

116. Have any experiments in that direction been tried with regard to the effect of small birds on such things as the codlin-moth?—Yes; that has been watched very carefully, but its help is not very appreciable.

117. Have you heard whether in any other places besides Auckland—for instance, in the Wairarapa—there has been a very material diminution in the codlin-moth pest during the last year or two?—In certain places.

118. Do you know any certain places where no treatment has taken place whatever?—Yes.

119. Is there anything to which you can attribute this reduction in the pest besides the climatic changes?—No; except in places where you have gone in for protective measures.

120. *Mr. Bollard.*] Do you know of the sparrows affecting the codlin-moth?—No, I do not think so. The sparrow must as a rule be very hungry before he looks for insects such as the codlin-moth grub. He is much more likely to eat the apple than the grub.

THURSDAY, 3RD SEPTEMBER, 1903.

W. A. BOUCHER examined. (No. 2.)

1. *Hon. the Chairman.*] You are in charge, under the Agricultural Department, of the orchard at Otahuhu?—Yes, sir.

2. Have you had charge of it from the time the Government took it over?—Yes.

3. What state was it in at that time?—It was an orchard that had been neglected for a good many years. The trees were entirely overgrown, and infected with all kinds of diseases—with scale, mealy bug, and codlin-moth. The fruit from the trees was also infected with the apple-scab, and the limbs of the trees were covered with moss and lichen; in fact, the trees were in about as bad a condition as those in any orchard you could find in the colony.

4. At what period of the year did you take charge of the orchard?—In October.

5. What steps did you take?—The first step that I took was to spray the trees in order to remove the moss and lichen, following that up with spraying for the codlin-moth. That was in the first season.

6. Did you spray for the scale?—No; I did not consider that a matter of sufficient importance to go to extra expense. The orchard was taken over specially for spraying for the codlin-moth. I desired to keep down expenses as much as possible, and sprayed more particularly for the codlin-moth, after removing the moss and the lichen, which would harbour the moth. That was a necessary adjunct to spraying for the codlin-moth.

7. What state of cultivation was the orchard in when you got it?—It had been entirely neglected.

8. Was it in grass?—Yes.

9. Did you do anything in the way of cultivation?—The first season there was no cultivation at all.

10. You left it as it was?—Yes.

11. Was the rubbish cleared out, and so on?—That followed in the second season.

12. Was there any result during the first season in the way of produce?—The result was the reduction of the percentage of the moth—from the apples being absolutely riddled to a percentage of, I think, 38 per cent. clean. In the second season the reduction of the percentage of the moth was considerably increased, giving an average of about 90 per cent. clean.

13. Did you do anything the first year besides spraying, bandaging, and so on?—They were bandaged the first year.

14. That was all that was done?—Yes.

15. Then, how did you proceed the second season?—The second year the orchard was fenced in so that we could have pigs, in order to save the expense of gathering up the fallen fruit.

16. All of it?—Yes; the orchard was fenced in and divided into two parts, so that if it were necessary one part could be used for cultivation and without the pigs, and the other part with the pigs and without cultivation.

17. What else was done during the second season?—The bandages were used as an adjunct for trapping any grubs that might escape from the fruit.

18. What amount of spraying was done?—It varied between four and eight times, according to the different varieties. The early varieties were sprayed four times, and the very late varieties eight times.

19. Was the increase in the cost of management material the second year?—It was considerably increased the second year.

20. And the result?—The result was not altogether favourable the second year on account of the excessively low prices ruling in the market. One great difficulty in the matter is the amount of infected fruit that is allowed to be sold—hundreds of tons of it. I am obliged to go to considerable expense to get the orchard free from moths. The clean fruit is sold in Auckland in competition with infected fruit that comes from all quarters—the Auckland market in particular is affected in this way—and it is hardly possible to sell clean fruit at a profitable price. So that I am placed in a very anomalous position. I am compelled to go to a certain amount of expense to produce clean fruit, and that clean fruit has to go into competition with infected fruit from orchards where there has been absolutely nothing done.

21. What was the general result the second year as far as expenditure and returns went—a loss or a profit?—The balance-sheet was produced last season. I could not give the exact returns from memory.

22. Then we come to the third season—the last season?—Yes. This last season the results have been altogether different.

23. What did you do the last season?—Far less cultivation. Before the season commenced I