

Variety Selection: Making the Tough Choice

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Historically, the majority of the fresh cherry harvest in The Dalles occurs in a six-day period around the 4th of July. New varieties are giving us the ability to extend the season to 1½ months, or longer when planted at different elevations.

Several years ago scientists from OSU established a variety trial in The Dalles, largely made up of new cultivar selections from Canada. The last two years, data from the trial has been collected and compiled by Dr. Roberto Nuñez of the OSU Mid-Columbia Research and Extension Center.

Figure 1 shows relative bloom time, comparing first bloom to full bloom of several different cultivars. Even though 'Lapins' and 'Sweetheart' bloom early, frost has not yet been a problem since both cultivars produce prolific bloom and a reduction of bloom by frost may actually improve fruit quality. Although not listed in the chart 'Regina' and 'Attika' bloom about one week after 'Bing'. Finding a suitable pollinizer for this variety has been a challenge. 'Sandra Rose', a self-fertile variety may actually bloom late enough to serve as a pollinizer for 'Regina' or 'Attika'.

Figure 2 shows the relative dates of fruit ripeness for 2001. 'Cristalina' is the earliest ripening variety listed on the chart, ripening just three days before 'Bing'. Information provided by Agriculture Canada indicates that, on the average, 'Cristalina' ripens five days before 'Bing', which is a slightly better harvest window than this later date. In 2001, it was clear that 'Cristalina' was not ready to harvest earlier than July 1, as the flavor was very flat prior to this time.

The period of time between "Bing" and 'Lapins' harvest is an important harvest window containing no clear cultivar choice. It is important that we find one or two good cherries for this time period in order to keep labor constantly engaged. Harvest gaps may cause pickers to leave before the harvest is complete. Although the chart indicates that 'Lapins' was harvested 23 days after 'Bing', a more typical and probably accurate timing is 10 to 14 days after 'Bing'. 'Sandra Rose', 'Sonnet', 'Sonata' and 'Attika' are potential selections for the harvest window between 'Bing' and 'Lapins'. All four of these cherries have a number of very positive attributes, but each has at least one significant problem that may limit its potential.

In 2001, 'Regina' ripened slightly later than expected, just two days before 'Sweetheart'. The other interesting late cherry is 'Staccato', not yet available to U.S. growers, ripening well into August.

The fruit weight of various cultivars, for 2000 and 2001, is displayed in Figure 3. Fruit was generally larger in 2001 than 2000. In 2001, 'Bing' was a very large cherry, averaging 11.4 grams, and, according to Figure 4, producing 60% 9 row and larger fruit. Most impressive, however, were 'Sonata', 'Sandra Rose' and 'Regina', each with fruit over 15 grams.

Figures 5 and 6 show fruit firmness in 2000 and 2001, respectively. All cherries received 20 ppm gibberellic acid prior to harvest. In 2000, all the cultivars but 'Sandra Rose' were firmer than 'Bing', whereas in 2001 'Sandra Rose' and 'Lapins' were both softer than 'Bing'. One local packinghouse uses 250 g/mm as the demarcation between export and domestic sales. With this criterion, even 'Sandra Rose' was firm enough for the export market in 2001.

'Cristalina': The fruit ripened this year just before 'Bing' harvest. Fruit was large and moderately firm and the flavor was a little flat. Observations in 2001 indicated that stem retention may be a problem. Additional observations are needed to determine if this is a valid concern.

'Sandra Rose': A cherry with very high eating quality and large fruit with nearly 60% of the fruit 8 row and larger. The main concern remains firmness. In 2001 fruit with gibberellic acid applied was adequate for export, but firmness may vary from year to year.

'Sonata': A very large cherry with 60% of the fruit 8 row and larger. Nose end splits were not as significant a problem this year as previously. Overall, Sonata had less rain damage than 'Bing'. Comments from packers of 'Sonata' indicate that although generally firm when harvested, this cherry may soften in shipment. Observations of 'Sonata' grown in Canada indicated a stem retention problem.

'Sonnet': A bright red cherry with white flesh that may be of interest to Japanese and Taiwanese markets. Eighty percent of the fruit this year was 9 row and larger with acceptable firmness. According to data supplied by Agriculture Canada this cherry will typically ripen just before 'Bing', but was several days later in our trial this year.

'Attika': Although no data was taken on the one tree in the variety trial, observations indicated that fruit this year was large and firm with very high eating quality. Fruit ripened seven to ten days after 'Bing'. Stem attachment was very strong even on overripe fruit. Rain cracking was low.

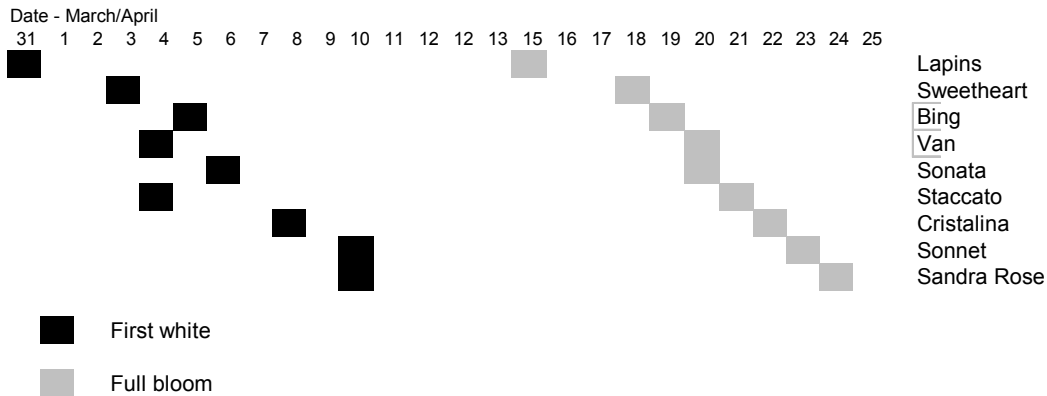
'Skeena': Trees in The Dalles were too immature to produce but bearing trees were observed in Wenatchee and Canada. In Wenatchee the fruit was harvested 2-3 days after 'Lapins'. Fruit quality was excellent, very firm and high eating quality. The fruit was similar in size to 'Lapins'. Fruit was borne in loose clusters at the base of the previous seasons wood. Trees are more open than 'Lapins' but branching is sparse.

'Regina': Observations at two locations in The Dalles on mazzard and Weiroot 158 indicate a cherry of very high quality. Fruit set on mazzard planted in 1997 was light, but good on the Weiroot. Fruit data was taken from

trees on mazzard showing large fruit averaging 84% 9 row and larger when slightly unripe. Fruit was firm in a year when many varieties were soft. Eating quality was good, although flavor was a little flat. Harvest date was just before 'Sweetheart'. Rain cracking was low.

'Staccato': A very late cherry ripening several days after 'Sweetheart'. Fruit size is similar to 'Sweetheart' with 60% 9 row and larger. The cherry was of excellent firmness and good flavor but a little flat. Powdery mildew was prevalent on the fruit but sprays were not consistently applied after 'Bing' harvest, which was one month earlier. This cherry is not yet available for production in the U.S.

Figure 1: 2001 First white and full bloom dates at the variety trial in The Dalles.



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Figure 2: 2001 fruit ripening dates at the variety trial in The Dalles.

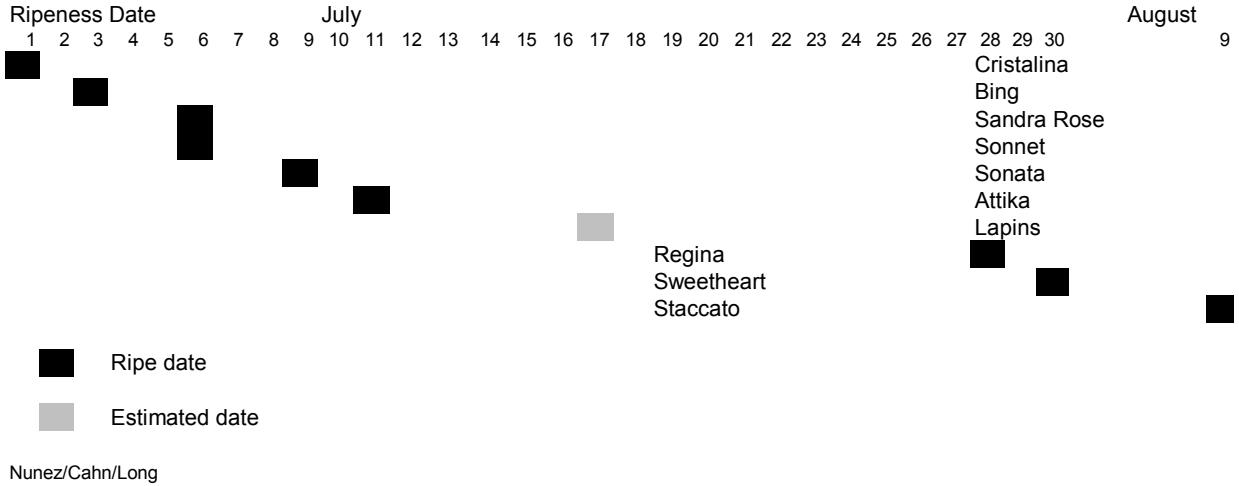


Figure 3: 2001 Fruit weight of various cultivars grown at the variety trial in The Dalles.

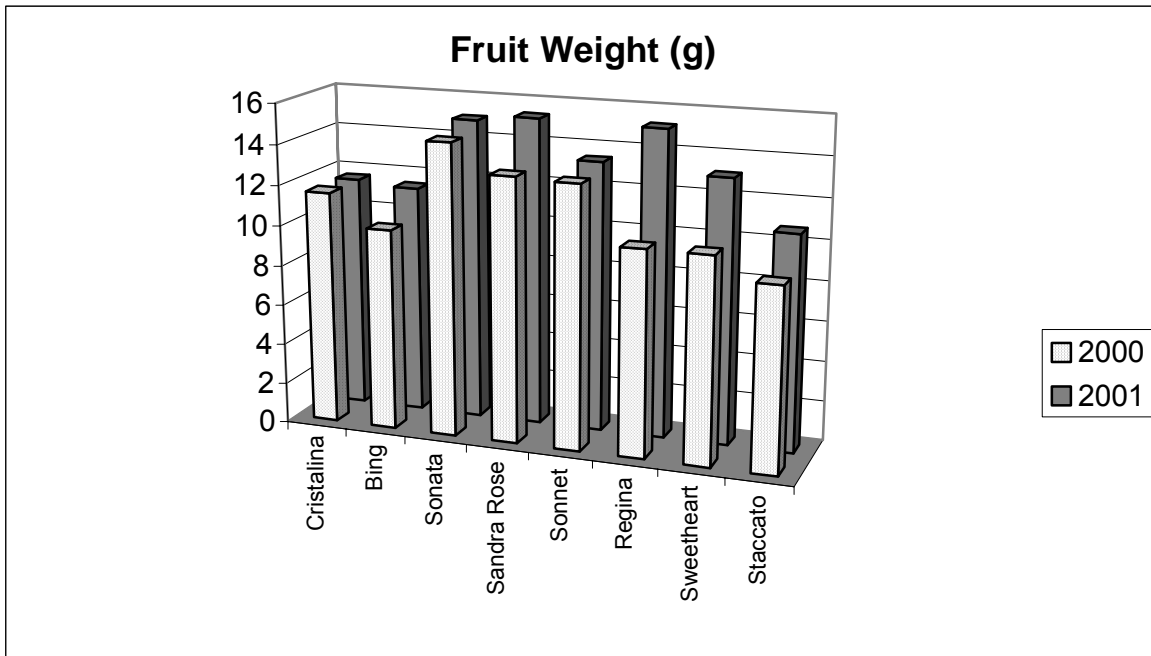


Figure 4: 2001 fruit size as a percentage of 9 row and larger fruit from the variety trial in The Dalles.

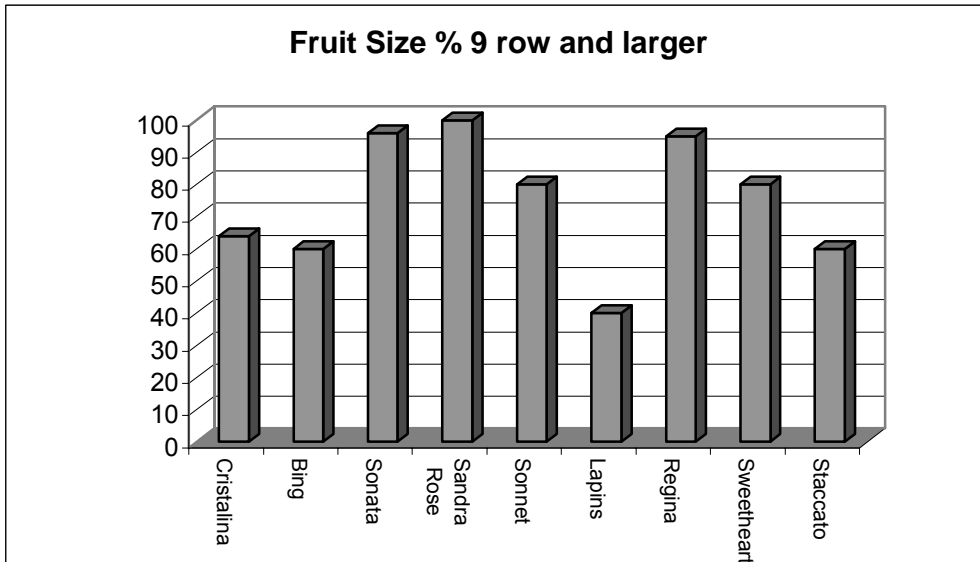


Figure 5: 2000 fruit firmness of various cultivars from the variety trial in The Dalles as measured by an Instron model 1000.

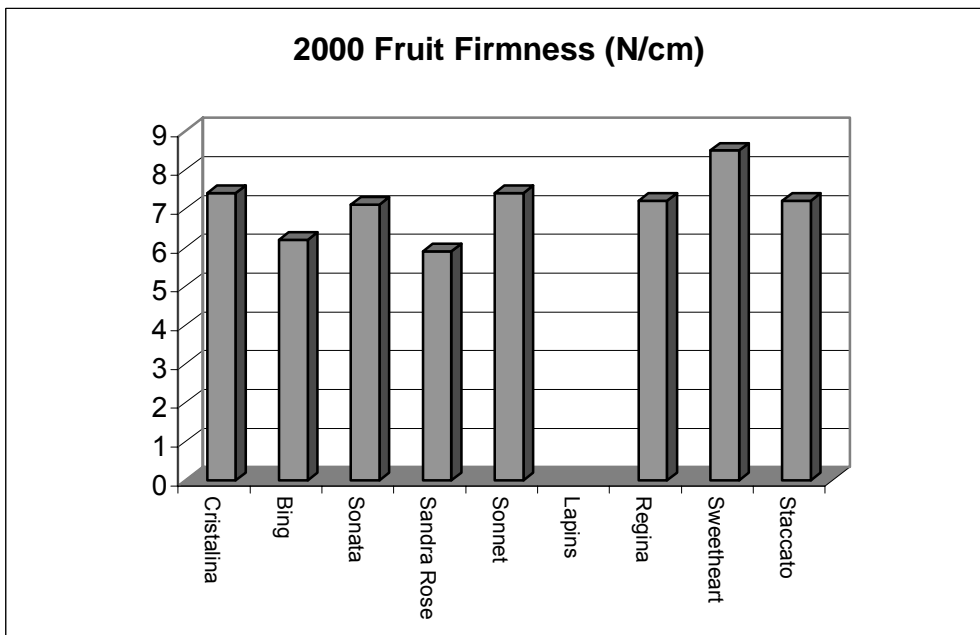


Figure 6: 2001 fruit firmness of various cultivars grown at the variety trial in The Dalles as measured by a FirmTech 2 instrument.

