

may be found that the immediate centre is of a yellowish colour, and in this respect it is easily distinguishable from the other scale insects mentioned herein.

*Treatment.*—The above-mentioned scales are easily controlled by spraying with red-oil emulsion, 3 pints to 4 gallons of water, during the dormant season, preferably in July.

#### WOOLLY APHIS (AMERICAN BLIGHT).

This is an insect pest too well known to need much description. It attacks many varieties of apples, and is most destructive. Its appearance is easily noticeable—a white woolly substance forming on the parts of the tree attacked. Infestation generally commences on the young wood or at the base of a leaf-stalk—the insect penetrating the wood tissues and sucking the plant-juices therefrom, causing the formation of warty growths on the parts affected. The insect increases rapidly, and, being protected naturally by the woolly substance and also by the growths and crevices caused by its attack, it is very necessary in combating this pest by spraying that the compound used should be applied with considerable force in order that the insect may be well reached.

Spraying is recommended as follows: During the dormant season, with red oil at a strength of 3 pints in 4 gallons of water; and during summer months, with Black-leaf 40, four-fifths of a fluid ounce (3 teaspoonfuls) to 4 gallons of water, to which is added 2 oz. of paste arsenate of lead.

#### RED MITE.

This pest, like the scales, is a sucking-insect living on the plant-juices of the leaves during the summer, and harbouring during the winter months in crevices in the bark or under forks of the branches, &c., on apple and stone-fruit trees. The insect itself is very small, brick-red in colour, and increases very rapidly. When neglected, the affected leaves are distinguishable at a considerable distance by their sickly appearance, and eventually drop off.

On apple-trees the treatment during the winter is similar to that advocated for woolly aphis—namely, spraying with red-oil emulsion at a strength of 3 pints in 4 gallons of water. For stone-fruits use 2 pints of oil in 4 gallons of water.

#### FUNGUS BLIGHTS.

Fungus blights include black-spot on apples and pears and leaf-curl on peaches and nectarines.

*Black-spot (Apples).*—This fungus winters on the fallen leaves, and when conditions are suitable in early spring spores develop. These latter settle on the leaflets at the base of the cluster of buds (known as blossom-buds), where the spores germinate and in due course attack the fruits.

The first spraying is directed to prevent their germination and is applied when the pink of the blossom is showing. Bordeaux mixture has proved most satisfactory, and is used at the following strength: Bluestone (sulphate of copper), 8 oz.; lime, 6 oz.; water, 4 gallons (See instructions for preparation.)