



## Results for the 2017 VSU Blueberry Variety Field Trial

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**Introduction:** Blueberry types suitable for Central Virginia are: a) Rabbiteye (*Vaccinium virgatum*), b) Southern Highbush (*Vaccinium corymbosum* X *Vaccinium darrowi* hybrids), and c) Northern Highbush (*Vaccinium corymbosum*). Virginia small market growers may benefit from knowledge of suitable blueberry varieties to plant based on research field trials conducted at Virginia State University Randolph Farm (Petersburg, VA) located in Central Virginia.

**Background:** The blueberry varieties studied in the field research conducted at VSU Randolph Farm includes different varieties of each of the three blueberry types mentioned before. There are two research and demonstration plots of different blueberry varieties planted, with the first plot established in 2009 (10 varieties); and the second plot, established in 2013 and 2014 (33 varieties). Table 1 lists the varieties and select characteristics of blueberry plants studied in the research trials at VSU Randolph Farm.

### Discussion and Results:

**Bird control:** The major source of crop loss is not weather related, but rather birds eating and damaging the blueberry fruits. To address this issue, the product of ‘Fly Away Birdies’ URL: <http://www.birdstoppers.com/fly-away-birdies> was purchased, installed and evaluated. Within the plots, a humming line was installed between two upright stakes and through wind activation, the humming line emits vibratory sounds with the breeze, and this sound supposedly deters the birds. This system was effective for only three weeks and after that the birds got used to the humming sounds and continued picking and damaging the blueberry fruits. We are unable to suggest this product based on our on-farm trial experience. As a result, we are continuously searching for a long-term, cost-effective bird control system. No data was collected for the late season producing varieties due to sever bird damage.

**Marketable yields:** Table 2 depicts the “Top 10” blueberry varieties with the highest marketable yield evaluated at Randolph Farm. From the field trials, the ‘Rebel’ variety produced the highest marketable yield pound per plant among all varieties.

**Fruit size:** The term ‘weight of 10 fruits’ is used to measure fruit size. Table 3 displays the weight of 10 fruits, for the “Top 10” blueberry varieties with the highest ‘weight of 10 fruits.’ . From the field trials, the varieties ‘San Joaquin’, ‘Suziblue’, and ‘Top shelf’ produced ‘very large’ fruits. The varieties ‘Farthing’, ‘Misty’, and ‘Rebel’ produced ‘large’ fruits.

Table 1. Description of blueberry varieties, types, chill hour requirement, and ripening season (Petersburg, VA)

Variety	Type	Chill hours needed to bloom <sup>1</sup>	Ripening Season
Reka	Northern Highbush	800-1000	Early
Bluegold	Northern Highbush	800-1000	Mid
Draper	Northern Highbush	800-1000	Mid
Blue Jay	Northern Highbush	800-1000	Earl-Mid
Toro	Northern Highbush	800-1000	Mid
Elliot	Northern Highbush	800-1000	Very Late
Hardy blue	Northern Highbush	800-1000	Mid
Clockwork	Northern Highbush	800-1000	Mid
Reka	Northern Highbush	800-1000	Early
Blueribbon	Northern Highbush	400-800	Early-Mid
Calypso	Northern Highbush	800-1000	Very early
Cargo	Northern Highbush	800-1000	Late
Top Shell	Northern Highbush	800-1000	Mid
Blue crop	Northern Highbush	800-1000	Mid
Patriat	Northern Highbush	800-1000	Early
North blue	Northern Highbush	800-1000	Early
Darrow	Northern Highbush	800-1000	Late
Brigitta	Northern Highbush	800-1000	Late
Earli blue	Northern Highbush	800-1000	Early
Chandler	Northern Highbush	800-1000	Mid
Duke	Northern Highbush	800-1000	Very early
Elizabeth	Northern Highbush	800-1000	Mid
Legacy	Northern Highbush	400-800	Mid-Late
Titan	Rabbiteye	400-800	Mid
Ocklockonee	Rabbiteye	400-800	Very late
Vernon	Rabbiteye	400-800	Early
Onslow	Rabbiteye	400-800	Late
Poweder blue	Rabbiteye	400-800	Very early
Brightwell	Rabbiteye	400-800	Mid
Primier	Rabbiteye	400-800	Early
Tifblue	Rabbiteye	400-800	Mid-late
Star	Southern Highbush	150-300	Early
Camellia	Southern Highbush	400-800	Mid-Late
Misty	Southern Highbush	150-300	Early
San Joaquín	Southern Highbush	150-300	Mid-late
Spring high	Southern Highbush	150-300	Very early
Scintilla	Southern Highbush	150-300	Early
Emerald	Southern Highbush	150-300	Mid
Sweet crisp	Southern Highbush	150-300	Early
Suzibblue	Southern Highbush	150-300	Very early
Spring high	Southern Highbush	150-300	Very early
Ventura	Southern Highbush	150-300	Very early
Rebel	Southern Highbush	150-300	Early
Farthing	Southern Highbush	150-300	Early
Jewel	Southern Highbush	150-300	Early-Mid
O'Neal	Southern Highbush	400-800	Early

<sup>1</sup>Note: Chill Hours are the number of cumulative hours below 45 degrees Fahrenheit needed for a specific variety to set fruit.

Table 2. 2017 “Top 10” highest blueberry marketable yields (Petersburg, VA)

Variety	Marketable Yield (lb./plant)
Rebel	4.2
San Joaquin	3.6
Farthing	3.5
O’Neal	3.3
Duke	3.2
Clockwork	1.9
Suziblue	1.4
Patriot	1.3
Misty	1.2
Legacy	0.9

Table 3. 2017 “Top 10” blueberry varieties, based on fruit size (Petersburg, VA)

Variety	Weight of 10 Fruits (grams)
San Joaquin	24.6
Suziblue	24.4
Top Shelf	24
Rebel	22.8
Farthing	22.7
Misty	20.7
Patriot	19.8
O’Neal	17.3
Legacy	16.9
Duke	16.1

**Plant Sources:**

"Here is the contact information for a few nurseries that sell blueberry plants. We do not endorse any particular nursery. When ordering blueberry plants, be sure to obtain clean and disease-free plants."

AGRISTARTS, <https://www.agristarts.com/>, Tel: (407) 889-8055

Hartman Plant Company, <https://hartmannsplantcompany.com/> , Tel: (269) 253-4281

North American Plants, <http://www.naplants.com/> , Tel: (877) 627-4636

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