

Avoid deep planting; it is worse than too shallow planting. Roots are of two kinds; first the young and tender rootlets composed entirely of cells—the *feeders* of the tree—always found near the surface of the earth seeking air and moisture—and secondly roots of over one year old which serve only as supporters of the tree and conductors of its food. Hence the injury that ensues when the delicate rootlets are too deeply buried in the earth.

As to the treatment of young trees, immediately after planting make a point of mulching all newly set out trees. Many people do not know the meaning of the word *Mulch*, which expresses a direction of great importance. Mulch consists of loose, light, litter, such as coarse manure. Chips, corn husks, or whatever will keep the surface of the ground moist, and prevent it from becoming dry and hot from the action of the sun. Whatever will shade the ground keeping the surface cool and moist will do. A tree well planted, well mulched, can hardly fail to live and do well.

It is absolutely necessary in all young orchards to keep the ground mellow and loose by cultivation for a few years at least, until the trees get well established. Indian corn, potatoes, beets, carrots and the like are the best crops for a young orchard, while grains such as wheat, rye, oats, etc., are injurious, although buckwheat is a favorable crop.

Fertilizers such as stable manure, wood ashes, lime, plaster, etc., are the best, and should be applied over the whole surface of the ground between the rows of trees. The feeding rootlets at the ends of the larger roots are not found near the trunk, but out near the middle, between the rows of bearing trees—as far as the branches extend from the trees. It is folly to suppose that a large growing apple tree will not, after a few heavy crops exhaust the soil of much of its proper food, and if we desire our trees to continue in a healthy bearing state we should manure as regularly as any other crop. Situated as most of us are at some distance from towns and villages, it is difficult to procure a sufficiency of manure even for the farm crops, but there is scarcely a farm where the waste barnyard and liquid manure, if economized by mixing with swamp muck, would not be amply sufficient to keep the orchard in good condition. A good way of renewing the soil of an orchard when manure cannot be had, is to sow peas, and when they are grown just to blossom, plough them under. After the trees become large it will be necessary to seed down to grass or clover. But an effort should be made to keep the ground under the branches, around the tree, clear of grass and weeds stirred up at intervals.

At the Dominion Fruit Grower's Convention, at Ottawa, last winter, Mr. Kew a large fruit grower near St. Catharine's Ontario said:

"In regard to cultivation, I let a large number of hogs run in the orchard. I raise considerable coarse grains and buy a good deal I believe that letting