

HORTICULTURE DIVISION.

REPORT OF J. A. CAMPBELL, DIRECTOR.

THE FRUITGROWING INDUSTRY.

From a horticultural point of view the year just closed has been a very satisfactory one. In many districts the climatic conditions were somewhat unusual, excessive wet weather being experienced during the autumn and winter months, followed by a dry warm spell during the spring and summer, which was favourable to the development of the crops. As a result, heavy crops of pip-fruits, especially apples, were harvested, while the return of stone-fruits was above the average. Owing to the continued dry weather, some varieties were lacking in colour, more particularly Jonathans and Delicious. In the Marlborough and Motueka districts a hailstorm caused serious damage to the apple crop, and considerably reduced the quantity available for export.

The crops of small fruits, such as strawberries, raspberries, and gooseberries, were fair average ones, the same applying to outdoor-grown tomatoes, with one or two exceptions.

Citrus-culture is receiving increased attention, satisfactory crops of lemons being obtained from the orchards already in bearing. An up-to-date lemon curing and packing shed has been established at Tauranga by the local Citrus-growers' Association.

There was no serious outbreak of orchard diseases during the year, and the majority of ordinary diseases and pests were kept under control where proper precautions were taken to combat them. There is still, however, room for improvement in this connection, more especially in the case of small orchards.

Investigations are being carried out as to the cause of "cracking" in apples, more especially in the Dunn's variety, which trouble has been prevalent in the Nelson central district during the last few seasons, and it is anticipated a solution of the trouble will be arrived at before long.

Owing to the further spread of fireblight disease, the whole of the North Island has been gazetted a fireblight area. Every precaution is being taken to confine the disease to the affected areas by the cutting-out of hold-over cankers, and the destruction of hawthorn hedges in those districts coming within the Third Schedule of the Fireblight Regulations.

In some localities red mite and bronze beetle have been troublesome, also leaf-hopper, mealy bug, and leaf-roller caterpillar. Black-spot and brown-rot diseases have not been so prevalent as in former seasons. The breeding of the natural enemy of the pear-midge is still receiving attention in the Biological Laboratory. Effective work is still being done by the *Aphelinus mali*, the natural enemy of the woolly aphis, this pest having been entirely eradicated in some localities by the operations of the *Aphelinus*. Experimental work is still being carried out for the control of earwigs, which are causing considerable damage to both fruit and vegetables, especially in the southern districts. The use of baits and hedgehogs is being tried, but it is doubtful if anything less than a natural enemy of this pest will give anything like satisfactory results.

Some 216 acres were planted in commercial orchards during the last planting season. The total area under commercial orchards for the whole of the Dominion now stands at approximately 30,000 acres. A number of old and neglected orchards were cut out during the year.

The use of stationary spraying outfits in lieu of portable power-pumps is now becoming generally recognized, and the former are a feature in a large number of commercial orchards in different districts throughout the Dominion. These stationary plants are especially applicable to hilly country, where the task of hauling heavy tanks of liquid spray, especially after wet weather, is exceedingly arduous.

The demand for information and advice on the many phases connected with horticulture generally has been very considerable, and every endeavour has been made to supply as full particulars as possible in connection with the varied requests.

EXPORT OF FRUIT.

During the 1927 export season a total of 544,233 cases of fruit were exported overseas. Of this total, 448,401 cases of apples and 22,075 cases of pears were shipped to Great Britain, 67,448 cases apples to South America, 5,360 cases apples to Honolulu, and 799 cases apples to Canada. The prices realized were very satisfactory, and there was very little call on the Government guarantee.

The guarantee has been renewed to cover shipments of both apples and pears made during the 1928 season, the grower being guaranteed a gross market price of 11s. per case for fruit of "extra fancy" and "fancy" grades, and 7s. per case for "good" grade. In regard to South American markets, the gross price is considered to be the c.i.f. price, plus 1s. 6d. per case selling-charges.

Owing to the prolific crops, it is expected that the number of cases exported during the 1928 season will be over the million mark, which will be an outstanding event in the history of fruit-export from the Dominion.

The Canadian fruit-export case, which has been adopted as the standard export case, is giving universal satisfaction, and the packing, generally speaking, is being carried out in a satisfactory manner.

During the year Mr. H. E. Stephens was appointed representative of the New Zealand Fruit-export Control Board in England, *vice* Colonel Gray, who has returned to New Zealand. Mr. Stephens is ably carrying out the work connected with the distribution, &c., of New Zealand fruit on the Home markets.