

Concern about market prospects when the large number of trees planted in recent years come into full production is natural. Though many trees are replacements, there is little doubt that in normal seasons increasing quantities of fruit, especially peaches, will have to be disposed of. Japanese plums already tend to be in oversupply for short periods on the Auckland markets. To maintain payable prices much more attention will have to be paid to distribution, and possibly alternative outlets will be necessary. Short-term cool storage helps to avoid temporary gluts, but cannot alleviate a sustained oversupply. If suitable varieties were available, canners and jam manufacturers possibly could take more than they do at present; this is certainly the case with apricots. These factors will be taken into account in formulating any future recommendations made by this Division to intending planters.

With the exception of Auckland, stone-fruit districts suffered in varying degrees from late spring frosts. These may be regarded as normal in Central Otago, and more frost-fighting equipment has been bought in recent years. Many growers were caught unprepared by the exceptionally late frost of 9th November; a number had already collected their pots in preparation for cultivation. Cherries and early peaches appeared to suffer less damage than other kinds of fruit. Substantial reductions in crop and complete losses in some orchards were general in Canterbury, Nelson, Marlborough, and Hawke's Bay, where fewer growers have fire-pots.

Investigations are being carried out by the Fruit Research Station, Department of Scientific and Industrial Research, on critical temperatures for apricots at different stages. Further work will be done on improved types of fire-pots, present indications being that heating by oil is likely to be the most practicable method of protection for some time to come.

There is need for more weather forecasting for specific areas, rather than the general forecasts such as are available at present.

Localized hailstorms caused serious damage to stone-fruit in parts of Hawke's Bay. The most serious, in February, was responsible for the loss of about 25,000 bushel cases of late peaches.

In many districts warm summer weather caused fruit to mature ten to fifteen days earlier than usual.

*Stone-fruit Diseases.*—The major insect pests of stone-fruits during the past year were leaf-roller caterpillar, green and black aphid, and pear slug. The leaf roller appears to be increasing and in some districts is causing concern. Brown beetle (grass-grub) caused damage to foliage in Hawke's Bay and the Hamilton district, and red mite was common on stone-fruit in Hawke's Bay. Possibly increased insect infestation has been caused by seasonal conditions, but in many cases extra control measures will be necessary to deal with the carry-over to next season.

A species of capsid bug, as yet not identified, is believed to be the cause of damage to peach fruits in several Auckland orchards.

Silver-leaf disease is by far the greatest menace to stone-fruit orchards and is general throughout the Dominion, causing considerable tree mortality and reduction of crop in trees not killed outright. Once established in a tree, there is no certain means of eliminating it. The recommended method of prevention—the protection of all cut surfaces of any size—involves more labour than is normally available. There is urgent need for the development of a cheap, speedy, and reliable method of sealing pruning and other wounds. In some districts where there are areas of waste ground near orchards stumps of such trees as willow, poplar, and broom killed by silver leaf are a potential source of infection.

Brown rot continues to be a serious problem in northern orchards and also causes losses in the drier areas, the degree depending on seasonal conditions. Where orchard hygiene is strict and spraying is thorough losses are kept reasonably low. New fungicides so far tested by the Plant Diseases Division, Department of Scientific and Industrial Research, do not appear to offer an easy means of control.