

Table 1. OP-9 Bartlett pear compared with other Bartlett selections (1965 season)

Selection	% Bloom	% Set	1965 X-Sect. trunk Cm ²	Virus ^a
OP-9	87		22.5	
3	58		14.9	
	86		21.1	
5	65		22.5	
6	54		17.5	
7	81		17.9	
8	68		19.1	
9	56		17.9	
10	43		14.9	
11	80		22.5	
12	80		22.7	
13	88		17.5	

^a0 = no virus detected

1 to 3 = different degrees of detected virus expression

communis rootstock (Old Home X Farmingdale #97) and each selection was replicated four times in a randomized block design.

Measurements of growth, flowering, and fruit set have been recorded and virus tests have been run each year. Tests for virus have been made only on B-13, a Bartlett seedling selected for greenhouse screening tests. Visual leaf symptoms on the inoculated indicator were used to determine the presence of virus. The use of other virus indicators might have detected other viruses not shown by our test.

After three years in the orchard, three of the selections have grown as well as OP-9, but only one other (No. 12) tested virus negative (Table 1). Either some viruses did not reduce growth or else some of the selections are physiological mutants and if so are genetically different from OP-9.

Percentage bloom and set varied considerably from selection to selection, but the virus-negative trees aver-

aged higher for both (84% bloom, 26% set) than virus infected ones (68% bloom, 13% set).

Our work thus far indicates that OP-9 is equal to but no better than the best other selections, but it is definitely better than the poorest selections. Virus infection is at least partly responsible for poor performance.

For the reasons stated above, most Oregon nurserymen are using OP-9 Bartlett in preference to others. Research in this area will be continued.

Scottish Strawberry Breeders Campaign Against Diseases

Problems in breeding strawberries, particularly for resistance against *Phytophthora fragaria*, or red core, are pointed out in *The Grower* by Ronald Webber, breeder of the Scottish Horticultural Research Institute, at Auchincruive, near Ayre. For one thing, varieties bred for immunity to one form of red core, eventually become infected with new strains of the disease, and new strawberry varieties have to be found. Also, indexing for resistance by grafting on an indicator plant, such as *F. vesca*, eliminates those selections which may have enough field resistance to be grown successfully.

The American red core resistant variety, Aberdeen, was crossed with promising Auchencruive selections, and out of these crosses Climax was obtained. Climax later fell victim to genetic June Yellows and had to be replaced. Talisman was introduced in 1955, Red Gauntlet in 1957, Templar in 1964, and Crusader in 1966. But breeding must go on at Auchencruive.