## DIVISION OF HORTICULTURE.

## REPORT OF W. K. DALLAS, DIRECTOR.

THE FRUITGROWING INDUSTRY.

Although orchard operations during the 1938-39 season were somewhat hampered by the changeable weather experienced during the spring months, growers as a whole were able to carry out the necessary spraying and general orchard routine work.

Early in the season good crops of both pip and stone fruits were indicated in most of the commercial growing areas. Unfortunately, in Hawke's Bay high winds, which reached gale force during November, December, and January, materially reduced the crop in that district. Drought conditions which have prevailed throughout the Dominion since the beginning of January also seriously affected what otherwise would have been a heavy crop of both apples and pears through the failure of the fruit to size up properly, thus rendering a considerable quantity unsuitable for export purposes.

A redeeming feature, however, is that the dry conditions have resulted in the fruit being of very firm texture, and it should hold well both in cool storage and under ordinary storage conditions.

The stone-fruit crop was a particularly good one, especially in Central Otago, where heavy yields were secured.

Small fruits were very disappointing, owing, chiefly, to unfavourable weather, and the supply of both raspberries and strawberries to the factories was greatly reduced.

There was a considerable increase in the area under tomatoes. The crop was, however, slow in reaching maturity, due to cold and windy conditions prevailing. The presence of virus disease caused fairly large losses in some of the commercial growing districts.

Reports to hand indicate that the major orchard diseases and pests were kept satisfactorily under control. The continued dry weather was favourable to the development of codling-moth, leaf-roller caterpillar, bronze beetle, and apple leaf-hopper, and necessitated extra precautions being taken on the part of the grower to keep these pests in check. Dicky-rice weevil has been causing some concern to citrus-growers in the Avondale district, Auckland. A survey of the affected area has been made, and steps taken with the view of keeping this pest within bounds.

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Fireblight has not caused any commercial loss during the year, any infections having been promptly dealt with.

At Coal Creek, near Roxburgh, Central Otago, a serious amount of damage was caused to a number of stone-fruit orchards by a heavy cloudburst in November, the rush of water uprooting trees and leaving an accumulation of boulders and other debris. Government assistance was promptly made available to the growers affected, and men were engaged clearing away the rocks, &c., and otherwise restoring the damage as far at is was considered economical to do so.

Growers generally are maintaining their orchards in reasonably good order. Equipment used both outside and in packing-sheds is up to date, and very few growers now lack first-class equipment. The general trend in spraying-equipment is to provide pumps of greater capacity and to improve the reticulation of orchard areas by using large-capacity pipes. The gradual change is tending towards greater efficiency in every direction and improved disease-control.

In general orchard-management growers are efficient and up to date, but could with advantage, as a general rule, devote more attention to a detailed thinning of the fruit crop. The lack of detailed thinning is evidenced in misshapen fruit, the greater range in sizes, and much of the undersized fruit which is harvested.

The season just ended has been a record one for citrus production, especially lemons. The monetary return to many growers has, however, been disappointing, and at times even fell below the cost of production. In these circumstances there was a tendency to allow large quantities of fruit to remain too long on the trees, and, when ultimately harvested, the keeping-quality had been greatly impaired and considerable loss incurred through internal breakdown and fungal rots.

The marketing of citrus fruit has been receiving the serious consideration of the Government for some time past, and the Internal Marketing Division will, as from the 1st May, 1939, purchase all lemons intended for commercial sale throughout the Dominion at a price determined from time to time by the Department.

Figures compiled from the orchard-registration cards indicate that the total area under citrus fruits is approximately 2,000 acres, comprising 1,200 acres lemons, 450 acres sweet oranges, 320 acres New Zealand grapefruit, and 100 acres other citrus.

The estimated production for the past season from commercial orchards was 144,000 cases lemons, 10,000 cases sweet oranges, and 40,000 cases New Zealand grapefruit (Poorman orange).

An ex gratia payment has been made to those growers at Kerikeri who suffered loss through the outbreak of citrus canker in their orchards last year, and appreciation was expressed for the Government's action in this regard.

A slight outbreak of citrus canker also occurred in January last in the Tauranga district. Prompt steps were, however, taken for the control of the disease, and no further outbreak has been reported.

Investigations recently made show that in the last few years a considerable decrease has taken place in the area in commercial orchards. The principal contributory causes have been neglect, unprofitable orchards, unsuitable localities, and uneconomic varieties.

The total area of pip, stone, and citrus orchards for the whole of the Dominion now stands at approximately 21,000 acres.