

ate state of mind and asked me if he could put kerosene on the trees. I told him he might if he wanted to but I thought he would kill the scale and presumed he would kill the trees also. He used kerosene thoroughly and, fearing that he had not been thorough enough, he used it a second time and I told him he had probably fixed the scale and his orchard too. I was surprised on learning that he had not killed his orchard, and the fact gave me hope that we might expect something from the application of pure kerosene. Some other experiments were made that did not turn out as favorably, as we killed the trees and since that I have been wondering why it would work satisfactorily one time and the opposite way at another. My assistant has applied kerosene to the same kind of trees, using the same brand of kerosene, and in one case it caused no injury and in the other case it killed the trees.

THE CHAIRMAN: Did he kill the insects in both cases?

PROFESSOR WEBSTER: Yes, he killed those that he reached. In some cases there would be individuals that were behind a bud, or behind some loose bark where he could not reach them, and I should not expect that a single application of anything, except fire, would kill every insect on a tree. Later, while dealing with the Catawba Island outbreak, we heard considerable about whale oil soap, and we used both kerosene and whale oil soap. The fruit commissioners got together and divided the trees into three grades. The first, comprising such as seemed to be too far gone to do anything with whatever, were cut down and burned. Then there were quite a number where it seemed as though, if we could destroy the scale at once, there might perhaps be a chance to save them, and I told these people that I would not be responsible for the results, but they might try kerosene: if there was any benefit to be gained they would get it, and that they could not do any more than destroy the trees and these would have to be destroyed anyway. In some cases the kerosene resulted fatally and, of course, that added to the number of trees that were destroyed. The other grade were such as were not so badly infested but what it seemed they might be saved, and on these they used whale oil soap.

Now, they have not exterminated the San José Scale on Catawba Island by any means. They have in this way simply got it under control by the use of whale oil soap. If the people persist in a proper way I think it can be exterminated. As it is they have simply reduced the pest to a point where they can control it; but just as sure as they give that over for a single year it will come to the front, and I think if they were to allow their premises to go two or three years there would be a great many trees that would not be worth saving.

PROF. JAMES: Has the fact of its being an island helped very much?

PROF. WEBSTER: I do not think so. The place is called an island by courtesy. It is only separated from the mainland by a swamp. There is really no bed of water between the island and the mainland. I do not think that has any effect at all. I do not see why they should have better results there than any place else if the same means were used. We have no law in Ohio that is good for anything. We have a law, relative to the suppression of peach yellow and black knot, and our Legislators thought it would be better to patch up the old law, and sandwich in a paragraph relating to the San Jose Scale, than it would be to make an entirely new one, and the consequence is we have a patched-up law that is worthless, because no one understands or dares to attempt to enforce it.

All that has been done since 1894 has been by persuasion on my part, the only authority I have being that of referee. If there is a question between the Fruit Commissioners and the owners of an orchard, it has to come to me, and as my decision is final, there do not very many of these questions come before me. That is the reason why they had such good results out at Catawba Island. Mr. Owen was sharp enough to throw the whole responsibility on me, and he would tell these people that my decision was final and that would settle it. What has been done there, has been done by the persistent use of fire and whale oil soap, and appealing to the people to do the same thing and at the proper time. There is as much in that, or more than in anything else. It is not so much what the scale will do as we know that pretty well, but what the people will do with the scale.