

The interests of fruitgrowers and others have also been further considered by the giving of public lectures and demonstrations in the different fruitgrowing districts, and in the conducting of classes in fruit grading and packing. The majority of growers are anxious to adopt up-to-date methods of orchard-management, and the opportunities thus given to increase their knowledge are, as a rule, taken full advantage of.

Research work in connection with the various problems affecting fruitgrowing has been continued during the year. The manurial and root-stock experiments are now nearing a stage when the data obtained should provide some useful information. This work is carried out in co-operation with the Department of Scientific and Industrial Research.

Other experiments include fruit-tree pruning, control of leaf-roller caterpillar, use of tree-banding materials for earwig control on stone-fruits, tests with various spraying-compounds for the control of orchard diseases and pests, and orchard cover-crops.

The Division is also co-operating with the Cawthron Institute, Nelson, in the carrying-out of tests for the control of internal cork in stone-fruits in Central Otago.

#### VITICULTURE AND WINEMAKING.

The total area of vineyards in the Dominion is approximately 655 acres. With temperatures above normal in the spring, vines made an early start and set their fruit under favourable conditions. The early ripening period was very dry and cooler than is usual at that time of year, which resulted in late ripening. The latter part of the season was, however, warm and dry, the grapes profiting in sugar content and colour.

Outdoor table grapes—of which Albany Surprise is the main variety grown—yielded good crops, and met with a good demand at payable prices to the grower.

The season has been an exceptionally good one in regard to quantity, quality, and freedom from disease in both table and wine grapes, especially when compared with the past two seasons.

It is estimated the production of wine will be in the vicinity of 223,500 gallons, an increase of more than a third on last year's figures. As a result of the very favourable conditions, the wine produced should be superior in quality to that of recent years.

The bulk of the vineyards are kept in good order and condition, and reasonable steps are taken to control disease. The Vine and Wine Instructor has visited many vineyards during the year and has given advice and instruction to the owners relative to management of their vines for the control of disease, winemaking, &c. It is expected that a considerable improvement in the general management will eventuate.

The growing of grapes under glass still attracts considerable attention, and a gradual increase is taking place in the number of vineries erected. A good season has been experienced by growers of indoor grapes, and the market prices received are considered satisfactory.

#### CIDERMaking.

There has been an increase in the quantity of apples utilized for cidermaking, the output of cider for the year being estimated at 55,400 gallons, which indicates an increasing demand for this product.

#### THE KAUPHATA HORTICULTURAL STATION (LOWER WAIKATO).

Routine farming operations were carried out during the year—buildings and fences kept in repair and drains attended to.

The usual number of live-stock was kept on the Station for grazing purposes, sales of live-stock, wool, &c., amounting to £188 17s. 10d.

The dry weather conditions experienced during the late spring and summer months were very favourable to the growth and development of the grape crop, grape-growing and winemaking being the main activities carried out at the station.

The grapes, although late in ripening, were harvested in good condition, being practically free from grey rot (*Botrytis cinerea*), which causes considerable loss in moist seasons. Although rather early to give exact figures as to the vintage, it is estimated that approximately 19,000 gallons of wine will be produced.

The wines produced at the Station are increasing in popularity with the general public, a total of 12,512 gallons having been sold during the year, which realized £9,029. This represents some 2,000 gallons in excess of the previous year's transactions.

Considerable quantities of rooted vines and vine cuttings were disposed of during July and August in response to numerous orders received.

The financial position of the Station is satisfactory, receipts exceeding the general working-expenses by some £2,450.

#### TOBACCO-CULTURE.

The total area planted in tobacco commercially during the 1938–39 season was approximately 2,130 acres, the bulk of the area being in the Nelson District (Motueka). Of this total, some 75 acres were planted at the Pongakawa tree-planting settlement, Bay of Plenty, which is under the control of the Forestry Department. The tobacco-plants in the Nelson and Bay of Plenty districts have been adversely affected by the weather conditions experienced during the growing period, and it is anticipated the harvested crop will be considerably below the average.