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## Blackberries for the Home Garden

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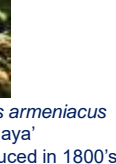





### "Wild" Blackberries

*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

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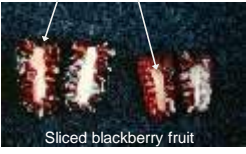
Aggregate fruit of many drupelets

calyx

drupelet

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

Sliced blackberry fruit

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### Terminology:

Marion during harvest





Fruiting Lateral

Drupelet: Section of a berry. Each has a seed

Primocanes: First year Always vegetative

Floricanes: Second year Always fruiting

Floricanes at bud break


<http://extension.oregonstate.edu/catalog/>

### GROWING BLACKBERRIES IN YOUR HOME GARDEN

By Bernadine Strik, OSU Extension Specialist

Blackberries are a popular fruit crop for home gardeners. They are easy to grow and produce a large crop of fruit. There are three types of blackberries: erect, trailing, and semi-erect. Each type has several varieties. The most popular variety is Marion, which is a trailing blackberry. Other popular varieties include Boysen and Triple Crown. Blackberries are best grown in a sunny location with well-drained soil. They are easy to care for and produce fruit from June to September.

Types of blackberries

**Erect** - These blackberries grow upright and are the easiest to grow. They are good for small gardens and containers. Examples include Ouachita and Boysen.

**Trailing** - These blackberries grow along the ground and are good for covering a large area. They are good for making jam and preserves. Examples include Marion and Boysen.

**Semi-erect** - These blackberries grow upright but have some trailing canes. They are good for small gardens and containers. Examples include Triple Crown and Boysen.

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### Blackberries

Three types of blackberries:

**Erect**  
e.g. 'Ouachita'

**Trailing**  
e.g. 'Marion', 'Boysen'

**Semi-erect**  
e.g. 'Triple Crown'

## 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:

### Trailing Blackberries



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## Trailing blackberry



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

## Trailing Blackberries

Primocanes are not tipped/pruned in summer

Every-year production:

Floricanes trained on wires



At harvest time

Hoop for training new primocanes

## Trailing blackberries

During harvest (generally July)



## Trailing blackberries

After fruit harvest is done (mid- late August)



Cut dying floricanes and remove from the trellis wires

### Trailing blackberries



Dying floricane, after pruning out



Primocanes ready for training

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

### Trailing Blackberries Training primocanes



Divide primocanes into two bundles  
Train half one way on trellis and the other in the opposite direction

### Trailing Blackberries Training primocanes



Loop bundles around the two upper training wires

### Trailing Blackberries Training primocanes

August trained



OR

Before training in Feb.



### Trailing Blackberries August-trained:

Re-growth should be tucked by late winter



Photo taken in October

### Trailing blackberries



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 blackberry



- 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



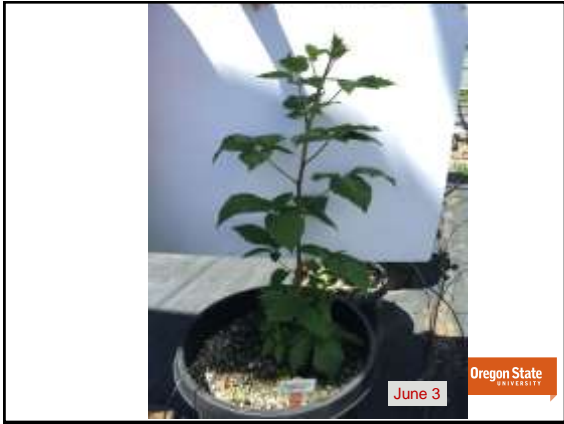
- Can use a simple trellis
- Prune in winter, when dormant to shorten the branches

Dormant primocanes after pruning

### Primocane-fruited erect blackberry



Can double-crop (primocane + floricane) or single-crop (just primocane)



**Pruning**  
Tip (at 3 ft)

**Tip primocane**

- Remove 4 to 12 inches of the cane tip
- If tip of cane shows flower buds it is too late to tip

3 ft tall

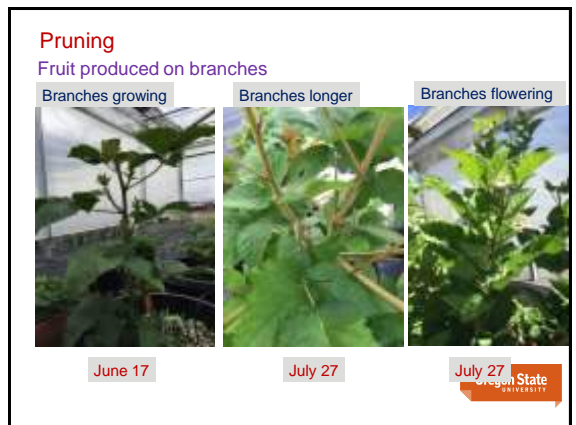


**Pruning**  
Fruit produced on branches


**Primocane development**

- Branches will grow


- Will fruit at tip (how much depends on region)



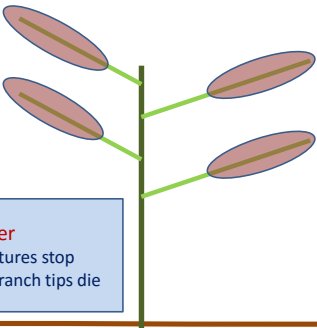
**Pruning**  
Fruit produced on branches



August 30



**Pruning – plants go dormant**



**Autumn/Winter**

- Cold temperatures stop fruiting and branch tips die

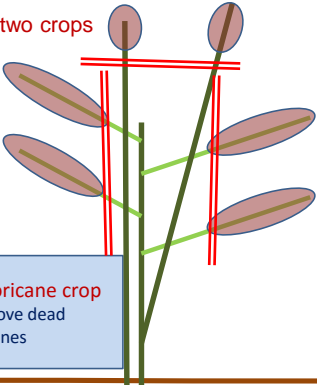
**Fruiting season cut short by weather in many temperate or continental climates**




End of October



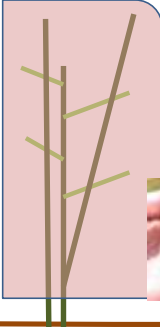

**Pruning for two crops**



**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.





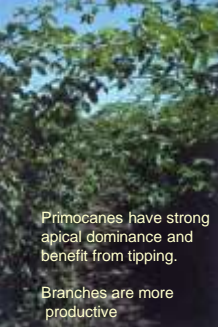
**Semi-erect blackberries**      6' x 10 to 12' spacing

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






**Semi-erect blackberry**




Primocanes have strong apical dominance and benefit from tipping.  
 Branches are more productive



Tip primocanes to ~ 5'

**Established blackberry**

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




**Publication:**



<http://extension.oregonstate.edu/catalog/>



'Marion' also known as "marionberry"











**Cultivars:**

Trailing types  
 Marion (thorny; previous slide)

Black Diamond (thornless)

**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



Primary bud killed by cold




Sliced cane showing damage to bud base.






**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



Lesions on leaves follow veins

Dried fruit often split



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### Red Berry Mite

- Use dormant oil and lime sulfur sprays in dormant season

Section of berry affected by mites

Mite is only 1/50" long

Receptacle

Drupelet



### Leaf Roller Larvae

Watch for leaf rolling and kill larvae before enter fruit



larva



Orange Tortrix adult

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### Herbicide Damage

Phytotoxicity from Round-Up®

Leaves are chlorotic and strap-like



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### 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



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### Spotted Wing Drosophila

*Drosophila suzukii*

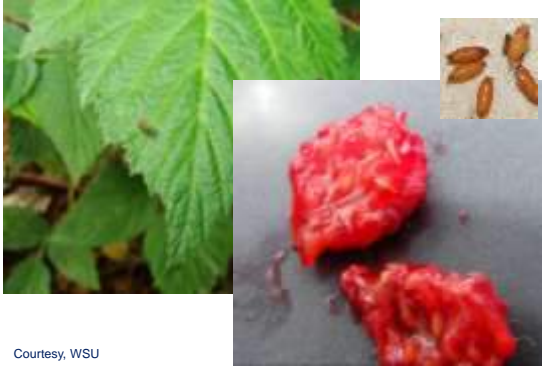
Actual size 2-3 mm



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From OSU Extension Publication, EM8991

### Spotted Wing Drosophila



Courtesy, WSU

### Brown Marmorated Stink Bug (BMSB)

- No control other than exclusion nets



BMSB on late-fruiting blackberry

### Crown Gall

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



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### The End



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