

experiments have been tried, not for that disease, but for one of the same nature which attacks the coffee trees. Small receptacles, such as tin cans, are kept filled, with a solution of carbolic acid. This vaporises through the trees and has had the effect of weeding out the disease in one of the coffee plantations. I had hopes of trying this year the same experiment on the apples, but have not had the opportunity. It is one, however, which I shall certainly try at some future time.

Q. Is it too late to try it this year? A. No, I don't think so. This black spot or *Fusicladium*, lives in three different positions on the trees. It passes the winter on the dead leaves and young green shoots of the tree, later on it attacks the fruit, and after the fruit is gone you can always find it on the leaves. A remedy which could be easily tried which I believe would be successful, although I have not tried it yet, would be to burn the dead leaves in the orchards, as they have the disease on them, and the young shoots might be sprayed with kerosene emulsion.

Q. I find that the black spot is peculiar to certain kinds of apples—to the Fameuse particularly? A. It certainly attacks some varieties more severely than others; especially the Fameuse, but I doubt whether any variety is actually exempt.

*By Mr. McMillan (Huron):*

Q. Have you known salt, plentifully applied to the trees in an orchard, assist in keeping off the black spot? I have a large number of apple trees and applied salt pretty plentifully to the roots, and although it did not completely eradicate the black spot the apples grown on the trees were very much clearer next season? A. Perhaps some Nova Scotia members can tell us whether orchards manured with marsh mud are least attacked. It is not the same kind of salt, but still it might throw some light upon this question.

*By Mr. Robertson (King's, P. E. I.):*

Q. The marsh mud is pretty well impregnated with salt? A. I think it would have the same effect as the salt.

Q. The mud is put round the root of the tree? A. Yes; perhaps Mr. McMillan will tell the Committee how he applied his salt.

Mr. McMILLAN—I sowed it round the base of the trees in the fall.

Mr. FLETCHER—This is very interesting information. Mr. McMillan says good results followed from the application of salt at the base of the trees in keeping down the black spot. In Nova Scotia I heard it stated that the salt air had a good effect in keeping down the black knot on the plum. All along the sea board this plum fungus, it is stated, does not attack the trees which are open to the salt breeze from the ocean. Now, if this be accurate, that is the point we should take advantage of and spray the trees with salt when looking for a remedy, and record the results.

*By Mr. Carpenter:*

Q. Have you any remedy for the blight on the pear tree? A. That is fire blight. It is a very troublesome thing for this reason:—A remedy which is applied with good results in one place will have no effect in another. I do not think that we can claim that a very good remedy has yet been found, although excellent results are said to have been produced by mulching the trees and keeping them cool around the base. A very curious discovery is said to have been made. It is claimed by scientific men that this disease is actually caused by bacteria; not that bacteria exists there, but that it is caused by bacteria. Some of the medical gentlemen in the Committee may be surprised and even dissent from this; but at all events such is what good scientific men declare. Prof. Burrill, who has studied this one disease particularly, in the Illinois University, has found that he could inoculate trees with bacteria from a seventh culture and produce pear blight. It has been found, however, that by mulching the trees around the base and keeping them cool in the summer, the disease was much less prevalent than in orchards where this is not done.

*By Mr. Mallory:*

Q. Have you noticed that there is some kind of insect which attacks the mangold? A. In the leaf?

Q. In the leaf and root? A. I have not seen it in the root. I have seen an insect that mines in the leaf; but I have not seen it in the root.