

their vicinity. The matters of weakness, strength, and cultural methods generally apparently play no part in the case. In America as well as New Zealand strong trees and weak trees alike, under practically every known condition, are equally readily affected.

It is not suggested that these and similar channels of investigation should be ignored, despite the non-success attending similar efforts elsewhere, but possibly a considerable amount of time would be required for their operation. If one's house were on fire it would be folly to stop to consider the installation of a high-pressure water-service if other means of fire-fighting were available. In a manner of speaking our New Zealand orchards are on fire, a portion has already been destroyed, and if we wish to prevent a general conflagration we must energetically adopt the only known means of prevention available. The only effective means to hand for the control of fire-blight—which is the form of "fire" referred to—is to cut out and destroy all infected parts, and to do this cutting-out so effectually as to prevent the disease being carried over to the following season either on fruit-trees or any other plant. Anything short of this will mean that fire-blight will be always with us.

—*J. A. Campbell, Assistant Director of the Horticulture Division.*

AUCKLAND.

Fire-blight: Since writing the orchard notes for last month an unlooked-for development has taken place in regard to this dread disease. Further infection has taken place in the inner suburban area of Auckland, and in the outer suburbs on the western side, reaching in this direction as far as the very borders of large commercial areas. From the time the infection took place early last season at Te Papapa the Department has adopted a vigorous policy of inspection and destruction of infected trees where necessary, with a view to limiting the infection to a definite area. This work is now being helped on by the honorary inspectors working under the Auckland Provincial Central Fire-blight Committee in conjunction with the Department in the commercial areas. However, the domestic orchardist and the general public may greatly assist by immediately reporting to the Orchard Instructor for their district any suspicious symptoms which may appear in their orchards from time to time. In view of the fact that hawthorn is a means of carrying over the disease from one season to another, all persons residing in the commercial fruitgrowing areas are asked to cut out their hawthorn wherever possible, in order to increase the possibility of successfully dealing with the disease in those areas. There is no other known method of successfully dealing with this disease than cutting out infected parts, and destroying the same by burning.

General operations: The most important routine operations for the month are cultivation and spraying. Citrus-growers who have so far been unable to get bordeaux on to their lemons at the falling of the blossom-petals from the main spring-crop flowering should lose no time in applying this at 4-4-40 strength, and in cases where verrucosis or grey scab is bad this spray should be repeated after about four weeks have elapsed.

Spraying summary: Peach, nectarine and plum—commercial lime-sulphur 1-125, or self-boiled lime-sulphur 8-8-50, when the fruit begins to ripen, and further as circumstances demand. Pear, apple, and quince—commercial lime-sulphur 33° test, 1-100, in conjunction with arsenate of lead, paste 1½ lb. or powder ¾ lb. to 50 gallons, every twenty-one days. To this may be added, if necessary, Blackleaf 40 at the rate of 1-800 for control of woolly aphid. Lemon and orange—bordeaux, 4-4-40, when petals have fallen from the main-crop blossoms (if not already applied). The commercial lime-sulphur application should be continued on pip-fruits wherever black-spot is showing. In cases where black aphid of the peach is giving trouble McDougall's Insecticide, 1-50, should be used. A second application may also be necessary to effectually control this insect

—*J. W. Collard, Orchard Instructor, Auckland.*

HAWKE'S BAY.

A number of the various varieties will mature for picking in the immediate future, and care should be taken in the selection of fruits to pick. Immature fruits shrink badly soon after removal from the trees, while fruits allowed to remain on the tree to attain the maximum development and colour have a very short marketing-period, becoming overripe rapidly. Experiments have indicated that the best results can be obtained by picking only fruits which have a distinct