LOCAL MARKETS.

The inspection of New-Zealand-grown fruit on the local markets was carried out during the year. There was again a tendency to flood the main markets with low-grade fruit, thereby affecting the prices received for fruit of high-grade quality. Both fruit and vegetables have been in good supply, and the bulk clean and free from disease. Satisfactory prices were received by the grower for good-quality stuff.

The tendency to "topping" is still in evidence, this practice applying more to growers of vegetables, who deceive the purchaser by placing good specimens of the particular class of vegetable at top of package, the bulk below consisting mainly of inferior rubbish. It was found necessary to take proceedings in a number of instances for breaches of the regulations governing this matter.

INSTRUCTIONAL AND EXPERIMENTAL WORK.

Full advantage is taken by growers and others of the opportunities existing of obtaining advice and practical instruction in all phases connected with fruitgrowing, &c., and the officers attached to the Division are ever ready to impart such information in the course of their official duties. In this connection lectures and demonstrations are given by the Instructors in the various districts, and advantage is also taken of delivering radio broadcast addresses on suitable subjects.

A good deal of the improvement that has taken place in the grading and packing of fruit is due to the classes on these subjects, which are conducted by the Orchard Instructors in the main commercial centres during the winter months in co-operation with the fruitgrowers' associations. The opportunity of obtaining the departmental certificate of competency in apple grading and packing is fully appreciated by those attending the classes. The same applies to the examinations held for the certificate in orchard pruning and spraying.

The carrying-out of tests with various fruit-tree stocks, a matter which is of vital concern to commercial fruitgrowers, is at present receiving attention. The important apricot and cherry crops of Central Otago are growing on sundry and unknown stocks, many of them being unsatisfactory. With a view to obtaining more definite knowledge and ascertaining the best stocks for these trees under the special local conditions, all reputable stocks are being tested for purposes of comparison. The lemon and orange groves of the Auckland Province are in a somewhat similar position, stocks suitable in other countries being not always suitable for New Zealand conditions.

A request was received from Italian settlers in Nelson for assistance in introducing suitable species of mulberry for the raising of silkworms. As these people are accustomed to the work, and it being a profitable domestic side-line to fruit and tobacco raising, the request was acceded to, as it is possible other settlers also may find it a useful occupation in a suitable climate.

Serious losses to the important stone-fruit crop of Central Otago are experienced periodically by growers through late-spring frosts. At the request of the local Fruitgrowers' Association, the Department imported special oil-burners and other apparatus, and demonstrated methods of frost-fighting during the past season. Valuable technical assistance was rendered by Dr. Kidson, Government Meteorologist. The growers concerned now have a good knowledge of the methods, costs, and possibilities of frost-prevention under local conditions.

Experiments were also conducted for the control of the more troublesome diseases affecting fruit-trees. Of special note is that for the control of brown-rot-fungus disease in stone-fruit in the Auckland District, where the average orehard has lost from 40 per cent. to 60 per cent. of fruit through attacks of this disease. As a result of this experiment less than 1 per cent. loss was experienced. The tests for the control of the so-called "mystery" disease of strawberries in the same district have so far given no definite results, and are being continued.

Experiments are being carried out in the Otago and Auckland Districts to ascertain essentials required to increase production and eliminate poor-quality fruit. By these means it is hoped to increase the production per acre, lower production-costs, and have more first-grade fruit available for local and overseas markets.

Several new proprietary spraying-compounds were submitted for official testing, and are receiving attention.

FRUIT COOL STORAGE.

Further successful work has been carried out in the fruit cool stores for the control of flesh-collapse and for the elimination of waste. In association with the Department of Scientific and Industrial Research and the Low-temperature Research Station of Cambridge, England, investigations are being made in the carriage of fruit overseas.

VITICULTURE AND WINE-MAKING.

The area planted in vincyards is steadily increasing, there being now some 320 acres under vines throughout the Dominion. Although the past season was not altogether favourable to grape-production, the results obtained were better than those of the previous year, when the crop was a very light one. Owing to different weather conditions, the grape crop varied in some districts. In the Auckland District an unusually dry period during the growing season considerably reduced the crop of the Albany Surprise variety, but other varieties profited by the absence of fungoid disease, with the result that the crop was a very sound one, and the wine produced should prove of excellent quality when matured. Different conditions prevailed in the Hawke's Bay District, where prolonged wet weather during the ripening period caused considerable loss. The quantity of wine produced from the year's vintage is estimated at 76,000 gallons, which at a conservative estimate is valued at £30,400.