

\$15 per acre. Occasionally, however, frost protection may be profitable. As for example, during the spring of 1929, when certain growers saved most of their crop by orchard heating, whereas certain others not equipped to heat, lost their entire crop.

When the temperatures are near the danger point or slightly below for only very short periods of time, it is claimed by some growers that the possible injury may be appreciably lessened by the application of irrigation water, especially if all the growers in the neighborhood irrigate just previous to the drop in temperature. Water in basins or running in furrows liberates heat since it is generally at a temperature higher than that of the air and thus may afford a small amount of protection.

*Fruit Thinning.*<sup>13</sup>—In general it is more profitable to thin peaches than any other deciduous fruit. Peaches are thinned primarily to increase the size of the fruit, inasmuch as it takes two 2-inch peaches to equal one 2½-inch peach in weight. With experience one man can thin by hand ten or twelve trees in a ten-hour day when from 1000 to 1500 peaches are removed from each tree. Thinning costs about 30 to 40 cents per tree.

There is usually a dropping of young fruit about the first part of June from causes, such as insufficient moisture, inadequate pollination, and adverse climatic conditions. Thinning is generally postponed until after the fruit drop, when the prospect of the crop can be determined. It, however, is usually done previous to the hardening of the pit. On the other hand, increase in size may be effected by later thinning. Peaches are thinned, four to six inches apart. The actual distance of spacing and number of fruits left on the tree varies with the variety, amount of crop set, character of twig and branch growth, soil, water supply, and other factors.

Weldon<sup>14</sup> suggests thinning so as to leave a given approximate number of peaches per tree. For example, if trees are planted 24 by 24 feet and a yield of 15 tons per acre of size two and three-fourths inch peaches is expected, each tree should average about 1155 peaches. The number of peaches per tree divided by three will give the approximate pounds of fruit, since it takes three normal-size peaches to weigh one pound. This multiplied by the number of trees per acre will give the total number of pounds, and when divided by 2000 gives the tons per acre. Growers are, therefore, advised to thin by count. It is

<sup>13</sup> Tufts, W. P. Thinning deciduous fruits. California Agr. Exp. Sta. Cir. 258:1-13. 1923.

<sup>14</sup> Weldon, George P. A new idea in peach thinning. Chaffey Junior College, Dept. Agr. Bul. 5:1-4.