

Although half the crop was lost the original spraying programme was carried out. The third spraying of self-boiled lime-sulphur was not nearly so drastic on the foliage—in fact, it could be said that the little burning it did would cause little or no harm. A different brand of lime-sulphur solution was used for the third spraying with good results and no damage to foliage.

So far as brown-rot infection is concerned there was less in this orchard than in either of the other two. In fact, the manager informed me that he found altogether less than two dozen infected fruits. A couple of consignments were examined in the Wellington markets and opened up in good order. Unfortunately, the fruit was then lost sight of, and it was not again examined when it became ripe and fit for consumption.

THE HENDERSON TESTS.

Mr. J. W. Collard, Orchard Instructor, Auckland, supplies the following report on the work carried out at Henderson:—

The Henderson Fruitgrowers' Association, having expressed its willingness to again co-operate with the Department on similar lines to those followed the previous season, and several of the members having again placed their peach-orchards at the disposal of the Department for this purpose, it was decided to continue the tests on the same orchard blocks (with additional areas in each case) in which the operations were carried out last season—namely, those of Mr. F. G. Platt, Mr. Thomas Colebrook, and Dr. Makgill (an extra block being secured in this orchard). The tests were divided into four groups, and were carried out in separate orchards.

THE MAIN EXPERIMENTS.

As was the case last season, the blocks selected for the carrying-out of the tests were such that as many varieties as possible could be brought under the same test in one block, having regard for the condition of the trees and general suitability. The conducting of these experiments on the same trees as in the previous season, although on extended areas, in itself constituted an additional test. In orchard No. 1 the sprayings were so arranged that rows of trees receiving summer application crossed those which were dressed with copper sulphate (1-20) in May, thus providing further tests.

The work in all the orchards was duly carried out according to the plan laid down, with the exception of some slight delay in the application of the fruit-set sprays on two of the blocks, owing to the prevailing influenza epidemic. This, however, cannot be considered as having made any material difference to the results obtained.

The sprays used in autumn and early spring were copper sulphate, 1-20, and bordeaux, 8-6-40, respectively; and in summer bordeaux, 2-3-40 and 3-4-40, commercial lime-sulphur, 1-125 and 1-120, and self-boiled lime-sulphur, 8-8-50. Atomic sulphur was not used, this spray having been substituted by self-boiled lime-sulphur, which had not hitherto been employed to any extent in the Auckland District, and consequently the results from its use have been eagerly watched by orchardists.