

Readers of course should not make the mistake of supposing that every orchard in the darkened area is badly infested. The fact is that this area includes nearly all of the tender fruit belt, and it is only in the neglected or semi-cared for orchards that the scale is found doing any injury. The well-cared for orchards are clean, and it is with difficulty that any scale can be found in them. In Kent and Essex, however, and in parts of Elgin, Welland and Lincoln there are hundreds of apple orchards that have been killed by it and hundreds more that will soon be killed. The owners of these orchards are not trying to save them, largely because they have not yet learned how valuable an asset an old apple orchard may be made.

THE EFFECT OF CLIMATE IN LIMITING SPREAD.—Since the San José scale is to-day, as shown in the map, confined to the south-western part of the Province, which is also the warmest part, it is very natural that the question should arise whether it can thrive in the other parts or is ever likely to do much damage to the fruit industry there. There is not sufficient data to give a definite answer to this question, but in my opinion there is very little doubt that the insect can live and thrive at least wherever peach trees can be grown. We may therefore expect that it will gradually spread through all the peach districts, including the district around Forest and the southern part of Lake Huron. At Collingwood at the base of the mountain, a well sheltered locality, I have seen peach trees that were about twenty years of age. I feel satisfied that if the scale got established there it would be able to do considerable damage. Furthermore in many parts of the Province we find here and there in back yards in towns a peach tree flourishing and bearing fruit. In such sheltered places I should expect the scale could become destructive. But apart from these cases in the great fruit districts where peaches cannot grow in the open we have considerable reason to hope that time will prove that the scale will not flourish or do much harm, though once introduced it may be able to maintain a struggling existence for years. While such is my hope, my advice to everybody is: *Take no chances, and on the least suspicion of its presence do your best to eradicate it.*

A brief review of the reasons for hoping that this pest may not be able to flourish much farther north than its present limits will be of interest:—

(1) The insect has now been in Ontario for about twenty years. In the course of this time it can scarcely be doubted that live scale has many times been shipped on nursery stock into such districts as the flourishing commercial apple-growing counties north of Lake Ontario; in fact I myself know of three cases where it has been found during the last five years on young trees in these districts, and yet has never got established. I am not sure whether the owners destroyed all these trees, but in any case there must have been similar occurrences where the trees were not destroyed.

(2) From correspondence with entomologists in the northern parts of the United States, where climatic conditions may be found approximating to those of our own uninfested fruit districts, I have received the following information:—

In New Hampshire the insect's present northern limits are Wolfeboro' and Plymouth, latitude about $43^{\circ} 40'$. In this State Prof. O'Kane says: "In general, in New Hampshire it is so far troublesome largely in the neighborhood of cities, although we are getting occasional reports of it from orchards, and in some cases severe damage is recorded." It seems evident from this statement that it is not regarded as doing a great deal of damage in New Hampshire, and does not occur at all in the northern part of the state.