Blackberries for the Home Garden

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"Wild" Blackberries
Rubus ursinus
The only true PNW native

Rubus laciniatus
‘Evergreen’
Introduced in 1800’s

Rubus armeniacus
‘Himalaya’
Introduced in 1800’s

Male plant
Female plant

The receptacle is part of the "berry" fruit we eat

Aggregate fruit of many drupelets

calyx
drupelet

Sliced blackberry fruit

Terminology:

Fruiting Lateral:
Marion during harvest

Drupelet:
Section of a berry
Each has a seed

Primocanes:
First year
Always vegetative

Floricanes:
Second year
Always fruiting

Blackberries

Three types of blackberries:

Erect
e.g. ‘Ouachita’

Trailing
e.g. ‘Marion’
‘Boysen’

Semi-erect
e.g. ‘Triple Crown’

Marion

http://extension.oregonstate.edu/catalog/
Trailing Blackberries

- Cultivars include
  - Marion, Obsidian, Black Diamond, Columbia Star
  - Hybrids: Boysen, Logan
- Fruit tend to be oblong, have relatively small seeds, and have a highly aromatic, good flavor
- Fruit from late June through August, depending on cultivar

Planting Establishment:

- Plant 3.5 to 5 ft apart
- Rows 10 ft apart
- Install trellis in planting year (wires at 6 ft & 4.5 ft)
- Train primocanes as they grow

At harvest time

- Floricanes trained on wires
- Hoop for training new primocanes

Every-year production:

- Primocanes are not tipped/pruned in summer
- During harvest (generally July)
- After fruit harvest is done (mid-late August)
- Cut dying floricanes and remove from the trellis wires
Trailing blackberries

Dying floricanne, after pruning out

Primocanes ready for training

Train in:
- August or
- February (colder regions)

Divide primocanes into two bundles

Train half one way on trellis and the other in the opposite direction

Loop bundles around the two upper training wires

Before training in Feb.

OR

August trained

Trailing Blackberries
Training primocanes

Trailing Blackberries
Training primocanes

August-trained:

Photo taken in October

Late winter

Early spring
Erect Blackberries

- Floricane and primocane-fruited types
- Relatively large seeds
- Less aromatic than trailing types
- Ripen July – late August for floricane fruited types & Sept.-Nov. for primocane-fruited types

Erect blackberries

2 to 3' in the row with 10' between rows

Erect blackberrie

- Tip primocanes in summer to about 3-4' high
- Do this several times to catch all in the field
- This encourages branching

'Ouachita' erect blackberry primocane after summer tipping

Erect blackberry

- Can use a simple trellis
- Prune in winter, when dormant to shorten the branches

Primocane-fruited erect blackberry

Can double-crop (primocane + floricane) or single-crop (just primocane)
Tip primocane
- Remove 4 to 12 inches of the cane tip
- If tip of cane shows flower buds it is too late to tip

Pruning Tip (at 3 ft)

Tip (at 3 ft)

June 3

June 7

New primocanes emerging from roots

Pruning Fruit produced on branches

Branches growing

Branches flowering

Branches longer

June 17

July 27

July 27

Primocane development
- Branches will grow
- Will fruit at tip (how much depends on region)
Fruit produced on branches

Pruning

Pruning – plants go dormant

Autumn/Winter
- Cold temperatures stop fruiting and branch tips die

Fruiting season cut short by weather in many temperate or continental climates

End of October

Prepare for floricane crop
- Prune to remove dead portions of canes

Floricane crop

Floricane crop
- Fruit produced on laterals that emerge from portion of healthy buds remaining

Semi-erect Blackberries

- Primarily for fresh market
- Mainly ‘Chester Thornless’ and ‘Triple Crown’ (best flavor!)
- Relatively large seeds
- Less aromatic than trailing types
- Ripen early August-Oct.
**Semi-erect blackberries**

- 6' x 10 to 12' spacing
- Primocanes summer tipped to about 5 - 6'
- Branches may be further pruned in winter
- Dead floricanes are removed

**Established blackberry**

- Fertilize with about 2 to 2.5 oz N/plant in spring
- Divide into thirds (early April; late May; late June)
- For example: 4 to 5 oz of 16-16-16 per application per plant

**Cultivars:**

- Trailing types
  - Marion (thorny; previous slide)
  - Obsidian
  - Boysen
  - Logan (Hybrids)
- Black Diamond (thornless)
- Columbia Star (thornless)

**Publication:**

- http://extension.oregonstate.edu/catalog/

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'S Marion' also known as 'marionberry'
**Cultivars (all regions):**
- Ouachita (erect; thornless)
- Triple Crown (semi-erect; thornless)
- PrimeArk®-45 (erect; primocane fruiter)

**Winter Cold Injury**
- Poor bud break due to cold damage
- Cane damage & poor bud break in trailing blackberry
- Sliced cane showing damage to bud base
- Primary bud killed by cold

**Heat/u.v. Damage**
- Sunburn to semi-erect blackberry
- Heat damage to a trailing type

**Cane Diseases**
- Cane & leaf spot (Septoria)
- Purple blotch

**Botrytis**
- Disease is promoted by a warm, moist environment
- Maintain an open canopy
- Avoid overhead irrigation and late watering

**Cane & Leaf Rust**
- Cane & leaf rust (Khuneola sp.)
  - Remove and burn infected floricanes right after harvest
  - Apply dormant copper sprays
Downy mildew
- Systemic – known to affect ‘Kotata’ & ‘Boysen’
- No home products registered that are effective
- Practice good weed control

Red Berry Mite
- Use dormant oil and lime sulfur sprays in dormant season

Leaf Roller Larvae
Watch for leaf rolling and kill larvae before enter fruit

Herbicide Damage
Phytotoxicity from Round-Up®
Leaves are chlorotic and strap-like

Crown Borer
- Two-year life cycle
- Adult lays eggs on leaves
- Larvae burrow into crown and into new primocanes
- Canes collapse
- Only home control is rouging out infected plants

Spotted Wing Drosophila
*Drosophila suzukii*

From OSU Extension Publication, EM8991
Spotted Wing Drosophila

Brown Marmorated Stink Bug (BMSB)
- No control other than exclusion nets

Crown Gall
- Bacterium in plant AND soil
- Cultivar differences in susceptibility
- No control
- Disinfect pruners to avoid spread

BMSB on late-fruiting blackberry

The End