



BLUEBERRY CULTIVARS FOR OREGON

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There are various species of blueberry grown in the United States. Lowbush blueberries (*Vaccinium angustifolium*) are low-growing shrubs, which spread by underground stems. They seldom grow higher than 1.5 feet in height. This species is native to the northeastern U.S. and Canada, and the majority of the fruit is harvested from managed, wild stands.

Rabbiteye blueberries (*V. ashei*) are extremely vigorous, productive types with fruit comparable to the highbush cultivars (varieties). These aren't winter-hardy but are drought-tolerant. Rabbiteyes are grown primarily in the area from eastern North Carolina south to central Florida and west to Arkansas and eastern Texas.

The highbush blueberry (*V. corymbosum*) is the most important species of blueberry grown in the U.S. The plants are vigorous and productive; they grow best on moist, well-drained, acid soils. They aren't drought-tolerant. Fruits are large and are better flavored in northern areas, such as Oregon, where the nights are cool.

If you're a home gardener, see EC 1304. If you're a commercial grower, see PNW 215.

Through plant breeding, new cultivars with increased productivity, fruit size, and disease resistance have been released; many of these cultivars will be described in this publication.

In Oregon, the highbush blueberry fruiting season extends from early July to mid-September (figure 1). Cultivars are classified as early, early midseason, midseason, late midseason, and late. The fruit on each cultivar ripens over a 2- to 5-week period. Cultivars that ripen after mid-September are rarely grown in the Pacific Northwest because wet weather often makes the harvest of sound fruit difficult.

The following cultivar descriptions are intended to serve as an aid in choosing cultivars for your home garden or for commercial production. If you're a home gardener, feel free to skip the information about mechanical harvest.

It's an advantage to choose various cultivars to offer a *succession* of ripening (figure 1). In addition, although highbush cultivars are generally self-fertile, cross-pollination produces larger berries. In a home garden, the growth habit of the plant may be important if space is limited, but usually fruit characteristics are of primary concern.

Some cultivars are suitable for both fresh market and processing. For fresh market or U-pick operations, cultivars with long, loose fruit clusters and large berries are easiest to hand pick. Very dark berries may be unattractive for the fresh market as they appear overripe.

Firm berries handle better and keep longer than soft ones. The scar, or point of attachment of the fruit stem to the berry, should be small and dry and shouldn't tear when the berry is picked. If the scar tears easily and is moist, the berries have a very short shelf life.

Most cultivars have good quality, but several are very tart until fully ripe; ripening may take several days after the fruit completely turns blue.

Blueberry fruit produced in the Pacific northwest has very high processed quality (better color and flavor development) compared to many other growing regions in the United States. Cultivars differ in fruit quality for a processed product. If fruit is to be machine-harvested, choose suitable cultivars. For example, cultivars that ripen fruit over a relatively long period or have fruit that shatters (drops) as soon as it ripens, aren't suitable for mechanical harvest. Berries should hang on the bush for a period of time, but drop off once the mechanical harvester shakes the bush.

HIGHBUSH CULTIVARS

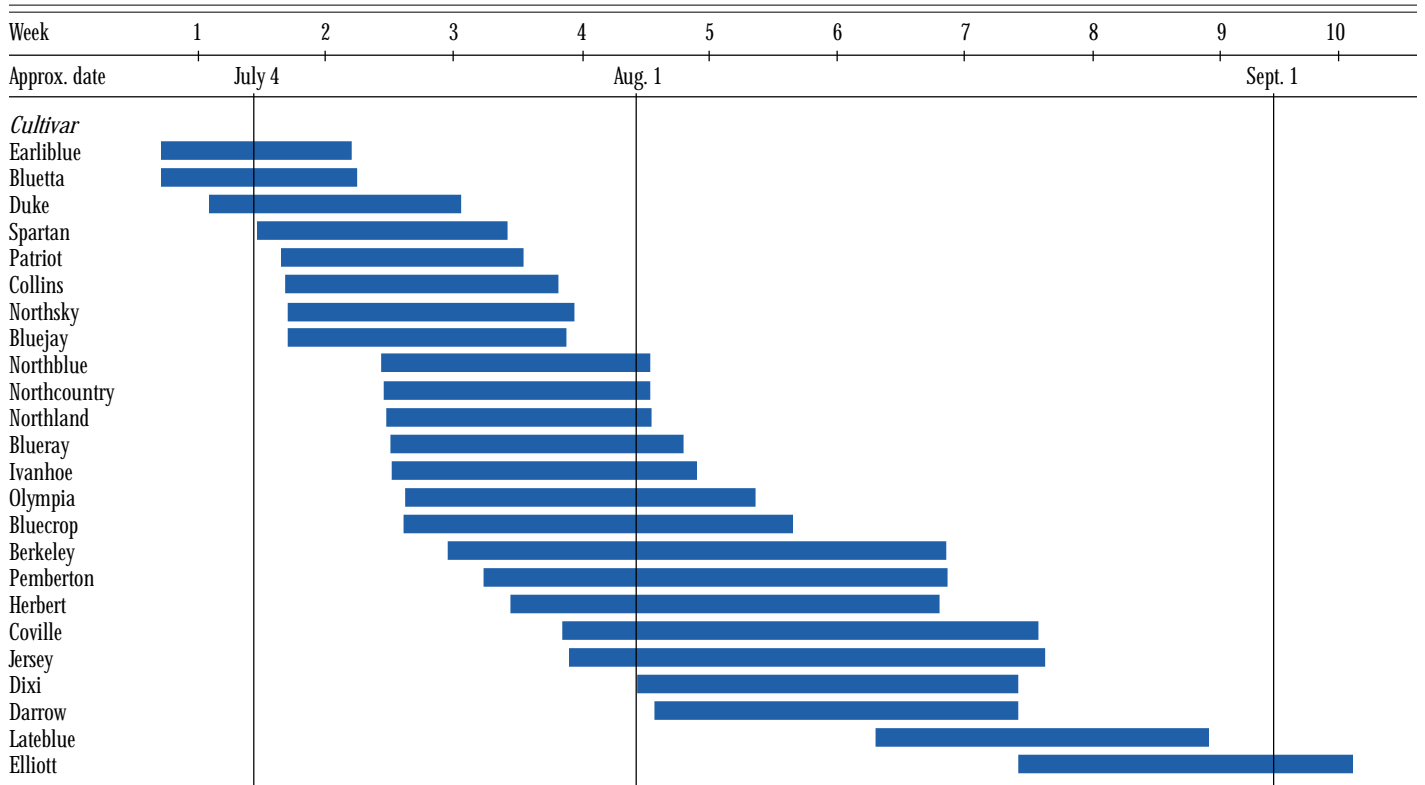
The following cultivars are listed in order of ripening (see figure 1 also):

Earliblue. Bush: Vigorous, erect, productive. Fruit cluster: Medium, loose. Berry: Medium-large, light blue, firm, resistant to cracking, medium scar; flavor good, sweet, aromatic; fruit ripens early, doesn't drop quickly once ripe, and ships well. Plants have some resistance to powdery mildew. Suitable for fresh market and U-pick. Suitable for machine harvest.

Bluetta. Bush: Moderately vigorous, compact, somewhat spreading, consistently productive; more frost- and winter-hardy than Earliblue. Fruit cluster: Loose. Berry: Medium,

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Figure 1.—Approximate fruiting season of various blueberry cultivars for western Oregon



light blue, firm, medium-broad scar; flavor fair to good. Suitable for machine harvest.

Duke. Bush: Vigorous, erect, open, consistently productive. Berry: Medium, light blue, firm, small scar; flavor is fair, becomes more aromatic after storage. Fruit has good shipping qualities. Plant has favorable characteristics for machine harvest.

Spartan. Bush: Vigorous, erect, open, productive. Berry: Very large, light blue, firm, medium scar; flavor is excellent. Blooms late and thus avoids frost injury, but ripens early. Concentrates ripening to two main pickings. Light, well-drained soil preferred. Some resistance to mummy berry. Suitable for machine harvest.

Patriot. Bush: Vigorous, moderately erect, open, very productive. Fruit cluster: Tight. Berry: Very large, slightly flat, medium blue, firm, small scar; flavor excellent. Concentrates ripening to two main pickings. Berries show a “red back” when immature, and fruit can be soft in very hot weather. Plants are tolerant of heavier, wetter soils, cold weather, and frost. Some resistance to *Phytophthora* root rot. Suitable for machine harvest.

Collins. Bush: Medium vigor, slightly spreading, productive. Berry: Large, light blue, firm, resists cracking, small scar; flavor excellent. Fruit doesn’t drop quickly once ripe; suitable for fresh market. Tolerant of spring frosts. Suitable for machine harvest.

Bluejay. Bush: Vigorous, fast-growing, erect, open, moderately productive. Fruit cluster: Loose. Berry: Medium-large, light blue,

very firm, resists cracking, small scar; flavor pleasant, mild, slightly tart. Fruit does not drop quickly once ripe and retains quality. Clusters at the periphery of the plant, long stems, and exceptional fruit retention make once-over machine harvesting practical. Berry keeping quality is good and it ships well. Moderately resistant to mummy berry.

Blueray. Bush: Vigorous, erect, open, productive. Fruit cluster: Small, tight. Berry: Large-very large, light blue, firm, resistant to cracking, small-medium scar; flavor excellent, aromatic. Good shipping quality. Performs well in hot climates. Tight fruit clusters discourage machine-harvesting the first picking.

Ivanhoe. Bush: Very vigorous, erect, not consistently productive. Fruit cluster: Medium, loose. Berry: Large, light blue, firm, resistant to cracking, medium scar; flavor good, tart, aromatic. Not suited for machine harvest.

Olympia. Bush: Vigorous, spreading, productive. Berry: medium to large, medium blue, thin skin, resistant to cracking, small scar; flavor very good. Fruit does not shatter. Popular for fresh market—good flavor and aroma. Well suited for process frozen packs—uniform size and high sugar content. Fruit can usually be shipped fresh the first and second picking if the weather isn't too hot. Suitable for machine harvest if bush is properly pruned.

Bluecrop. Bush: Vigorous, erect, open, very productive. Fruit cluster: Loose. Berry: Very large, light blue, firm, resistant to cracking, small scar; flavor very good, slightly aromatic. Fruit can be tart or show "red back" if picked too early. Plant is easy to grow but tends to overproduce if not pruned correctly. Moderately resistant to mummy berry and powdery mildew. Suitable for machine harvest.

Berkeley. Bush: Vigorous, open-spreading, productive-very productive. Fruit cluster: Large, loose. Berry: Large-very large, light blue, firm,

resistant to cracking, small-medium scar; flavor fair, mild, less acid than most cultivars, slightly aromatic. Fruit stores well. Plant is easy to grow, but does best in light, well-drained soil. Some resistance to powdery mildew. Suitable for machine harvest. Popular for U-pick, fresh, and process markets.

Pemberton. Bush: Vigorous, erect, very productive. Fruit cluster: Loose. Berry: Medium-large, dark blue, firm, large scar; flavor fair, slightly aromatic. Easy to grow and prune, but more difficult to pick than most other cultivars and thus not suited for machine harvest.

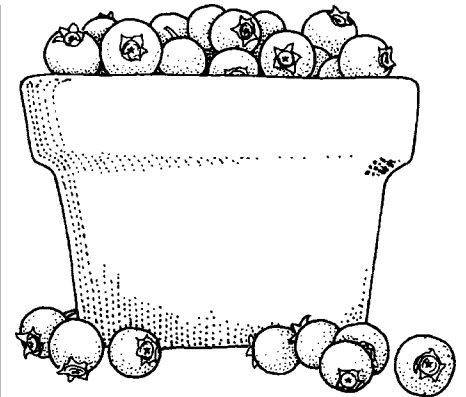
Herbert. Bush: Vigorous, open-spreading, consistently productive. Fruit cluster: Medium, loose. Berry: Large-very large, medium blue, medium firmness (fruit can be tender), resistant to cracking, medium scar; flavor very good, aromatic. Fruit doesn't shatter from bush. Moderately resistant to mummy berry. Suitable for machine harvest.

Coville. Bush: Vigorous, open-spreading, productive. Fruit cluster: Loose. Berry: Very large, medium blue, firm, resistant to cracking, medium scar; flavor good, tart, highly aromatic. Fruit doesn't drop quickly once ripe. Moderately resistant to mummy berry, powdery mildew, and Godronia canker. Suitable for machine harvest.

Jersey. Bush: Very vigorous, erect, productive. Fruit cluster: Loose. Berry: Medium, medium blue, firm, resistant to cracking, medium scar; flavor fair, no aroma. Moderately resistant to mummy berry. Well-suited for machine harvest and process market.

Dixi. Bush: Vigorous, open-spreading, productive. Fruit cluster: Medium, tight. Berry: Large-very large, medium blue, firm, subject to cracking, large scar; flavor good to excellent, aromatic. Not suitable for machine harvest.

Darrow. Bush: Vigorous, erect, consistently productive. Fruit cluster: Medium, loose. Berry: Large-very large, light blue, firm, resistant to cracking, small-medium scar; flavor excellent, tart. Some resistance to mummy berry. Best suited for fresh market sales or U-pick. Not suitable for machine harvest.



Lateblue. Bush: Vigorous, erect, consistently productive. Fruit cluster: Moderately loose. Berry: Medium-large, light-medium blue, firm, small-medium scar; flavor good to very good. Fruit ripening is concentrated. Some resistance to mummy berry. Suitable for machine harvest; however, high temperatures at harvest may cause steminess.

Elliott. Bush: Vigorous, erect, consistently productive. Fruit cluster: Loose. Berry: Medium, light blue, firm, small scar; flavor mild to good, slightly tart. Fruit ripening is concentrated. Moderately resistant to mummy berry. Well-suited for machine harvest.

HALF-HIGH CULTIVARS

These have been developed by crossing the highbush blueberry with the lowbush blueberry. These plants are short-statured, winter-hardy, and have a fruit character similar to the highbush type. The following half-high cultivars may be available in Oregon. Although not all have been widely tested, some may be suitable for trial in areas with very cold winter temperatures.

Northsky. Mid-late season. Bush: Short-statured (10 to 18 inches), dense, withstands temperatures to -22°F , moderately

What if you find a cultivar that's not on this list?

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

Remember: If you purchase a cultivar that's not on this list, it probably hasn't been extensively tested in Oregon. It's best to *try* a plant first and see how well it grows and how you like the fruit.

productive (1 to 2 lb per plant). Berry: Medium, light blue; flavor good. Fruit stores well and has more of a “wild” blueberry flavor. Bush is attractive, compact, and highly branched, with dark green leaves in the summer and bright red in the fall. This cultivar would be quite suitable for container growing. Recommended for home gardens.

Northblue. Mid-late season. Bush: Vigorous, low-statured (2 feet), withstands temperatures to -22°F , consistently productive (3 to 7 lb per plant). Berry: Large, dark blue, firm; flavor good. Fruit stores well and has more of a “wild” blueberry flavor. Good for processing, U-pick, or local sales. Bush has large, glossy, dark green leaves and is attractive as an ornamental in home gardens. May be suitable for commercial production in colder areas.

Northcountry. Early midseason, about 10 days before Bluecrop. Bush: Moderately vigorous, less than 3 feet high, productive. Berry: Medium, very light blue; flavor sweet, mild “wild” flavor. Bush habit, foliage, and bloom make this an attractive ornamental and also suitable for container growing. For home garden use.

Northland. Early season, before Bluecrop. Bush: Vigorous, moderately spreading, mature height about 4 feet, hardy, very productive. Berry: Medium, medium blue, moderately firm, small scar; flavor good, sweet. Fruit ripening is concentrated. Good for processing or local sales. Prune plant to upright stature to machine pick.

FOR FURTHER READING

The publication listed below, and the one you’re holding, are available from Publications Orders, Agricultural Communications, Oregon State University, Administrative Services A422, Corvallis, OR 97331-2119.

EC 1304, *Growing Blueberries in Your Home Garden*, by Bernadine C. Strik, Oregon State University Extension Service publication (Corvallis, reprinted April 1993). 75¢

PNW 215, *Highbush Blueberry Production*, by Bernadine C. Strik, editor, Pacific Northwest Extension publication (Oregon State University, Corvallis, revised January 1993). \$10.00

This publication replaces EC 699. Trade-name cultivars are listed as illustrations only. The OSU Extension Service does not endorse any listed cultivar or intend any discrimination against others not listed.

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