

Blackberry Culture

Prepared by R. RALPH CLARK

Extension Horticulture Specialist, Oregon State University, Corvallis

The term "blackberry" includes all types of trailing berries—including Loganberries, Boysenberries, Youngberries, 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. The industry involves five to six thousand acres of better types of valley soil.

Blackberries are often grown as part of a diversified agriculture, rather than as the only crop on the farm. They 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, cover crops, and crop waste materials will improve berry soil. Land that has been in grass sod for a few years makes excellent soil for blackberries. Work the soil well as soon as it is dry enough for good preparation.

Propagation

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. By spring, the new plant can be severed from the parent plant and lifted with a good root system of its own.

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

Under the Oregon Register of Merit program some berry growers propagate desirable planting stock and sell the plants in the spring.

Planting

Plant 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 future use. Cut plants short and lift them carefully. If you want to store the plants, shake the soil from them and pack in moist moss, plastic bags, or boxes lined with plastic. Keep the roots slightly moist. A storage temperature of around 32° F. is desirable.

Set rows of plants 5 to 10 feet apart, depending on the training system and the cultivation equipment used.

Plants in the rows may vary from 3 to 10 feet apart, depending on the training system to be used. Most commercial plantings are now being 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.

Varieties

Many varieties of blackberries can be grown in Oregon. On heavy, poorly drained soil, the Evergreen variety is the best to plant. On better soils, plant any variety, according to personal or market preferences.

- **Boysen**, a California introduction, is widely grown, quite vigorous, and productive. The fruit is dark red, quite large, and ripens from early July to late August. It is used on the local 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, 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 fair 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. It is hard to get pickers for the late part of the crop, causing a growing interest in mechanical pickers.

- **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.



This is one of a series of *Fact Sheets* reporting Cooperative Extension work in agriculture and home economics, F. E. Price, director. Printed and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914. Oregon State University, Oregon counties, and U. S. Department of Agriculture cooperating.

- **Nectar** is of California origin and appears to be quite similar to Boysen.

- **Pacific** is of Oregon origin, much like Cascade except it has less vigor and is less productive. Fruit is slightly larger, firmer, and possibly more acid than Cascade.

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 now use chemicals for weed control. Check with your local county Extension agent to be sure you have the most current recommendations. They change often.

Cover Crops

Plantings of oats, rye, vetch, crimson clover, 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 picked up later by the berries 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 and Pacific.

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 around 60 pounds of potash.

Training

New canes appear early in the spring, and, after growing upright for a time, turn down and run along the ground. To avoid injury to new canes, keep them trained in a narrow row beneath this year's bearing canes.

Remove old canes following harvest. Early blackberry varieties can be trained (tied in desired shape) in either fall or spring. Training within 10 days after harvest permits a fall spray, a gradual and better approach to dormancy, no tip rooting, a better dormant spray job, 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 30 to 40 feet apart and using two wires, one 5 feet high and the other 18 inches below it. 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. Save all lateral growth for highest yields.

Some growers train on one wire, in one or both directions. The ends of the canes may be cut off or left on. This method may result in broken wires, broken canes, and crowded canes.

Some commercial growers prefer to cultivate in both directions, and so train plants on stakes. They wind the canes around the stake, cutting excess tips off and tucking the ends in at the top of the stake. This method is useful in home-garden culture of trailing berries.

Another system is fan training. Under this system, plants are set close together and canes are tied up one or two in a place, fan style, on a 3- to 5-wire trellis, cutting off the tips just above the top wire. This system requires more labor, but in return it gives a higher yield of fruit.

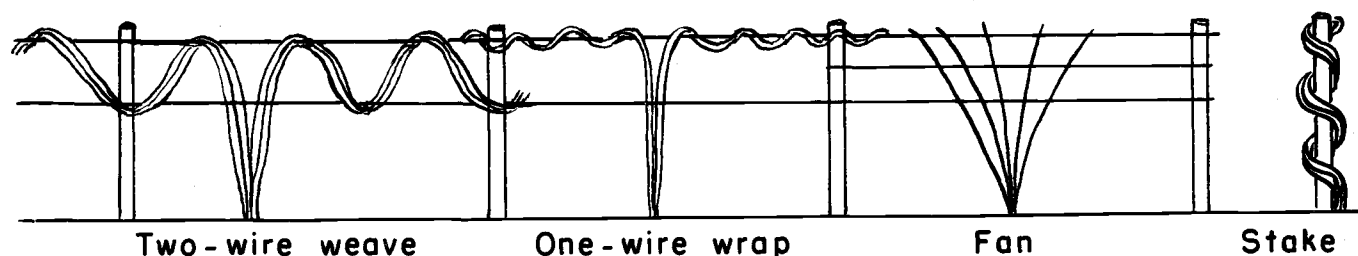
Two- and four-wire horizontal systems are also used. A single set of wires may be 4 or 5 feet high, or one set there and another 2 feet below them. Wood crossarms are placed on the wires and canes are trained on them. Sometimes bearing canes are on the top wires and new canes are trained on the lower wires instead of on the ground.

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.

Hand-pick into carriers of various kinds—either fastened to the waist or made to sit on the ground. Mechanical pickers are also being perfected for large commercial acreages, and are proving satisfactory.

Protect picked fruit from the sun and keep it as cool as possible until delivery to the buyer.



Commonly Used Training Systems