Give the New UGA *Southern Misses* Blueberries a Try

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The University of Georgia produces and evaluates thousands of seedlings and selections each year seeking new blueberry varieties for commercial growers. There continues to be interest in higher yielding varieties with improved fruit quality. Recently, three new southern highbush varieties were released and we are calling this new series *Southern Misses*. More than 10 years in the making, the *Southern Misses* are intended to target our major southern highbush season with high quality, improved varieties which are well adapted to the area. Overall, this suite of varieties should offer commercial Georgia growers, and others across the Southeast, novel new southern highbush varieties to develop more reliable production strategies. A brief description of each of the *Southern Misses* is given below, along with some data, to help visualize how they might be used.

'Miss Alice Mae™' - This is a main season southern highbush cultivar to consider as a replacement for the older industry standard 'Star'. 'Miss Alice Mae™' will flower a few days later than 'Star', helping to avoid some freeze damage scenarios. However, frost protection measures would still likely benefit 'Miss Alice Mae™' in many years. The new variety should ripen during the peak of southern highbush season, which is around the first week of May in south Georgia. In trials (see data in tables) yields and berry quality have been very good, and the variety will hopefully provide the industry a new main season workhorse. The plant habit is semi-upright and compact. Regular pruning is advised to maintain good berry size on 'Miss Alice Mae™'. Berry size, Brix, and firmness of the variety are very good.

Figure 1. 'Miss Alice Mae™' fruit.

'Miss Jackie™' – 'Miss Jackie™' is a high yielding, high fruit quality, late season southern highbush. This new variety is later ripening than 'Miss Alice Mae™' and 'Star', ripening more closely to our 2006 release 'Camellia'. The latter half of May is a production time frame in south Georgia that often has a "fruit gap". This gap occurs as the main season highbush varieties expire; but, before the early season rabbiteye varieties come into significant production. 'Camellia' has proven to help fill this gap, but additional varieties are needed. 'Miss Jackie™' fits the timing of the gap well, and should compliment 'Camellia' nicely. The variety generally flowers later than main season varieties and also ripens later. This variety, like 'Camellia', could be used in production systems without frost protection to achieve later season highbush production. The upright, compact bush habit of 'Miss Jackie™' is generally easier to manage than 'Camellia', which can be overly vigorous, causing excessive plant "leggyness". 'Miss Jackie™' should be a strong companion variety for 'Camellia' and/or 'Legacy', or as a variety offering an additional option to growers in the later season production window.

Figure 2. 'Miss Jackie™' fruit.

'Miss Lilly™' – 'Miss Lilly™' is a strongly upright, narrow plant, with large high quality berries. Many growers are looking for reliable main season highbush varieties to produce without having to incur frost protection expense. 'Miss Lilly™' is expected to offer growers fruit that ripens in the main southern highbush season, but without the requirement of frost protection. The new variety flowers very late, yet ripens with or near 'Star' and 'Miss Alice Mae™'. Although 'Miss Lilly™' per plant yield is less than 'Star' on average, yields are steady from year to year due to the late flowering habit allowing the variety to typically escape cold damage. The lower per plant yield for 'Miss Lilly™' can be compensated for by higher density planting, since the plant is very narrow and upright. Higher density planting would achieve comparable per acre yields in that case. Regardless, there are a number of growers looking for an easier to manage, early ripening southern highbush. 'Miss Lilly™' could be grown with 'Camellia' and 'Miss Jackie™' to provide both early and later ripening fruit on the same farm without overhead frost protection.

Figure 3. 'Miss Lilly™' fruit.

In summary, after more than 10 years of breeding and selection, going through literally thousands of plants, UGA has released three new *Southern Misses* highbush blueberries with high quality fruit, and plants that are well adapted to Georgia growing conditions. The varieties differ in their targeted utility, and growers are urged to give these a trial. The new varieties are all being patented, and plants can only be produced and sold by licensed nurseries. Licensed nurseries for 'Miss Alice Mae™' and 'Miss Jackie™' are Cornelius Farms and Fall Creek Farm & Nursery. Licensed nurseries for 'Miss Lilly™' include Cornelius Farms, Farmer John, and Fall Creek Farm & Nursery. Contact these suppliers today and order plants for trial.

Table 1. Plant and fruit ratings for the new UGA *Southern Miss* blueberry varieties and standards at the Alapaha Research Farm. Data are 5 Year avg.

Berry and plant attributes	Star	Camellia	Miss Jackie™	Miss Alice Mae™	Miss Lilly™
Berry size	7.6	8.9	7.9	7.4	8.4
Berry scar	7.0	7.2	7.5	7.9	7.4
Berry color	7.1	8.7	7.6	7.6	7.8
Berry firmness	7.2	7.2	7.8	7.6	7.8
Berry flavor	7.0	7.8	7.5	7.9	7.8
Cropping	4.7	5.4	5.9	5.9	5.2
Plant vigor	6.3	9.8	8.5	8.4	7.6
Date of 50% flowering	Mar 3	Mar 11	Mar 10	Mar 8	Mar 17
Date of 50% ripening	May 8	May 15	May 17	May 8	May 11
Fruit development period (days)	66	65	67	61	55

Table 2. Yield, berry wt., firmness and BRIX for 3 new UGA blueberry varieties and 2 standards 2010 thru 2013. Data are from the UGA Blueberry Farm in Griffin, Ga.

Year	Star	Camellia	Miss Jackie™	Miss Alice Mae™	Miss Lilly™
	Yield (lbs/bush)				
2011	12.7	9.7	10.0	10.4	8.5
2012	11.7	10.5	17.0	9.1	7.2
2013	3.9	15.9	15.5	14.3	7.3
Avg	**9.4**	**12.0**	**14.2**	**11.3**	**7.7**
	Berry wt (g/berry)				
2010	1.53	2.94	1.90	2.07	3.15
2011	1.20	1.97	1.80	1.47	2.08
2012	1.80	1.60	1.55	1.75	2.17
2013	1.79	2.56	1.76	2.00	2.12
Avg	**1.58**	**2.28**	**1.75**	**1.82**	**2.38**
	Firmness (g/mm)				
2010	196	150	165	208	165
2011	206	166	173	190	188
2012	190	164	168	182	186
2013	191	150	166	208	188
Avg	**196**	**157**	**168**	**197**	**182**
	Brix (%)				
2012	13.9	14.5	12.0	15.3	12.0
2013	13.5	13.3	13.3	14.0	12.3
Avg	**13.7**	**13.9**	**12.7**	**14.7**	**12.2**