

The SECRETARY: I think the rot was the worst.

Mr. PARTISON: The free application of wood ashes and lime is very beneficial to the plum. I have fed them very freely with these substances, and have had absolutely no rot whatever, although I have grown plums for over nine years, many of my trees being full grown when I went there, I never lost a basket from rot. Mr. Cline informs me that where he has fertilized with special fertilizer that is compounded at Smith's Falls and I believe is largely composed of potash, that he has noticed quite a difference in the liability of plums to rot on that account, and in the general immunity of the plums from disease.

Mr. FISHER (Burlington): We didn't have any plum rot this year where I live. We had no plums (laughter.) Last year I noticed that the trees I have growing on an alluvial deposit were very much worse with rot than on other soil.

Mr. JAMES: I think careful experiments ought to be made on the question. Why do the diseases strike certain trees? Are we starving, or partially starving, our trees, and as a consequence getting the trees into such an unhealthy or weak condition that the disease strikes them readily? Can we build up the constitution of the trees so that they will resist the disease?

Mr. CASTON: It is a well-known fact that some of the best and thriftiest apple trees are affected by apple-scab. You would think the tree with the greatest vigor would have the greatest ability to resist the attacks of these diseases; but it seems to be the contrary. Although what would bear out the opposite would be this fact, that trees that are not susceptible to the apple scab at all, are particularly hardy, and it is the peculiar hardness that prevents the attacks of the scab.

Mr. ALLAN: There is a simple reason for all that. We are seeing more and more every year that throughout our fruit orchards there is a lack in the soil. No doubt you can go into the country and find a young tree badly spotted; but the reason there is exactly the same as in the other instances, the soil lacks some particular substance that is required for the production of perfect fruit. Now, in order to get at this subject and understand it, we must analyse our soil; we must know what those qualities are that must be in the soil for the perfect production of strong, perfect, healthy wood, and the production of healthy, good fruit. When we reach that point, we will have come to a point very much in favor of the fruit-growers of this Province; and come to that point we must, or go down largely in the markets. We have gone down to a considerable extent in the markets of Britain with the apple; and I trace it all back to one point—that our orchards are lacking; the soil is not cultivated and fitted for the crop as it should be. We should look on the orchard as we do any other part of the farm. We should study the orchard's wants; and feed its soil as we do for a crop of wheat or any other roots. (Applause.)

Mr. JAMES: Very frequently we draw erroneous conclusions from simple observation of one circumstance. Here is a man who examines his orchard; and he says: "Those trees are growing on a heavy soil;" and he draws conclusions from that one point—the soil—leaving out entirely the slope of the land, the prevailing wind, whether it is shaded or not; so that in coming to conclusions on those points we have a variety of circumstances to take into consideration. The mere fact that a tree is not thrifty on heavy soil, should not disprove the fact that perhaps those trees would grow on such soils. You may take a variety of soils, they are all clay and they are all heavy, but they may be very different in composition. We should take all the circumstances into consideration before we arrive at any conclusion. Hence a number of experiments carried on at different places all grouped together, will give us better results than the results on one man's farm. We are not very likely to put too much fertilizers on our orchards. It requires something to prove that heavy clay is the material that is needed. I remember years ago hearing Mr. Allan speaking on this subject, in referring to the use of salt in his apple-orchard making the fruit and the trees strong and healthy. Not that there was any benefit in the salt, but it set free other ingredients in the soil.

The SECRETARY: Some people believe that the yellows can be cured by an appli-