

*Orchard Pests and Diseases.*

As mentioned in the earlier part of this report, fungus disease caused considerable damage in a number of districts where the wet-weather conditions during the fruiting season prevented anything like systematic spraying being carried out. Stone-fruits suffered severely from attacks of brown-rot, which was very prevalent in the Auckland and Hawke's Bay districts, and experiments are being undertaken for its control.

In some localities the leaf-roller caterpillar was very conspicuous, considerable quantities of fruit, chiefly apples, being badly blemished by this insect and rendered unfit for market. Growers will require to take extra precautions for the control of this pest by carefully spraying with arsenate of lead.

The Orchard Instructors report a continued improvement in the control of diseases in orchards generally. In a number of instances, however, some difficulty is now being experienced in securing suitable labour for carrying out such work as pruning and spraying. No doubt this will become more acute as the war goes on.

*Root-knot in Imported Fruit-trees.*

During the season a considerable amount of trouble was experienced by the officers of the Department and others concerned in connection with the importation of Australian fruit-trees. Despite the definite warning previously issued by the Department with respect to root-knot a large proportion of the season's imports was on examination found to be affected with the disease. Early in the year several consignments were condemned and reshipped, whilst others were destroyed. Later on condemnations were held over by the shippers pending an investigation. It was eventually decided, with a view of minimizing the loss to New Zealand planters, to allow the condemned consignments to be picked over and the non-affected trees to be passed.

*National Patriotic Apple Show.*

This show was held in the Town Hall, Wellington, from the 8th to 13th May inclusive. A very excellent collection of fruit and fruit products from all parts of the Dominion was tastefully displayed in the various courts. As a result of the judging the Nelson exhibit was placed first, Hawke's Bay second, and Canterbury third. The main object of the exhibition was to popularize the New-Zealand-grown apple and to bring under the notice of the public the importance to which the fruit industry has already reached, and its present and prospective value to the Dominion. The profits of the show were devoted to the patriotic funds in connection with the war.

*Registration of Nurseries.*

Regulations for the registration of all nurseries in the Dominion were gazetted in June, 1916. These require all occupiers of nurseries which come within the meaning of the regulations to apply for registration not later than the 1st day of April in each year. As a result 376 nurseries were registered during the year, representing the sum of £376 in fees. The inspection and registration of these nurseries has entailed a large amount of extra work both on the field and clerical staff of the Division. I am pleased to report that these regulations have been welcomed by the nurserymen as a whole, and in the majority of cases they are giving every assistance to facilitate the work generally.

*Orchard Registration and Orchard-tax.*

The work of registering all orchards from one tree upwards was undertaken during the year. It is estimated that one hundred thousand applications to register have been received, and the recording of this large number, together with the compiling of lists of occupiers in each Orchard Inspector's district, has been no small task. These lists will prove of great value in facilitating the orchard-inspection work.

Under the Orchard-tax Act which was passed last session all occupiers of orchards from which fruit is sold or intended to be sold are required to pay a tax each year calculated at the rate of 1s. per acre or part of an acre, with a minimum charge of 2s. 6d. Moneys received are paid over to the New Zealand Fruitgrowers' Federation (Limited), to be expended in the furtherance of the interests of the fruitgrowers of New Zealand. Some ten thousand tax-demand notices have been sent out from this office, and according to the figures supplied by the Postal Department, through which the tax is collected, the sum of £1,917 had been received up to the 31st March, 1917. The Act has been well received throughout the Dominion, orchardists recognizing that it is in the interests of the fruitgrowing industry generally.

*HORTICULTURAL STATIONS.*

The work at the horticultural stations at Te Kauwhata, Tauranga, and Arataki has been carried out under the careful supervision of the respective Managers. Several improvements and extensions have been dealt with during the year.

*Te Kauwhata.*

Shortage of suitable labour (over twenty permanent and temporary employees having joined the Forces), together with an exceptionally wet spring and summer, militated greatly against the efficient working of the station.

The fruit crop was a very light one, peaches being, with few exceptions, a complete failure. Owing to the wet and humid conditions fungoid diseases were very prevalent, especially on pears. On the other hand, the grape crop was a record one. Tests with different spraying-compounds