

# Fruits in Home Garden

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VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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

The screenshot shows a web browser window with the address bar displaying [www.ext.vt.edu/topics/agriculture/commercial-horticulture/small-fruit/index.html](http://www.ext.vt.edu/topics/agriculture/commercial-horticulture/small-fruit/index.html). The page header includes navigation links: Home, Jobs, Volunteering, Internships, Giving, Local Offices, News, and About. The main header features the Virginia Cooperative Extension logo and 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 header is a navigation menu with links: 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 is a sidebar with sections: "Follow VCE" with social media icons for Facebook, Twitter, Pinterest, and RSS; "Need help?" with a map 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 is a "Featured Publications" section with links to "2015 Commercial Vegetable Production Recommendations" and "Pest Management Guide: Horticultural and Forest Crops, 2015". Below this is a "Related Topics" section. The footer of the page includes a "Resources" section with links to "2014 Southeast Regional Strawberry Integrated Management Guide", "2014 Southeast Regional Caneberries Integrated Management Guide", and "Breeding and Production Physiology at UC Davis, Department of Plant Sciences". The browser's taskbar at the bottom shows various application icons and the system clock indicating 10:49 AM on 2/23/2015.

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Small Fruit | Virginia Coop... x +

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

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**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](#)

**What do you need?**

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- » [2015 Commercial Vegetable Production Recommendations](#)
- » [Pest Management Guide: Horticultural and Forest Crops, 2015](#)

**Related Topics**

10:49 AM  
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# Site Selection

- Locate small fruit planting as part of or near vegetable garden.
- Free from frost pocket and high wind.
- Integrate with ornamentals where space is limited.
- Strawberries: avoid sites previously under cultivation with tomato, potato, or eggplant.
- Blueberry: plant away from trees.



# Soils

- Fertile, sandy loam soil.
- Raised beds.
- Drip irrigation is recommended.
- Strawberry pH: 6.0-6.5
- Blueberry pH: 4.2 to 5.2
- Caneberries pH: 6.0 to 6.5

**Table 1. Space Requirement, Yield, Bearing Age, and Life Expectancy of Small Fruits.**

<b>Fruit Expectancy</b>	<b><u>Minimum Distance</u></b>		<b>Annual Yield per Plant</b>	<b>Average Bearing Age</b>	<b>Life expectancy</b>
	<b>Between Rows</b>	<b>Between Plants</b>			
	<b>feet</b>	<b>feet</b>	<b>Lbs.</b>	<b>years</b>	<b>years</b>
Blackberry (erect)	10	5	5-10	1	5-12
Blackberry (trailing)	8	6	5-10	1	5-12
Blueberry	6	5	4-6	3	20-30
Raspberry (red)	8	3	3-5	1	5-12
Raspberry (black)	8	4	3-5	1	5-12
Raspberry (purple)	8	4	3-5	1	5-12
Strawberry (June bearing and day neutral)	3	1	1-2*	1	1-2
Strawberry (ever bearer)	3	1	3/4 -1	1/3	2

\* per parent plant grown in the matted row system.

# Propagation

**Plugs:** Runner tips rooted in peat based media and feature intact root ball. Most widely used method of starting plants in the field. Also the most expensive.



**Fresh dug:** vegetative foliage retained. Transplanted by hand.

**Cut offs:** vegetative foliage mowed prior to digging off the propagation bed.



# Strawberry Plant Types

- Short day or June bearing types:

Fruit harvested in May-June season. Flower buds initiated in fall or short days in spring (March) less than 14 hours daylight or when temperatures are below 60 °F. e.g. Chandler, Camino Real.

- Day-neutral or everbearing:

Perform well in cooler regions. Produce flower buds throughout season however initiation can be hindered when temperatures are high. e.g. San Andreas, Albion.

## Planting depths- Left: Too shallow; Center: Correct; Right: Too deep



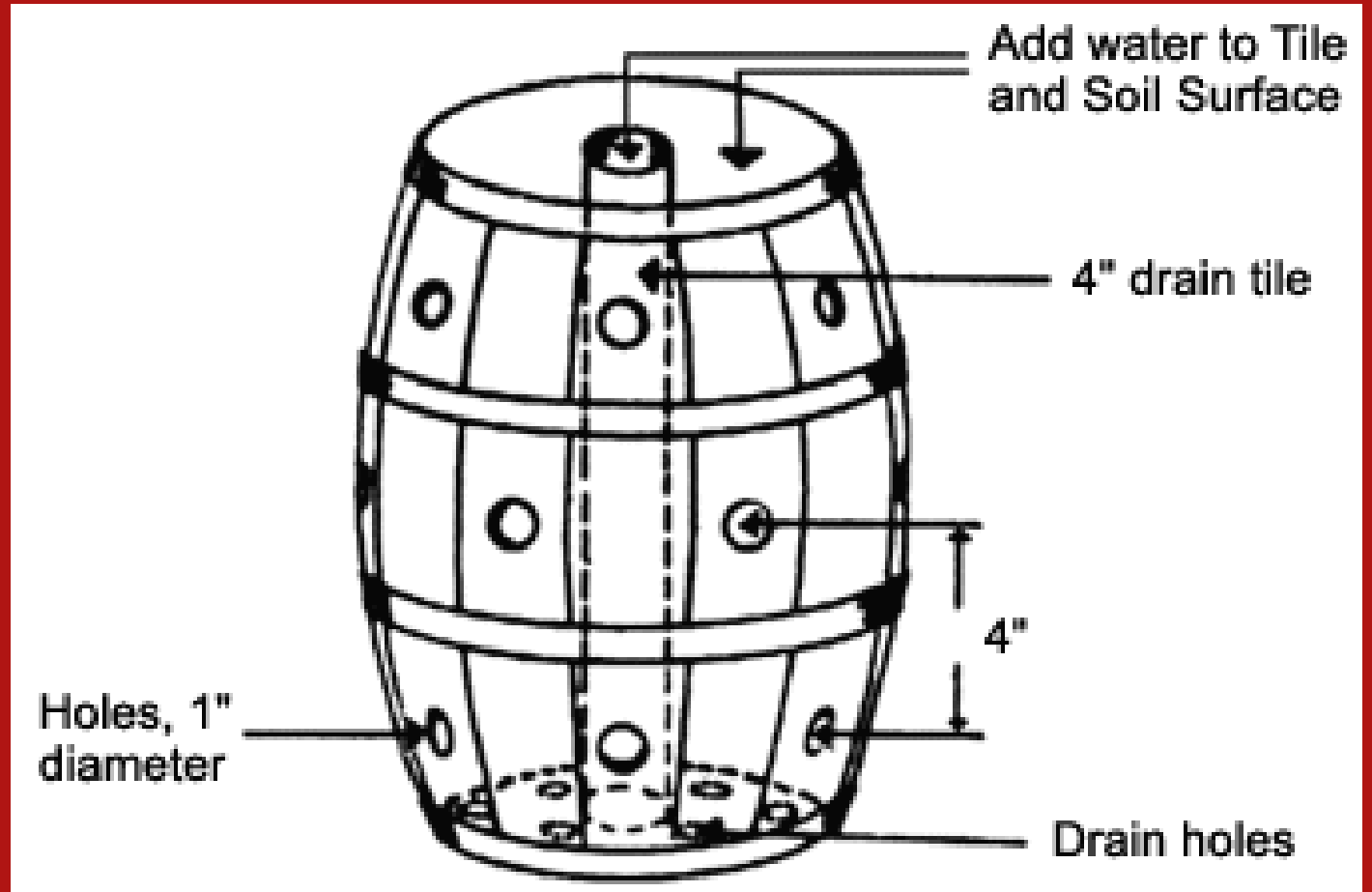
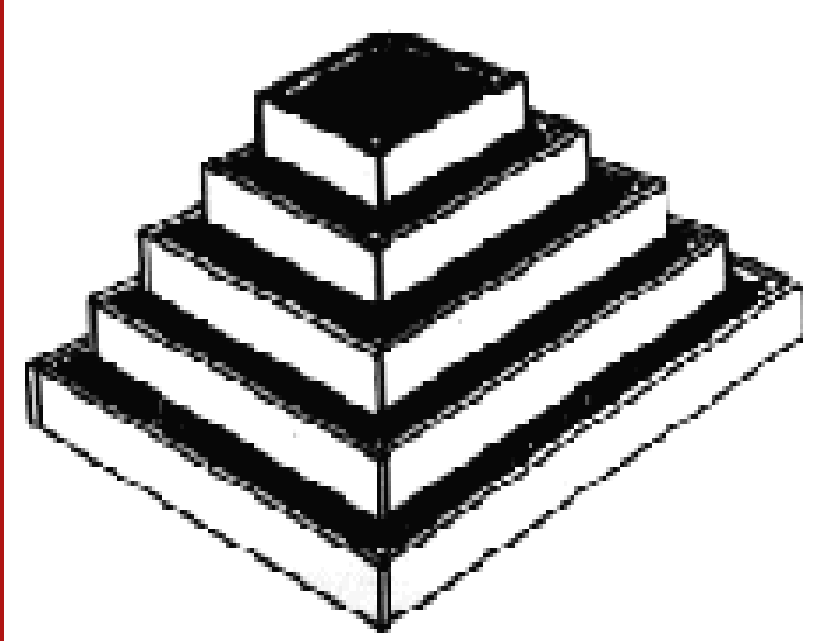




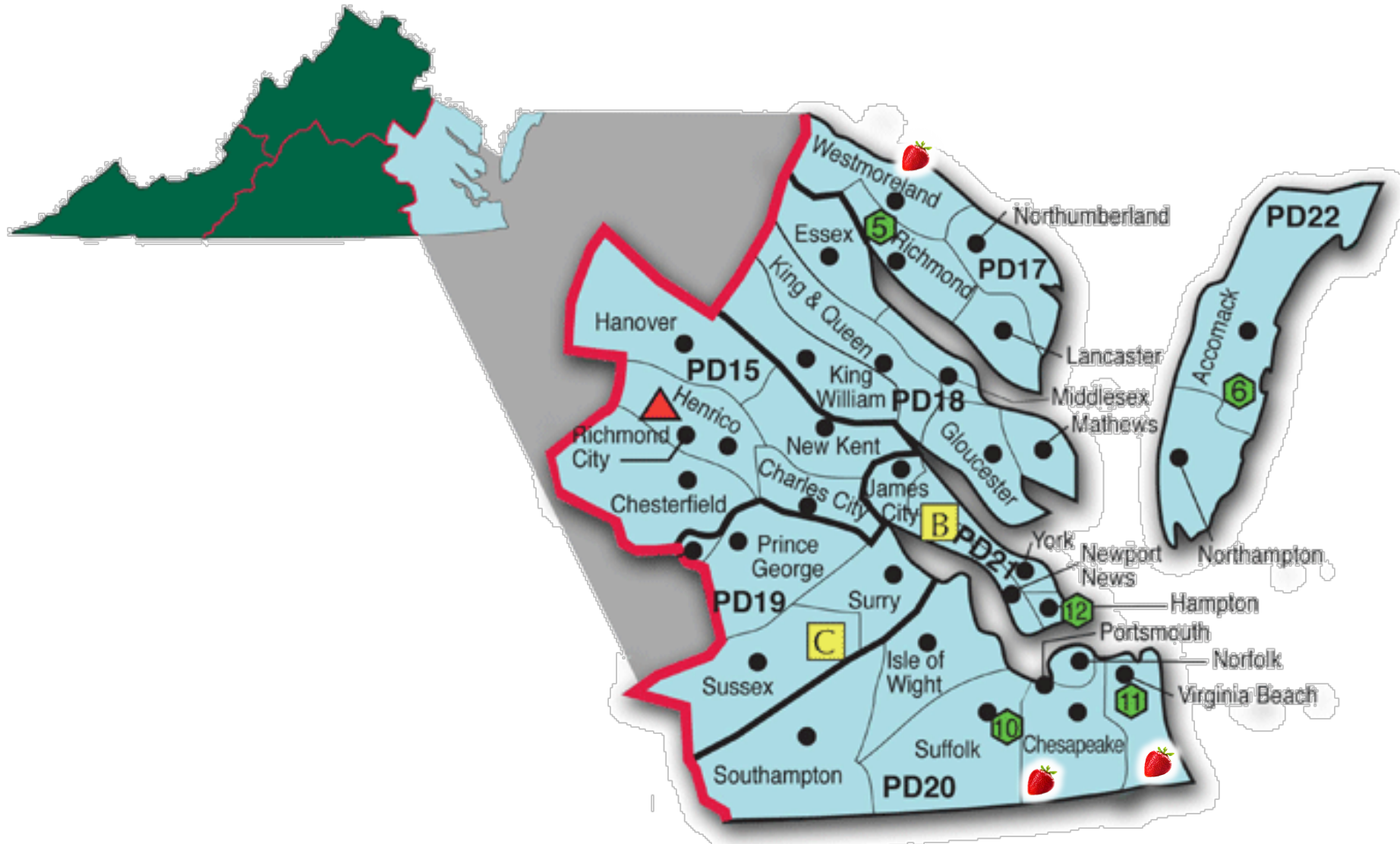
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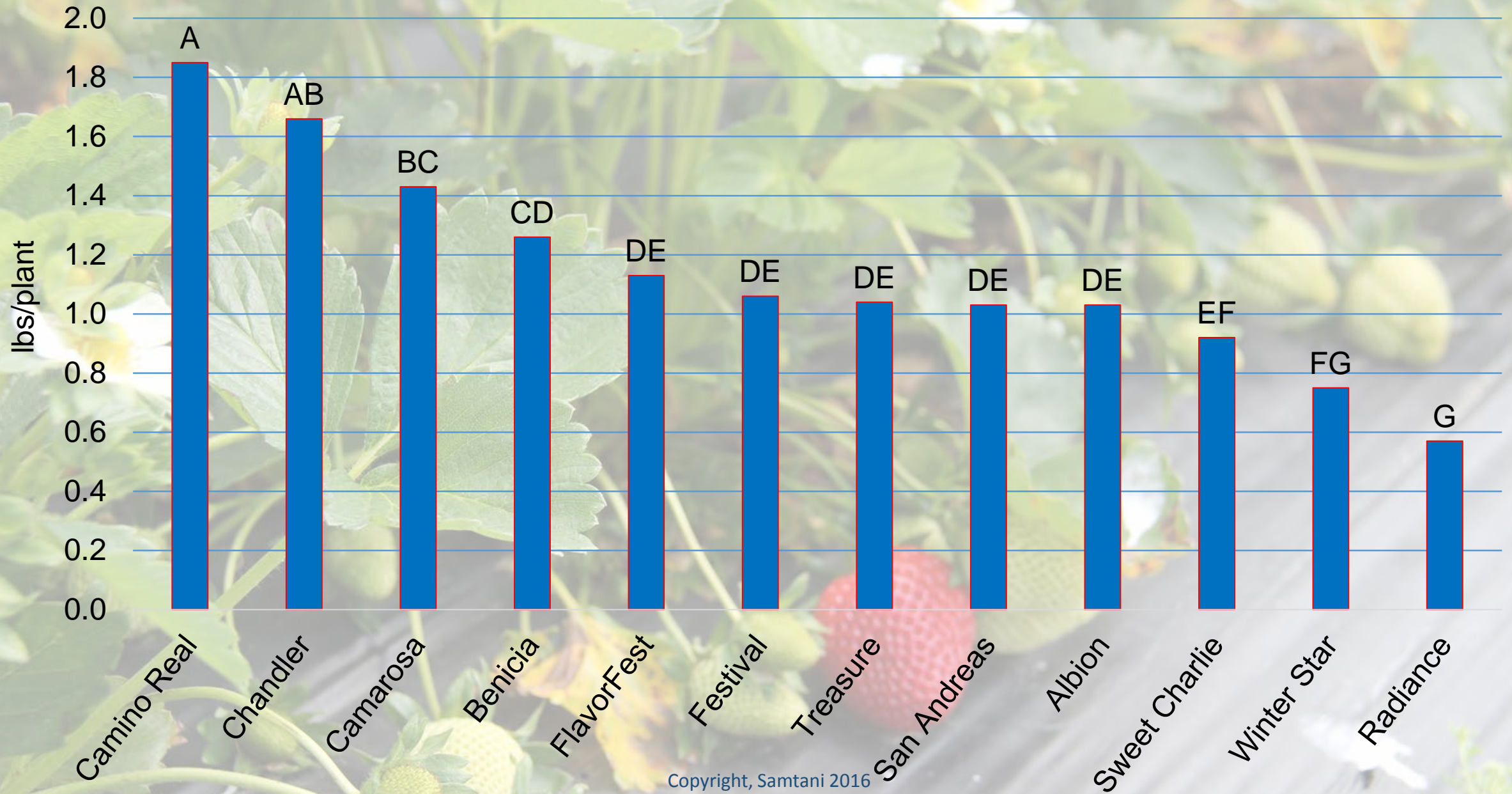
Plants can be grown in pyramid setting, or a barrel in home garden.



# Southeast District

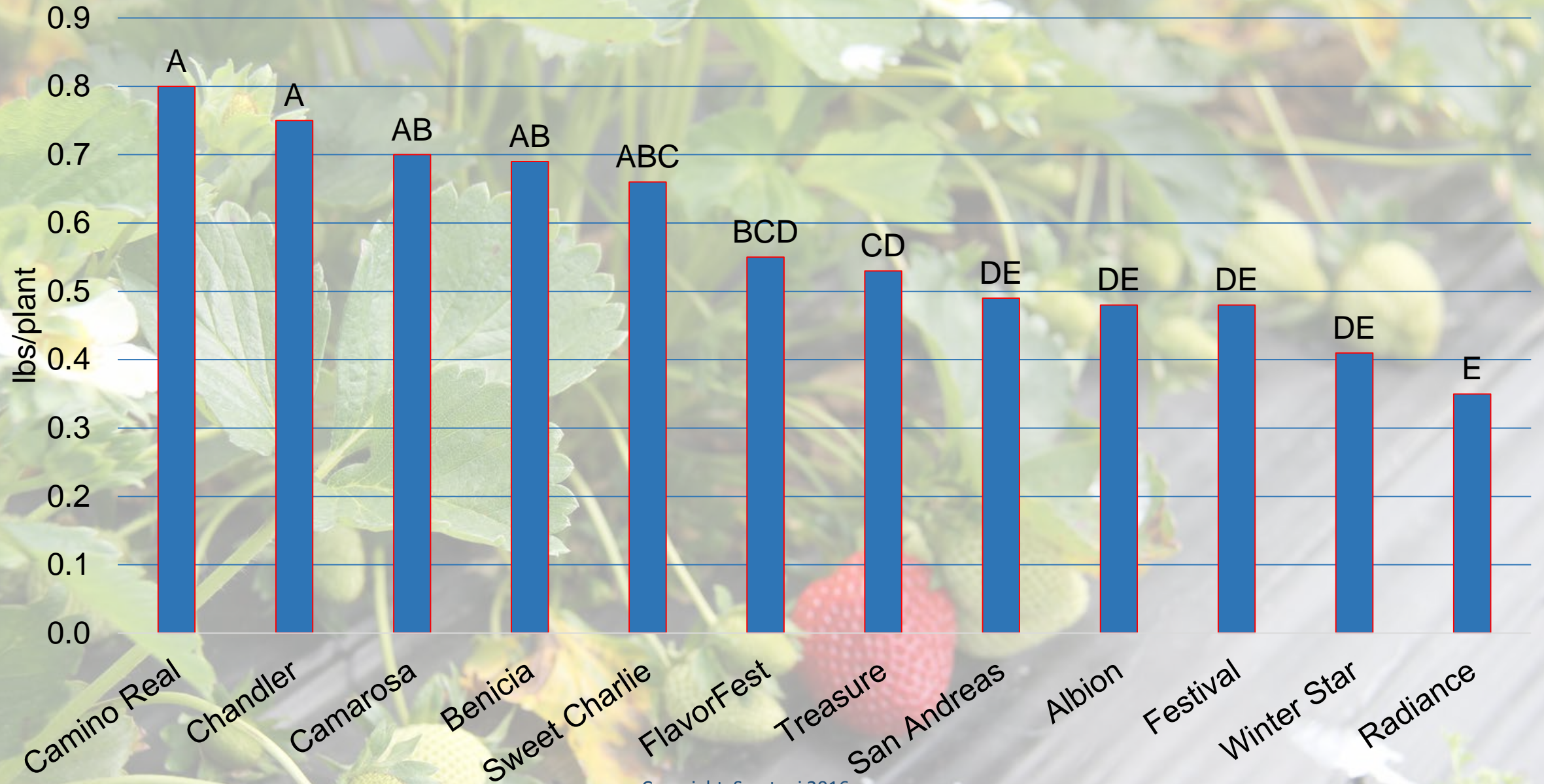


# Marketable Yield: Virginia Beach, VA



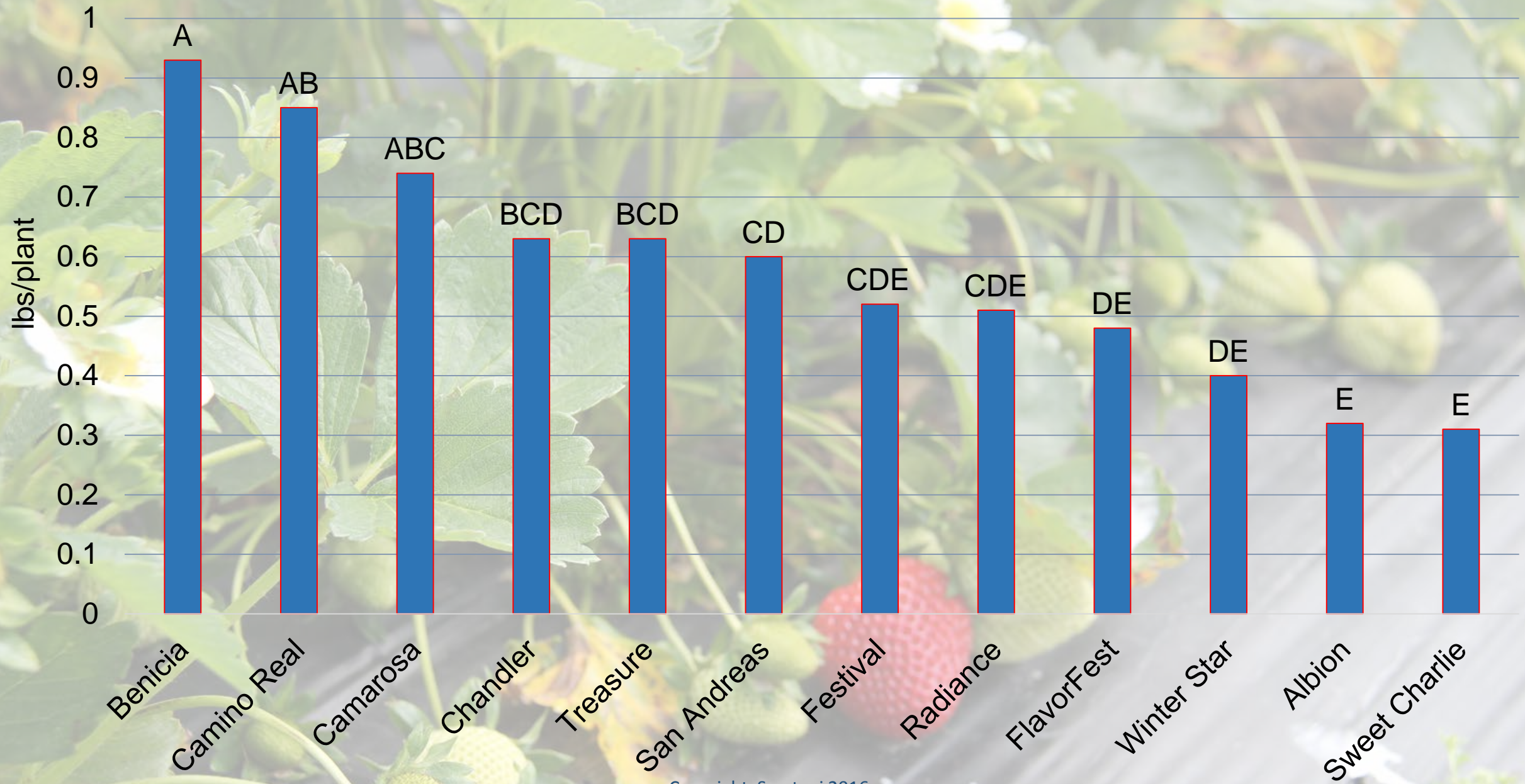


# Marketable Yield: Chesapeake, VA



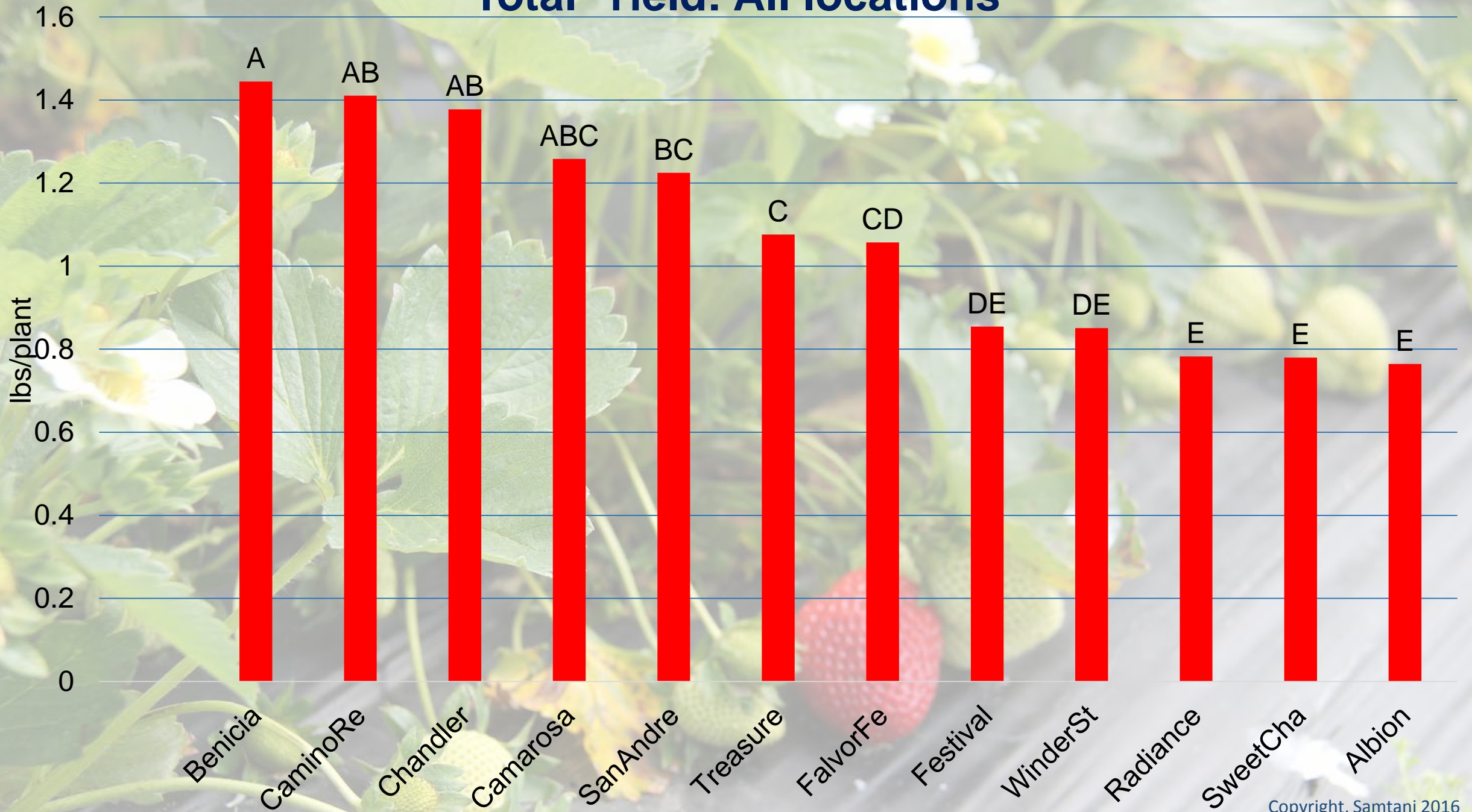


# Marketable Yield: Colonial Beach, VA



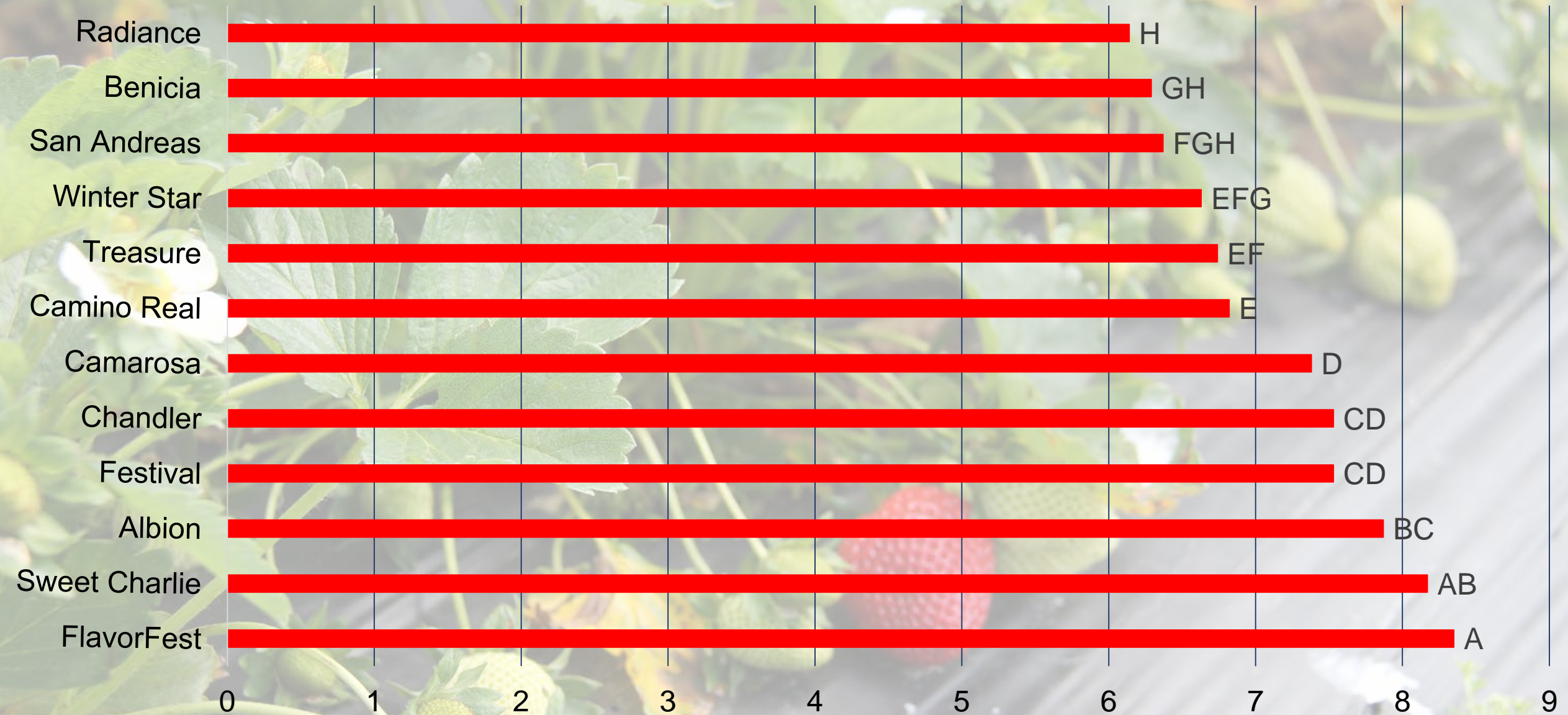


# Total Yield: All locations





# Average Refractometer Readings (°Brix) - All Farms



# In Summary

- Camino Real, Chandler, Camarosa, and Benicia were the top yielding varieties. Camino Real yield was consistently the best at all three locations.
- Camino Real and Benicia had larger fruits than Chandler, Camarosa, and Sweet Charlie.
- Sweet Charlie and Flavorfest were amongst the sweetest berries, but Sweet Charlie yielded high only at single location. Flavorfest may be a good alternative variety to Sweet Charlie in terms of sweetness.
- Both Benicia and Camino Real were less sweet compared to Chandler and Camarosa.

# Chandler

- UC Davis cultivar released in 1983.
- June bearing.
- Adaptable to eastern U.S. including matted row production.
- Susceptible to diseases.
- Fruit size is medium to large, with medium firmness.
- Good for pick your own farms.
- Most reliable yielding variety for the upper piedmont, foothills, and coastal plains in Virginia and North Carolina.



# Sweet Charlie

- Univ. Florida variety. Selected in 1986 and has 'Pajaro', a UC variety as one of its parents.
- June bearing, early season variety.
- Fruits are medium in size with high sugar-acid ratio, so berries are sweet to taste.
- Tolerant to Anthracnose fruit rot.
- 'Sweet Charlie typically bears 5 to 10 days prior to 'Chandler' in the growing season.
- Good for U-pick operations and home growers.

# Camarosa

- UC Davis variety. Released in 1992.
- June bearing variety.
- Moderate to high plant vigor.
- Good disease profile except susceptible to Verticillium wilt (*Verticillium dahliae*).
- Fruit is large and firm, and holds well in the rains. Suitable for shipping and local market consumption.
- Fruit tastes best when it is picked darker in color, past the glossy bright red stage.

# Camino Real

- UC Davis variety. Patented and released 2001.
- June bearing.
- Compact growth habit.
- Resistant to Verticillium (*Verticillium dahliae*) and Phytophthora(*Phytophthora cactorum*). Relatively resistant to Anthracnose crown rot (*Colletotrichum acutatum*).
- Attractive, mostly symmetrical conic fruit.
- ‘Camino Real’ has good flavor and is suitable for fresh market and processing.
- Darker color (internal and external) compared to ‘Camarosa’.







# Benicia

- UC Davis variety. Released in 2010.
- June bearing variety.
- Moderate to high plant vigor with an open canopy.
- Good disease profile except susceptible to Verticillium wilt (*Verticillium dahliae*) and moderately susceptible to Anthracnose crown rot (*Colletotrichum acutatum*).
- Fruit is large and firm, and plant is a heavy bearer. In California, fruits were produced earlier in the season than 'Camarosa'.
- Good for fresh market, processing, and home gardens.





BENEC-IA



# Flavorfest

- USDA Beltsville, Maryland variety. Released in 2012.
- June bearing
- High yielding variety with good plant vigor.
- Fruits are attractive, bright red, with excellent flavor.
- Berry size is larger compared with 'Chandler'.
- Suited for both annual plasticulture and matted row production systems.
- Resistant or tolerant to stem or leaf diseases.

# Strawberry fertilizer

- If no soil test conducted, broadcast 4 lbs of 10-10-10 fertilizer for 100 linear ft. of row, 2 to 3 weeks before planting.
- If additional fertilizer needed, sidedress with 1.5 lbs. ammonium nitrate per 100 ft. linear row.
- In late January or February, suggested rate of  $\frac{3}{4}$  lb of ammonium nitrate per 100 ft. linear row.

# Pests

- Weeds
- Deer
- Anthracnose : Warm, wet conditions.
- Phytophthora
- Mites
- Botrytis
- Spotted wing drosophila





# Voiles can chew off plants at the roots



Chandler Strawberry 2014/2015

## Ultrasonic Solar Pest Repeller – deterrent for rodents





## Strawberry Clipper weevil (*Anthonomus signatus*) damage







Strawberry Clipper





## Sap Beetle

(Coleoptera: Nitidulidae)



E. Beers, 2010

**SWD larvae can render a harvest useless, even for jam berries.**

# Caneberries

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# Caneberry Culture

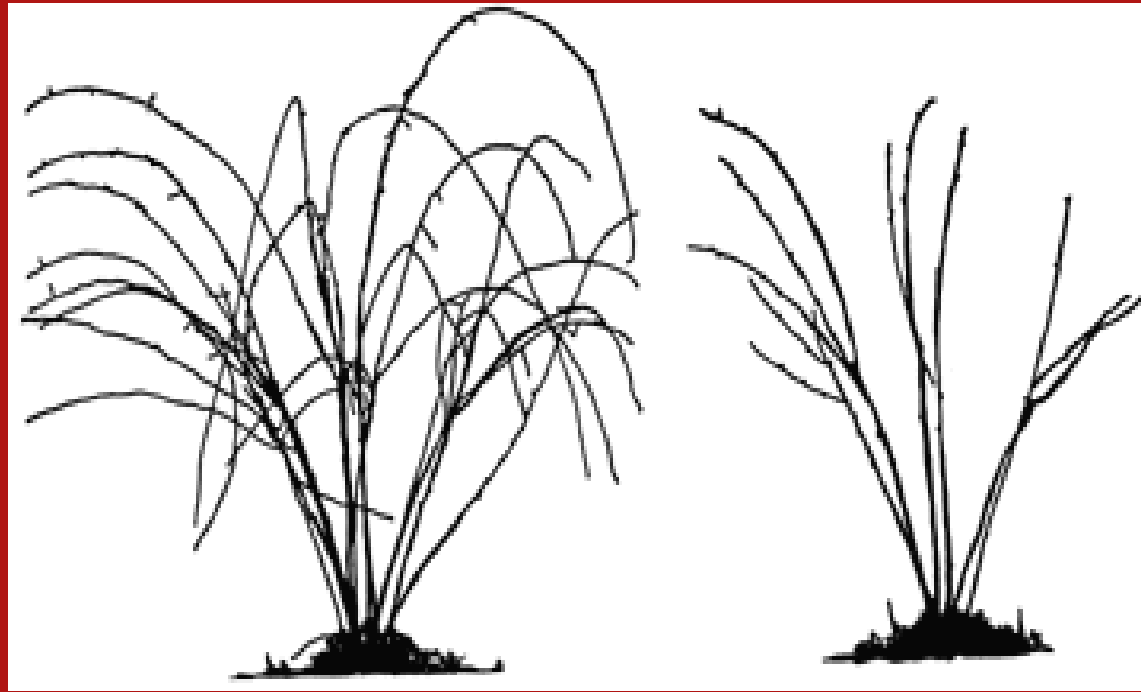
- Sun/Shade - Full Sun
- Pollination - Self Pollinating
- Fruit Color – Black, Red, Purple
- Soil pH Level : 6.0 – 6.8
- Years to bear: 1-2 years
- Fertilizer: No fertigation needed on rich fertile soil. Add 2 to 3 lbs of ammonium nitrate per 100 ft of row.



Caneberry plants are biennial in nature; the crowns are perennial. New canes grow from buds at the crown each year. The new shoots called 'primocanes' will produce vegetative growth the first season, go through a dormant winter season, and then are referred to as 'floricanes' the second year.

Primocane bearing varieties produce fruit on first year canes (shoots). The base of these primocanes will survive, while the top portion of the cane will die off after fruiting.

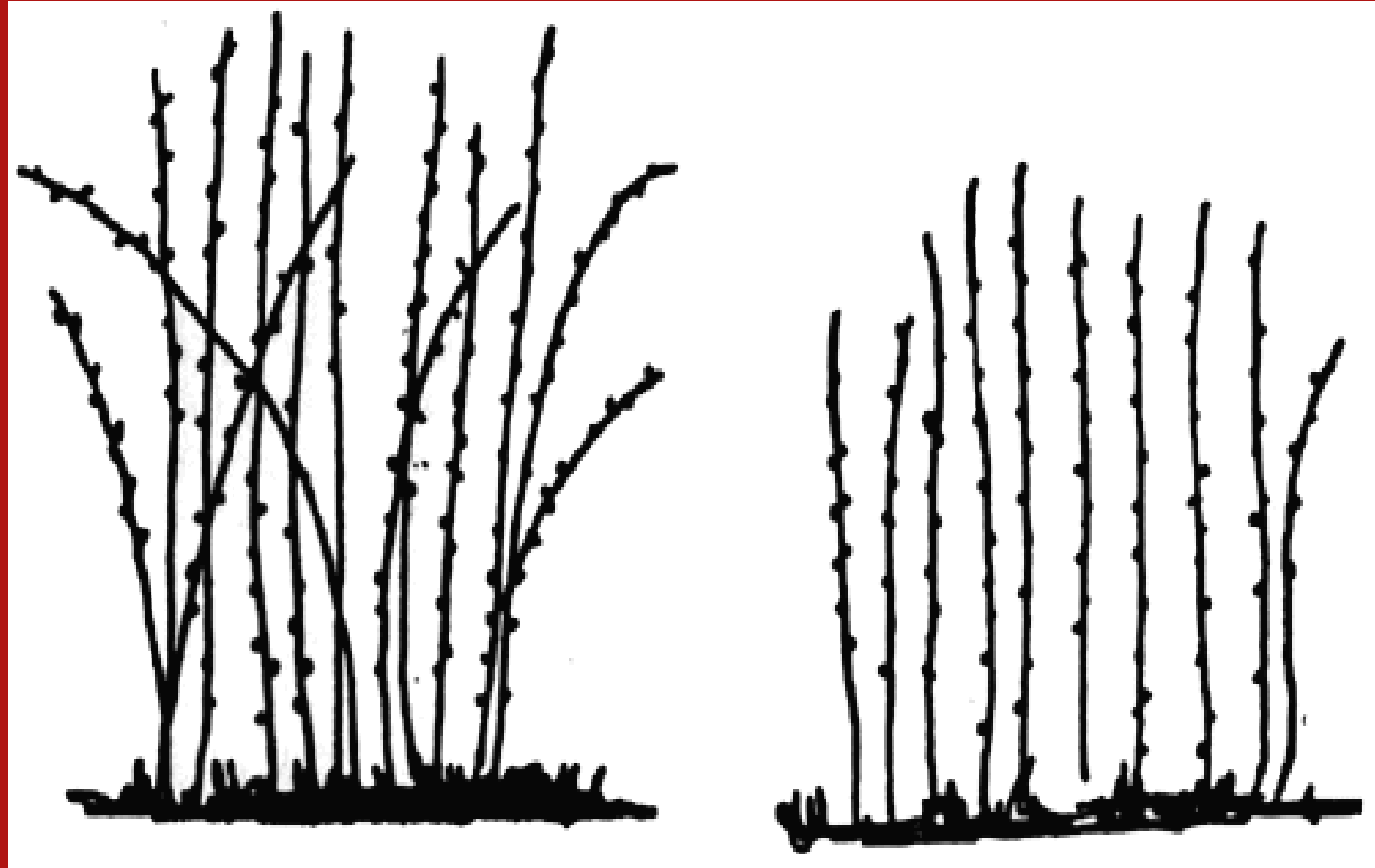




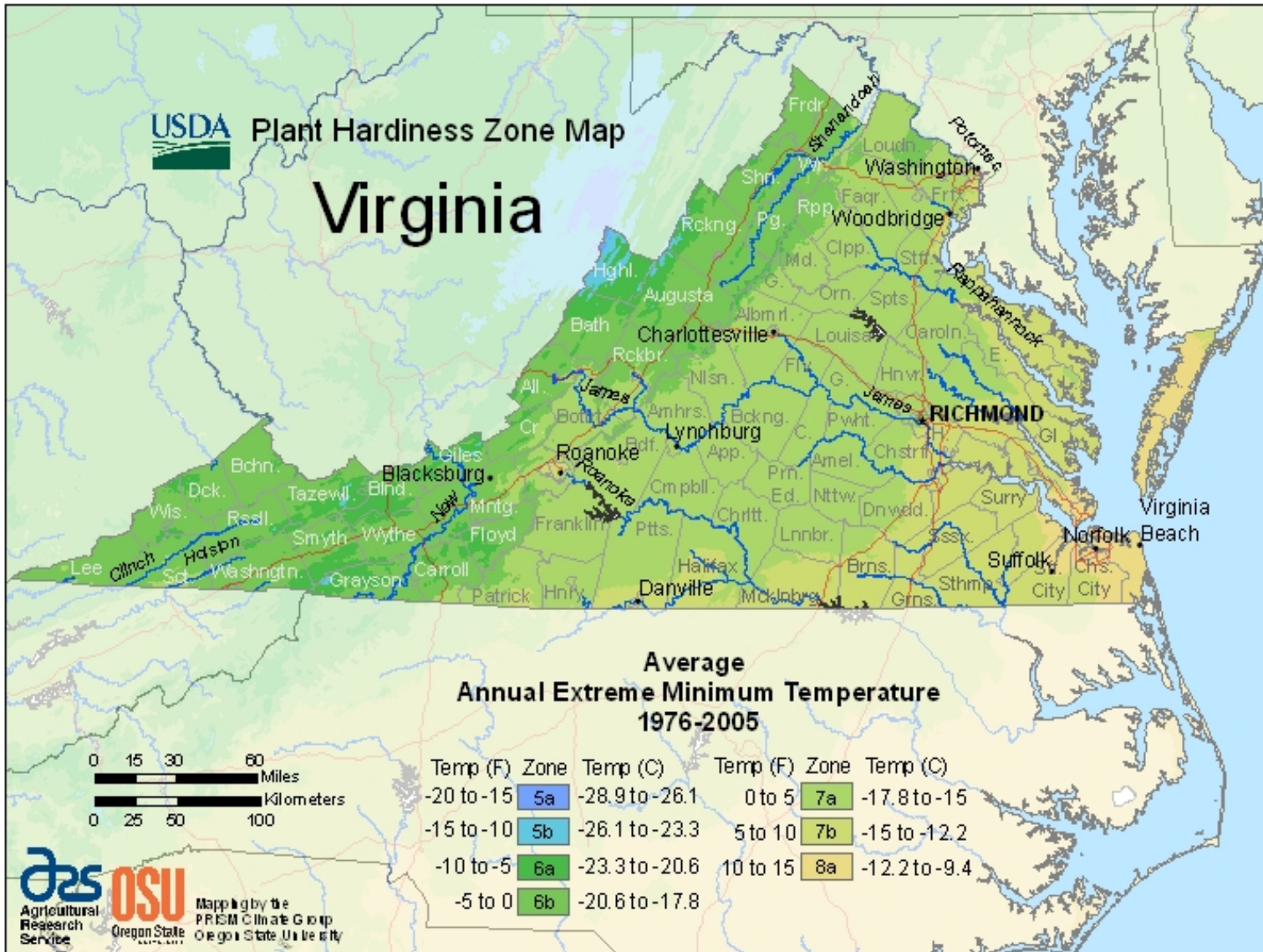
**An unpruned blackberry plant (left). Once plants are dormant, only retain four to five best canes (right).**

Where possible, fruiting canes 1/2 inch or more in diameter are selected. Cut the lateral branches of the black raspberry to 9 to 12 inches long; those of the purple raspberry to 12 to 15 inches long and the blackberry to 15 to 18 inches long.

If the plants are grown in hedgerows, keep the width of the rows to 18 inches or less and remove all plants outside the row areas. Thin the canes within the hedgerows to 6 to 8 inches apart, saving the best canes.












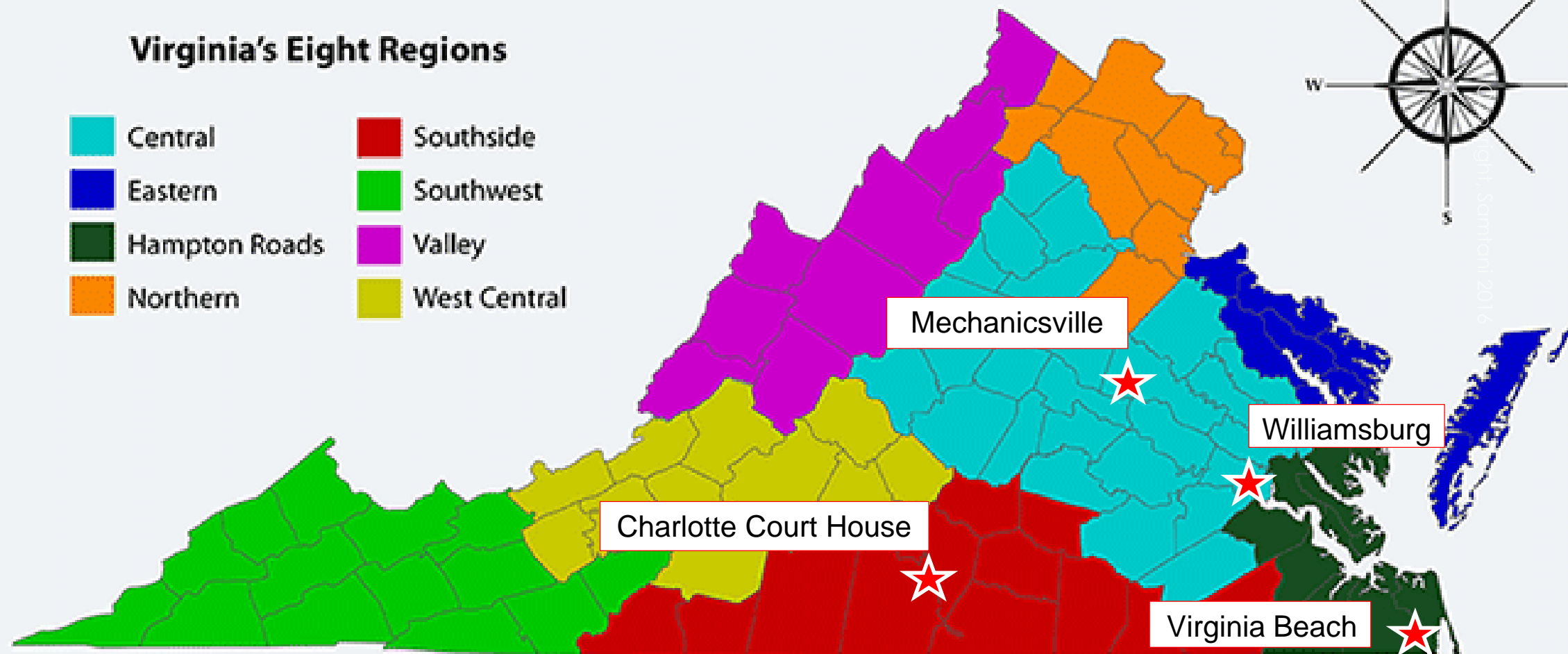
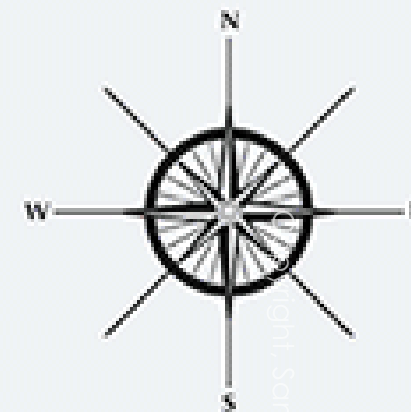
Virginia:  
Zones 5a to 8 a

North Carolina:  
Zones 5b to 8 b

Arkansas:  
Zones 6b to 8a

## Virginia's Eight Regions

 Central	 Southside
 Eastern	 Southwest
 Hampton Roads	 Valley
 Northern	 West Central





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



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

\*This cultivar not grown at this location

# Sugar content measured by °Brix

Cultivar	Agriberry	Barron's Farm	Mill Farm	Pungo Blueberry Farm
Apache-STD	9.0	*	*	*
Apache-RCA	9.8	*	*	*
Arapaho		*	10.5	*
Chester	8.0	8.5	*	9.7
Chickasaw	8.7	*		*
Kiowa	8.7	*	*	*
Natchez	8.5	*	10.8	*
Navaho		12.0	10.3	*
Ouachita	9.0	12.8	10.2	*
Triple Crown	9.0	*	9.4	8.9 (2 ½ yr.); 10.7(15 yr.)

\* Cultivar is not at this location.



Agriberry	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

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

Mill Farm	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

Pungo Blueberry Farm	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

Cultivar Name	Agriberry	Mill Farms	Pungo Blueberry Farm	Wildwood Berry Farm
-----Measurement in mm <sup>2</sup> -----				
Apache RCA	636.53	*	*	*
Apache STD	676.14	*	*	*
Arapaho	*	351.78	*	*
Chester	499.65	*	526.62	444.76
Chickasaw	966.27	*	*	*
Kiowa	986.91	*	*	*
Natchez	759.36	451.82	*	*
Navaho	*	377.12	*	418.82
Ouachita	549.19	349.56	*	568.15
Triple Crown O	*	*	487.81	*
Triple Crown Y	660.28	319.44	532.94	*

# Chester



- Semi-erect Thornless.
- Zone Range - 5 – 8.
- Bloom Color – Pink.
- USDA cultivar.
- Yield – High.
- Harvest – July through Sept.
- Chill Hours – 900.



# Navaho



Photo courtesy MicroFamily Farm

- Erect Thornless.
- Zone Range - 5 – 10.
- Bloom Color – White.
- Fruit Size - Medium.
- Yields - Moderate to High.
- Harvest – Mid-June.
- Chill Hours – 800.

# Natchez



Photo courtesy Stark Bros.

- Erect Thornless.
- Zone Range - 6 – 8.
- Bloom Color – White.
- Fruit Size – Large.
- Yield – Moderate to High.
- Harvest – Mid-June.
- Chill Hours – 500.

# Arapaho



Photo courtesy Stark Bros.

- Erect Thornless.
- Zone Range - 6-8.
- Bloom Color – White.
- Fruit Size – Medium.
- Yield – Moderate (Low).
- Harvest – Mid-June.
- Chill Hours – 500.



# Ouachita



Photo courtesy Stark Bros.

- Erect Thornless.
- Zone Range 5 – 9.
- Bloom Color - Purple, red.
- Fruit Size – Medium.
- Yield – Moderate to Low.
- Harvest - Mid June.
- Chill Hours – 300.

# Prime-Ark® Freedom



- World's first primocane thornless cultivar. Released 2013.
- Very Erect, thornless.
- Zone Range – 6 – 8.
- Fruits— Very Lg. (9 g), good flavor.
- Harvest - Late May and in fall.
- Good for local market shipping.
- Floricane fruits early, 1-2 weeks before Natchez and Ouachita.
- Chill Hours - Not confirmed.

Photo courtesy University of Arkansas

# Prime Ark® Traveler



Photo courtesy University of Arkansas Agriculture Research and Extension

- The second erect thornless-primocane fruiting blackberry.
- Zone Range - 5-9.
- Bloom Color – White.
- Fruit Size – Med-Large.
- Harvest – Two harvests.
- Yield – 1 yr. Sensitive to high heat.
- Yield – 2 yr. canes, Very Good.
- Chill Hours – Not confirmed.
- Good handling and storage – for commercial production.



# Von



Photo courtesy Team Rubus; NC State University

- Erect Thornless.
- Zone Range - 5-9.
- Bloom Color – White.
- Fruit Size – Med w/ small drupelet.
- Yield – High.
- Harvest – Mid June.
- Years to Bear – 2.
- Sweet, low acid.
- Chill Hours – 500.



**Japanese Beetle**  
(*Popillia japonica*)



**Green June Beetle**  
(*Cotinis nitida*)



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





**This is a pest** – Vines will choke out sunlight and reduce yield for blackberry canes.



# Red Raspberry (*R. idaeus*) Varieties

**Heritage (Cornell Univ.,1969)**: Medium sized fruit, firm, and of good quality. Good variety for freezing and fresh consumption. This variety is resistant to most diseases. High in thorns.

**Himbo Top (Switzerland,2003)**: Large, firm, bright red, conic fruit. Good flavor and tolerance to Phytophthora root rot disease. Plant is upright and medium in height. Long fruiting laterals. Requires trellising.

**Joan J (U.K., 2002)**: Fruit is firm, glossy, dark red and darkens further in storage. Canes are vigorous, upright, and spineless. Fruit skin is thin subject to damage.

# Red Raspberry Varieties

**Jaclyn (University of Maryland, 2005)**: Early season variety. Dark red in color and darkens further in storage. Large fruit, excellent flavor. Fruit adheres to the plant until it is fully ripe. Susceptible to potato leaf hopper and yellow leaf rust. Fresh consumption.

**Josephine (University of Maryland, 2001)**: Dark red, large, excellent flavor, shelf life. Fresh consumption. Upright and needs little support. Resistant to leaf hopper and Phytophthora root rot.

**Caroline (Univ. of Maryland, 1999)**: Medium size, conical fruit, excellent taste. Fruiting laterals are short. Moderate to good resistance to Phytophthora fruit rot. Overly vigorous. Fresh/Process use.



# Black raspberry varieties (*R. occidentalis*)

**Black raspberries (floricane bearing)** are very susceptible to viral diseases.

**Cumberland:** Plants are vigorous and productive, but not cold hardy.

**Jewel (Cornell Univ., 1973):** has firm, glossy, flavorful fruits. Cold hardy, vigorous, and resistant to most diseases. Weeping form.

**New Logan:** has glossy fruits of good quality. Tolerant to mosaic and other diseases.

# Purple raspberries (Red x Black)

**Brandywine (Cornell Univ., 1976)**: Fruit is firm, ripe, and quite tart. Reddish purple in color. Berries are used for processing. Susceptible to crown gall but partially resistant to other diseases. Canes are tall with thorns.

**Royalty (Cornell Univ., 1982)**: Most widely planted purple variety. Soft fruit, reddish-purple to dull purple in color. Sweet flavor, high productivity. Can be eaten fresh or for processing. Canes are upright, have thorns, but extremely productive. Resistant to raspberry aphid which reduces probability of mosaic virus infection.

# Blueberries

- Rabbit eye and southern highbush suited for hot summers.
- Chilling requirement for rabbiteye: 250-600 hours.
- Northern highbush: 1000 hours.

## Rabbiteye varieties:

Early season - Alapaha, Climax, Premier, Titan, and Vernon.

Mid-season - Brightwell, Powderblue, and Tifblue.

Late season - Centurion and Ochloknee



# Rabbiteye (Early season):

**Alapaha (Univ. Georgia, 2002)**: Named after Alapaha river in S. Georgia. Late flowering. Early ripening of fruit. Medium size fruit, dark blue, ideal for fresh and frozen packs. Resists fruit cracking. Companion variety Vernon.

**Vernon (Univ. of Georgia, 2004)**: Good yields, excellent plant vigor. Large berries, firm.

**Climax (USDA, Univ. of Georgia, 1974)**: Berries are small to medium size, good color, flavor. Poor leafing, spring freeze damage. Concentrated harvest. Recommended cross pollinating variety: Premier.

**Premier (NCSU release, 1978)**: Produces medium to large size fruit, medium firmness, good flavor, dark blue color. Canes on the plant may not support heavy load. Susceptible to blueberry gall midge.

**Titan**: Fruits are larger than Vernon or Premier. Good flavor and color but subject to cracking under rain. Companion variety is Vernon.

# Rabbiteye (Mid season):

**Brightwell (Univ. of Georgia, 1983)**: Medium to large size fruit. Susceptible to splitting under wet conditions. Recommended cross Pollination with Premier. Bush is vigorous, productive and upright.

**Powderblue (NCSU, 1978)**: Medium size, light blue fruit, good firmness. Cracks less than Tifblue. Recommended pollination with Tifblue or Brightwell.

**Tifblue (USDA/Univ. of Georgia, 1955)**: Small to medium size fruit, must be fully ripe or else tart. Will split under rainy conditions.

# Southern Highbush (Early season)

Recommended for central and southern Virginia

**Suziblue (Univ. of Georgia, 2009)**: large fruit-2.2 to 2.8 g/berry, light blue color, good flavor, bush vigorous

**Palmetto (Univ. of Georgia, 2003)**: early variety, medium size fruit, medium blue color, outstanding flavor, good plant vigor, bush is open with medium vigor

**O'Neal ( NCSU, 1987)**: medium size fruit, popular worldwide



# Southern Highbush (Mid-season)

**Camellia (Univ. of Georgia, 2005)**: large size fruit, sky blue color, good fruit color and plant vigor

**Jubilee**: small size fruit, moderate growth habit, relatively pest resistant

**Magnolia**: small fruit, medium size, productive, good flavor, firmness

# Northern Highbush (Early season)

**Duke**: good flavor, mid size fruit, fruit bland if picked late

**Earliblue**: very early, good flavor, large fruit

**Patriot**: heavy producer, large size berry, winter hardy but sensitive to frost, tolerant to heavy soils

**Spartan**: good flavor, large berry size, late bloom date avoids frost, but still produces early crop, resistance to mummy berry

# Northern Highbush (Mid season)

**Bluecrop**: most widely planted mid season cultivar in world, high yield, firm fruit, good flavor, hardy, drought resistant, weepy canes

**Blueray**: large, dark fruit, flavorful, weepy canes, good winter hardiness

**Legacy (Rutgers/USDA, 1993)**: adaptable, highly vigorous, fruit light blue, firm, berries maintain flavor even when overripe, high yields once established, requires pruning to manage stem canker disease.



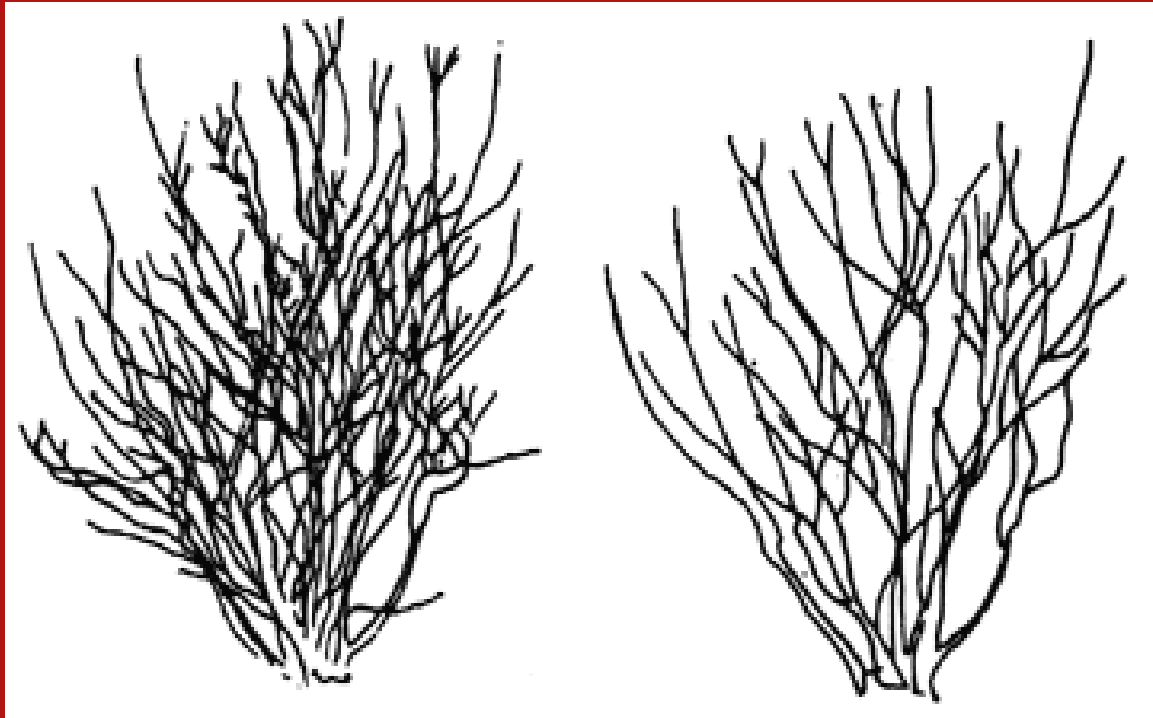
# Northern Highbush (Late season)

**Elliott (Michigan/USDA, 1973)**: large, good flavor, can turn tart if berries turn blue before they become ripe, upright cluster, can form dense center that should be pruned to improve air circulation. Resistant to mummy berry, phomopsis canker, and anthracnose fruit rot

**Jersey (1928)**: adapted to wide range of soils, medium, dark berries, upright plant that forms dense center

# Fertilizer Blueberry

- 2 ounce of ammonium sulfate per plant starting year 2. Each year add one ounce to maximize at 8 ounce.
- When sawdust is used as a mulch; additional ammonium sulfate per plant: 12 ounce per mature plant



Unpruned blueberry plant on left. After pruning, a mature blueberry bush should have ten to fifteen canes as seen on right side.

As the bushes come into bearing, regular annual pruning will be necessary.

Timing. from leaf fall until before growth begins in the spring.

A mature blueberry plant should produce three to five new canes per year.

Locate the oldest canes and prune out one of every six existing canes; cut as close to the ground as possible. A mature blueberry bush should have ten to fifteen canes: two to three canes each of one-, two-, three-, four-, and five year old canes.



# Diseases and Insects

- Use of virus free plants.
- Choose well drained soils; follow crop rotation.
- Remove berries instantly to reduce fruit rots.
- Remove older foliage and canes.
- Avoid keeping older plantings for too long (strawberries).

# Picking

- Pick berries early in the morning.
- Transport berries to room temperature as quickly as possible.
- Take advantage of the shade in your garden.
- Keep damaged berries separate from firm, quality berries.