

apples and 300 packages pears to South America; 10,921 cases apples to Canada; and 7,808 cases apples to Honolulu and Pacific islands. The prices realized were, generally speaking, considered to be satisfactory, and very little call was made on the Government guarantee.

The following figures show the total quantities of fruit exported from the Dominion during the last five years: 1924, 243,429 cases; 1925, 236,870 cases; 1926, 730,308 cases; 1927, 544,233 cases; 1928, 1,026,986 cases.

The Government has again renewed the guarantee on apples and pears exported during the 1929 season, the grower being guaranteed a gross market price of 11s. per case for "Extra Fancy" and "Fancy" grades, and 7s. for "Good" grade.

It is anticipated some 900,000 cases of apples and 50,000 cases of pears will be exported during the 1929 season.

LOCAL MARKETS FOR FRUIT AND VEGETABLES.

The inspection of locally-grown fruit, vegetables, &c., at the main marketing centres received regular attention during the year. The markets have been well supplied, and satisfactory prices received by the growers for all stuff of good quality.

Reports to hand indicate that as a whole the requirements of the regulations relating to the sale of New-Zealand-grown fruit for local consumption are being satisfactorily complied with. Diseased lines are now only occasionally met with, growers realizing that it does not pay to place such fruit on the market. Although it was again found necessary to take proceedings in the earlier part of the year against a few growers for "topping" consignments of vegetables forwarded to the auction-rooms for sale, this practice of defrauding the public by placing good specimens at the top of a package and inferior stuff below has become much less frequent. The action taken by the Department in this matter has no doubt had a salutary effect.

FRUIT COOL STORAGE.

As a result of a prolific harvest the cool-storage accommodation of the various stores established in the chief commercial fruitgrowing centres was fully taxed. The bulk of cool-stored fruit opened up in good condition, very little evidence being found of flesh-collapse in apples—an affection developed under cool-storage conditions, and which has caused considerable loss in the past.

Work of an experimental nature in connection with the cool storage of fruit, both on overseas boats and ashore, is being continued in conjunction with the Low Temperature Research Station, Cambridge, England, an officer of this Division being specially detailed to carry out the investigations. The carriage of fruit by rail within the Dominion is also receiving attention.

INSTRUCTIONAL AND EXPERIMENTAL WORK.

In addition to their other duties, practical demonstrations and lectures on matters relative to orchard management generally, pruning, spraying, &c., have been continued during the winter months by the Orchard Instructors in their respective districts. Considerable interest is taken in these matters by fruitgrowers and others, the demonstrations as a rule being well attended.

In addition, apple-grading and packing classes have been conducted in the main commercial centres in co-operation with the fruitgrowers' associations, and have afforded a number of candidates the opportunity of gaining the Department's certificate of competency in these subjects.

Experimental work of a miscellaneous character has been continued in the field. Some of the main features are: Tests with various fruit-tree stocks, including pip, stone, and citrus fruits, a matter of vital concern to commercial fruitgrowers; control of the more troublesome diseases affecting fruit-trees; trying out of new proprietary spraying-compounds; control of the earwig pest, which is becoming a serious menace to the stone-fruit grower and others, particularly in the Otago Central district; orchard manurial trials for the purpose of increasing production; introduction of suitable species of mulberry for the raising of silkworms, and tests with olive-trees in the Nelson District; growing of subtropical fruits, such as avocados and persimmons.

The establishment of the tung-oil tree in New Zealand is also receiving attention. A quantity of seed has been received, and arrangements made for the raising of plants in the Auckland District, where it is considered the trees should do well on the gum-lands of the North. The oil is in demand by the paint and varnish trade, and as supplies from China are limited and irregular it is desired to have a more reliable source of supply.

VITICULTURE AND WINEMAKING.

The growing of outdoor grapes is carried on to a considerable extent in the warmer portions of the North Island. In the Hawke's Bay and Poverty Bay districts the crop of wine grapes was considerably reduced by late frosts, hail, and the effects of downy-mildew disease. Good average crops were secured in other localities where the climatic conditions were more favourable. The returns from outdoor-grown table grapes were satisfactory, the Albany Surprise variety in particular yielding heavy crops, and good prices were realized by the growers.

The estimated yield of outdoor table grapes is 791 tons, which at 6d. per pound represents a value of £44,296. An approximate estimate of the quantity of wine produced from the year's vintage is 80,000 gallons, which at a conservative estimate is valued at £32,000.

A number of new varieties of grape-vines were recently imported by the Department for testing out under New Zealand conditions, and a further consignment is expected to arrive at an early date.

An increase is noticeable in the number of vineries in the Dominion, the extension taking place in the vicinity of the larger towns, where there is a ready demand for hothouse-grown grapes at payable prices to the grower. The value of the grapes produced under glass is estimated at £75,450.