

Project No.: 13K-3455-5218

Title: Alternate Crops: Growing Cherries on Dwarfing Rootstocks for Niche Markets

Reporting Period: 1999

Personnel:

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Accomplishments

A test planting of a number of cherry varieties and selections, on dwarfing Gisela rootstocks, has been established. Netting was installed over a framework enclosing the entire plot, virtually eliminating bird damage. In 1999 several varieties produced significant quantities of fruit for harvest. Data was collected on fruit yields, cracking, maturity, etc. and for those varieties with significant fruit, the entire crop was harvested, weighed, and sorted into good fruit, cracked, and rot (see Appendix, Table 1.) The Western Washington Tree Fruit Research Foundation, a group of small growers and home gardeners, put \$15,200 into variety trials in 1999. They have been and continue to be a good partner for us in new crop identification, and are working with NARF in partnership on this project.

Results

Trees of the early sweet cherry variety 'Early Burlat,' and the late sweet cherry varieties 'Lapins,' 'Sweetheart' and 'Hudson,' planted in 1996 on Gisela 5 (148-2) rootstock, produced sufficient quantities of fruit for data collection and study. Pickers harvested all fruit, which was then sorted into good fruit, cracked, and rot. Weights were recorded, and yields per tree calculated.

'Lapins' had the highest yield at 57.8 lbs/tree, and also the lowest percentages of cracking and rot.' Sweetheart' yielded 32.2 lbs/tree, 'Hudson' 22.7 lbs/tree and 'Early Burlat' 18.9 lbs/tree. 'Early Burlat' also had the highest cracking and rot, mainly due to its early ripening at a time when the weather was rainy.

'Hudson,' 'Lapins,' and 'Sweetheart' appear to have excellent potential as very late ripening varieties. Young grafts of 'Regina' produced sample fruit that indicate good market quality but their productivity and other characteristics await further evaluation. Heavier pruning for trees on Gisela rootstock may be needed, to counteract a tendency to overset, thus increasing the fruit size.

Publications

None.

Appendix

The results appear in Table 1 (weights recorded in pounds).

Table 1. Cherry harvest data

Cv	Pick Date	Total Fruit ⁽¹⁾	Yield/tree	Good ⁽²⁾	Crack	% Crack	Rot	% Rot
Early Burlat	6/29	94.5	18.9	58.7	24.8	26%	11.0	12%
Lapins	7/29	288.8	57.8	263.0	12.8	4%	13.0	5%
Sweetheart	8/9	128.9	32.2	100.9	20.2	16%	7.8	6%
Hudson	8/9	113.3	22.7	97.6	8.1	7%	7.6	7%

(1) Trees per plot = 5, except Sweetheart = 4 trees/plot

(2) "Good fruit" included only those fruits with no blemish, "cracked" included all fruit with any skin cracking, and "rot" consisted of rotted fruit from whatever cause, i.e. rain cracks, fruit clumped together, etc.