

Blackberry Varieties in Oregon

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The commercial blackberry industry in Oregon is centered in the Willamette Valley of western Oregon. The normal climatic conditions of this area, a mild autumn, a cool dry summer and sufficient spring moisture to develop the fruit, favor the production of these berries. Also, the mild but moist autumn weather stimulates cane growth, and the dry summer permits harvesting with a minimum loss from moldy or decaying berries.

The native trailing wild blackberry *Rubus macropetalus*, grows in western Oregon. From time to time, seedlings, which have shown some promise, have been found in the wild, and a few are grown commercially in a small way. European blackberries, the Evergreen and the Himalaya, have been introduced into Oregon and have become naturalized in the wild. The early breeding work by Judge Logan of Santa Cruz, California, resulted in the introduction of the Loganberry more than 50 years ago, and for a time it was widely planted. In more recent years, the Boysen, a chance seedling also from California, has been widely planted.

Breeding work with blackberries carried on by the U. S. Department of Agriculture in cooperation with the Oregon Agricultural Experiment Station has resulted in the introduction of the following varieties: Cascade, Pacific, Chehalem, Olallie and Marion. This breeding program is still being carried on, and there is the possibility of more varieties being introduced. At present, the varieties described briefly herein are receiving

considerable attention from growers. Three varieties being grown extensively are Evergreen, Boysen and Chehalem.

Boysen (Nectar) is widely distributed over western Oregon and is grown in eastern Oregon to a certain extent, although it is not fully hardy under those conditions. The Boysen is popular in home gardens as well as in larger commercial plantings. The fruit of the Boysen is the largest of our commercial blackberry varieties. Plant growth is usually very vigorous, and the plants produce so many canes that growers often complain that there is more cane growth than necessary for fruit production. The Boysen is the principal blackberry on local markets and is extensively used for freezing and canning. In recent years, the frozen fruit of Boysen has become popular with bakers for pies.

Cascade is the result of a cross between a native blackberry variety, Zielinski and the Logan. Cascade berries have a rich blackberry flavor very similar to the flavor of the native wild blackberry, but they are somewhat acid. The berries are too soft for commercial handling, but the variety is extensively planted in home gardens and is very popular for home freezing, canning and so forth.

Chehalem is a cross between Himalaya and Santiam (a pure native blackberry or a cross of a native blackberry and some cultivated variety). It has the native blackberry characteristics except that the berries are very firm. The Chehalem is also noted for

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its very bright, black color and small seeds. The plant vigor of Chehalem is very similar to that of Himalaya. The season of Chehalem is somewhat later than that of the Boysen or the Logan; and to a certain extent it fills in a period between the Boysen and the Evergreen harvest. Chehalem has long fruiting laterals, which hang out from the canes archlike, and although the berries are small, they can be easily picked. Yields are often as high as 5 tons per acre. Chehalem is now extensively grown and probably ranks in popularity just behind Boysen and Evergreen.

Evergreen (Thornless) is very popular. This form was discovered in the wild by Philip Steffes of Sublimity, Oregon, just east of Stayton, about 1926. The thornless form has now completely superseded the thorny form in cultivation. The Evergreen is a native of Europe and is known in England as the parsley leaf or cut leaf blackberry. Its season is very late, the fruit being harvested in August and September. For this reason, many growers object to the variety, since the harvest season interferes with the harvest of other crops. The Evergreen, however, produces the highest yields of all blackberries, often 6 to 10 tons or even more per acre, but the quality of the fruit is only fair, and the seeds are large. Because of the ease of production and high yields, the Evergreen is the most popular with growers of all our blackberries at present.

Himalaya is also of European origin, and is probably the same as the variety Theodore Reimers as grown in Germany. Like the Evergreen, the Himalaya has become naturalized in western United States, and only a relatively small acreage is under cultivation. Considerable quantities are picked from the wild for home use. The flavor is very good and is mildly

acid, but the seeds are also large. It is used principally in canning.

Logan (Thornless), which at one time was very extensively grown, is now becoming of minor importance. Most of the fruit is grown for wine making. The fruit is dark red, very acid and soft, and does not fit the present demands of our commercial blackberry industry.

Marion is the most recent introduction from the breeding work of the U. S. Department of Agriculture and the Oregon Agricultural Experiment Station. The Marion is the result of crossing Chehalem with Olallie. The Marion has many of the characteristics of Himalaya in that the canes are very long and large in diameter. The fruit is black and has a rich flavor somewhat similar to that of the native wild blackberry. The berries are considerably larger than those of the Chehalem but do not equal those of the Boysen in size. Because of the fine flavor in Marion berries, they can be used in the frozen pack



Fig. 1. Fruit of the Marion blackberry as grown in Oregon.

for jams, jellies, ice-cream flavors and so forth, as well as in pies. Although the Marion is new, there is considerable interest in it among growers.

Olallie comes from a cross between Black Logan and Young. The origin of Black Logan is somewhat doubtful, but it probably has the native wild blackberry as one parent. The principal characteristic of Olallie is its large, very bright black fruit. Although the flavor, under Oregon conditions, is not especially high, it is superior to the flavor of Evergreen. Olallie has a very productive habit, and in California it has become quickly popular. In Oregon, plants have been severely injured in some winters, and the variety is unreliable in this climate.

Santiam (Ideal) is sometimes called the mountain blackberry. Its parentage is unknown, but in many respects the variety is similar to Cascade. It is less productive and more susceptible to leaf and cane spot disease than Cascade. The flavor, however, is excellent and similar to that of the native blackberry. Santiam is very popular with makers of jams and jellies and for flavoring.

Pacific was introduced at the same time as the Cascade by the U. S. Department of Agriculture and the Oregon Agricultural Experiment Station. It comes from the same parents as Cascade, and has many of the same characteristics. Like the fruit of the Cascade, the fruit of Pacific is used mostly for home freezing, canning, jams, jellies and so forth. Pacific, like the Cascade, is probably too soft for commercial handling.

Young has grown very vigorously in the Pacific Northwest but has not been productive, and for that reason is not now grown extensively. The berry of the Young blackberry is almost as large as that of Boysen and has a fine

flavor with less acidity. The Young has been considered equal to, if not superior, in fruit quality to the Boysen. When the Young was grown here, it was canned and used in the frozen pack.

Both Boysen and Young have the characteristic of producing thornless canes rather frequently. These thornless canes are chimeras similar to those found in the thornless Evergreen and thornless Logan. However, many people have found that the thornless forms of the Young and Boysen have not been reliable and often their fruit production has been low and the berries sometimes poorly shaped. Occasionally a thornless form of these berries has proved to be satisfactory.



Jonadel Apple

I have several Virginia Crab trees topworked to Jonadel in our student orchard which produced last fall for the first time. We had several bushels in our cold storage and just disposed of the last of the fruits about April 4, 1958. The apple looks more like Jonathan than Delicious. It is a slightly larger apple than Jonathan; blocky, not conical, with a wider cavity and a deeper basin than Jonathan. The color is quite similar to Jonathan and I found myself confusing the two when not looking closely at them. The fruit kept much longer than Jonathan, but I doubt if they will keep as long as Delicious. The fruit we had in cold storage were in common storage until November so they ripened up more than under continuous cold storage. Even so they were only slightly over-ripe by April 1st. We noticed only 1 or 2 fruits showing any indication of Jonathan Spot, while Jonathan showed considerable spotting.—*H. E. Nichols, Iowa State College, Ames, Iowa.*