HORTICULTURE

Wanted—A Fruit Commission

Mr. S. Nesbitt, M. L. A., of Brighton, Ontario, headed a deputation that waited on the Ontario Government last week, and asked that a Government Commission be appointed to investigate the conditions surrounding the fruit industry with the object of bringing about needed improvements. Mr. Nesbitt claimed that he represented the Apple Shippers' Association, as well as a number of co-operative apple growers' associations.

Whereas, a number of years ago the apple shippers made profits as high as several dollars a barrel on apples shipped to the old country, Mr. Nesbitt contended that during the past few years men shipping 10,000 barrels a year have been fortunate if they have not suffered heavy loss on their consignments. He felt, also, that the conditions surrounding the growing and marketing of peaches and strawberries needed to be investigated. At the factory of the Canadian Canners at St. David's they had been unable to secure enough peaches and had purchased some $12,000 worth from a grower in the state of New York. There was need also for an investigation covering the shipment of fruit from Ontario to the West to insure the growers obtaining better results. Efforts should be made to develop a strawberry that would not be green at the end. The strawberries now grown largely for canning purposes had this defect, which was a serious one. He thought that it might be advisable for legislation to be passed to provide for compulsory spraying and to compel nurserymen to furnish trees to growers true to name.

Mr. Nesbitt felt there was a great deal of dishonesty connected with the growing and marketing of fruit, and he felt that a commission would help to find the weak points. This led Hon. Mr. Duff, Minister of Agriculture, to ask him if his desire to have a commission appointed was not largely governed by the hope that such a commission would help to make people more honest. Mr. Nesbitt admitted that that was practically what it amounted to.

As practically all the matters mentioned by Mr. Nesbitt have been considered thoroughly by the Ontario Fruit Growers' Association, and have been discussed with the Government, it is hardly likely that the request of the deputation will receive much consideration.

Apples in Huron Co., Ont.

Much valuable information on the culture of apples was given at the short course in fruit growing that was held this winter at the Ontario Agricultural College. The following is taken from a paper on "Money in Apples in Huron County," that was read by Mr. R. R. Sloan of Blyth:

"The factors which govern the profitable culture of any crop are the detriments of the outlook for that particular branch of agriculture. When did the apple growers' future look more promising than at the present time, with markets such as our mother country, where they require an immense amount of fruit annually; our great West increasing rapidly in population, where there are 250,000,000 acres, only 7,000,000 of which have yet been touched by a plow; and our friends across the line occasionally require considerable quantities of our fruit. We can always get the market if we produce what the consumer requires, and in this branch of our agriculture, it is No. 1 fruit.

"The main factors of importance in apple culture are suitable conditions of soil and climate; these we have in Huron county. Soils are very variable, running from heavy clay to light sand. These points were amply brought out in reports in orchard survey work throughout that section during the past summer. Our geographical position is hard to beat, situated, as we are, east of Lake Huron, we get all the benefits derived from the water, the prevailing winds are lessened in their severity of cold, abundance of moisture in the atmosphere for the benefit of the trees and we are far enough north, yet out of danger of severe frosts to produce fruit of as one quality as can be grown anywhere in Canada. We can grow not only apples, but cherries, plums and pears do remarkably well with us, also all kinds of small fruits. Peaches are, as yet, an experimental crop with us, although I can and have grown them as fine as comes from the Niagara district."

Pointers on Planting Orchards

At the short course in fruit growing at Guelph the following interesting points on orchard planting and management were brought out by Prof. J. W. Crow:

When plans are being made for the planting of an orchard two especially important points should be kept in view: First, the question of pollenization in the varieties chosen; second, economy in spraying and harvesting. Economy in this latter is best secured by planting varieties in solid blocks, but this is impracticable in many varieties because of self-sterility.

The question of self-sterility is not fully understood, but many varieties either will not fertilize themselves or certain strains or individuals of the variety act in this way. Without fertilization of the female part of the flower by the pollen from the male part of another flower no fruit is borne. Generally speaking, the fruit of all varieties of apples grow larger and better when cross-pollination takes place.

It is wise then to plant two or three varieties of apples in an orchard and to have these so placed as to insure that the pollen of the one variety shall get to the flowers of the other variety. This, of course, could be accomplished by planting alternate rows of trees, but this complicates spraying and harvesting unnecessarily. It is sufficient to plant in series of rows, three rows in a series of one variety and three in another or any modification of this system that may be necessary. For instance, if three-quarters Spys were being planted and one-quarter Baldwins, three rows of Spys could be planted and then a row of Baldwins. By following such a system, cross-pollination will be secured while spraying and harvesting will not be complicated.

In choosing varieties to secure cross-pollination, it should be borne in mind that the varieties chosen should bloom nearly at the same time in order that the stigma (i.e., the female organ of the flower) shall be receptive at the time that the pollen from the flowers of the other variety is in a condition to do its work. Several days' latitude can be allowed, but the margin should not be too wide. Varieties differ in their relative dates of blooming in different localities, and the best varieties to plant together can only be determined absolutely by observation. The following list of self-sterile and self-fertile varieties are arranged opposite one another in nearly their respective order of blooming:

SELF-STERILE	SELF-FERTILE
Gravenstein	Duchess
Winter St. Lawrence	Russet
McIntosh	Wealthy
Peewaukee	Snow
Blenheim	Yellow Transparent
Spy	Wagener
Gano	Fallawater
King	Talman

Other self-fertile varieties are: Alexander Ribston, McMahon, Stark, Ontario, Greening, Colvert, Hubbardston. Baldwin and Spy are sufficiently close in blooming period to fertilize one another.

It is often desirable to spray one variety at a time when another variety is still in full bloom so that it is not wise to plant indiscriminately for this reason. The rows that are ready to be sprayed can be done at the right time and other rows not ready can be missed and done again when they are ready.

KEEP BEES IN THE ORCHARD.

Bees play a very important part in cross-fertilization. Wild species do much of this work, but are seldom sufficient in an orchard of considerable size. This is especially noticeable in a cold, wet, blooming season. Then too a large block of trees of one variety will often bear all around the outside of the orchard, but be almost sterile in the middle. This is due to the pollen brought by bees from other orchards; but it is evident that the bees have never penetrated to the centre. It will pay any fruit grower to keep a few colonies of bees in his orchard.—D. S.

Thorough spraying is the keynote to success in fruit growing. Spraying in itself is not sufficient. It should be practised in conjunction with the proper methods of cultivation, pruning, thinning, and other modern orchard practice.

It is sometimes advocated that one spraying for fruit trees is enough. The best orchard practice demands more than one application. With the spraying mixtures that are in common use, and for the purpose of combatting all classes of orchard troubles, at least four applications should be given during the season.