



A Twelve-Year-Old Apple Tree Never Pruned Since Planted

I believe that in the past we have grown our trees too fast and have pruned them a great deal too much. To develop a strong fruit-bearing structure, a tree should not be unduly forced. It may be observed that with trees that have made a normal growth the branches are more tapering and more rigid than those on rapidly grown trees. The excessive growth is frequently due to liberal fertilization and cultivation, but is just as often due to severe winter pruning.

During the past six years I have had under observation a young orchard that has been developed under various systems of pruning, and I am forced to state that the best shaped trees in the orchard to-day are those that have not been pruned since they were planted. Now, we should not deduce from this that under all conditions a young tree should not be pruned. These trees were Baldwin and McIntosh, and were grown under the grass mulch system. I was fortunate enough to find another young orchard that appeared to be about twelve years of age and composed of Baldwins and Spies. These trees had not been pruned since they were planted. They had been under cultivation part of the time and in grass part of the time. The Baldwins were in bearing, but the Spies had evidently not started to bear. The Baldwin trees were fine shaped specimens, but could have been improved by a moderate pruning. The Spy trees were unsightly specimens, and their tops presented a broom-like appearance.

It is safe to say that some varieties

would be better left unpruned until they reach the bearing age, and that others should have a moderate amount of pruning, and that a large part of this pruning should be done during the growing season. The character of the soil, of course, will exert considerable influence upon the behaviour of a growing tree. Trees grown on light soil require less pruning than those grown on heavy soil. Drainage, also, exerts considerable influence upon the behavior of a tree, and the training of a tree on a well-drained soil is an easier proposition than that of training one on land that remains wet late in the spring.

SUMMER PRUNING

Summer pruning, as contrasted with the regular practice, is the pruning of trees while in foliage. Its influence upon the tree in many respects is opposite to winter pruning. The latter, as mentioned before, stimulates wood growth, while the former tends to lessen wood growth. As a rule, any practice that checks wood growth tends to induce fruitfulness. Growers have taken advantage of this fact for many years. In England the result is attained by root-pruning. The method consists in digging a trench around the tree at some considerable distance and severing some of the roots. This interferes with the food supply and necessarily reduces growth. In the famous Ozark apple region of Missouri and Arkansas the same result is attained by ringing or girdling the trunk or main branches of the tree, thus checking the downward flow of sap. The roots in this way are

partially starved and are, therefore, unable to induce a strong wood growth the following season. The work is done during the growing season, and, as a result, the wound soon heals over. The growers in the Pacific Coast region practice summer pruning to check wood growth. A complete or partial defoliation by insects, disease, or spraying injury during the early summer seems to have the same effect.

Just why the checking of wood growth should induce the formation of fruit buds and how it exerts this influence is not well understood. The theory has been advanced that there is some inherent tendency on the part of the tree to reproduce itself before it dies and that when anything interferes with the natural processes the tree prepares for death. This is not a satisfactory explanation, and it is hoped that the physiologists may be able to throw some light on the subject in the near future.

(To be continued.)

A Balanced Ration for Peach Trees

Wm. Armstrong, Niagara-on-the-Lake

As a balanced ration for peach trees on sandy soil I give a light annual dressing of good manure, left undisturbed over the roots and applied during late December or January in each year. This is supplemented with the following home mixed commercial fertilizers, applied immediately after mixing, about May first in each year, and scattered carefully and evenly around each tree by hand:

Mix in your wagon box on the barn floor, twenty-five per cent. pure fine ground bone meal and five per cent. fine ground sulphur together first. Add forty-five per cent. muriate of potash, fifteen per cent. Thomas Phosphate Powder, and ten per cent. coarse salt.

The quantity for each tree is as follows: Infant tree from the nursery row, one-half pound each; one year old, three-quarters pound; two years old, one and one-half pounds; three years old, two three pounds; five years old, four pounds.

Varieties of Gooseberries

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As the best varieties of gooseberries for planting in western Canada, I should recommend either the Pearl or Downing. If a red skinned gooseberry is desired, either the Josselyn or the Red Jacket would be a good variety. I should suggest planting gooseberries in the proportion of fifteen hundred Downing or Pearl and five hundred Red Jacket.

The English varieties are very subject to mildew, and although this can be controlled in part by spraying, it is not entirely satisfactory. I believe the American varieties would off-set any advantage in price there might be in favor of the English sorts in this country.