

unexplained "silver-top" injury to hay, this crop in Ontario has not suffered. The clover seed midge is now by early cutting comparatively well kept in hand by growers.

The root crops have been poor for want of rain, turnips suffered severely and late in the season all growth was stopped in some districts by enormous quantities of a grey aphid. When treated in time these were easily destroyed by spraying with kerosene emulsion. Few, however, could be induced to take this trouble so late in the season; preferring to take their chance they did nothing, and as a consequence lost their crop of turnips.

Carrots last year were badly attacked by the carrot fly (*Pila rosea*), but this year very few complaints were received. Radishes and cabbages were badly attacked by Anthomyian flies, so well known to gardeners as root maggots. I have, however, during the past summer had such success with Prof. Cook's carbolic acid treatment, that I had no trouble in growing radishes entirely free from attack, right through the summer. This remedy is as follows:—Take one gallon of water in which two quarts of soft soap have been dissolved; into this when boiling hot one pint of crude carbolic acid is put, and after being boiled and stirred for a short time, is put by in bottles. When required for use I put one cupful in a watering can with fifty cupfuls of soft water. This when stirred up a little is ready for use, and is watered by means of a rose all over the beds, beginning three days after the seed is sown and continuing once a week until the radishes are ready for the table. It can be watered all over the foliage and will have no effect, either on the vegetation or in giving any offensive taste to the vegetable. For cabbages the most successful treatment was as follows:—At the time of planting out gas-lime was sprinkled lightly all round each plant. About first July the earth was well hoed up round the stems and another light application was made. This substance was also found very beneficial by Mr. E. Bell, of Archville, in preventing to a large extent the attacks of the onion maggot. In this case it was sown very lightly broadcast over the whole bed—once a fortnight,—from the beginning of the season until the middle of August.

Potatoes suffered in some localities from the Colorado potato beetle. This pest, however, is so easily and cheaply kept down with Paris green that it is not necessary to speak of it at greater length.

The Imported White Cabbage-butterfly (*Pieris Rapæ*), committed serious injury throughout the Province, notwithstanding the fact that myriads of the larvae were destroyed by the fungous disease known as *flacherie*. This disease has been noticed for the last seven or eight years from the virulence of its attacks upon the larvae of this insect; but this year the caterpillars having appeared in undue numbers, its presence seemed to force itself upon everyone's notice. Great injury was done by these caterpillars before the epidemic developed and it was necessary to have recourse to active remedies. Of these, without doubt, insect powder (*Pyrethrum*) is the best. This material can be mixed with four or five times its weight of common flour. With one of the many insect-guns and a very little practice, a large number of plants can be dusted in a short time. Treatment with a tea of this poison was not so successful as the dry application.

Orchards have in some districts fared worse than other crops. In the first place the leafing out of the trees was retarded in early spring by the want of rains. The enormous numbers of *Clisiocampa* and a goodly host of other caterpillars, at one time threatened to entirely strip the foliage from the apple trees. In Nova Scotia the apples were from various causes reduced to one-quarter of the average crop. Two particular insects were most complained of, "the canker worm" and the pear-blight beetle *Xyleborus dispar*, Fab., (*Xyleborus pyri*). This latter was called, locally, "the shot-borer," from the resemblance of its tunnels to small shot holes. It has done much injury. Many specimens have been sent to me from the Annapolis Valley, and by the kind assistance of Mr. T. E. Smith, of the Nova Scotia nursery at Cornwallis, N.S., a close and careful observer, I have been put in possession of much useful knowledge with regard to this insect. Mr. Smith is under the impression that they do attack healthy trees. He writes: "One of my neighbours has lost about forty fine healthy apple trees, mostly Gravensteins and King of Tompkins. They attack the butt, and in some cases well into the limbs of young and bearing trees a foot