

## Red Raspberry Varieties for Coastal British Columbia

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The southwest coastal region of British Columbia is the principal red raspberry production area in Canada. A combination of mild winters and moderate summer temperatures, plus ample rainfall, generally provides ideal conditions for growing high quality red raspberries. Winter injury is occasionally a problem, but a more serious one is the dying out of plants on heavy soils having poor winter drainage. Virus diseases are not a serious problem, as they are in some of the other red raspberry growing regions of North America.

At the present time three varieties, Willamette, Newburgh, and Sumner are grown commercially. Willamette is the most important of these and accounts for approximately 50 percent of the acreage. This variety has been the standard for quality, although it occasionally shows winter injury, and does not make satisfactory growth under conditions of poor soil drainage. Newburgh, which accounts for approximately 45 percent of the acreage, is susceptible to virus disease and produces fruit of relatively poor quality. Despite these disadvantages, however, it remains the most satisfactory variety under conditions of poor drainage. At present Sumner accounts for less than five percent of the acreage but is increasing in importance. It has satisfactory quality and it shows less susceptibility to winter injury than Willamette.

A replicated yield trial of twelve red raspberry varieties or seedlings was planted in well drained soil at the Abbotsford Small Fruits Substa-

tion in 1958. In addition to Willamette, Newburgh, and Sumner, other varieties planted were Canby, Carnival, Creston, and Puyallup, each of which seemed to have some potential to succeed as a commercial variety for the area. Lloyd George and Washington, varieties which were at one time popular in the area, but had lost favor because of crumbly fruit and susceptibility to winter injury, were also planted. Three seedlings, 14 (Winona o.p.), 19 (Ottawa 271 o.p.), and 34 (Newburgh  $\times$  Cuthbert), selected for winterhardiness from the Agassiz red raspberry breeding program, were included in the trial. The marketable yields of each of the varieties or seedlings, over a three-year period, are given in Table 1.

Two of the commercially important varieties, Sumner and Willamette, have been among the top yielders in each of the years. Both varieties consistently produced fruit of satisfactory quality. Sumner, in particular, showed little reduction in fruit size as the picking season progressed. Under the conditions of the trial, Newburgh has consistently yielded less than either Sumner or Willamette. It is likely, however, that, under conditions of poor winter drainage, Newburgh would outyield each of the other varieties.

Inconsistency of yield over the three-year period was a factor in discrediting Creston, Carnival, Canby, and Puyallup as varieties with commercial potential. Production of soft and crumbly fruit was also a factor which made Creston, Canby, and Car-

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Table 1. Yield data from red raspberry varieties grown at the Small Fruits Substation, Abbotsford, B. C.

Marketable Yields in Tons per Acre <sup>1</sup>					
1960		1961		1962	
Sumner	5.15	Willamette	4.62	Sumner	4.78
Willamette	5.07	Agassiz 14	4.17	Canby	4.29
Carnival	4.75	Sumner	4.10	Willamette	4.14
Agassiz 14	4.74	Lloyd George	3.89	Agassiz 14	3.97
Puyallup	4.60	Newburgh	3.70	Lloyd George	3.95
Creston	4.31	Agassiz 34	3.69	Newburgh	3.86
Agassiz 34	3.82	Creston	3.50	Creston	3.76
Canby	3.56	Canby	3.36	Agassiz 34	3.51
Washington	3.43	Puyallup	3.18	Puyallup	3.43
Agassiz 19	3.22	Washington	3.11	Agassiz 19	3.15
Newburgh	3.21	Carnival	3.11	Carnival	2.74
Lloyd George	2.65	Agassiz 19	2.20	Washington	1.91

<sup>1</sup>Any two figures not included by the same bracket are significantly different at the 5% level.

nival unattractive. The fruit of Puyallup was firm and large, but coarse in texture. Both Puyallup and Carnival were susceptible to powdery mildew. Lloyd George was another inconsistent yielder, while Washington was among the low yielders in each of the years. In 1962 the latter variety suffered severe winter injury, and this factor was probably the cause of the very low yield recorded in that year.

Among the seedlings, Agassiz 14 consistently produced a relatively high yield of fruit which was soft and of poor quality. Agassiz 34 produced better quality fruit, but was a relatively poor yielder. Agassiz 19 was among the low yielders in each of the years, and produced unattractive fruit.

Since the trial was established, a new variety, Fairview, developed by the U.S.D.A. in Oregon, has created considerable interest in the area. In 1960 a single row of it was planted adjacent to the yield trial, and in 1962 the first yield data were obtained. The variety looked very promising when compared with either Sumner or Willamette. More information on its performance over a period of several years must be ob-

tained before commercial planting of the variety in British Columbia can be recommended. In the meantime, Willamette and Sumner are recommended for planting on well drained soils; Newburgh is recommended only where drainage is a problem.



### Promising New Strawberries in Massachusetts

Of thirty strawberry varieties and selections tested by J. F. Anderson, of the University of Massachusetts in 1961, the following newer varieties appeared worthy of further testing:

*Fulton* (New York): is a firm attractive midseason variety of good flavor. It is vigorous and a good runner producer.

*New Jersey 157*: is a very large, attractive berry of good quality. It is late in season and vigorous. However, the first berries tend to be rough, the cap is tight, and it is not resistant to red stele.