

In the few cases where untreated leaders produced fruit, there was considerably more fruit on the girdled leader and also some fruit on the bended leaders. The fruits on the girdled limb were similar in size, color, and other principal characters to those on ungirdled limbs on the same tree.

It was found that the 3/16-inch girdle was ineffective on leaders larger than 3/4-inch at one foot from their bases, presumably because the girdle healed too quickly. A wider girdle apparently would be indicated for young, rapidly growing cherry with leaders of such size.

The results obtained suggest that girdling in the third growing season

is an effective method of forcing early production on sweet cherries. Girdling permits handling of seedlings at close spacing and facilitates early evaluation of seedlings in a breeding program. In the seedlings studied, fruit evaluation was made on seedlings just 4 years and 2 months after the crosses were made. The time required, therefore, is at least one year less than one could expect normally without girdling and only a year longer than that required for peach seedlings.

Observations over two years after girdling show no adverse effects on the seedlings. It is well to bear in mind that any evaluation of the first fruit produced is subject to considerable revision in later years.



Fig. 1. Typical girdling (left) and ungirdled (right) leaders on a sweet cherry seedling in the fourth growing season, showing the fruitfulness induced by a 3/16-inch girdle made in early May of the previous season.

Halehaven and Redhaven as Parents in Peach Breeding

While Halehaven has been a valuable peach commercially, it has had a secondary value that should not be overlooked. This variety has proved to be an outstanding parent in peach breeding at South Haven and other stations, especially for the transmission of bright red color and early maturity. Several new peaches being introduced by the United States Department of Agriculture and several experiment stations have Halehaven as a parent.

Redhaven hasn't been used in peach breeding for as many years, but it, too, is showing remarkable value as a parent. Sunhaven and Richhaven, just introduced, and two other varieties which will soon follow, all have Redhaven as a parent.—*Stanley Johnston, Superintendent, South Haven Experiment Station, South Haven, Michigan.*