

only within the last five years, but which has already done a great deal of harm in our country. The useful knowledge with regard to the life habits of this insect and the best ways of fighting it are increasing from year to year, and the condition of affairs to-day is very much more satisfactory than it has ever been possible for one to say before. It is without doubt the most injurious fruit insect we have ever had to study practically. Notwithstanding that so much good work has been done, particularly in the province of Ontario, by the Provincial officers, there is still much to be learned by the fruit growers of the Dominion. At the present time this pest occurs in Canada, in Ontario only. The matter has received close attention from the Federal and Provincial Governments, and, as a result of much careful experimenting, I am to-day able to claim that there are already three remedies which will give paying returns if they are applied carefully and with the necessary trouble and expense. They are practical remedies, in that they will control the insect sufficiently to allow paying crops to be grown, but they are such as will still be thought rather expensive or difficult remedies which many farmers will hesitate to adopt on account of the expense necessary in applying them. However, I believe that judged as any other ordinary business transaction, the results of the work will pay very largely if the remedies are put in force as advised.

The whole of this work is detailed at some length in my forthcoming annual report, but I will just mention what these three remedies are, because information given before this Committee, as a rule, gets to the country long before the Departmental report is issued.

SPECIAL REMEDIES.

Of the three remedies I will mention first Crude Petroleum. This is probably the most effective remedy, but it is one which is rather more dangerous to use than will allow of its being recommended for general use by the ordinary fruit grower. It is very largely used now in Ontario and the United States, and we know that with proper care, orchards can be protected from the San José Scale without injury to the trees. It therefore pays all fruit growers whose trees are affected, to find out what is the proper way to apply crude petroleum to their trees, and to follow closely the specific instructions which are issued both by the Federal and Ontario Governments, if they wish to get the best results of their labours. In western and south-western Ontario the time has gone past when fruit growers can afford to neglect the precautions advised against insect enemies, and the application of proved remedies. In the part of Ontario where the San José Scale has been introduced, they must for many years be prepared to make a continued effort to stamp out this pest.

By Mr. Wright:

Q. Has the San José Scale appeared in eastern or central Ontario ?

A. No.

Q. Only in the west ?

A. I think we may outline the district where it has appeared in injurious numbers as the district which is broadly known as the peach district. That is, the west of Lake Ontario and along the north of Lake Erie. Where you can raise a paying crop of peaches there you will find, I think, that the San José Scale will thrive, if introduced.

Regarding the injurious effect of this insect on the trees, too much cannot be said. It had been hoped that because Canada was so far north the scale would not be so likely to destroy the trees as elsewhere, but that is now known to be a very erroneous idea. I have been lately in orchards where I saw apple trees, the least susceptible to injury of all our fruit trees, which were actually dead from the attacks of the San José Scale. So that question is answered, once for all, that the San José Scale can destroy fruit trees in Canada. I have seen apple, plum, peach and pear trees, during the past season, all of which were dead, and they had been killed by the San José Scale.