

STANDARDIZATION OF GRADES OF APPLES, PEARS, AND LEMONS

The standard grades operating are "Fancy," "Commercial," and "Minimum." The New-Zealand-grown Fruit Regulations 1940 have been amended to include extensions of allowances for small defects in "Commercial" and "Minimum" grades. These extensions are confined to the inclusion of sound, marketable fruit showing a greater percentage of certain defects than previously. The supplies of fruit needed for marketing to meet the local demand have been somewhat augmented by these concessions. It has also had the effect of making available for supply to the Armed Forces relatively larger quantities of apples.

FRUIT COOL STORAGE

Fruit cool storage space has been increased since 1936 from 840,700 bushel case capacity to 1,105,100 cases. This increase of 264,400 bushel cases has mostly been erected since the 1939 season to meet the need for additional storage arising from the temporary cessation of export shipments to Europe. The additional space has been provided by growers and public cool store companies. Increasing interest by cool store operators is being shown in obtaining even temperature and relative humidity control, which is provided by the direct expansion ceiling cooling system with the addition of forced convectional air circulation. Ventilation of the storage chambers is also being closely studied by grower proprietors with a view to obtaining some control of the carbon dioxide concentration in the storage atmosphere.

ORCHARD INSTRUCTION SERVICE

The increase in the other activities of the Division and staff shortage have somewhat curtailed instructional visits as far as the older-established orchardists were concerned to permit special attention being given to new growers, some of whom are rehabilitated ex-servicemen. Addresses and demonstrations have been given throughout the whole of the districts.

ORCHARD AND NURSERY INSPECTION

Although transport restrictions and shortage of staff hampered the work to no small extent, a considerable amount of inspection has been undertaken throughout the Dominion. All registered nurseries have been made the subject of at least one inspection per annum.

Both commercial and domestic orchards have received visits of inspection as frequently as circumstances permitted, work in connection with fireblight necessitating a great deal of attention. Citrus canker inspection was continued throughout the appropriate season.

The inspection of nurseries has shown that they are being kept in a satisfactory condition and free from disease.

Six hundred and forty-three nurseries were registered throughout the Dominion for the year, an increase of 43 compared with the previous year.

DISEASES OF HORTICULTURAL CROPS

The humid weather was conducive to fungous diseases, and in some districts effective control could not be maintained owing to rain, with consequent interruptions in spraying, and to shortage of manpower.

Black-spot.—The season in the Nelson, Manawatu, and Wairarapa districts has favoured the development of black-spot, which was more prevalent than in recent years in these areas. In other districts good control was obtained when growers were able to maintain their usual spray programmes.

Brown-rot.—The incidence of brown-rot generally was very severe this year. In Otago, although bad in some stone fruit orchards, it was much less in evidence than last year.

Bacterial Spot of Plums.—Bacterial spot of plums has shown a marked increase this season.

Fireblight.—Fireblight has reappeared this season in most districts. Shortage of labour has, no doubt, been responsible for growers being unable to attend to the cutting-out of carry-over cankers. Where the work of cutting out has been carried out effectively, as in Nelson and Alexandra districts, the infection has been considerably reduced.

Ripe-spot on Apples.—Spraying for ripe-spot on apples is becoming a general practice, and is having the effect of greatly reducing the incidence of this disease.

Codling-moth.—Generally, codling-moth has been more prevalent than usual this season. This would appear to be due to weather conditions preventing the full spraying programme being carried out or to delay in applying sprays.

White Butterfly and Diamond-back Moth.—Where plants have not been effectively treated, damage has been caused in vegetable gardens by the white butterfly and diamond-back moth. Growers are realizing the necessity for applying proper methods of control. With the easing of the war situation, an improvement in supplies of insecticides for control purposes is looked for.

Late Blight.—Late blight has severely affected potato crops this year, resulting in loss of crops and in many growers digging their potatoes earlier than usual to prevent the disease affecting the tubers.

Citrus Canker.—A close watch has been kept on citrus areas for canker infection, and the situation has shown improvement. No further outbreaks have occurred in the North Auckland (Kerikeri) orchards, and it has been possible to remove planting restrictions which had been imposed on certain orchards in that area. The position in the Tauranga district is being kept under close observation, and any recurrence of the disease is being promptly dealt with. Only a few individual diseased trees have been recorded.