'Blue Suede™': A Southern Highbush Blueberry for the Home Gardener

D. Scott NeSmith^{1,3}

Department of Horticulture, University of Georgia, 1109 Experiment Street, Griffin Campus, Griffin, GA 30223-1797

Mark K. Ehlenfeldt²

USDA-ARS, Marucci Center for Blueberry and Cranberry Research and Extension, Rutgers University, Chatsworth, NJ 08019

Additional index words. *Vaccinium* hybrid, fruit breeding, cultivar, edible ornamental

'Blue Suede™' is a new southern highbush blueberry (*Vaccinium* hybrid) jointly released by the University of Georgia College of Agricultural and Environmental Sciences, the University of Georgia Agricultural Experiment Station, and the U.S. Department of Agriculture–Agricultural Research Service for the homeowner market. The new cultivar ripens early compared with rabbiteye cultivars generally available to home gardeners in the Southeast through large commercial nursery outlets.

Origin and Description

'Blue Suede™' (selection number TH-682) was selected in 2001 at the Georgia Experiment Station in Griffin, GA, by D. Scott NeSmith. It originated from a crossing of MS-122 × MS-6 made by Mark Ehlenfeldt, USDA-ARS, Chatsworth, NJ. The pedigree for the new cultivar (Fig. 1) shows it is a hybrid containing considerable *Vaccinium corymbosum* L. and *V. darrowii* Camp with a small amount of *V. ashei* Reade coming through 'Sharpblue' (Lyrene and Sherman, 1992). Although from a more recent cross, 'Blue Suede™' has the same pedigree as the commercial southern highbush releases 'Camellia' (NeSmith and Draper, 2007) and 'Gupton' (USDA-ARS, Poplarville, MS; described in Lyrene, 2006). 'Blue Suede™' produces an abundance of attractive, light-blue fruit (Fig. 2), and berries are generally large and have good flavor. The plant of 'Blue Suede™' is vigorous, and attractive deep red color develops for fall foliage (Fig. 3). The cultivar is estimated to have a chilling requirement of 500 to 550 h below 7 °C (derived by comparing flowering dates with those of known cultivars). It is estimated that 'Blue Suede™'

will perform well in USDA hardiness zones 6a through 9a.

Performance

Data from Georgia has indicated that 'Blue Suede™' has desirable attributes for a backyard blueberry cultivar. Table 1 lists berry and plant attributes for 'Blue Suede™' compared with two early rabbiteye cultivars (Climax and Premier) and one southern highbush cultivar (O'Neal) grown under field

conditions at The University of Georgia Blueberry Research Farm near Alapaha, GA. Plants were established in 2002, and data are averages over the years 2004 through 2006. Some of the new cultivar's prominent features have been early ripening, large berry size, and outstanding light-blue fruit color as compared with the rabbiteye varieties at this test site. When compared with the southern highbush 'O'Neal', 'Blue Suede™' has shown larger berry size, more pronounced light-blue color, increased plant vigor, and considerably later flowering time.

Table 2 presents 3-year average data for plants of the new cultivar and the same standard cultivars grown at The University of Georgia Blueberry Research Farm near Griffin, GA. At this test site, 'Blue Suede™' also had better berry color than all cultivars and had good plant vigor. Additionally, berry size was good for 'Blue Suede™' in Griffin, and average crop load was very good.

The large berry size and light-blue fruit make the selection 'Blue Suede™' desirable for the home gardener. Large nursery retail chains in the southern United States typically carry only older early-ripening rabbiteye cultivars like Premier and Climax or the older southern highbush 'O'Neal'. As discussed previously, 'Blue Suede™' has been

Fig. 1. Pedigree of 'Blue Suede™' (selection TH-682) southern highbush blueberry.

Fig. 2. 'Blue Suede™' southern highbush blueberry fruit during ripening.

Fig. 3. 'Blue Suede™' fall foliage color development.

Received for publication 4 Nov. 2009. Accepted for publication 19 Nov. 2009.

This research was supported, in part, by state and Hatch Act funds allocated to the Georgia Agricultural Experiment Stations.

A contribution of the University of Georgia Agricultural Experiment Station's Griffin Campus.

¹Professor.

²Research Plant Geneticist.

³To whom reprint requests should be addressed; e-mail snsmith@griffin.uga.edu.

Table 1. Ratings of fruit and plant characteristics of 'Blue Suede™', two rabbiteye (Climax and Premier), and one southern highbush (O'Neal) standard cultivars over a 3-year period (2004 to 2006) at Alapaha, GA.^z

Berry and plant attributes ^y	Blue Suede™	Climax	Premier	O'Neal
Berry size	8.3 ± 0.4	6.7 ± 0.3	7.7 ± 0.4	6.8 ± 0.6
Berry scar	7.8 ± 0.6	8.3 ± 0.2	8.2 ± 0.2	7.0 ± 0.1
Berry color	9.5 ± 0.3	7.5 ± 0.3	8.0 ± 0.3	7.2 ± 0.2
Berry firmness	7.7 ± 0.2	8.3 ± 0.2	6.8 ± 0.1	6.7 ± 0.2
Berry flavor	7.7 ± 0.2	7.8 ± 0.2	8.0 ± 0.1	7.7 ± 0.2
Crop load	4.8 ± 1.2	4.3 ± 1.6	6.0 ± 0.8	4.7 ± 1.3
Plant vigor	7.0 ± 0.1	8.5 ± 0.8	9.0 ± 0.1	6.0 ± 0.5
Date of 50% flowering	21 Mar.	10 Mar.	18 Mar.	5 Mar.
Date of 50% ripening	24 May	3 June	6 June	15 May

^yRatings are based on a 1 to 10 scale with 1 being the least desirable and 10 being the most desirable. A value of 6 to 7 is generally considered to be the minimum acceptable rating for a commercial cultivar.

^zValues are means ± the SE with n = 3.

Table 2. Ratings of fruit and plant characteristics of 'Blue Suede™', two rabbiteye (Climax and Premier), and one southern highbush (O'Neal) standard cultivars over a 3-year period (2004 to 2006) at Griffin, GA.^z

Berry and plant attributes ^y	Blue Suede™	Climax	Premier	O'Neal
Berry size	8.1 ± 0.4	7.4 ± 0.3	8.1 ± 0.4	7.2 ± 0.7
Berry scar	7.0 ± 0.1	8.2 ± 0.1	7.5 ± 0.5	7.0 ± 0.1
Berry color	9.0 ± 0.3	7.9 ± 0.1	7.5 ± 0.5	6.9 ± 0.1
Berry firmness	7.3 ± 0.2	8.3 ± 0.1	6.9 ± 0.2	6.9 ± 0.1
Berry flavor	7.7 ± 0.2	7.9 ± 0.1	8.0 ± 0.1	7.9 ± 0.1
Crop load	8.0 ± 0.3	7.3 ± 0.3	3.5 ± 1.5	5.5 ± 0.5
Plant vigor	8.3 ± 0.2	7.8 ± 0.1	8.0 ± 0.1	5.5 ± 0.5
Date of 50% flowering	28 Mar.	25 Mar.	29 Mar.	18 Mar.
Date of 50% ripening	3 June	15 June	19 June	26 May

^yRatings are based on a 1 to 10 scale with 1 being the least desirable and 10 being the most desirable. A value of 6 to 7 is generally considered to be the minimum acceptable rating for a commercial cultivar.

^zValues are means ± the SE with n = 3.

more vigorous than 'O'Neal' at two Georgia locations and has produced much larger berries that had a better color rating. 'O'Neal' typically blooms too early for most homeowners, subjecting it to spring freeze damage

during flowering, but 'Blue Suede™' had flowering dates 10 to 14 d later than 'O'Neal'. 'Blue Suede™' typically flowered with, or later than, 'Climax' and 'Premier' but ripened considerably earlier than these early

rabbiteye cultivars. The period of ripening of 'Blue Suede™' tends to be protracted, which would be desirable for homeowners because they can harvest berries over a longer period of time. However, the longer ripening period would be less advantageous for most commercial operations. Thus, the expectation is that 'Blue Suede™' will provide home gardeners early-season, high-quality blueberries and desirable fall foliage color development.

Availability

A patent for the new cultivar has been applied for under the selection number TH-682. However, the cultivar has been exclusively licensed to McCorkle Nursery and will be sold under the trade name 'Blue Suede™', which will be introduced as part of their Gardener's Confidence® Collection (www.GardenersConfidence.com) in late 2010 or early 2011. Propagation rights are controlled by University of Georgia Research Foundation, Technology Commercialization Office, GSRC Boyd Bldg, Athens, GA 30602-7411. (www.ovpr.uga.edu/tco/).

Literature Cited

- NeSmith, D.S. and A. Draper. 2007. 'Camellia' southern highbush blueberry. J. Amer. Pomol. Soc. 61:34–37.
- Lyrene, P. 2006. 'Gupton' blueberry, p. 1106. In: Clark, J.R. and C.E. Finn (eds.). Register of new fruit and nut cultivars List 143. Hort-Science 41:1101–1133.
- Lyrene, P.M. and W.B. Sherman. 1992. The 'Sharpblue' southern highbush blueberry. Fruit Var. J. 46:194–196.