Blackberry Cultivars for Oregon

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'Marion' (trailing)

here are three main types of blackberries grown in Oregon: trailing, erect, and semierect. Several hybrids between raspberry and trailing blackberry have been developed, including 'Logan', 'Tayberry', and 'Boysen' blackberries. Since these grow like a trailing blackberry, they need to be managed in the same way.

This publication briefly describes each type of blackberry. Tables 1–5 list the primary cultivars in approximate order of ripening within each type.

Trailing Blackberries

The main species in the background of the trailing blackberry is *Rubus ursinus*, which is native along the Pacific Coast from British Columbia to California, and inland to Idaho. Trailing blackberries produce vigorous primocanes (first-year, vegetative canes) from the crown (base) of the plant. Primocanes trail along the ground and may grow to 20 feet long. Primocanes are produced only from the crown, not

from roots, so this type of blackberry is less invasive than many others. Plants need a trellis for support.

Second-year canes, known as floricanes, produce fruit. In general, trailing blackberries produce berries that have a long shape; relatively small seeds; and highly aromatic, intense flavor.

In Oregon, fruit ripens from mid-June to August, depending on the cultivar. The fruiting season for each cultivar lasts about 4 weeks.

Trailing blackberries are considered the least cold hardy of the three types of blackberries. Expect damage to buds and canes when temperatures drop below about 13°F in December or early January. Plants are even more sensitive to cold in late fall and late winter, when damage might occur at much warmer temperatures (in the 20s). Trailing blackberries grow well west of the Cascades in Oregon and southern Washington, although some damage might occur in particularly cold winters.

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'Columbia Star' (trailing)

A second species of trailing blackberry, *Rubus laciniatus* (the cutleaf or evergreen blackberry), was imported from Europe in the late 1800s. This species was once an important industry in Oregon but has now declined. 'Evergreen' and another introduced species from Europe, 'Himalaya' (*Rubus armeniacus*, syn. *R. procerus*), have naturalized throughout much of the Pacific Northwest and are considered noxious weeds.

Trailing blackberry cultivars are listed in Table 1.

Blackberry/Red Raspberry Hybrids

These hybrids generally have been developed unintentionally. Most have been found in plots or in the wild where red raspberry has been grown with *R.ursinus* blackberry. Despite their purple-to-red fruit color, they are technically blackberries because the receptacle (white core) is part of the fruit when it is picked. (In red raspberries, the receptacle stays on the plant.)

These hybrids are considered trailing blackberries because of their growth habit. While 'Boysen' and 'Logan' historically have been very important in the commercial industry, commercial acreage of these hybrids has declined steadily. 'Tayberry' is another hybrid that is sold occasionally.

Blackberry/red raspberry hybrids are listed in Table 2.

Erect Blackberries

These blackberries were developed from a very different eastern native blackberry species. Erect blackberries produce stiff, upright canes that may grow to 12 feet in Oregon, if left unpruned. Plants can colonize an area by producing new primocanes (suckers) from the roots. Plants form a hedgerow and need a trellis for support. Prune or tip primocanes in

summer to encourage branching and increase fruit production on the second-year floricanes.

Erect blackberries produce fruit with relatively large seeds. Flavor and aroma are not considered as intense as in many of the trailing blackberry cultivars. Although many erect blackberries taste good, berries often have a "grassy," "green," or bitter flavor that some people don't like. These berries are commonly grown for the fresh market, as the berries are firmer than those of most trailing types. In Oregon, fruit ripens from early July to August.

Erect blackberry cultivars are listed in Table 3.

Primocane-Fruiting Erect Blackberries

These blackberries produce fruit on the tips of the primocanes or on primocane branches. This characteristic makes management easier, as the canes can be cut to the ground in the dormant season, and fruit is produced from September through October, depending on the climate. Tip primocanes in summer to encourage branching.

Primocane-fruiting blackberries will produce a floricane crop the following year on the part of the cane that did not fruit the previous fall; however, we recommend growing these cultivars only for a fall crop. See the OSU Extension publication *Growing Blackberries in Your Home Garden* (EC 1303) for more information.

Primocane-fruiting erect blackberry cultivars are listed in Table 4.

Semierect Blackberries

These plants are thornless and produce very vigorous, thick, erect canes from the crown. The canes grow up to 20 feet long and arch to the ground if left unpruned. Primocanes are not commonly produced from the roots. Prune primocanes in summer to encourage branching and increase fruit production on the second-year floricanes. Canes require a trellis for support.

Semierect blackberries generally produce a higher yield than trailing or erect types. Fruit quality is similar to that of erect blackberries. In Oregon, fruit ripens from late July to early October, depending on the cultivar. The introduced weed 'Himalaya' has a growth habit most similar to the semierect types.

Semierect blackberry cultivars are listed in Table 5.

Cultivar Table Notes

Tables 1–5 list the primary cultivars of each type of blackberry. Not all of the listed cultivars are available in nurseries; however, these are included in the tables because plants are long lived, and established plantings of older cultivars still exist.

Fruit Descriptions and Yield

Assessments of fruit quality, including flavor, are primarily based on results of trials by the USDA-ARS/OSU cooperative breeding program at the OSU North Willamette Research and Extension Center in Aurora, Oregon, and on commercial grower experience. These traits, particularly flavor, can vary tremendously depending on location (because of differences in temperature and rainfall), cultural practice, and, of course, personal preference.

Yield ratings are based on comparison to other cultivars of the same type.

Wholesale Fresh or Processed Commercial Value

A commercial value score is provided to help commercial growers select appropriate cultivars for fresh and processed markets:

- 1 = Appropriate for most commercial operations
- 2 = May have commercial value but:
- (a) not enough is known about its performance *or*
- (b) may meet a specific requirement (e.g., unique color or very early harvest) but has a negative trait (e.g., low yield or poor shipping quality)
- 3 = Unlikely to have good commercial value

Small Farm, U-Pick, and Home Gardens

Cultivars that are well suited to small farms, local sales, U-pick farms, and home gardens are noted as such.



'Obsidian' (trailing)



'Black Diamond' (trailing)



'Boysen' (blackberry/red raspberry hybrid)

What if you find a cultivar that's not on these lists?

Find out as much about it as you can, such as its growth habit, hardiness, fruit characteristics, disease susceptibility, and machine harvestability (commercial processed markets).

Remember: If you purchase a cultivar that is not on these lists, it probably has not been extensively tested in Oregon. It's best to try some plants first and see how well the cultivar grows and how you like the fruit.

Table 1. Trailing blackberry cultivars

Cultivars are listed in approximate order of ripening. Obsidian harvest typically starts in the third week of June in Oregon's Willamette Valley.

Cultivar	Plant	Fruit	Yield	Market	Machine harvest	Large-scale commercial value	Small farm or home garden
Obsidian	Very vigorous, thorny	Large size, good firmness, black, fair shape, excellent flavor, very early ripening	Very high	Primarily fresh but processes well	<i>^</i>	1	<i>></i>
Metolius	Vigorous, thorny	Medium size, firm, black, excellent uniform shape, excellent flavor, very early ripening	High	Primarily fresh but processes well	>	1	<i>\</i>
Silvan	Very vigorous, thorny	Large size, soft, dark purple, fair shape, excellent flavor	Very high	Processed	^	2 (very soft and does not hold up in heat)	٨
Cascade	Vigorous, thorny	Small to medium size, soft, purple, excellent flavor, early ripening	Low to medium	Processed	^	3 (not productive enough)	٨
Olallie	Very vigorous, thorny	Medium size, soft, black, lumpy shape, excellent flavor, early ripening	Low to medium	Primarily fresh but processes well	→	(was grown commonly in California for U-pick and fresh sales, but in Oregon it is lower yielding and more sensitive to winter cold injury than Marion)	√ (but Marion is better)
Black Diamond	Vigorous, thornless	Large size, firm, black, very uniform shape, good flavor	High	Fresh or processed	>	1	7
Columbia Star (U.S. Plant Patent pending)	Very vigorous, thornless	Large size, firm, very uniform shape, outstanding flavor and processing quality	High	Fresh or processed	>	2 (too new to fully evaluate but very promising)	٨

Table 1. Trailing blackberry cultivars

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Cultivar	Plant	Fruit	Yield	Market	Machine harvest	Large-scale commercial value	Small farm or home garden
Kotata	Very vigorous, very thorny	Small to medium size, good firmness, dark purple, uniform shape, excellent flavor	Medium	Fresh or processed	>	2 (may be difficult to market processed but popular for fresh market)	
Marion (often called marionberry)	Very vigorous, thorny	Medium size, soft, dark purple, uneven shape, excellent flavor	Medium	Processed	^	1	<i>></i>
Wild Treasure	Thornless, very vigorous Thin canes break easily, so commercial growers should use alternate-year production systems or train canes very gently to avoid breakage.	Small size, medium firmness, dark purple, very uniform shape, excellent flavor	Low to high, depending on amount of damage during cane training	Processed, particularly small fruit market	>	2 (suited for small fruit market)	>
Onyx (U.S. Plant Patent 22,358)	Vigorous, thorny, fairly upright growth habit for a trailing blackberry	Medium size, uniform shape, firm, black, excellent sweet, mild flavor	Medium	Fresh	<i>></i>	2 (too new to fully evaluate but expected to do well in fresh market)	<i>></i>
Thornless Evergreen (a thornless chimera) and Everthornless (genetically thornless clone)	Vigorous, thornless	Small size, soft, black, mild but good flavor, August–September ripening season, prone to gray mold after fall rains	High	Processed	>	2 (nursery plants not available)	

Table 2. Blackberry/red raspberry hybrids Cultivars are listed in approximate order of ripening.

Cultivar	Plant	Fruit	Yield	Market	Machine harvest	Large-scale commercial value	Small farm or home garden
Logan (often called loganberry)	Moderate vigor, thorny, canes susceptible to disease Thornless Logan is available, but it is not genetically thornless and will produce thorny canes.	Medium size, more like raspberry than blackberry in color and flavor, deep red color, conic shape, excellent firmness but tender skin, excellent but distinctive flavor, hard to pick	Low to medium	Processed		2	>
Tayberry	Moderate vigor, thornless	Medium size, glossy, reddish purple, good firmness but tender skin, excellent but unique tart flavor, very hard to pick, fruit damaged easily by hot weather	Low	Processed		3 (Successful niche markets have been developed, but low yield and difficulty of harvest make this nearly impossible to produce economically.)	>
Newberry	Vigorous, thorny	Large size, blocky, glossy, reddish purple to dark purple, firmer and tougher skin than Boysen, excellent flavor, but despite Boysen look, does not have Boysen flavor	Very high	Fresh	>	2 (too new to fully evaluate)	>
Thornless Boysen (This thornless cultivar is the color of Boysen but was developed in California and does not have the flavor of the original Boysen.)	Vigorous, thornless	Small to medium size, lumpy, purple, fair flavor	Medium	Fresh	>	8	>
Boysen (often called boysenberry)	Vigorous, thorny	Large size, soft, lumpy, purple, unique and very good flavor	High	Processed	>	-	>

Note: Nectarberry and Youngberry are very similar to Boysen.

Table 3. Erect blackberry cultivars Cultivars are listed in approximate order of ripening.

Cultivar	Plant	Fruit	Yield	Market F	Machine harvest	Large-scale commercial value	Small farm or home garden
Natchez (U.S. Plant Patent 20,891)	Vigorous, thornless	Large to very large size, very firm, black, glossy, picks easily, seedy, fair flavor. Can have variable fruit set (lumpy fruit)	Medium (yield can vary from year to year— biennial bearing)	Fresh		2	
Ouachita (U.S. Plant Patent 17,162)	Vigorous, thornless	Medium size, firm, tough skin, attractive, black, glossy, round, prone to sunburn (UV damage), fair flavor	Medium (yield can vary from year to year— biennial bearing)	Fresh		2 (uneven performance in commercial fields)	>
Osage (U.S. Plant Patent pending)	Vigorous, thornless	Small to medium size, firm, tough skin, black, glossy, round, fair flavor	Medium	Fresh		2 (too new to fully evaluate)	
Apache (U.S. Plant Patent 11,865)	Vigorous, thornless	Large size, firm, tough skin, black, glossy, round, lumpy, seedy, prone to sunburn (UV damage), fair flavor	Medium	Fresh		8	
Illini Hardy	Vigorous, very thorny, cold hardy	Medium to large size, soft, black, glossy, tends to be bitter	Medium	Fresh		3 (an option when too cold to grow most blackberries)	٨
Navaho	Moderate vigor, thornless	Small to medium size, firm, tough skin, attractive, black, glossy, round, good flavor, ships well	Medium	Fresh		-	>

Table 4. Primocane-fruiting erect blackberry cultivars Cultivars are listed in approximate order of ripening.

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Cultivar	Plant	Fruit	Yield	Market	Machine harvest	Large-scale commercial value	Small farm or home garden
Prime-Jim (U.S. Plant Patent 16,989) and Prime-Jan (U.S. Plant Patent 15,788)	Vigorous, very thorny	Large size, soft to medium-firm, moderately tender skin, black, glossy, seedy, fair flavor, season is from late August to first frost	Medium	Fresh		د	7
Prime-Ark 45 (U.S. Plant Patent 22,449)	Moderately vigorous to vigorous, very thorny	Large to very large size, firm, moderately tender skin, black, glossy, seedy, good flavor, season is from early September to first frost	Medium	Fresh		2 (limited yield in short season)	>
Prime-Ark Freedom (U.S. Plant Patent pending)	Prime-Ark Freedom Vigorous, thornless Small to medium, (U.S. Plant moderately firm, Patent pending) season is from earl September to first frost	Small to medium, moderately firm, black, glossy, seedy, season is from early September to first frost	Low (unless grown in a tunnel)	Fresh		2 (too new to fully evaluate)	>

Table 5. Semierect blackberry cultivars Cultivars are listed in approximate order of ripening.

Cultivar	Plant	Fruit	Yield	Market	Machine harvest	Large-scale commercial value	Small farm or home garden
Loch Ness	Moderate vigor, thornless	Medium size, fair firmness, attractive, black, glossy, oblong, prone to sunburn (UV damage), fair flavor	Medium	Fresh		1	
Hull Thornless	Vigorous, thornless	Medium size, fair firmness, black, glossy, round, prone to sunburn (UV damage), fair flavor	Medium	Fresh		2 (too soft to ship well)	
Triple Crown	Vigorous, thornless	Medium to large size, fair firmness, attractive, black, glossy, round, lumpy, prone to sunburn (UV damage), berries can ripen unevenly, good flavor	High	Fresh		1 (limited shelf life)	>
Doyle's Thornless	Vigorous, thornless	Small to medium size, fair firmness, black, glossy, round, lumpy, noticeably large seeds, poor to fair flavor	Medium	Fresh		3	
Black Satin	Moderate vigor, thornless	Small to medium size, soft, attractive, black, glossy, round, prone to sunburn (UV damage), fair flavor	Medium	Fresh		ъ	
Chester Thornless	Vigorous, thornless	Small to medium size, firm, tough skin, attractive, black, glossy, round, prone to sunburn (UV damage), fair flavor, susceptible to red berry mite	Very high	Fresh		1 (ships fresh very well)	



'Triple Crown' (semierect)



'Ouachita' (erect)

For More Information

For more information on blackberry growth habit and management, see the OSU Extension publication *Growing Blackberries in Your Home Garden* (EC 1303).

Many other OSU Extension publications about fruit production and gardening are available online from the OSU Extension Catalog: http://extension.oregonstate.edu/catalog



'Navaho' (erect)



'Prime-Ark 45' (primocane-fruiting erect)

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