

Cooperative Extension Service Oregon State University, Corvallis

Blackberry Culture

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The term "blackberry" includes all types of trailing berries—Logan, Boysen, Young, Marion, and many others. Oregon's blackberry industry is centered in the Willamette Valley because of favorable climate, availability of labor, and the presence of processing plants. Plantings consist of five to six thousand acres.

Blackberries do best on a fertile soil that holds moisture during the growing season. Windy areas, places where late spring frosts occur, and heavy soils that hold excessive moisture for long periods should be avoided.

Soil Preparation

Plant blackberries on soil that is reasonably fertile and in which organic matter content has not been depleted. Barnyard manure free of weed seed, cover crops, and crop waste materials are major sources of organic matter. Land that has been in grass sod for a few years makes excellent soil for blackberries, provided it is thoroughly worked to kill the grass before the plants are set out.

Propagation

Trailing blackberry plants normally will propagate themselves in late September or October if the soil is moist and loose. You can insure propagation by making a cut with a plow, shovel, or trowel, inserting the tip of the cane, and covering it with soil. In early spring, sever the new plant from the parent plant. It should have a good root system of its own and will grow readily when transplanted in a permanent spot.

If large quantities of new plants are needed, cut the new tip out in the spring when the cane is about two feet long. This produces branching and develops several canes suitable for fall rooting.

Planting

Plant in moist soil as soon as land can be worked in the spring. Planting stock may be taken directly from the field or it can be stored for a short time before planting. Cut plants short and lift them carefully. If plants are to be stored, shake the soil from them and pack in moist moss, plastic bags, or boxes lined with plastic. Keep the roots slightly moist and store at a temperature of $32^{\circ}F$.

Set rows of plants 8 to 10 feet apart, depending on the cultivation equipment used. Plants in the rows may vary from 3 to 10 feet apart, depending on the training system. Most commercial plantings are set 10 feet between rows and from 5 to 10 feet between plants in the row.

Plant with a shovel, setting the new tips at ground level. Spread the roots and firm the soil around them. Avoid placing roots in direct contact with fertilizer. Provide adequate moisture during and following planting. This is especially important on lighter soils.

The Evergreen variety will tolerate heavy, poorly drained soil. On better drained soils, plant any variety according to personal or market preferences.

Varieties

Many varieties of blackberries can be grown in Oregon. Only those most widely planted are listed below.

• *Boysen*, of California origin, is widely grown, quite vigorous, and productive. The fruit is dark red, quite large, and ripens from early July to late August. It is sold on the local fresh market and for freezing and canning. The flavor is excellent, being subacid to acid.

• *Cascade* is an Oregon introduction, vigorous and productive. The berries are dark red, smaller than Logan, somewhat soft, and not the best-suited for fresh market. Cascade ripens at the same time as Logan, has a characteristic wild blackberry flavor, makes excellent jam and preserves, and is well-suited to home-garden culture. Canes grow like the wild blackberry, small in diameter.

• *Chehalem* is an Oregon introduction, quite vigorous, with long canes, and highly productive. Berries are bright black but rather small. Flavor is

excellent and seeds are small. This berry is frozen and used for pies. It ripens a few days later than Boysen.

• Thornless Evergreen, an Oregon introduction, is a sport of Evergreen, and because of its ease of handling has replaced this variety. Fruit is firm and has a mild flavor. Large quantities are canned. This berry is very productive and accounts for the largest acreage of all blackberry varieties raised in Oregon. It ripens in August and September.

• Logan is a California berry, quite vigorous and productive when well cared for. Berries are dark red, of medium size, and tend to be a little soft. An acid-type berry, with desirable flavor, it is grown mainly for juice and wine. It ripens from late June through July.

• Marion is an Oregon introduction which produces only a few large canes. It is very productive on long laterals. Berries are medium to large, bright black, and of excellent flavor. It is used for canning, freezing, and the fresh market. Season —early July to mid August.

• Aurora is an Oregon introduction that has firmness, size, excellent flavor, and ripens before any other blackberry grown in western Oregon. Canes are medium vigorous and train easily. Medium productive. Best suited for fresh market or home gardens.

Weed Control

Cultivation is primarily for control of weeds which compete with the plants for nutrients and water. This cultivation should be very shallow to avoid injury to berry roots.

Nearly all commercial growers use chemicals for weed control. Check with your county Extension agent for current recommendation.

Cover Crops

Oats, rye, wheat, winter peas, or barley, seeded in the fall and turned under in the spring, can help maintain organic-matter content of the soil and hold fertility so that it can be used later by the berry crop. Fertilizers help growth of the cover crop and are partially available to berry plants as the cover crop decomposes. Disc the cover crop into the surface soil as early in the spring as soil can be worked.

Irrigation

Blackberries require a good supply of moisture in the soil all season. When rainfall is light or a permanent cover crop is maintained, supplemental moisture is needed. Sprinkler irrigation can supply this, but use it in frequent small amounts during ripening—particularly with softer varieties such as Cascade.

Fertilization

A soil test will show fertilizer needs. Ask your Extension agent for soil cartons and instructions on getting a test. Fertilizers should be added in early spring. As a general rule, valley plantings can use 50 to 100 pounds of nitrogen, 100 to 120 pounds of phosphate, and 50 to 100 pounds of potash. See Oregon State University fertilizer guides 48 and 51 for further information.

Training

New canes appear early in the spring, and, after growing upright for a time, turn down and grow along the ground. To avoid injury to new canes, keep them trained in a narrow row beneath the bearing canes as shown in Figure 1. Remove

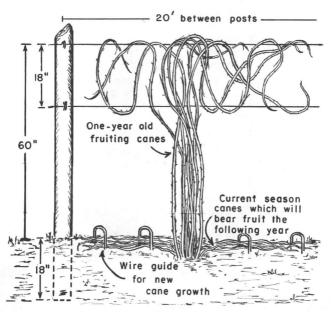


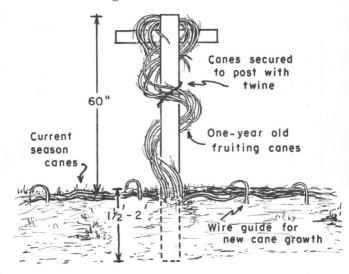
Figure 1

old canes following harvest. Early blackberry varieties can be trellis-trained in late summer or early spring. Training is best accomplished within 10 days after harvest. This permits fall sprays, allows no tip rooting, better dormant spray applications, and less injury from training. In severe climates fall training may leave canes more susceptible to freezing.

A good trellis can be made on posts set 20 to 30 feet apart and using two wires, one 5 feet high and the other 18 inches lower. In mechanically harvested fields the height of the trellis should be consistent with the design of the machine. Canes are wrapped one or two at a time in a spiral around the two wires, working each way from the plant. This allows for growth and a good spread of fruiting arms during the next season. Wrap the longer laterals the same as main canes. Shorter broken, kinked laterals can be pruned to leave a stub of 8 to 10 inches. No stubbed laterals should be left on the basal 18 inches of main canes.

Training each plant on an individual stake allows one to cultivate in both directions. Canes are wound on stakes and excess growth pruned off. (See Figure 2.) This method is useful in homegarden culture.

Other training systems used in the home garden are shown in Figures 3 and 4.



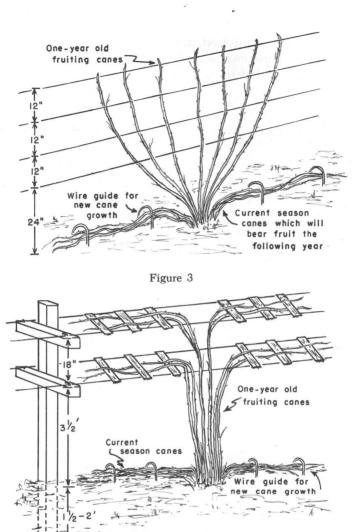


Figure 4

Chemical Pruning

An innovation gaining wide commercial acceptance is the use of a contact herbicide to "burn" off low growing laterals and delay development of new canes.

Use 2 quarts of 5-pound per gallon formulation of dinitro general plus 4 quarts of summer-type spray oil in 100 gallons of water. Spray foliage thoroughly between ground and 18 inches high. Apply when new cane growth is 4 to 8 inches high. Detailed, long-term research information substantiating the benefits of this practice in perennials such as caneberries is not yet available. A degree of caution is advised, particularly where the grower has no previous experience. The method is not recommended for weak or debilitated plantings.

Harvesting

Harvest season for blackberries starts the last of June and lasts until early September, depending on the variety. Pick every 3 to 6 days, depending on weather and variety. Protect picked fruit from the sun and keep it as cool as possible until delivery to the buyer. Marion, Chehalem, and Thornless Evergreen can be mechanically harvested. Other varieties are sometimes also harvested mechanically, particularly as part of a cleanup picking when labor is scarce.



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