

enabled fungoid and insect pests to be easily kept in check. In the vineyard a splendid crop of grapes was harvested in first-class condition. The fruit-trees on the fruit-farms have made good headway, the apples setting a very fair crop. All the shelter-belts have made good growth.

The 40 acres sown in oats yielded a heavy crop, averaging 2 tons 5 cwt. to the acre. A small area of early potatoes produced a good crop free from blight. The main crop was also satisfactory, there being no signs of disease. The lucerne plot (autumn sown) is still holding well. Two cuttings were harvested, and a third growth was fed off. On account of the shortage of labour no bark was stripped in the wattle plantation.

An excellent demand still continues for wines manufactured at the station. The following are particulars of wines sold during the year: Frontignac, 5,473 gallons, value £4,651 18s.; Madeira, 1,017 gallons, value £876 2s.; Claret, 539 gallons, value £377 10s.; Hock, 333 gallons, value £242 16s.; unfermented, 20 gallons, value £18 0s.: total, 7,382 gallons; value £6,166 6s.

Arataki (Hawke's Bay).

Another very dry season has been experienced, and as a result plant-growth was very disappointing. Pastures commenced to burn up in the early part of December, and by the middle of the month not a green blade was to be seen. Absence of frosts in the early spring enabled stone-fruits, with the exception of apricots, to set well. Plums developed fairly satisfactorily and yielded average crops. Many of the varieties of peaches, however, were very much undersized, notwithstanding that they had been properly thinned and the soil well cultivated. This was no doubt largely due to the hot dry winds experienced, which similarly affected both apples and pears. The whole of the bearing trees in the apple, peach, and pear sections were used for various spraying experiments, which constitute a feature of the work carried out at this station. The dry weather, however, suited the grape-vines, the yield of fruit being the best that has been produced for some years. Many of the varieties that failed to reach maturity in previous seasons ripened satisfactorily this year. Owing to the unsuitable growing-weather many of the resistant-stock cuttings and grafted vines failed to strike, and there were barely sufficient to fill the orders booked. In the vegetable-garden the early-sown varieties matured fairly well, but the majority of those planted later were practically a failure. Tomato-plants, although not attaining any great size, yielded a fair crop. Plants in the herb-garden, with the exception of foxglove, made very little progress, owing to lack of sufficient moisture. The latter has made moderate growth and gives promise of yielding a fair crop next year provided weather conditions are favourable.

Some 778 persons, seeking information and advice in the various branches of fruitgrowing, visited the station during the year. Two field-days were held under the auspices of the Hawke's Bay Fruitgrowers' Association; both meetings were well attended.

Tauranga (Bay of Plenty).

The past season has probably been one of the best experienced in the Tauranga district as far as growth is concerned, the weather conditions being all that could be desired. The apple crop, where not affected to any extent by fireblight disease, was very satisfactory. Unfortunately, this portion of the orchard suffered severely from the ravages of fireblight, and considerable work was entailed cutting out infected wood throughout the season. The trees in the test orchard have made good growth; several of them developed the disease, but the infected wood was immediately removed, and so far little damage has resulted in this area. Considerable interest is still being manifested in the citrus-testing plot, the results obtained in which have been taken full advantage of by a large number of new settlers and visitors to the district desirous of information on lemon-growing, for which the locality seems well adapted. All varieties of lemons have made vigorous growth, and the older trees are commencing to bear heavily. The avocado or alligator pears are growing well, and withstanding frosts; seeds received from the Cook Islands are now germinating in the glasshouse. Pomegranates flowered freely, but so far have set no fruit. In the nursery a large number of seedling stocks are now under way—principally sweet orange and rough lemon. The sour stocks received from California have all commenced growth, but will not be vigorous enough for budding for another season. Comprehensive tests with different varieties of tomatoes have been conducted, and trials continued with maize, kumaras, and sugar-beets. Spray-testing for control of orchard diseases has been carried out during the year. Some five thousand forest-trees were planted on the rough slopes, and a portion of the swamp cleared and drained.

PAPANUI EXPERIMENTAL ORCHARD, CHRISTCHURCH.

When taken over two years ago the trees in this orchard were old and considerably neglected. The objects the Department had in view were: (1) To demonstrate that pests and diseases of fruit-trees could be successfully controlled by the spraying-compounds recommended by the Department for the purpose; (2) to test new spraying-compounds; and (3) to try out theories in reference to the control of orchard pests and diseases. The results obtained have been most successful, both from the viewpoint of the Department and that of the fruitgrower, the present highly improved condition of the orchard serving as a valuable object-lesson of what can be done by adopting correct and up-to-date methods. The orchard has proved of very great value to orchardists in the district, and there is a constantly increasing number of visitors interested in the work. Two very successful field-days were held, there being a very good attendance on each occasion.

AVONHEAD TRAINING-FARM.

The fruit-trees planted out on this area have made fair growth and are free from disease. Of the berry fruits, loganberries and currants have succeeded best; gooseberries have suffered from