

Bramble Cane Management

Update on Web Resource

Dr. Brent Black, Extension Fruit Specialist

Light optimization

- Pruning and tree training
 - Trees structure exists to hold leaves and carry fruit
 - Fruit quality goes where light goes
 - Optimum light use is 70%



Light optimization – canefruit?

- Maximize light interception and utilization
- Minimize labor inputs

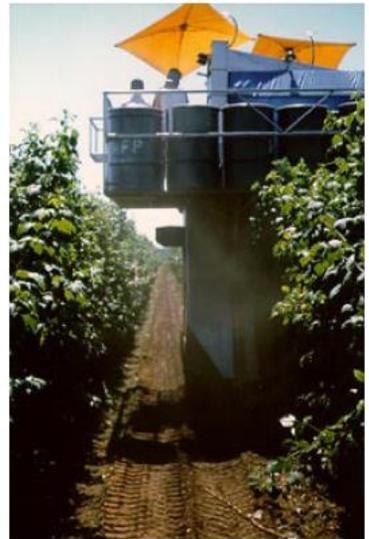


System in the Pacific Northwest

- Narrow vertical bearing surface

- Advantages

- Hand harvest
- Machine harvest
- Insect and disease control
 - Canopy density optimum
 - Uniform spray coverage



PNW hedgerow system

- Continuous row
- Canes held between two wires
- Topped above the trellis (6')
- Canopy density affects pest and disease pressure

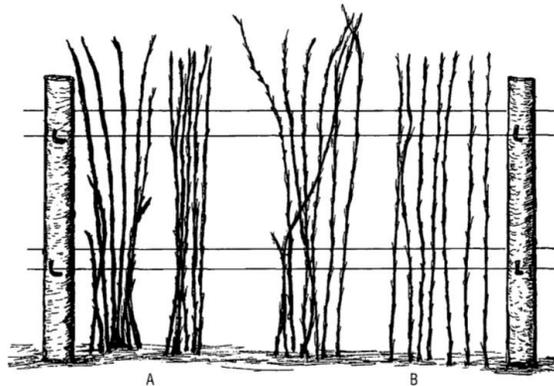


Figure 2. Typical four-wire trellis design showing unpruned and pruned winter canes for (A) hill-trained red raspberries and (B) hedgerow-trained red raspberries. The top wires usually are 5 to 6 feet above ground.

From: Commercial Red Raspberry
Production in the Pacific Northwest (2007)

System in the Pacific Northwest

- Trained in hills
- 4 to 6 canes per hill
- Vertical trellis
- Untopped
- Canes bunched and bent over
- Terminal fruit are undersized

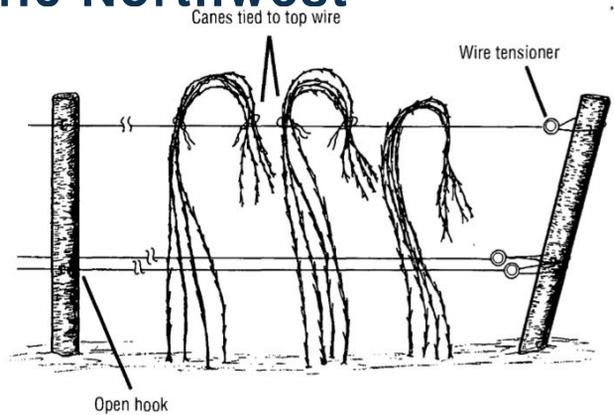


Figure 3. Typical three-wire trellis design for arc-trained red raspberries. The top wire usually is 4½ to 6 feet above ground. Wire tensioners at the ends of rows and open hooks on the poles allow the lower wires to be pulled out to catch canes and bring them into the centers of the rows.

System in the Pacific Northwest

- Disadvantage – primocane position
- Suppress primocanes
- Burn them off (contact herbicide)
- Long growing season with significant late cane growth

Control

Oxyfluorfen, (Goal 2XL, 0.05 to 0.1 lb. ai/acre). (24c -WA960005). This material is applied to the rows for early season suppression of primocanes when they are 4-6" tall. It also provides some contact weed control. This is currently (1998) the material of choice and is standard practice in the industry.



“V” trellis for Hand Harvest (Northeast)

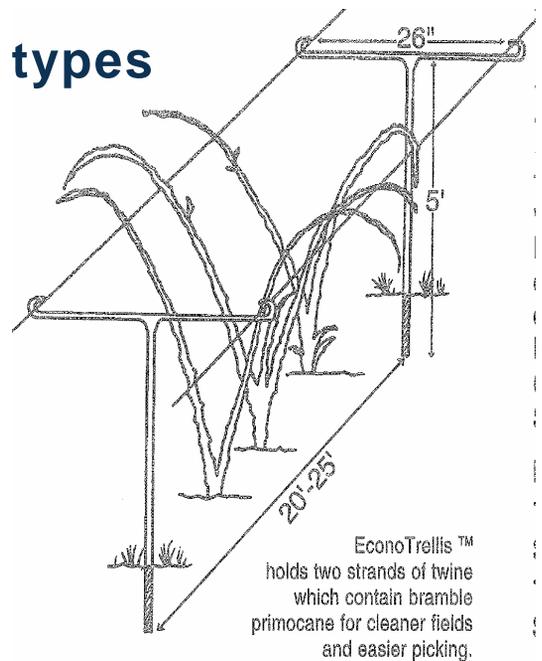
V-trellis

- Characteristics
 - 4' tall x 3' to 4' wide
 - Recommend 20 to 30° from vertical
- Management
 - Floricanes removed post harvest
 - Primocanes selected and tied over in spring
 - Cane density = 4 - 6/foot



Support for Fall-bearing types

- Metal Posts
- Baling twine
- Adjust canopy width by rotating posts
- Adjust trellis height by post depth
- Commonly used with primocane fruiterers
- Posts available from Indiana Berry (indianaberry.com)
 - 5' x 26"
 - \$19.50 each
- DIY
 - #3 rebar (3/8")
 - 32" piece and 5'



Which system is best for you?

Economics

- Trellis materials
- Yields
- Labor cost and availability
 - Trellis installation
 - Pruning and tying
 - Harvest labor



Semi-erect blackberries

- Trellis
 - Large wooden posts, 25' apart
 - Two wires at both 2' and 4' (can just use one)
 - One upper wire at 5'
- Top primocanes at 6'
- In winter, tie canes to upper wire, shorten laterals

Erect blackberries – floricane fruiting

- Trellis
 - T-posts
 - Two lower wires, 1.5-2' high and 1.5-2' apart (optional)
 - Used to tie first year canes, which are trailing
 - Two upper wires 3.5' high, and 3' apart
- Top primocanes at 3-4' during growing season
- Shorten laterals to 12-14" during dormant season

Erect blackberries – primocane fruiting

- Trellis
 - T-posts
 - Two wires (or bailing twine) 1.5-2' high and 1.5-2' apart
- “Soft tip” primocanes when they reach 1.5'; tip laterals when they reach 1.5'

Horticulture



extension.usu.edu



April 2015 Horticulture/Fruit/2015-03pr

Raspberry Management for Utah

Tiffany Maughan, Research Associate, and *Brent Black*, Extension Fruit Specialist

Introduction
Raspberries are a favorite fruit for many Utahns. The plants can be grown across much of Utah, but require special care in some areas. With proper planning, management and care, a raspberry planting can provide fresh fruit for many years. This fact sheet will provide a general guide to raspberry production that can be adapted for both home use and for small-scale commercial production.

Plants
Raspberry plants have a perennial root system. However,

different management than the summer (floricane-fruited) types that will be discussed.

Cultivated raspberries can have red, blue, or purple fruit color. Raspberries are self-pollinated by insects or wind. Along with the fall-bearing raspberries, fall-bearing raspberries are better adapted, as the fruit ripens after the summer is over, thus avoiding frost damage. At higher elevations with colder climates, the season is typically too short for fall-bearing raspberries are better adapted.

Horticulture



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March 2018 Horticulture/Fruit/2018-02

Blackberry Management in Utah

Tiffany Maughan, Shawn Olsen, and Brent Black

Introduction
Blackberries can be grown successfully in Utah but careful cultivar selection and care is needed. Harsh winters and frequent late spring frosts often result in significant blackberry cane damage and crop loss. However, the delicate fruit have a short shelf life that makes shipping from distant markets difficult, presenting opportunities for local sales or as a special treat from the home garden. Blackberry plants have a perennial root system with biennial canes.

Semi-erect blackberries have primocanes that initially grow erect, but then branch and the side branches droop down to the ground. When the shoot tips come in contact with the ground, the plants will tip layer (root down and form a new plant) which is an important consideration in trellising and management. Under northern Utah conditions, semi-erect types typically produce heavier yields than the erect and trailing types.

Web Resources

www.fruit.usu.edu



PRODUCTION HORTICULTURE



Commercial Fruit



Commercial Vegetables



Cut Flowers



Small Acreage / Garden



High Tunnels



Organics

Menu

PRODUCTION HORTICULTURE

- Upcoming Events
- Produce Sales
- En Espanol
- Organizations ▾
- Fruit ▾
- Vegetables ▾
- Flowers
- Small Acreage ▾
- High Tunnels
- Organics ▾

Upcoming Events

[View full calendar](#)

Web Resources

www.fruit.usu.edu

www.berry.usu.edu

The screenshot shows a website header with a background image of raspberries and the text "PRODUCTION HORTICULTURE". Below the header is a section titled "Commercial Berry Crops" with four main content areas:

- Management Considerations:** A photograph of a berry field with wooden stakes.
- Cultural Recommendations:** A close-up photograph of raspberries and blackberries.
- Utah Berry Growers Association:** A logo featuring the letters "U", "B", "G", and "A" stacked vertically next to a raspberry illustration.
- Pacific Northwest Weed Management Handbook:** A green graphic with the text "Pacific Northwest Weed Management Handbook".

On the right side of the page, there is a "Menu" section with the following items:

- PRODUCTION HORTICULTURE
- Upcoming Events
- Produce Sales
- En Espanol
- Organizations -
- Fruit -
- Vegetables -
- Flowers
- Small Acreage-
- High Tunnels
- Organics-

Below the menu is an "Upcoming Events" section with a "View full calendar" button.

Web Resources – alternative crops

fruit.usu.edu



PRODUCTION HORTICULTURE

- 

Commercial Fruit
- 

Commercial Vegetables
- 

Cut Flowers
- 

Small Acreage / Garden
- 

High Tunnels
- 

Organics

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Upcoming Events

[View full calendar](#)

Web Resources – alternative crops

www.fruit.usu.edu

Alternative crops

- Goji
 - Haskap
 - Hardy kiwi
 - Hazelnut
 - Nanking Cherry
-
- Elderberry
 - Serviceberry
 - Chokecherry

The screenshot shows the 'PRODUCTION HORTICULTURE' section of the website. The main heading is 'Fruit'. Below it, there is a grid of six resource tiles:

- Common Fruit Crops: from Apple to Strawberry
- Alternative Fruit Crops: from Blueberry to Hazelnut (highlighted with a red box)
- Natives: from Elderberry to Serviceberry
- Management: from Pruning to Bees
- Pest and Disease Management
- Cornell University Nursery Guide (highlighted with a red box)

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