

Blackberry Variety Study

JAYESH SAMTANI, ASSISTANT PROFESSOR AND SMALL FRUIT EXTENSION SPECIALIST
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY



Blackberries going strong:

- Local food movement.
- Nutrition (low in fat, rich in antioxidants).
- 24% of total berry acreage (269 acres) in Virginia is under blackberry production (USDA, 2015).
- Growing interest among homeowners.





Virginia:
Zones 5a to 8a

North Carolina:
Zones 5b to 8b

Arkansas:
Zones 6b to 8a

Virginia's Eight Regions



Mechanicsville

Williamsburg

Charlotte Court House

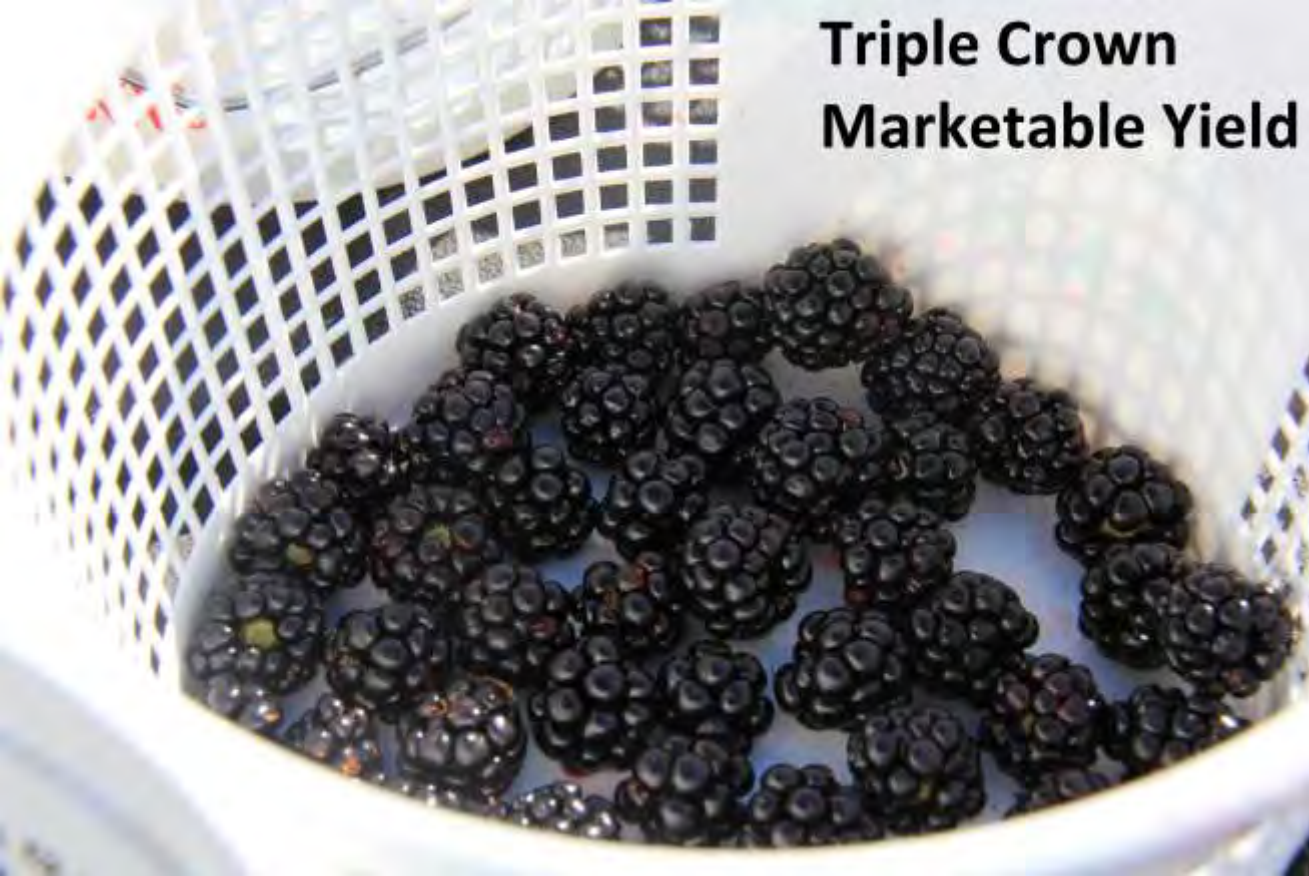
Virginia Beach



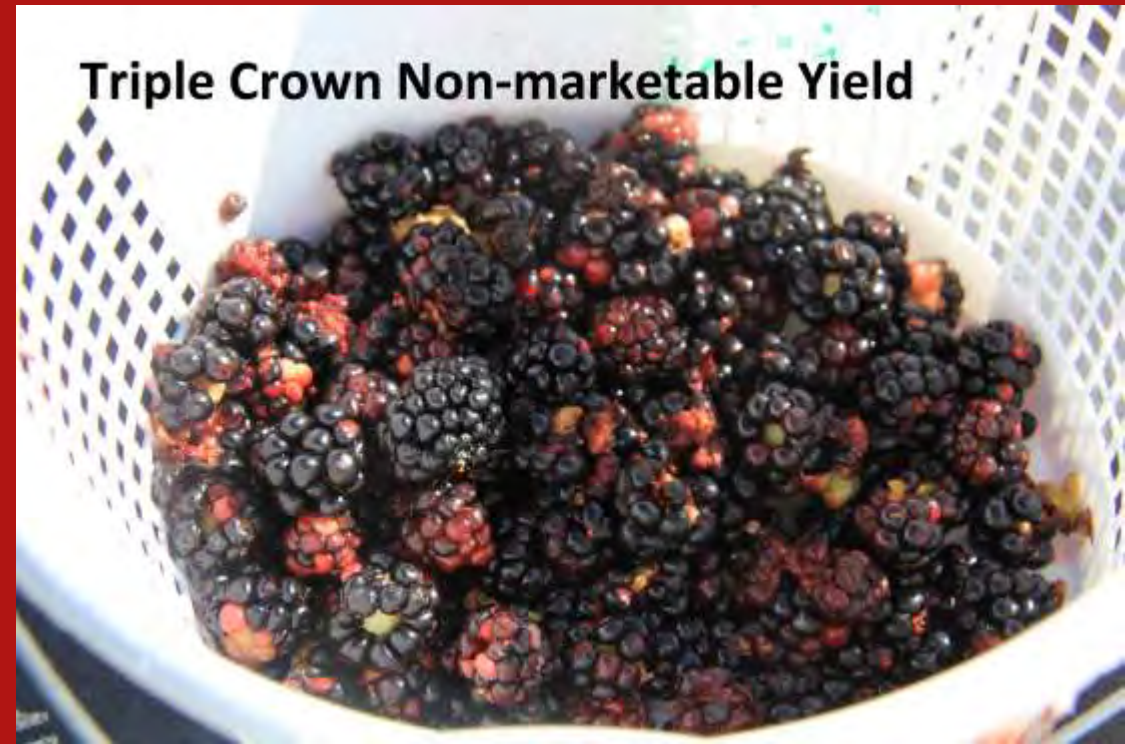
Cultivar	Year released	Growth habit	Cane description	Harvest season
Apache-STD	1999	Erect	Thornless	Mid-Early
Apache-RCA	1999	Erect	Thornless	Mid-Early
Arapaho	1993	Erect	Thornless	Mid
Chester	1985	Semi-erect	Thornless	Late
Chickasaw	1999	Erect	Thorny	Early
Kiowa	1996	Erect	Thorny	Very Early
Natchez	2008	Erect	Thornless	Early
Navaho	1989	Erect	Thornless	Mid
Ouachita	2003	Erect	Thornless	Mid
Triple Crown	1996	Semi-erect	Thornless	Late

On-Farm Locations	Charlotte Court House	Mechanicsville	Virginia Beach	Williamsburg
Age of plants (years)	2 years	5 – 6 years	2 cultivars - 2 ½ 1 cultivar - 15	6 years
No. of varieties evaluated	3	8	3	5
Plant count/variety	3	2 – 4	4 - 5	3 - 4
Plant spacing	4'	3'	5'	1 ½'
Latitude/Longitude	37°06'55.90"N; 78°35'38.64"W	37°41'52.05"N; 77°14'38.21"W	36°42'01.34"N; 75°59'00.98"W	37°22'25.36" N; 76°44'2.86"W

**Triple Crown
Marketable Yield**



Triple Crown Non-marketable Yield



Our Mobile Office



Measuring the Width of a Triple Crown Berry



Weighing Ouachita Grade "A" Marketable Berries



Variety	Charlotte Ct. House	Mechanicsville	Virginia Beach	Williamsburg
	Marketable yield/plant (lbs.)			
Apache-STD	*	2.9	*	*
Apache-RCA	*	2.0	*	*
Arapaho	*	*	*	0.6
Chester	5.1	22.6	8.3	*
Chickasaw	*	7.5	*	*
Kiowa	*	9.4	*	*
Natchez	*	5.9	*	1.2
Navaho	5.4	*	*	2.2
Ouachita	5.2	4.4	*	1.0
Triple Crown (Young)	*	7.9	3.8	0.7
Triple Crown (Old)	*	*	3.9	*

*This cultivar not grown at this location



Chester

Cultivar	Charlotte Court House	Mechanicsville	Virginia Beach	Williamsburg
	-----°Brix -----			
Apache-STD	*	9.0	*	*
Apache-RCA	*	9.8	*	*
Arapaho	*		*	10.5
Chester	8.5	8.0	9.7	*
Chickasaw	*	8.7	*	
Kiowa	*	8.7	*	*
Natchez	*	8.5	*	10.8
Navaho	12.0		*	10.3
Ouachita	12.8	9.0	*	10.2
Triple Crown	*	9.0	8.9 (2 ½ yr.); 10.7(15 yr.)	9.4

* Cultivar is not at this location.

Mechanicsville	Start Harvest	Finish Harvest	Total Rainfall in Inches
Natchez	06/18/15	07/14/15	1.3
Chickasaw	06/18/15	08/01/15	2.2
Kiowa	06/27/15	08/07/15	1.2
Ouachita	06/27/15	08/04/15	1.2
Triple Crown	07/04/15	08/07/15	1.2
Apache - RCA	07/10/15	8/07/15	1.1
Apache - STD	07/10/15	08/07/15	1.1
Chester	07/10/15	9/04/15	3.3

Williamsburg	Start harvest	Finish Harvest	Total Rainfall in Inches
Natchez	6/19/15	7/21/15	4.4
Arapaho	6/23/15	7/31/15	4.6
Ouachita	6/23/15	7/31/15	4.6
Navaho	6/26/15	8/11/15	6.2
Triple Crown	7/2/15	8/11/15	6.2

Charlotte Ct. House	Start Harvest	Finish Harvest	Total Rainfall in inches
Ouachita	6/26/15	8/12/15	4.8
Navaho	7/3/15	8/12/15	4.2
Chester	7/29/15	9/4/15	4.0

Virginia Beach	Start Harvest	Finish Harvest	Total Rainfall in Inches
Triple Crown Young	7/3/15	8/11/15	8.0
Triple Crown Old	7/3/15	8/5/15	7.5
Chester	7/3/15	8/21/15	11.1

Variety	Charlotte Court House	Mechanicsville	Virginia Beach	Williams burg
-----Fruit size in in ² -----				
ApacheSTD ^z	*	1.1	*	*
ApacheRCA	*	1.0	*	*
Arapaho	*	*	*	0.7
Chester	0.7	0.8	0.8	*
Chickasaw	*	1.5	*	*
Kiowa	*	1.5	*	*
Natchez	*	1.2	*	1.1
Navaho	0.7	*	*	0.7
Ouachita	1.0	0.9	*	0.8
Triple Crown (Y) ^y	*	1.0	0.8	0.6
Triple Crown (O)	*	*	0.8	*



Chickasaw Berry Sample



**Chickasaw
Berries**

In Summary:

Charlotte Court House - 'Ouachita' was the sweetest and the largest berry.

Mechanicsville - 'Chester' had the highest observed yield per plant, 'Apache' grown on RCA trellis had the sweetest berries, 'Kiowa' and 'Chickasaw' had the largest berry.

Virginia Beach - 'Chester' had the highest yield, the older plantation of 'Triple Crown' produced the sweetest fruit, the younger plantation of 'Triple Crown' had the largest berry size.

Williamsburg - 'Navaho' had the highest total yield, 'Natchez' had the sweetest and the largest berry.

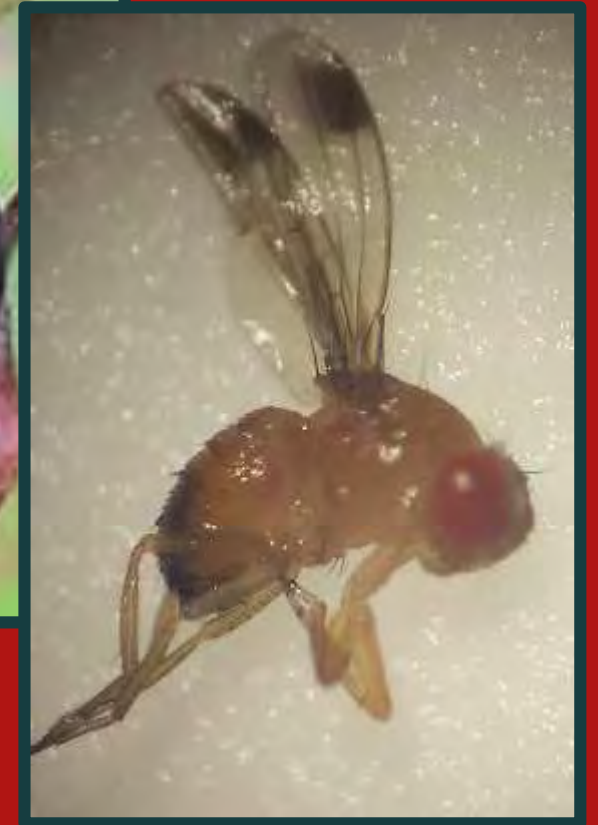


Japanese Beetle
(*Popillia japonica*)



Green June Beetle
(*Cotinis nitida*)

Spotted winged drosophila (*Drosophila suzukii*) - **SWD**



Credit?

**Botrytis found on
Triple Crown**



Botrytis on Chester Berries

Gratitude

Funding: Virginia Agricultural Council.

Farms: Wildwood berry farms; Agriberry; Mill Farms;
Pungo Blueberry Farm.

Extension Agent: Robert Jones, VCE Charlotte County.

Lab. Members of Small Fruit Program.



Chester Berries



<http://www.ext.vt.edu/topics/agriculture/commercial-horticulture/small-fruit/index.html>

The screenshot shows a web browser window displaying the Virginia Cooperative Extension website. The browser's address bar shows the URL: www.ext.vt.edu/topics/agriculture/commercial-horticulture/small-fruit/index.html. The website header includes navigation links: Home, Jobs, Volunteering, Internships, Giving, Local Offices, News, and About. The main logo for Virginia Cooperative Extension is prominently displayed, along with the text "Virginia Tech • Virginia State University". A search bar is located in the top right corner with the text "What do you need?" and "Use the search below to search the site or find your local unit office." Below the search bar is a "GO" button. A horizontal menu lists various categories: Agriculture, Community & Leadership, Natural Resources, Family, Food & Health, Lawn & Garden, and 4-H / Youth. The main content area features a large image of a strawberry field with the text "Small Fruit" overlaid. Below the image is a paragraph: "This page focuses on crop production and marketing aspects pertaining to small fruits (strawberry, blueberry, blackberry, raspberry, and other exotic berries). Information on cultivar recommendations, cultural practices including pruning, training, and trellising, plant and soil sanitation practices, and pest management can be found here." To the right of the main content are several sidebars: "Follow VCE" with social media icons for Facebook, Twitter, Pinterest, and RSS; "Need help?" with a location pin icon and the text "Find your city or county's local office"; "Publications and Resources" with a book icon; and "Events and Calendars" with a calendar icon. At the bottom of the page, there are sections for "Featured Publications" and "Related Topics". The "Featured Publications" section lists: "2015 Commercial Vegetable Production Recommendations" and "Pest Management Guide: Horticultural and Forest Crops, 2015". The "Related Topics" section is partially visible. The browser's taskbar at the bottom shows various application icons and the system clock indicating 10:49 AM on 2/23/2015.

File Edit View History Bookmarks Tools Help

Small Fruit | Virginia Coop... x +

www.ext.vt.edu/topics/agriculture/commercial-horticulture/small-fruit/index.html Search

Home - Jobs - Volunteering - Internships - Giving - Local Offices - News - About

What do you need?
Use the search below to search the site or find your local unit office.
Search **GO**

Virginia Cooperative Extension
Virginia Tech • Virginia State University

Agriculture Community & Leadership Natural Resources Family Food & Health Lawn & Garden 4-H / Youth

Small Fruit

This page focuses on crop production and marketing aspects pertaining to small fruits (strawberry, blueberry, blackberry, raspberry, and other exotic berries). Information on cultivar recommendations, cultural practices including pruning, training, and trellising, plant and soil sanitation practices, and pest management can be found here.

Resources Websites Publications

- 2014 Southeast Regional Strawberry Integrated Management Guide
- 2014 Southeast Regional Caneberries Integrated Management Guide
- Breeding and Production Physiology at UC Davis, Department of Plant Sciences

Follow VCE
Social Media Directory

Need help?
Find your city or county's local office

Publications and Resources

Events and Calendars

Featured Publications

- 2015 Commercial Vegetable Production Recommendations
- Pest Management Guide: Horticultural and Forest Crops, 2015

Related Topics

Explore more Extension resources

10:49 AM 2/23/2015