Southwestern British Columbia, specifically the Lower Fraser Valley, is one of the world’s leading producers of red raspberries (Rubus idaeus L.). About 2500 hectares produce the highest yields per unit area of any region in the world today. Production has increased in recent years because of the demands for red raspberry-derived products such as jam, yogurt, and juice as well as increased demand for fresh market berries.

For the past 30 years ‘Willamette’ has been the established cultivar in the region, but it is now beginning to be replaced by new cultivars from the British Columbia breeding program. One of these, ‘Chilcotin’ (cover photograph), is particularly suitable for the fresh market outlets. In contrast to ‘Willamette’, which has excessively dark red color when fully ripe, ‘Chilcotin’ berries ripen more uniformly and have a bright, glossy, red color which does not darken even when overripe. Berry size of ‘Chilcotin’ is larger than that of ‘Willamette’ and the ripening season is of longer duration. These traits also are positive assets for the fresh market.

‘Skeena’, another cultivar from the program, has gained at least as much commercial acceptance as ‘Chilcotin’. ‘Skeena’ berries are superior to those of ‘Willamette’ in size and color although not as bright and glossy as ‘Chilcotin’. Berries usually are firmer than either those of ‘Chilcotin’ or ‘Willamette’ and are suitable for fresh market outlets. However, the ripening season is more concentrated compared to that of ‘Chilcotin’. Berries shake off the receptacles easily and this trait, along with concentrated ripening, makes ‘Skeena’ well-adapted to machine-harvesting which is standard throughout the Pacific Northwest for berries that will be processed. ‘Skeena’ produces particularly sturdy, upright, and smooth canes with strongly attached laterals; thus, management is considerably easier than that for other cultivars.

‘Nootka’ and ‘Haida’, 2 other cultivars released from the program, have not received as wide an acceptance. ‘Nootka’, the best-adapted of all the cultivars to machine-harvesting, is the most similar in many traits to ‘Willamette’. Possibly because of this, interest in it has been limited. However, ‘Nootka’ has the most resistance to postharvest fruit rots of any cultivar screened and is now accepted as the resistant standard in postharvest screening tests. ‘Haida’ is high-yielding, and like ‘Chilcotin’, produces bright, glossy, red berries which do not darken when overripe. The berries are suitable for the fresh market but usually are too soft for long distance shipping. In cooler growing seasons, the berries tend to be somewhat difficult to remove from the receptacles, a trait that has tended to limit acceptance. Both ‘Skeena’ and ‘Haida’ have high enough levels of winterhardiness to produce satisfactory crops in Michigan, Ohio, and Ontario, where winter temperatures are much lower than those in the Pacific Northwest.

‘Skeena’, ‘Nootka’, and ‘Haida’ are highly resistant to Amphorophora agathonica Hottes, the aphid vector of the raspberry mosaic virus complex which can be devastating to susceptible cultivars. ‘Chilcotin’, like ‘Willamette’, is susceptible to the aphid but resistant to the virus complex itself. ‘Skeena’ is susceptible to the common strain of raspberry bushy dwarf virus, which is pollen-transmitted, as are several of the newer cultivars from other breeding programs, for example ‘Meeker’ from Washington and ‘Glen Prosen’ from Scotland. However, this should not be a problem since it is unlikely that virus-free plants in commercial situations will be exposed to the virus.

At present, new selections from the breeding program are being tested extensively throughout the Pacific Northwest and in other red raspberry-producing regions. Most have ‘Skeena’ as one parent and are resistant to A. agathonica. Each has horticultural traits superior to those of any of the cultivars released to date. Among the traits are large, firm, bright, glossy red berries which are easily removed from the receptacles and which show extended shelf-life. Canes are smooth, upright, and have strong lateral attachments. It is likely that one or more new cultivars will be named within the next few years. Such cultivars, along with those already released, will increase production efficiency. At the same time they will contribute greater versatility to an industry that shows every indication of continued expansion.

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