are more susceptible to TSWV than the popular runner varieties. If these TSWV-susceptible varieties contract the disease, vield losses could be substantial. Two new virginia varieties --Georgia-05E and Florida Fancy -- appear to have better TSWV resistance than the others. Georgia-05E and Florida Fancy also have very competitive pod yield. Florida Fancy has high oleic oil chemistry which is a significant benefit for virginia types when they are prepared by salting and roasting in-shell. This preparation significantly hastens oxidation and rancidity of normal oleic types, but high oleic types do not oxidize as quickly which preserves 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 are 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 2006 and 2008 TSWV pressure in Marianna was much lower compared to 2005 and 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-06G, 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 and/or in situations that 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 disease 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.

#### **On-Farm Tests**

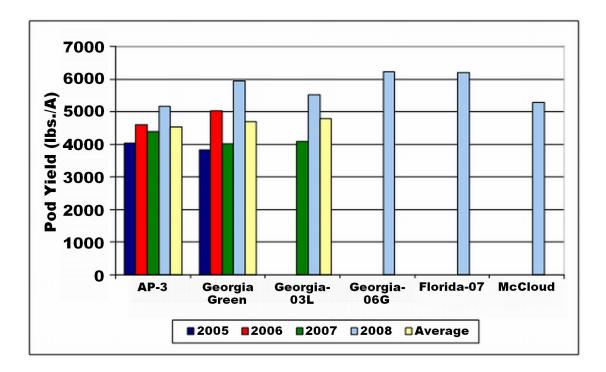
During the four-year period that includes 2005, 2006, 2007 and 2008, scientists conducted farm-scale variety tests in Columbia County, Fla., using a limited number of peanut varieties. These tests consisted of replicated plots of one to two acres within a peanut field managed under conditions normal for the farmers who cooperated in the tests. Management included a full-season fungicide program. The typical rotation on this farm is two to three years of peanut followed by four to five years or more of bahiagrass. Soil-borne disease pressure is usually low, but leaf spot disease pressure can be intense. These tests were helpful to verify results from research trials under low disease pressure.

Over the four years of the test of the medium-maturity varieties, AP-3 and Georgia Green had similar average yield (Figure 3). Georgia-03L yielded well in 2007 and 2008 and was similar to AP-3 and Georgia Green. Yields of two tons per acre are well above the state average of 2,500 - 2,800 pounds even though in some cases the tests were planted the season after a previous peanut crop. The results show that the yield potential of these varieties is similar under near-ideal conditions with little or no TSWV. The value of the long-term bahiagrass rotation with peanuts is especially striking. In 2008, three new varieties were added. Of these, Georgia-06G and Florida-07 yielded more than 6,000 lbs. per acre. These results corroborate results from the small-plot tests described above and show excellent yield potential of Florida-07 and Georgia-06G.

### Summary

Variety choice is 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, York, and Georgia 01R all 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-06G, Georgia-03L, C-99R, and AP-3 – have good resistance to soil-borne diseases, such as white mold (S. rolfsii). Additionally, Georgia 01R, Georgia 02C, and Carver have some resistance to Cylindrocladium black rot (CBR).

When choosing a variety and making arrangements for seeds of the varieties that best fit your needs, evaluate your production and marketing situation. Seed of Florida-07, York, Georgia-06G and McCloud should be readily available for the 2009 season. Seed of AP-4, Georgia Greener, Tifguard, and Florida Fancy should be available for the 2010 season.



**Figure 3.** Performance of Six Medium Maturity Varieties in 1-2 Acre Replicated Plots in Columbia County, Fla., in 2005-2008. (The fields were not irrigated, and 2005 and 2008 were the first year of peanut following four to five years of bahiagrass. The 2006 and 2007 tests were planted in the same field following four to five years of bahiagrass.)

Peanut Variety Performance in Florida, 2005 – 2008

Table 1. Performance of Peanut Varieties in Three Locations in Florida in 2008 (Varieties are sorted by market type, maturity and then yield in descending order.)

ade)	AVG	73.5	77.4	9.08	78.3	76.1	6.77	77.0	75.4	79.3	76.9	75.7	74.6	74.8	78.9	7.77	75.3
TSMK % (grade)	ΛS	73.5	77.5	81.8	80.4	78.7	79.1	78.0	75.8	81.1	7.77	76.6	77.3	76.2	79.7	6.77	75.3
TSI	MR	73.6	77.3	79.4	76.3	73.5	76.8	76.0	75.1	9.77	76.1	74.8	72.0	73.5	78.2	77.5	75.3
**	AVG	2.1	2.8	1.8	1.4	1.9	4.1	1.7	1.4	1.9	1.3	1.2	1.4	1.6	1.8	1.8	1.3
10 rating	չ	3.0	2.3	1.7	1.7	2.0	1.7	2.0	2.3	1.3	2.0	1.2	1.3	2.0	2.0	2.7	2.0
WV (1-1	Ρ	1.3	4.0	2.7	1.7	2.7	1.7	1.7	1.0	3.3	1.0	1.3	2.0	1.7	2.0	1.3	1.0
TS	MR	2.0	2.0	1.0	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.0
Pod Yield (lbs./A)	AVG	4265	3965	5832	5781	5563	5463	5456	5354	5350	5145	5087	5023	4980	4895	4870	4679
Pod Yield (lbs./A) TSWV (1-10	γſ	3728	3282	5484	5292	4650	4589	5215	4992	2060	4332	4569	5185	5669	4575	4147	4229
Pod Yield (lbs./A)	ĊΛ	4398	3243	6053	6118	6260	6272	5808	5772	5337	5669	5689	4808	4256	5279	5498	5127
Pod Yield (lbs./A)	MR	4669	5369	2960	5934	5779	5527	5343	5298	5653	5434	5004	5076	5014	4830	4966	4682
	Maturity*	ME	ш	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	7	Г
	Туре	æ	~	æ	ď	æ	ĸ	ĸ	ĸ	æ	ĸ	ĸ	~	ĸ	æ	æ	R
		Andru II**	Virugard	Georgia-06G	Georgia-07W	Florida-07**	Carver	AP-4	AT3081R	Georgia Greener	McCloud**	AT3085A**	AP-3	Georgia-03L	Georgia Green	C-99R	York**

Table 1. Performance of Peanut Varieties in Three Locations in Florida in 2008 (Varieties are sorted by market type, maturity and then yield in descending order.)

Peanut Variety Performance in Florida, 2005 - 2008

ade)	AVG	80.7	78.9	73.5	72.0	72.5	73.1	74.7	73.6	74.0	75.4	81.4	2.1	1.9
TSMK % (grade)	ΛS	81.1	79.4	73.5	73.1	72.0	75.1	74.7	72.9	74.5	78.4	83.0	2.2	2.9
TSI	MR	80.3	78.4	73.6	71.0	73.0	71.1	74.7	74.3	73.5	72.5	79.9	1.5	1.9
(***	AVG	1.7	1.3	1.8	1.8	1.8	2.0	1.9	2.3	1.7	1.6	1.3	38.0	0.5
TSWV (1-10 rating***)	Ϋ́	2.3	2.0	2.0	2.3	2.0	2.3	2.7	3.3	2.0	1.7	1.7	27.3	0.8
SWV (1-	ΛĐ	1.7	1.0	1.3	1.0	1.3	1.3	1.0	2.0	1.0	2.0	1.3	35.1	8.0
TST	MR	1.0	1.0	2.0	2.0	2.0	2.3	2.0	1.7	2.0	1.0	1.0	17.5	0.3
	AVG	4626	4296	5023	4734	4698	4617	4591	4580	4198	5464	5309	12	479
(lbs./A)	γſ	4049	3996	4627	3523	3652	3125	3751	4219	3461	4968	5245	11	969
Pod Yield (lbs./A)	ĊΩ	5240	4521	4791	5182	5063	5472	5018	4217	4533	6125	5285	12	836
	MR	4588	4372	5650	5498	5379	5253	5005	5305	4601	5298	5398	8	561
	Maturity*	٦	٦	Э	ME	Э	Е	Э	Э	Э	M	M		
Market	Туре	<u>«</u>	R	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ		
		Georgia-02C**	Georgia-01R	VAC92R	Gregory	NCV11	Brantley	CHAMPS	VC2	NC12C	Florida Fancy**	Georgia-05E	C.V	CSD

<sup>\*</sup> E = 125-130 days after planting, DAP; M = 133-139 DAP; L = 145-155 DAP

<sup>\*\*</sup>High Oleic \*\*\*Ratings for TSWV were on a 1-10 scale, where 1 = no disease, and 10 = all plants severely diseased or dying.

Peanut Variety Performance in Florida, 2005 - 2008

Table 2. Performance of Runner Market-Type Peanut Varieties in Two or Three Florida Locations over Four Years -- 2005, 2006, 2007 and 2008. (Entries are sorted by maturity and the four-year average yield in descending order.)

			YIELC	YIELD (lbs./acre)			TSMK %	TSMK % (grade)			TSWV	TSWV (1-10)***	
Name	Maturity*	2008	2-YR <sup>†</sup>	3-YR	4-YR +++	2008	2-YR	3-YR	4-YR	2008	2-YR	3-YR	4-YR
Andru II**	ME	4265	4098	4076	3665	73.5	74.2	74.7	72.5	2.1	3.6	3.4	3.6
Virugard	ME	3962	3579	3878	3440	77.4	6.77	77.3	75.8	2.8	4.4	4.1	4.1
Florida-07**	Μ	5563	5061	5127	4859	76.1	76.2	76.8	76.2	1.9	2.0	2.1	2.3
Georgia-03L	M	4980	4177	4287	4197	74.8	76.2	76.5	76.0	1.6	2.7	3.0	3.1
AT3085A**	Μ	2087	4411	4489	4186	75.7	75.6	75.7	75.0	1.2	2.9	2.9	2.9
AP-3	M	5023	4313	4336	4047	74.6	74.9	74.5	73.8	1.4	2.4	2.4	2.5
McCloud**	M	5145	4274	4248	3986	76.9	77.4	7.97	76.3	1.3	2.4	2.6	3.0
AT3081R	Μ	5354	4345	4220	3890	75.4	75.5	75.2	73.8	1.4	3.0	3.3	3.5
Carver	Μ	5463	4447	4411	3889	77.9	77.2	77.2	75.7	1.4	2.8	2.7	3.2
Georgia Green	Μ	4895	4228	4066	3647	78.9	78.3	78.1	77.0	1.8	3.0	3.5	3.8
AP-4	Μ	5456	4907	4743		77.0	77.0	77.4		1.7	2.4	2.5	
Georgia-06G	Μ	5832	4893			9.08	80.3			1.8	2.6		
Georgia Greener	Μ	5350	4862			79.3	79.7			1.9	2.4		
Georgia-07W	M	5781				78.3				1.4			
C-99R	٦	4870	4434	4423	4344	77.7	78.1	77.1	9.92	1.8	2.6	2.6	2.7
Georgia-01R	٦	4296	4083	4383	4279	78.9	79.1	79.0	78.5	1.3	1.8	1.9	2.2
York**	٦	4679	4261	4348	4193	75.3	75.0	74.9	74.5	1.3	1.8	1.9	1.9
Georgia-02C**	T	4626	4205	4316	4009	80.7	9.08	80.8	79.6	1.7	2.2	2.2	2.6
C.V.		12	15	14	15	2.1	1.9	2.4	2.6	38.0	36.5	33.3	31.8
TSD		479	202	354	336	1.9	1.2	1.3	1.2	0.5	9.0	0.4	0.5

<sup>\*</sup> E = 125-130 days after planting, DAP; M = 133-139 DAP; L = 145-155 DAP

<sup>\*\*</sup>High oleic

Average of 2007 and 2008 test data.

<sup>&</sup>lt;sup>1†</sup>Average of 2006, 2007, and 2008 test data. <sup>1††</sup>Average of 2005, 2006, 2007, and 2008 test data.

Peanut Variety Performance in Florida, 2005 – 2008

Table 3. Performance of Virginia Market-Type Peanut Varieties in Two or Three Florida Locations over Four Years -- 2005, 2006, 2007 and 2008. (Entries are sorted by maturity and the four-year average yield in descending order.)

			Pod Yield	Pod Yield (lbs./acre)			TSMK %	TSMK % (grade)			TSWV	TSWV (1-10***)	
Name	Maturity*	2008	2-YR <sup>†</sup>	3-YR ††	4-YR ++†	2008	2-YR	3-YR	4-YR	2008	2-YR	3-YR	4-YR
Gregory	ME	4734	4428	4307	3840	72.0	72.1	71.8	71.3	1.8	3.4	3.1	3.3
VC2**	В	4580	3848	4001	3669	73.6	74.2	74.4	73.8	2.3	3.5	3.3	3.4
VAC92R	В	5023	4181	4009	3651	73.5	73.2	72.2	71.5	1.8	3.6	3.8	4.1
NCV11	Ш	4698	3675	3769	3478	72.5	72.4	72.9	71.8	1.8	3.5	3.6	3.9
NC12C	В	4198	3556	3570	3219	74.0	74.0	74.2	73.5	1.7	3.6	3.6	4.3
CHAMPS	Ш	4591	3926			74.7	74.4			1.9	3.2		
Brantley	В	4617	3664			73.1	72.4			2.0	3.9		
Georgia-05E	Σ	5309	4842	4584		81.4	81.1	80.4		1.3	1.5	2.0	
Florida Fancy**	Μ	5464	4649	4531		75.4	74.1	73.3		1.6	2.6	2.7	
C.V.		12	15	14	15	2.1	1.9	2.4	2.6	38.0	36.5	33.3	31.8
LSD		479	505	354	336	1.9	1.2	1.3	1.2	0.5	9.0	0.4	0.5

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

\*\*High oleic

<sup>†</sup>Average of 2007 and 2008 test data. <sup>††</sup>Average of 2006, 2007, and 2008 test data. <sup>†††</sup>Average of 2005, 2006, 2007, and 2008 test data.

Table 4. Pod Yield of Peanut Varieties in Three Florida Locations over Four Years -- 2005, 2006, 2007 and 2008. (Entries are sorted by market type, maturity and the overall

Peanut Variety Performance in Florida, 2005 - 2008

average yield in descending order. Compare variety performance within columns and within in the location average when tested in the same number of years.)

						J	Pod Yield	(IDS./acre)	:re)									
			·	Ma	Marianna (	(MR)				Jay (JY)				Gain	Gainesville (GV)	(GV)		
Name	Maturity	Market- type	2005	2006	2007	2008	MR Avg.	2005	2006	2007	2008	کر Avg.	2005	2006	2007	2008	GV Avg.	Overall Avg.
Andru II	ME	, a	2239	4369	2975	4669	3563	1765	3311	4142	3728	3237	3285	4420	4675	4398	4195	3665
Virugard	ME	٣	2052	4856	2610	5369	3722	1236	3940	2636	3282	2774	3094	4630	4333	3243	3825	3440
Florida-07	Σ	æ	4311	5915	4456	5779	5115	3204	4424	3924	4650	4051	4940	5440	5295	6260	5484	4883
Georgia-03L	₽	œ	3198	4860	2530	5014	3901	2943	3985	3907	2669	4126	5637	4675	3688	4256	4564	4197
AT3085A	₽	ď	3298	2660	2810	5004	4193	2510	3340	3272	4569	3423	4020	4934	5124	5689	4942	4186
AP-3	₽	œ	3417	5595	3472	5076	4390	2639	3333	3185	5185	3586	3475	4221	4153	4808	4164	4047
McCloud	₽	ď	2878	5027	2497	5434	3959	2533	3372	3114	4332	3338	4188	4188	4598	2669	4661	3986
AT3081R	₽	W.	2807	4901	2452	5298	3865	2388	2817	2604	4992	3200	3501	4191	4951	5772	4604	3890
Carver	₽	œ	1997	5544	2449	5527	3879	1471	3088	3435	4589	3146	3491	4392	4408	6272	4641	3889
Georgia Green	M	R	1736	4107	2204	4830	3219	2100	2578	3491	4575	3186	3333	4540	4989	5279	4535	3647
AP-4	M	R		5308	4111	5343	4921		3175	3982	5215	4124		4762	4985	2808	5185	4743
Georgia-06G	M	R			2946	2960	4453			3672	5484	4578			5247	6053	5650	4894
Georgia Greener	M	Я			4214	5653	4934			3988	2060	4524			4921	5337	5129	4862
Georgia-07W	M	R				5934	5934				5292	5292				6118	6118	5781
C-99R	Г	8	4046	4747	3049	4966	4202	3875	3633	ı	4147	3885	4401	4818	5285	5498	5001	4363

Table 4. Pod Yield of Peanut Varieties in Three Florida Locations over Four Years -- 2005, 2006, 2007 and 2008. (Entries are sorted by market type, maturity and the overall average yield in descending order. Compare variety performance within columns and within in the location average when tested in the same number of years.)

Peanut Variety Performance in Florida, 2005 - 2008

							Pod Yield (lbs./acre)	(lbs./ac	cre)									
				Ma	Marianna	(MR)				Jay (JY)	(			Gain	Gainesville	(GV)		
Name	Maturity	Market- type	2005	2006	2007	2008	MR Avg.	2005	2006	2007	2008	JY Avg.	2005	2006	2007	2008	GV Avg.	Overall Avg.
York	7	Ж	4598	2037	6998	4682	4497	3795	3930	3350	4229	3826	4062	4598	4508	5127	4574	4299
Georgia-01R	_	œ	3636	4937	3486	4372	4108	3162	4566	3314	3996	3760	5105	5446	4879	4521	4988	4285
Georgia-02C	7	R	2581	4882	3656	4588	3927	3078	3491	3023	4049	3410	3607	5240	4676	5240	4691	4009
Gregory	ME	^	2055	4869	3130	5498	3888	1568	3627	4093	3523	3203	3688	3878	5143	5182	4473	3855
VC2**	Е	^	2285	4643	2281	5305	3629	1868	3449	2650	4219	3047	3859	4834	4414	4217	4331	3669
VAC92R	Е	>	2249	4320	2965	5650	3796	1707	2578	2776	4627	2922	3775	4095	4279	4791	4235	3651
NCV11	Е	Λ	2114	4824	1339	5379	3414	1717	2791	1985	3652	2536	3985	4226	4779	5063	4513	3488
NC12C	Е	Λ	1739	3788	1839	4601	2992	1497	2552	2776	3461	2572	3252	4459	4124	4533	4092	3218
CHAMPS	Е	Λ			1901	2002	3453			2633	3751	3192			5250	5018	5134	3926
Brantley	Е	^			1378	5253	3316			2554	3125	2840			4204	5472	4838	3664
Georgia-05E	M	Λ		5085	4472	5398	4985		3020	4401	5245	4222		4098	4253	5285	4545	4584
Florida Fancy	M	^		4533	3356	5298	4396		3078	3252	4968	3766		5272	4892	6125	5430	4530
C.V.			12	12	21	8		16	14	11	11		16	12	6	12		
LSD			427	794	861	561		520	612	493	969		808	756	546	836		

**Table 5.** Disease Resistance of Major Peanut Varieties in the Southeastern United States. (Adapted from the University of Georgia Disease F mean better resistance.)

Variety <sup>1</sup>	TSWV Points	Leaf Spot Points	Soilborne Dis	ease 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	unknown	unknown	unknown
Georgia Green	30	20	25	15
Andru II <sup>2</sup>	25	30	25	25
Florida Fancy* <sup>,2</sup>	25	unknown	unknown	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 3085 RO <sup>2</sup>	15	30	25	unknown
Georgia-05E	15	20	25	unknown
Georgia Greener*	15	20	25	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	20	20	unknown
Florida-07 <sup>2</sup>	10	20	15	unknown
Georgia-07W*	10	15	10	unknown
Tifguard <sup>3,6</sup>	10	15	10	unknown
York <sup>2</sup>	10	10	5	unknown
Georganic	5	10	10	unknown

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

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>High oleic variety.

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

<sup>&</sup>lt;sup>4</sup>Varieties AP3 and C-99R are less resistant to CBR and are not recommended for fields where this disease is a problem.

<sup>&</sup>lt;sup>5</sup>The malady referred to as "funky" or "irregular" leaf spot tends to be more severe in GA02C and GA03L 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>&</sup>lt;sup>6</sup>The new variety Tifguard has excellent resistance to the peanut root-knot nematode.