9 H.—29.

## FRUITGROWING.

The area in commercial orchards in the Dominion remains practically stationary at about 27,000 acres, of which 11,700 are in the North Island and 15,400 in the South Island; any planting of new areas is largely offset by other established areas becoming unprofitable and going out of production.

The conditions prevailing generally in the 1935-36 season were not at all favourable for orcharding. Considerable damage was done by gales in February, and, further, largely because of weather conditions, the amount of disease and of russetting was greater than usual. Despite the unfavourable conditions the quantity of fruit exported was greater than in the previous season, being 1,228,286 cases—1,115,320 cases of apples and 112,966 cases of pears—in comparison with 1,063,420 cases in the previous year, in which the quantity was the lowest since 1929. The total quantities in cases of apples and pears exported during the previous four years were: 1932, 1,596,058; 1933, 1,430,513; 1934, 1,574,912; 1935, 1,063,420. Throughout the season the fruit exported was in excellent condition. In general the handling of the fruit at the ship's side was as satisfactory as can be expected under the conditions obtaining. The local carriers of fruit—the shipping company and the Railway Department—gave good service. Although some modern vessels have been engaged upon the export fruit-trade, the majority of the ships used were of an old type in which improved equipment for fruit carriage would be of value. Of the 1936 exports 818,973 cases went to London, 191,736 cases to the West Coast of Britain, 61,659 cases to Southampton, 55,624 cases to Halifax, 30,000 cases to South America, 62,000 cases to the Continent of Europe, and 7,790 cases to the East. The Government assists in the export of fruit; its liability does not exceed £12,500 for each year, and Government assistance is to cease with the 1937 payment.

Citrus culture is making satisfactory headway, especially in the northern districts which are suitable for the production of citrus fruits. The total area now planted in citrus fruit-trees is 1,884 acres, consisting of 1,300 acres of lemons and 584 acres of oranges; 112 acres were planted during the year. Good, seasonable crops of lemons were secured. While appreciable improvement in the grade and keeping-quality of the fruit took place there remains room for further improvement. Growers are showing a keen interest in this and a desire to improve their knowledge. Regulations relative to the grading and packing of citrus fruit were brought into force in December, 1935, and growers are satisfactorily endeavouring to meet the position. The New Zealand grape-fruit (Poorman orange) is coming into favour rapidly as a breakfast fruit, and plantings are being made to meet the demand. Various phases of citrus growing have been investigated and further investigation is contemplated. The co-operative grading and packing shed at Kerikeri is nearing completion, and this should be of great value to citrus growers in that district, where the citrus industry is of considerable size.

Passion-fruit culture which received considerable attention a few years ago has not made any progress during the past year. There is evidence of increasing demand for New Zealand wines and of expansion in vineyards. The season was unsatisfactory because of the weather generally, and particularly the February storm, and it is considered the season's wine-production will not exceed 100,000 gallons in comparison with 148,000 gallons in the previous season.

Many demands have been made upon the Department for advice regarding orcharding, and as a means of ensuring that such demands for advice will be met in a fully satisfactory manner in the future, a considerable amount of investigational work is being undertaken; trials carried out during the year numbered seventy-five. An important series of the trials relates to the use of fertilizers and lime. The investigational work relates also to root-stocks, spraying, grafting, variety-tests, and fruit cold-storage. Especial attention has been given to cold storage, because of its importance in orcharding, and the work has included experiments carried out in conjunction with the Department of Scientific and Industrial Research. A portion of the work is now reaching finality and it is clear that some very useful information is being obtained. The work ranges over a wide field and deals with the influence of locality and soil types on the keeping-quality of apples, the influence of maturity on the incidence of bitter pit in Cox's Orange Pippin, the use of oil wraps in the control of scald, the influence of storage temperatures on internal breakdown, and the influence of methods of handling on overseas transport.

## OTHER BRANCHES OF PRIMARY INDUSTRY.

The markedly satisfactory status of the major sections of primary industry in respect to the quality and quantity of production is repeated in certain other branches of primary industry which, though not of particularly great current importance, in our national economy are, nevertheless, very useful parts of it or promise to become of major importance.