

HORTICULTURE DIVISION.

REPORT OF J. A. CAMPBELL, DIRECTOR.

THE FRUITGROWING INDUSTRY.

Generally speaking the year just closed has been a satisfactory one to the fruitgrower. The crop of pip-fruit (apples and pears) was a fair average one. Damage by hail-storms, which were experienced in a number of commercial fruitgrowing districts, reduced the quantity of fruit suitable for export. The stone-fruit crop was on the light side, but the satisfactory prices realized for this class of fruit made up for the short supply. In portions of the Otago Central district, which produces stone fruit of high quality, considerable damage was done to the apricot and cherry crops by a blizzard in the early part of the season.

A steady increase is taking place in the area planted in citrus trees, particularly lemons, and satisfactory crops of good-quality fruit are being obtained. In the Tauranga district, which is well adapted to citrus culture, it is estimated there are approximately 160 acres planted in lemon-orchards.

The tomato season was a successful one. In the Nelson district frosts in the early part of the season caused heavy losses in young plants, both under glass and outdoor. Replanting, however, was undertaken, and the production was much better than anticipated, most growers receiving satisfactory returns. A considerable increase in glasshouses for tomato-culture is noticeable throughout the Dominion.

Small fruits, such as strawberries, raspberries, and gooseberries, have given good returns, heavy crops being harvested in some localities.

In the majority of commercial orchards, where proper measures were taken, the bulk of orchard pests and diseases were kept well under control. There are still, however, a number of growers who neglect to keep their trees clean, and it was found necessary to take proceedings against some of these in different districts during the year.

The cool weather conditions did not favour the development of black-spot disease.

Brown-rot, bronze beetle, red mite, and leaf-roller caterpillar were fairly conspicuous in a number of localities.

Pear-midge continues to be a troublesome pest, more especially in the northern districts, doing considerable damage to the young shoots, and thereby causing loss of fruit. The experimental work carried out by officers of the Division in co-operation with the Biological Laboratory for the control of this pest has not yet produced any satisfactory results.

Although fireblight disease has been less virulent in the infected areas, it has made its appearance in the Manawatu, Wairarapa, and Hawke's Bay districts, and the question of gazetted the whole of the North Island a fireblight area is at present under consideration. Energetic measures are being taken to keep the disease under control, and fruitgrowers generally are co-operating with the Department in this direction.

Reports to hand indicate that good work continues to be done by the *Aphelinus mali*—the natural enemy of the woolly aphis—some orchards being kept entirely free of this pest by the ladybird. Many requests for parasitized insects were received from various parts of the Dominion, and the necessary material has been supplied.

The total area in commercial orchards for the whole of the Dominion stands at approximately 30,000 acres. During the last planting season some 264 acres were planted, the largest extensions being in the Hastings and Motueka districts.

A considerable area of neglected and abandoned orchards was cut out during the year, particularly in the Nelson district, thus removing a serious menace to clean orchards in the vicinity.

Fruitgrowers generally are adopting up-to-date orchard appliances in the way of power sprayers, tractors, mechanical fruit-graders, and other packing-shed equipment to facilitate the handling of fruit.

The installation of stationary spraying plants is also receiving attention, several of these having now been installed, and are reported to be giving satisfactory service. One of the main advantages of the stationary outfit is that spraying can be carried out immediately after rain, whereas with the ordinary horse-drawn vehicle it is frequently necessary for two or three days to elapse before the land is in a suitable condition for haulage purposes.

EXPORT OF FRUIT.

The 1926 export season was a record one since the inauguration of the fruit-export trade. As the result of a bountiful harvest a total of 730,308 cases of fruit were exported, which was over three times the quantity exported during the previous season. Of this total, 656,611 cases of apples and 9,410 cases of pears were shipped to Great Britain; 61,185 cases apples to South America; 2,619 cases apples to Honolulu; 444 cases apples and 39 cases pears to the Pacific islands. The bulk of the fruit was exported under the Government guarantee of 1d. per pound net return to the grower. While the majority of the shipments arrived in good condition, the market at Home was unfortunately considerably affected by the coal strike. This, in conjunction with the arsenic scare, was largely