

## PREVENTION OF INSECT PESTS AND DISEASES.

The following pages have been prepared by direction of the Hon. the Minister of Agriculture for the use of, and distribution among, farmers and fruit-growers of British Columbia. The remedies and suggestions contained therein, which have been compiled under the careful supervision of the Provincial Board of Horticulture, are recommended to their careful consideration and for adoption. If generally acted upon they will, it is confidently asserted, prove to be effective, not only in preventing the spread of the insect pests and plant diseases which have made such inroads on the gardens and orchards of the Province, but in a large measure obtaining immunity. A condition precedent is that eternal vigilance must be exercised, and the success of whatever precautions may be adopted is dependent upon the thoroughness with which they are observed. The recommendations which are contained in these pages are the result of careful study of all the conditions, and are confirmed by experience.

The rapid spread of numerous destructive pests and hurtful plant diseases, following upon increased cultivation and the importations of fruits and nursery stock, has been seriously felt throughout the agricultural districts, and points to the necessity of a vigorous and rigid enforcement of the rules and regulations of the Department and the adoption of practical measures of suppression, in order that the promising agricultural resources of British Columbia may be permitted to develop.

Mr. R. M. Palmer, Inspector of Fruit Pests, in his report to the Hon. the Minister of Agriculture for the year ending December 31st, 1896, speaking with reference to his work in visiting and inspecting orchards in the different sections of the Province, says:—

“The necessity of this work has been emphasized by the discovery of the most dangerous scale insect enemy of fruit trees known—the San Jose Scale (*Aspidiotus perniciosus*)—in two orchards on Vancouver Island, and although, so far as known, this pest has not spread, it is hardly possible that the infestation is limited to these cases. I propose during the coming season to give special attention to the district in which the infested trees were found.

“It has cost the fruit-growers of California and Oregon hundreds of thousands of dollars to fight the San Jose Scale, and the war against it still continues. Now it is known that this pest will live under the conditions obtained in British Columbia (which has been considered doubtful by some persons), there is no doubt that the most stringent measures should be adopted in dealing with it when found. The appearance of San Jose Scale in orchards and gardens in Ontario, and some of the Eastern and Southern States, has created wide-spread consternation amongst fruit-growers there, and a demand for Legislative assistance from the respective governments in dealing with the pest, similar to that enacted in the Pacific Coast States and British Columbia, has sprung up.

“In many parts of the lower mainland, and to a less extent on the islands, much injury has been done to the apple crop by a pest which has been named the Apple-Fruit-Miner. It is a small larva or “worm” which feeds upon the pulp of the fruit. To a slight extent, it had been noticed in previous seasons, but the past year it has been so plentiful as to destroy or render of no value a large percentage of the apple crop in some localities.

“In regard to the spraying of orchards, although good work has been done by many persons, and most encouraging reports are constantly being received of the good effects consequent on spraying, still there is much room for improvement. Many owners of orchards and gardens containing fruit trees are careless or indifferent; this is especially the case with old orchards in or near the cities. Most of these old orchards would better be destroyed altogether, as many of the trees, from various causes, such as neglect or being of poor or unsuitable varieties, are of no value to their owners, besides being infested with various insect pests and diseases, for which they serve as breeding places, and are a constant menace to the progressive fruit-growers. Those who spray and take care of their trees are demanding that more vigorous measures be taken to enforce the cleansing of these old, infected trees. Another year’s experience with the No. 1 spraying mixture (lime,

### Introductory Remarks.

### The San Jose Scale.

### Importance of Spraying.