

[Sparrow

SPRING activities in the home orchard are discussed in this article by S. P. Money, Instructor in Horticulture, Department of Agriculture, Wellington. They include routine spraying, application of fertilisers, cultivation, and descriptions of some of the insect pests which may be troublesome during the year.

SPRAYING

THE spraying programme in the home orchard must be carefully carried out if crops are to be well protected. Efficient spraying equipment capable of applying the material to all parts of the tree is needed, and the sprays must be applied at the right time. Equipment which is satisfactory for young or small trees may be quite unsuitable for large bearing trees. Diseases and pests in home orchards are often worse at the tops of trees, nearly always because of inadequate spray equipment.

The extra cost of satisfactory equipment for bearing trees is soon recovered from the harvesting of crops of good fruit which would be badly damaged or lost if not sprayed properly. Most full-sized trees require at least a gallon of spray material for efficient protection. When there are more than seven or eight mature trees, especially if they include some of the more vigorous stone fruit varieties, it is well worth while to invest in a

knapsack sprayer, which of course can be used for the spraying of other crops. For large home orchards the purchase of one of the many small powered units now available should be considered.

The first sprays in spring should be applied at the earliest noticeable bud movement, which is shown by loosening of the bud scales and swelling of the buds. New tissue is exposed from beneath the scales and it is here that the leaf curl fungus of peaches and nectarines gains entry unless checked by a bordeaux spray cover. From this time on regular spray applications are essential to give continued complete cover to provide protection against various diseases and pests.

Care in the mixing of sprays is important. Serious damage can occur when the spray is too strong or when sprays are mixed indiscriminately. When proprietary brands of spray materials are used the manufacturers' directions printed on the labels should be followed carefully. Valuable pieces of equipment are a measuring glass

and small scales, which eliminate guesswork.

Protection of Bees

The movement of bees in the orchard at blossom time is essential for the setting of a crop. There are many natural factors which may interfere with this, such as prolonged cold, wet weather or strong winds over the blossoming period. Lack of bees may account for an absence of crop, especially when the failure is confined to one type of fruit which normally sets fruit satisfactorily and has blossoms at a different time from the rest of the orchard.

In the home orchard, where usually there is a variety of trees blossoming at different periods, there is a tendency to apply the petal-fall sprays at one time for convenience. Apart from the sprays being applied at the wrong time on some trees, the greatest danger lies in poisoning bees.

Applying insecticides to trees in full or part flower not only causes deaths among bees visiting the flowers, but among those in the hives to which infected material is carried. Many bees are killed in this way each year, and it is in the home orchardist's own interest to take particular care not to endanger insects which are so useful to him.