# **Dwarf Apple Trees**

#### W. T. Macoun, Central Experimental Farm, Ottawa

There has been a revived interest in dwarf apple trees in Canada and the United States during recent years owing principally, no doubt, to the fact that spraying is now considered necessary to the best success with apple trees, and that dwarf trees can be sprayed much more easily than standards. The success with dwarf trees in America has not, however, been so generally successful as was hoped, although in some cases good results have been obtained. The difference in results is due to the difference in climate, soil, varieties, and so forth, but also largely to methods of pruning, dwarf trees requiring much more care in pruning than standards.

Dwarf trees under favorable conditions come into bearing much earlier than standards, fruit being sometimes obtained the second year after planting of varieties that usually take six or seven years to come into bearing. As dwarf trees are much smaller than standards the crop is smaller on dwarf trees in proportion. Dwarf trees may be set about ten or twelve feet apart each way or even less. Two of the commonest kinds of dwarf stock for apples are the "Paradise" and the "Doucin," the former dwarfing the tree more than the latter. The "Doucin" stock will probably give better results on the whole in this country than the "Paradise."

### The Cherry Orchard Wm. Platts, Jr., Pelham Corners, Ont.

We prefer a clover sod for starting a cherry orchard. After you have cut your first crop of clover, plow the sod under



Among the Blossoms Orchard of Wm. Platts, Jr., Pelham Corners, Ont.

thoroughly, cultivating it until the middle of October, then mark the ground out eighteen by twenty feet apart. We plant in the fall so that the ground will get thoroughly settled around the roots by spring, so that they get a good start before dry weather sets in.

We think that a good one year old tree is the best to set out, because it makes a better start and is more sure to grow.

We plant some vegetables or small fruits that take lots of cultivation between the rows so as to make a good growth each year, until the trees commence to bear well.

We start pruning about the middle of March, keeping the trees headed low, and plow away from them just before they come in bloom. From this on keep the ground thoroughly cultivated, using the disc-harrow and the cultivator, until the crop is harvested.

We generally have some good girls and boys to pick them and pay them fifteen cents a quart basket, using small step ladders, or standing on the ground, for being headed low, there is not much climbing to do. We sell the fruit to our nearest canning factory, which is located near Welland, Ont., two and one-half miles from our orchard. After harvesting the fruit we spread manure, and then plow up to the trees for the coming winter.

## Arsenate of Lead M. C. Smith, Burlington, Ont.

Arsenate of lead has many advantages over Paris green as a poison to control codling moth or any leaf eating insect. It mixes readily with water and stays mixed with a minimum of agitation. It is much lighter than Paris green; consequently, much more easily held in suspension. There is nothing in it to clog nozzles. It sticks on the foliage and cannot be washed off by rains; in fact, arsenate of lead will last on the foliage throughout the entire season. It is the safest form of poison that can be used. It positively will not burn foliage of any description, fruit or vegetable.

It should be used in the proportion of two pounds to a forty gallon barrel. At this strength it will control codling moth. If canker worm or potato bugs were allowed to get very bad, an additional pound could be added with absolutely no danger to the foliage.

It is advisable when buying arsenate of lead to get a brand that has a guaranteed analysis of arsenic oxide of at least sixteen per cent., such as the "Niagara Brand." This brand has been used very largely in Ontario and the United States and has given excellent results. It costs from twelve to fifteen cents a pound, according to the size of package. I would not have any brand of arsenate of lead at any price that had not been fully experimented with on foliage, nor would I buy one that did not have a guaranteed analysis of at least sixteen per cent. of poison.

Of late years, Paris green has varied

so in strength that a grower is never sure of results; an overdose at any time is dangerous to foliage. The first cost of arsenate of lead would be slightly higher than Paris green but the difference in the results will more than make up the difference in cost, and it is the best results that growers should look for. Arsenate of lead can be applied by itself, with lime and sulphur or with Bordeaux mixture.

The codling moth is the most destructive pest that the orchards of Ontario are subject to. It causes more loss than any other, and it is the easiest controlled. A thorough application of arsenate of lead when the blossoms are falling will almost entirely control it. Thoroughness in spraying is the most essential feature. Fill in the calyx end of every blossom with poison. Do not try to spare your spraying material. In seasons like last year, when the codling moth is very active, a later spraying in about three weeks or a month is necessary. What growers in Ontario need to learn is thoroughness. This and arsenate of lead used at the proper time will control codling moth.

## Forming Apple Trees

Editor, THE CANADIAN HORTICULTUR-IST: I read with special interest, the article on "Forming and Pruning Apple Trees," in your issue of May, 1908, and I advise the re-reading of that article by lovers of tree culture. The writer of it says truly, "The main stem is the tree, keep that intact," and then contrasts it with the tree that has its "centre cut out"-causes lots of trouble-loss. Ten years ago, about sixty trees of this "sec-ond class" style, was sent me to set out. The Duchess has borne some fruit every year. Some branches split off, and many more would have done so had I not fastened the branches together with screws, and wire and small bolts.

On reading the article referred to, I began to consider and examine the trees, to find that they had been beheaded, and I had worked along the same lines in caring for them—so-called. It is time that more care be given and more knowledge be brought to bear on this point. —Peter Barrett, Truro, N.S.

To spray effectively, be on time and be thorough.

If you want to save labor and expense in caring for the new orchard, start the trees with low heads.

Nova Scotia, New Brunswick and Prince Edward<sup>\*</sup> Island horticulturists are requested to contribute articles and photographs for publication in the July issue of THE CANADIAN HORTICULTURIST, which will be devoted in a large measure to topics of interest to our friends in the maritime provinces.