

CONTROL OF BROWN-ROT OF STONE-FRUITS.

THE PAST SEASON'S EXPERIMENTS.

THE brown-rot experiments conducted by the Department in the 1917-18 season, and published in the *Journal* for April and May, 1918, were continued on a more extended scale during the past season. A different phase of control was tested in four orchards in the Henderson District in co-operation with the local fruitgrowers' association. At Arataki Horticultural Station the experiments were again a prominent feature of the work. In Hawke's Bay, in addition to Arataki, trials were made in three private orchards, each of which was used to test a special point. Full reports on all these trials are published herewith. A further series of experiments was conducted by the Stoke Fruit-growers' Association in co-operation with the Department, but these tests were barely concluded at the time of writing.

Although there were no outstanding features in the results of the various tests which could be followed with assured success, the data obtained, nevertheless, have been very valuable. The weather was much kinder, and the losses from brown-rot, not only in the experimental orchards but in orchards generally, were much less than for the two or three previous seasons. The weather, coupled with the individual efforts of the majority of growers, no doubt contributed to the reduction of the disease.

Together with control in the orchard the Department is also investigating the development of brown-rot after the fruit is picked, packed, marketed, and up to the time that it is ripe enough for the retail trade. In Hawke's Bay this past season most of the fruit was traced from the experimental orchards through the auction-rooms to the retailer. Next season it is proposed to extend investigations and make a special feature at the Arataki Horticultural Station of noting the development of the disease after the fruit is picked. In this connection the use of new and second-hand cases will be tried, as well as picking the fruit from the same trees in various stages of ripeness. Experiments to ascertain the advisability of dipping or spraying the fruit after it is picked will also be continued. In these trials the fruit will be despatched to market and kept under supervision up to the time that it is ripe enough for the retail trade.—*T. W. Kirk, Director of the Horticulture Division.*

ARATAKI.

The following report on brown-rot experiments with peaches at the Arataki Horticultural Station is furnished by Mr. T. E. Rodda, Manager :—

The scheme on the peach section was slightly different from what was practised at this station last year. In this section a block of 336 trees was selected, comprising forty-eight rows of seven trees each. Every alternate tree in each row was pruned in the ordinary way. The