

A. No. I would advise them to do the best they could with the ordinary whale-oil soap, which they can get in this country. Whale-oil soap is the material which has given the best results. Kerosene emulsion has also given good results and this well-known combination, which consists of coal oil and soapsuds is the standard remedy against plant-lice and scale insects. But I should now say a word of warning in regard to pure kerosene being used on fruit trees. This has been advocated very widely in some of the United States, and has given some good results when used carefully by specialists, and upon some kinds of trees only.

Q. But it would kill the trees off?

A. Not apple trees, it would appear from experiment; but peach trees it has injured. In my experiments it has not been successful, but men in whom I have every confidence have told me that they have secured good results from using pure kerosene, spraying it on to the trunks on bright days when evaporation goes on quickly. But I think that the safest treatment is with whale-oil soap or with the kerosene emulsion.

*By Mr. Rogers :*

Q. I see some trees at the farm with a bright coating on the trunks?

A. That is due to their being treated regularly every year with an alkaline wash to prevent the borers in the trunks which kill so many trees in Canada. Our trees are very clean, owing to the care Mr. Craig has taken with them for some years. The location of the orchard does not seem to be quite satisfactory, and we have lost some trees from time to time, but though our trees may die from other causes we have very seldom lost any from borers.

*By Mr. McGregor :*

Q. Would you wash them up as far as possible, even to the larger limbs?

A. Yes, for the borers; or do you mean for the San José Scale?

Q. Yes.

A. Oh, they should be sprayed. The potash soap I have mentioned can be sprayed with a spraying pump; the trees should be sprayed late in winter, before the leaves open. There are four or five broods of the scales in summer and that makes it difficult to destroy all in the summer when the trees are covered with leaves, as there are some young on the trees all the time. The covered scales are difficult to get at with any of the treatments recommended, therefore it is necessary to do very thorough work in winter when the whole tree can be covered with the spray.

Q. What is the best time to spray?

A. Winter treatment is the best, and it must be very thorough; infested trees should be sprayed after the leaves are off in the autumn, and again before the buds open in the spring.

*By the Chairman :*

Q. You speak of kerosene, is that what we know as coal oil?

A. Yes, but in the United States, where there are a great many more people than here it is usually spoken of as kerosene. It is simply the ordinary illuminating oil such as is generally used in lamps.