

If, when the trees arrive from the nursery, it is not convenient to plant them at once, they should be "heeled in" by placing the roots in a trench and covering them with mellow soil, well packed, to prevent their drying out. Never allow the roots to be exposed to the sun or wind any more than can be helped.

No matter how carefully a tree has been taken up, its roots are always more or less mutilated and broken. All such injured roots and broken ends should be cut back with a smooth cut to sound wood. That a newly planted tree may flourish, it is necessary that a balance should exist between the roots and tops or branches, consequently when transplanting the tops should be cut back to correspond with the roots that remain.

The hole should be dug wide enough to allow the roots to be extended freely in all directions, and deep enough, that, after a few inches of surface soil have been filled in the bottom, the tree will then stand about the same depth as it stood in the nursery. Spread the roots out carefully in their natural positions and cover them with moist, mellow surface soil. When the hole is about half filled, get in and tramp the earth firmly about the roots. Omitting to do this is one of the most frequent causes of failure in transplanting. If watering is necessary a pail full may then be added, but this is seldom necessary except in a very dry time. The balance of soil being filled in and tramped firmly, a couple of inches on top should be left loose and untramped. This acts as a natural mulch, checking the evaporation of moisture from below.

MULCHING. When the tree is planted spread around it as far as the roots extend, or a little beyond, a five or six-inch covering of coarse stable manure, or other loose material which will act as a mulch. This is particularly necessary in a dry soil or in a dry season. It prevents baking and cracking of surface soil and consequent escape of soil moisture from below, and at the same time maintains a uniformity of heat and moisture which is highly favorable to the formation of new roots.

CULTIVATION AND CROPPING. One of the most important factors in determining the profits from an orchard is good cultivation. Sod should never be allowed around young trees. For the first five or six years some hoed-crop, such as roots, potatoes, beans or corn, may be grown in the orchard. The cultivation required to grow these profitably will keep the ground in good condition for the trees, while such crops will yield a return from the land until the trees themselves begin bearing. Never sow a grain crop in a young orchard unless a strip, at least as wide as the height of the trees, is left on each side of the rows and kept well cultivated.

The roots of a tree generally extend as far below ground laterally as the top spreads above it, and they should be the sole occupants of the