

Some of the Plate Fruit and Honey Exhibits made at the Ontario] Horticultural Exhibition Last Month

house. I have several strains which appear of exceptional value and whose appearance has suited almost everyone who has seen them. These I hope in another year to be able to pass out to you for trial.

I have also been working on tomatoes. For indoor work I have been trying to breed the good qualities of the Industry tomatoes—especially its disease resistance, on to the pink tomato which I obtained in Grand Rapids, Mich., four years ago, and which has exceptional thickness of flesh with thin skin but good carrying qualities. These I hope also before long to be able to give you to prove out. I have made it a practice to send out seed of varieties which have proved of value under our conditions, to any who desired, hoping by this means to be able to give you something which will increase your returns.

We all know that frequently we obtain seed which is not such as is represented, and probably have tried to find some way to overcome this difficulty. For a number of years we have grown seed of various vegetables as radish, lettuce, beets, cabbage, tomatoes, onions and melons, with excellent results. The Dominion Government last year made some provision for assisting in this work. Can we not help along by experimenting, under the care of your Association, to find where we could grow seeds commercially in the province?

Would it be possible for you to add cabbage and sunflower to the three crops already in the crop competitions? They are very important crops in the province, and could be judged in the field in the fall, and then shown at the Horticultural Exhibition in November. The interest in the competition before has been great, and the addition of these crops should tend to increase their interest.

## Soft Rot of Vegetables B. Blaschrd, O.A.C., Gaelph, Ont.

That the soft rots of our comon garden vegetables are mostly caused by bacteria is a fact not always realized by gardeners. Research work carried on during recent years has proved this to a certainty.

The most common result from the attack of the bacteria is a soft dark rot of the affected parts. All plants are composed of cells, each cell being enclosed in a cell wall. In the early stages of the disease the bacteria live between the cells. They produce substances which have the power of destroying the cell wall. After the cell wall has been thus broken down, the organisms infest the whole tissues, which become a soft, pulpy mass.

The bacteria generally gain an entrance through an injured portion of the plant, such as an insect bite. A wet season, too, is much more favorable to the spread of the disease than is a dry one. When storing vegetables care should be exercised in sorting as the rot will spread from a diseased specimen to a healthy one if they be touching.

A most important control measure is to keep insects in cheek. Caterpilars are largely responsible for the spread of rot in cabbages. One part of Paris green to fifteen parts of flour, sprinkled on the cabbages, will keep them down. It is possible for the bacteria to live in the soil for several years. It is difficult for them, however, to gain access to an uninjured plant. Care then should be taken in cultivating the plants so as not to injure them in any way.

All diseased plants or parts should be removed and burned as soon as noticed; should the disease become general it is best to harvest the good specimens and burn the rest. Practically the same organisms cause soft rot in cabbage, cauliflower, radish, carrot, mangle, turnip, parsnip, potato, celery, onion, asparagus and rhubarb.

Protecting Small Fruits.—Where winter protection is necessary the strawberry bed should be mulched with long, strawy stable manure, after the ground freezes, but before severe weather. Cover the plants two inches deep and two or three between the rows. Raspberries should be protected by laying them down. Bend them over near the ground and hold in place by a shovelful of earth near the tips. Straw, hay, or corn stalks, or even soil, can be used for mulching, but it should not be put on before the first frosts.—II. Gibson, Staatsburg.

Too much stress cannot be put upon careful handling of any crop to be stored and during storage. Each bruise or cut gives the proper conditions for the development of disease and if rough handling is permitted we are sure to find decay starting from such places, eventually infecting the whole crop.