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Special Reports *Recent University of Georgia Blueberry Variety Releases to Consider*

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Special Reports:

Recent University of Georgia Blueberry Variety Releases to Consider

D. Scott NeSmith

Southern highbush blueberry production in the Southeast continues to expand, and the UGA Blueberry Cultivar Development Program is introducing new and more relevant cultivars as fast as feasible. Often new varieties are introduced, but due to a lag in initial plant supply and propagation it is some time before plants are actually available. This may tend to make growers “forget” a new variety since plants were not initially available for trialing. Three newer southern highbush UGA blueberry varieties that should be considered for trialing and/or production that are now available (perhaps in limited quantities) are ‘Suziblue’, ‘Camellia’ and ‘Southern Splendour’. The following is a brief update on these varieties following the 2011 season.

Suziblue Southern Highbush Blueberry (USPP 21,167)

‘Suziblue’ (Fig. 1 and 2) was released in 2009. There are a few small plantings that were 2 to 3 years old or more around South Georgia which we could observe during 2011. On average, ‘Suziblue’ flowers and ripens with ‘Star’; however, berry size and firmness of the new UGA variety continue to be more favorable than ‘Star’. On healthy bushes, ‘Suziblue’ berry size often exceeds 2.5 g per berry, a size more typical of the large fruited variety ‘Emerald’. However, ‘Suziblue’, like ‘Star’, ripens 5 to 9 days earlier than ‘Emerald’ in general, and flowers 7 to 10 days after ‘Emerald’.



Figure 1. ‘Suziblue’ blueberry during bloom, March 22, 2010.

‘Suziblue’ has been observed to do very well in weaker soil situations as compared to several southern highbush varieties and selections in our various test plots over the past 2 to 3 years. Thus, the new variety appears to be vigorous across a range of environments, and produces good yield. In both 2010 and 2011 we were able to machine harvest ‘Suziblue’ at the Alapaha Research Farm, and berries held up well through the process, exceeding ‘Star’ in firmness following machine harvest. While we are not advocating ‘Suziblue’ as a “machineable variety”, it was beneficial to see that fruit firmness of the berry is very good. This suggests harvesting, handling, and shipment of the fruit should result in minimal losses due to soft berries as compared to many standard southern highbush varieties. ‘Suziblue’ is suggested as a ‘Star’ companion and/or replacement in South Georgia and similar growing regions. ‘Rebel’ and ‘Southern Splendour’ could be good companion varieties for pollination with ‘Suziblue’.



Figure 2. 'Suziblue' fruit during ripening.

Camellia Southern Highbush Blueberry (USPP 18,151)

'Camellia' (Fig. 3 and 4), although released in 2005, has only been planted in limited quantities to date. However, this may be a "sleeper" southern highbush variety for South Georgia. The variety continued to perform very well in test plots in 2011. The berries are very high quality, having good firmness, excellent color, good flavor, and a very large sized berry. 'Camellia' flowers and ripens on average 3 to 7 days after 'Star' and 'Suziblue'. Therefore, this would be considered a mid-season southern highbush. In South Georgia, there can be a lag in fruit available just after 'Star' and just before 'Premier', 'Vernon', and 'Alapaha' rabbiteye ripen heavily. 'Camellia' has very good potential for filling the production gap between early southern highbush and early rabbiteye. Plants are very vigorous, with a strong upright growth habit. The large berry size of 'Camellia' improves hand-harvesting efficiency as compared to smaller sized berries from the latter part of the early southern highbush season. Growers might want to consider planting some 'Camellia' as part of an effort to extend the southern highbush harvest season in South Georgia. 'Suziblue' and 'Star' would be varieties to consider for pollination. 'Camellia' is not considered suitable for machine harvest.



Figure 3. 'Camellia' blueberry during bloom, March 5, 2008.



Figure 4. 'Camellia' fruit during ripening.

Southern Splendour Southern Highbush Blueberry (USPPAF)

'Southern Splendour' (Fig. 5 and 6) was released in 2010. It is an early season southern highbush blueberry, having great flavor and very good berry firmness. The new variety also has a short fruit development period (time from flowering to ripening). 'Southern Splendour' ripens with 'Star' and 'Suziblue', perhaps just a little earlier in some years. Berries generally have concentrated ripening. While no significant commercial acreage is yet established, 'Southern Splendour' continues to perform well in test plots. Yields for the variety are typically less than those for 'Star' and 'Suziblue'. However, the plant type (particularly the crown), ease of berry detachment, concentrated ripening and firmness of the fruit potentially make this a good candidate for machine harvesting, especially for the early market. It is recommended for trial, and would be suitable for pollinating 'Rebel', 'Suziblue', and 'Star'.



Figure 5. 'Southern Splendour' blueberry during bloom, March 22, 2010.



Figure 6. 'Southern Splendour' fruit during ripening.

Plant Sources/Availability

As discussed earlier, the newer UGA blueberry varieties have not been widely available, but the plant supply should improve starting in 2012. Please note that propagation of the above mentioned varieties, and all new UGA blueberry varieties, is strictly prohibited without a license from the University of Georgia Research Foundation, Inc. Below in Table 1 is a partial list of suppliers that are likely to have plant material available, or soon-to-be available. For a complete list of licensed suppliers, or for more information on becoming a licensee, contact:

University of Georgia Research Foundation
 Technology Commercialization Office
 808 Boyd GSRC Building
 Athens, Ga. 30602-7411
 Ph. (706)-542-1404
 E-mail: tco@uga.edu

Table 1. A partial list of licensed nurseries for the UGA blueberry varieties listed in this article. This **is not** an endorsement for the companies listed, rather it is provided simply for information purposes to assist growers in finding a supply of plants.

Licensee	Camellia	Southern Splendour	Suziblue
Alma Nursery	X		X
Blue River Farms	X	X	
Cornelius Farms	X	X	X
Fall Creek Farm & Nursery	X		X
Island Grove Ag Products	X	X	
Oregon Blueberry Farms & Nursery	X	X	X

Syngenta Announces a New Paraquat Formulation – Gramoxone SL

Wayne Mitchem
 NCSU, Clemson Univ., and UGA

In October Syngenta introduced Gramoxone SL which will replace the Gramoxone Inteon formulation of paraquat that has been marketed in the US for several years. The new formulation lacks the Inteon (alginate) technology and is expected to be more compatible with various qualities of water. Gramoxone SL contains the same concentration of paraquat as Gramoxone Inteon so use rates will remain the same.

Additional products containing paraquat marketed in the U.S. include Firestorm, Paraquat Concentrate and Parazone. All of the products are more concentrate formulations of paraquat than Gramoxone SL and therefore have a lower use rate.

SRSF Sponsored Agent Training on Organic Production of Small Fruits

Gina Fernandez, Professor, Horticultural Science Department, NC State University

On November 8-9, 2011, twenty-four scholarship county extension agents from NC, SC, AR, TN, GA and VA and 10 others (growers, consultants, NC regional agronomists) attended a 2-day organic small fruit agent training session sponsored by the Southern Region Small Fruit Consortium (SRSFC). The training was held in conjunction with the SE Strawberry Expo, so agents were able to attend part of that meeting earlier in the week.



During the first day, we had a classroom session that started with a general overview of organic production and certification presented by Tony Kleese, of the Earthwise company. The rest of the classroom sessions included a series of one-hour sessions on each of the primary small fruit crops grown in the southern region. John Vollmer, a grower from Bunn NC, shared his experiences with organic strawberry production. Dr. Gerard Krewer, Professor Emeritus, Univ. GA and blueberry grower, taught us about organic blueberry production. Dr. Gina Fernandez, NC State University, presented information on organic caneberry (blackberry and raspberry) production. Dr. Mizuho Nita, VA Tech, and Clyde and Pat Colwell, from Carolina Heritage Vineyard and Winery, Elkin, NC, shared their experiences with winegrape organic production.



Blackberry and Raspberry Seasonal Checklist

Gina Fernandez, Small Fruit Specialist
North Carolina State University

This checklist was originally developed for blackberry growers in North Carolina. Many of the items apply to raspberry production as well. You may have to adjust your work activities either earlier or later depending on your location. For more detailed information, check the Southern Region Integrated Bramble Management Guide and the Southeast Regional Bramble Production Guide at:

<http://www.smallfruits.org/SmallFruitsRegGuide/index.htm>. Fertilization recommendations courtesy of NCDA &CS Agronomic Division.

WINTER

Plant growth and development

- ✓ Plant is “dormant”
- ✓ Some differentiation is occurring in the flower buds

Pruning and trellising

- ✓ Pruning should occur in late winter. However, in some areas winter ice storms can do tremendous damage to plants and trellis systems. If you produce blackberries in one of these areas, pruning can take place early winter to help avoid severe damage.
- ✓ **Make trellis repairs after plants have defoliated but before pruning and training.**

Erect types

- ✓ Prune out the spent floricanes



There was a similar training in 2005, and most of what was presented was standard practices that help minimize pest pressure and general use of cover crops and composts. Although there are still many unknowns, there were many new science based recommendations that will help agents help growers produce berries organically.

On the second day of the training there was a tour of the Vollmer Farm in Bunn, NC. John Vollmer was one of the first farmers in the area to produce organic strawberries, and has since added blueberries and blackberries. Agents were able to see first hand the challenges and practices of organic berry production at this farm.

- ✓ Tie canes to wires in a fan shape
- ✓ Cut lateral branches back to 8-12"
- ✓ Thin canes to 6-8 canes/ hill (4 ft spacing)

Trailing types

- ✓ prune out spent floricanes
- ✓ tie or weave canes to wire so that they do not overlap
- ✓ prune side laterals to 12-18"
- ✓ thin canes to 6-8 hill (6-8ft spacing)

Primocane fruiting raspberries and blackberries

- ✓ Prune (mow) primocane fruiting types to ground level

Weed control

- ✓ Many summer weed problems can be best managed in the fall and winter using preemergent herbicides. Determine what weeds have been or could be a problem in your area. Check with local extension agent for cultural or chemical means to control these weeds.
- ✓ Establishing new plants into rows of black plastic or landscape cloth can reduce weed problems significantly

Insect and disease scouting

Check the Southern Regional Bramble integrated Management Guide for recommendations.
www.smallfruits.org

- ✓ To learn more about the spotted wing drosoplila and how it may impact your fruit in 2012, check out Hannah Burrack blog, she has lots of links in addition to her blog posts
- ✓ Scout fields for insect and disease damage and remove those canes
- ✓ Remove wild brambles within 600 ft of your planting during the winter
- ✓ Apply liquid lime sulphur or Bordeaux for disease control before new buds are 1/8"

Planting

- ✓ Growers in warmer regions can plant in December.
- ✓ Take soil tests to determine fertility needs for spring plantings.
- ✓ Prepare list of cultivars for next years new plantings. Find the commercial small fruit nursery list at <http://www.smallfruit.org>

Nutrient management

- ✓ Establishment

Broadcast any recommended lime, P2O5 and K2O along with 30 lb N per acre before plowing. Do not add additional fertilizer when plants are set out. In July, topdress with additional nitrogen at the rate of 30 lb per acre.

✓ Maintenance

- a. If you limed and fertilized the crop at setting according to soil test recommendations, follow this fertilization schedule. In March, broadcast 40 lb N, 40 lb P2O5 and 80 lb K2O per acre. In July, topdress with additional N at the rate of 60–80 lb per acre.
- b. If you did not lime and fertilize the crop at setting according to soil test recommendations, follow this fertilization schedule.
 - Have the soil tested.
 - Broadcast any recommended lime as soon as possible.
 - In March, apply the recommended rates of P2O5 and K2O along with 40 lb N per acre.
 - In July, topdress with N at the rate of 60–80 lb per acre.
 - The following year, use the maintenance schedule outlined under a. above.
 - Have the soil tested at least once every three years.

Water management

- ✓ Make repairs to irrigation system (check pumps, lines, etc)
- ✓ Plants generally do not need supplemental water in winter

Marketing and miscellaneous

- ✓ Order containers for next season
- ✓ Make contacts for selling fruit next season
- ✓ Attend grower meetings:
 - 2012 SE Regional Fruit and Vegetable Conference
- ✓ January 5-8, 2012 in Savannah, Ga. Jan 6 has a session on blackberry production. <http://seregionalconference.com/index.html>
- The 2012 North American Raspberry & Blackberry Conference Meeting

- ✓ The 2012 North American Raspberry and Blackberry Conference will be held January 16-18, 2012 in Sandusky, Ohio, in association with the Ohio Produce Growers and Marketers Association.
<http://www.raspberryblackberry.com/local.cfm?doc=webdocs%2F2012NorthAmericanRaspberryBlackberryConference%2Ehtm>
 - The North Carolina Commercial Blackberry and Raspberry Growers Association
- ✓ Feb 6, 2011. Shelby NC. For more information, click on this link:
<http://cipm.ncsu.edu/NCCBRGA/> or contact [Daniel Shires@ncsu.edu](mailto:Daniel_Shires@ncsu.edu) or Josh Beam <josh.beam@sunnyridge.com>

Quarterly Strawberry Growers Checklist

E. Barclay Poling
Professor Emeritus & Small Fruit Specialist

This checklist was originally developed for growers in North Carolina. You will have to adjust your work activities either earlier or later depending on your location. For more detailed information, check the Southern Region Integrated Strawberry Management Guide and the Southeast Regional Strawberry Plasticulture Production Guide at:
<http://www.smallfruits.org/SmallFruitsRegGuide/index.htm>

December-January

- ✓ Winterize your drip system now
- ✓ Keep deer out of the strawberry patch.
- ✓ Order row covers now! Don't wait until the day before you need them.
- ✓ If annual ryegrass was seeded, check to see if it is getting tall. It is getting too tall when it reaches 10 inches. A spray with Poast to stunt the annual ryegrass but not to kill it may be a good strategy. Lower rates of Poast can be very effective. Contact your agent for more information.
- ✓ If you are seeing fresh dug or plug plants that have not grown off well, get them sent to the Plant Disease & Insect Clinic (PDIC, see www.cals.ncsu.edu/plantpath/extension/clinic/) at NCSU for a proper diagnosis. A correct diagnosis is critical to differentiating anthracnose crown rot from crown rot caused by *Phytophthora cactorum*.

- ✓ Scout for weeds.
- ✓ If considering Stinger herbicide for vetch control, first check the Dow AgroSciences label at this website to see if the required supplemental label exists for your state; it is important to download the label specific to your state. See www.cdms.net/LabelsMsds/LMDefault.aspx?manuf=11&t=1,2,3,4
- ✓ Scout for mites (especially before applying row covers).
- ✓ Purchase your digital thermometer before you need it! Calibrate all thermometers to read a true 32°F in an ice bath.
- ✓ Monitor weather forecasts closely – consider a subscription to a custom weather report/service.
- ✓ Check all equipment, including sprayer (replace hoses, etc.).
- ✓ Subscribe to electronic advisories for strawberry plasticulture growers (see box below).

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Editor and Contributor.....Tom Monaco

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