almost 150 years ago, no other cultivar has yet replaced it as the dominant European summer cultivar.

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Cracking Resistance in Certain Cherry Cultivars and Selections

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A major problem in trying to grow good quality sweet cherries in regions where cool, damp summers are the rule (such as the Puget Sound region) is cracking of the fruits just before harvest. Cracking, caused by absorption of water through the skin of the ripening cherry, can damage some or even most of the fruits and allow the entry of fungus rots. Cracking and rot in combination can destroy the entire crop, given unfavorable weather conditions and a susceptible variety.

Fortunately, there are differences in the degree of resistance to cracking exhibited by different cherry cultivars. Cherry plantings at WSU's Northwestern Washington Research & Extension Center, Mount Vernon, are regularly rated on the amount of cracking exhibited by the fruit, and a summary of the ratings for 1986 appears in Table I. The rating was done on July 7, approximately in the middle of the cherry harvest period. Rainfall for June was typical of a normal year: a total of 2.12 inches of precipitation, most of it coming in three periods on June 14 (0.55), June 17-18 (0.93), and June 28-29 (0.46). Additional rainfall of July 1-3 (0.90) occurred shortly before the ratings were taken and brought the June 1-July 7 total to 3.02 inches.

It should be noted that two very early-ripening cultivars, 'Early Burlat' and 'Moreau,' had no fruit left on the tree when ratings were taken. 'Early Burlat' has a very low rate of cracking, and 'Moreau,' though somewhat firmer-fleshed, rarely has more than 15% cracked fruit. Bird damage is the chief threat to these early cultivars.

Tart cherries generally have very low rates of cracking, though 'Kansas Sweet' (a duke cherry) is considerably more susceptible to this problem than most others (e.g. 'Schatten Morelle').

Among the sweet cherry cultivars, those with 20% or fewer cracked fruits can be characterized as "cracking resistant." Even those with cracking rates up to 40%, which includes several high

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Table 1. Cherry cracking — July 7, 1986.

Cultivar	% Cracked	Selections	% Cracked
Starkspur Montmorency	0	PC 6680-1*	20
Schatten Morelle	3	PC 7147-4	40
English Morello	10	PC 7145-1	50
Angela	10	B 53-54	60
Hudson	13	PC 7147-13	60
Compact Lambert	20	PC 7064-8	70
Lapins	20	B 56-43	70
Kansas Sweet	23	B 53-38	100
Vogue	25		
Hardy Giant	27		
Corum	30		
Sam	35		
Van	40		
Garden Bing	40		
Emperor Francis	42		
Ulster	50		
Bergie	50		
Kristen	50		
Bing	60		
Starkrimson	60		
Cavalier	70		
Lambert	75		
Rainier	80		
Stella	80		

0 = no cracking
100 = all fruits cracked

*P.C. selections—advanced selections from the WSU cherry breeding program at the Irrigated Agriculture Research and Extension Center, WSU, at Prosser, Washington.

quality cherries such as 'Van' and 'Hardy Giant', should still be considered acceptable for planting in a moist cool climate. Cultivars with very high cracking rates, however excellent their quality, will produce only very limited amounts of usable fruit except in cases where the weather at harvest proves unusually favorable.

Of a number of test selections that have been evaluated 1976-1986, there is one (PC 6680-1) that appears to be quite resistant to cracking and is also of good quality, flavor, and appearance. Its possible introduction, at least for the Puget Sound area, is under consideration.

The American Chestnut in Wisconsin

Introduction

The American chestnut, *Castanea dentata* (Marsh.) Borkh., was one of the most economically and ecologically important tree species in the eastern United States in 1900. The species was most abundant in the southern Appalachian mountains, where it comprised about 25 percent of the forest stand on some 33 million acres.

However, 50 years later the American chestnut was practically extinct within its native range. Chestnut blight, destroyed the equivalent of over 9 million acres of pure American chestnut.

Wisconsin lies completely outside the native range of chestnut. Settlers from the eastern states established American chestnut trees here in the mid to late 1800s. So far, these isolated trees and their progeny have escaped infection by the blight. They constitute a significant portion of the genetically pure American chestnuts left in the world.

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