

is hoped that the minister will take immediate action in the matter. Such will not injure nursery firms that are reliable. It may be a means of ridding the country of those that are not. There are sufficient of the former to supply the demand. The latter are not needed.

This year, as a result of the new act governing horticultural societies, a number of Ontario horticultural societies that, in the past, have been of little value, having been merged with their local agricultural societies, are starting out for themselves. One of these, Goderich, is planning to offer prizes for garden competitions, to distribute seeds among the school children, and to conduct an energetic campaign along horticultural lines. May the efforts of these societies meet with the success that they deserve.

What are you doing to help us increase the circulation of THE CANADIAN HORTICULTURIST? If you will merely draw the attention of a few of your friends, who are interested in fruit and flowers, to its merits and low subscription price, it probably will be sufficient to lead them to join the ranks of our regular readers. Any help of this kind that you may give us will be much appreciated.

Work for the Station

The discussion at one session of the recent convention of the Niag. Pen. Fruit Grs.' Assn. centered in a subject of much importance to the fruit interests of the Niagara district; namely, the work and purpose of the new experimental station at Jordan Harbor. S. W. Fletcher, professor of horticulture and landscape gardening, Agricultural College, Lansing, Mich., said that one of the chief problems that will require attention is the improvement of varieties. While many of our varieties have good qualities, they usually are found wanting in one or more respects. A variety, for instance, which is of good color and flavor, might be of little value for shipping purposes. At the new station, varieties and classes of fruit should be bred for keeping qualities, flavor, hardness, freedom from rot; in fact, they should be bred to eliminate all undesirable qualifications.

To be successful in plant breeding, one must first recognize the fact that there is a great variation in plants. The foundation for the work lies in the fact that no two plants are alike, and that even the least deviation in varietal type might, by crossing and selection, develop into a new variety of superior excellence. The professor described in detail the mode in which a plant breeder performs the operation of crossing and pollenating the blossoms.

The value of propagating nursery stock from trees of known worth also was mentioned by Prof. Fletcher. In selecting scions for the multiplication of stock in nurseries, the nurseryman should know the history of the trees from which the scions are taken. It is not always possible to secure large quantities of scions from bearing trees; in such cases, it would be well for nurserymen to propagate primarily from bearing and productive trees and for the next few years renew their stock from scions taken from young trees thus propagated. Every 4 years, however, it would be necessary to go back to the bearing trees for a renewal of the stock.

The professor said that the new experimental station would do well to make out a list of varietal names and synonyms for the use of our fruit growers. This is necessary because there are so many varieties that are nearly alike in character and even in standard sorts there are distinct varieties or strains.

An interesting feature of Prof. Fletcher's address were some comments on the Spencer Seedless apple. Recently the professor visited the home of this fruit, and found it to be nothing

more than a fake. The apple, according to the professor, is below medium in size, poor in color, and not pleasing in shape, coarse in texture and in quality, below that of Ben Davis; in fact, its only value is its keeping quality. It is not seedless, as at least two-thirds of the apples have seeds of more or less development. The worst feature of this novelty, however, is the fact that it has a core, and a tough one. It is the core of the apple, and not the seeds, that bother the housewife and the canner. "The Spencer Seedless apple," said the professor, "is a horticultural gold brick—there is nothing in it."

Markets of the West

During one of the sessions of the convention of the O.F.G.A. held in Nov. last, Robt. Thompson, of St. Catharines, discussed the markets of the west. He spoke particularly of the progress that has been made in the trade between the St. Catharines district and the west. Until 3 years ago, shipments to the west were made at only irregular intervals, except in the case, perhaps, of grapes and apples. On the whole they did not turn out satisfactorily. Buyers said that they would pay only the price that the fruit would bring at the point of shipping. Three years ago there was a change. Under the direction of Professor Reynolds of the O.A.C., the government sent some experimental shipments to the west that proved that fruit could be carried through successfully.

To take full advantage of the western markets, cooperation is necessary. It is not wise to send shipments of less than a carload, and it usually takes a number of growers in combination to fill a car each day. It should be packed at the right time, and cooled before shipping. A number of growers working together can get assistance from the departments at Ottawa and Toronto. They can load the cars quickly and have better railway facilities and fewer losses. They are in a position to better know the requirements of the market and distribute their fruit to better advantage.

Tomatoes for the west must not be sent green. The best stage is learned by experience. They should be firm and nearly all red. A lot depends on the package. Put part of a shipment in the 4-tray boxes. In a car, place, say, 100 trays, and 300 bsks. An assortment of sizes gives best returns. Peaches should be packed in boxes, and a large part of the shipment should be wrapped. It only costs from 5 to 8 cts. a box to wrap them. There is a good market in the west for pears, not in carloads, but in reasonable lots. Ont. pears are of better flavor than those imported from the western states. There is a market also for early apples if handled properly and packed right. The grape outlook is good; there is no competition, as B.C. cannot grow grapes. In other respects, competition with B.C. is not to be feared for 20 years to come; then the most serious competition will be in apples. Apples for the west should be packed in boxes.

Boxes vs. Barrels in England

The Extension of Markets Division, Ottawa, has received a letter from the department's cargo inspector at Glasgow, dated Dec. 14, 1906, of which the following is a copy: "Enclose, please find catalog of Messrs. Simons, Jacob & Co.'s apple sales. You will observe that some very high prices were paid for boxed apples from British Columbia, and also a note at the foot re sales of boxed apples from Oregon. These boxes are about the same size as Ont. boxes, and the fruit in each case was papered. There is an increasing quantity of apples in boxes being imported to Glasgow from B.C., all of excellent quality. Apples in boxes are becoming more popular, I believe, in Glasgow and district, and I think there is a market for a larger quantity of 'fancy grade' Ontario apples than are at pres-

ent shipped. In the recent arrivals of boxed fruit there has been so much No. 2 grade, some of indifferent quality, that it compares very unfavorably with boxes from Ore. and B.C., whose imports are rapidly establishing a reputation for excellence.

"I had a conversation with an importer of Ont. apples in boxes, who is also a retailer of Ore. and B.C., and he is of the opinion that it would be well for Ont. shippers to utilize this style of package for fancier quality of fruit than they are packing. The prices realized at the sale in question were:

British Columbia Apples—Prize Medal Fruit.		
	Boxes.	Price
Canyon Brand, Spitz.....	9	14/
Cold Stream Brand, Spys....	5	14/
Jas. Gattreal, Kings.....	10	17/3
Nonsuch.....	5	12/6
Summerland Brand, Nonsuch.	5	16/6
Salome.....	10	16/6
Spitz.....	5	16/6
Stirling & Pitcairn, Newton...	5	18/3

"At the same time Oregon Newton Pippins in boxes were selling for 14 shillings a box, and the same variety in barrels was realizing on an average 16 shillings a bbl., thus showing that the package had a great deal to do with the enhanced price received for the boxed fruit."

San Jose Scale in Cities

Ed. CANADIAN HORTICULTURIST.—The San Jose Scale is spreading to an alarming extent. During the season of 1906, it spread faster than in previous years, partly owing to the continued hot, dry weather, and partly on account of the apathy or indifference of people who fail to live up to the law, and neglect to spray or cut out infested trees.

We have, in St. Catharines, a number of vacant lots, the owners of which live out of the province. These lots contain many seedling fruit trees, covered with scale and black knot. As there is no provision in the act to meet such cases, these places become uncontrollable breeding places for all kinds of insects as well as black knot. I do not suppose that St. Catharines is any worse in this respect than other municipalities, but I thought that by calling attention to this matter, you might be in a position to help us to find the remedy.

The season has arrived when all persons owning or occupying properties on which trees or shrubs are growing that are susceptible to scale or black knot, must be up and doing. They must get to work with a will and severely prune their trees and, where they find a tree that is badly affected, cut them out. Pruning makes spraying less costly and more effective.

There are several spraying formulas on the market, but only two have proved effective. One of them, the lime and sulphur formula, owing to the difficulty of preparation and handling in the small places of the city, as well as the trouble of getting men to apply it, is unsatisfactory. We are obliged, therefore, to use the Carlson formula. We have used this with good results for the past two years. It is easy of application and one barrel will cover about 3 times the number of trees that sulphur and lime will cover. I have had it used with good results in the latter part of the month of June, without seriously injuring the foliage or fruit.

The following is a list of trees, bushes and shrubs that are susceptible to scale: Apple trees of all varieties, Greening most susceptible; crab apples, badly; peaches of all varieties; plums of all varieties, Japans badly; pears of all varieties, Kieffer seldom attacked; apricots, not badly; sweet cherries; currants; quince; also rose bushes, lilacs, privet hedges, Japan quince, all kinds of thorn, willow, mountain ash and poplar.—Thomas Reattie, San Jose Scale Inspector for St. Catharines.

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