

the orchard has little to recommend it, as it is not feasible to carry out this operation under adverse weather conditions.

#### SPRAYING.

Codlin-moth, leaf-roller caterpillar, and pear-slug will all be in evidence at this period, and trees should be sprayed with arsenate of lead—paste 1 lb., or powder  $\frac{1}{2}$  lb., to 30 gallons water. For powdery mildew on apples use atomic or atomized sulphur, 8-100; for black-spot on apples and pears, lime-sulphur, 1-125, or bordeaux, 3-4-50. It is a great mistake to think that one or two sprayings are sufficient to control these pests and diseases. It is necessary to repeat the applications well on into the autumn. Woolly aphis will now be working freely, and the trees should receive a dressing of Black Leaf 40, 1 pint to 100 gallons water, plus 3 lb. soap, the application being repeated in two weeks if necessary.

Where bud-weevil is troublesome in raspberries they should be sprayed immediately after the fruit is packed, using arsenate of lead, 2 oz. to 4 gallons water. This pest does considerable damage by eating out the buds from the new canes.

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#### CITRUS-CULTURE.

Phenomenal blossoming has taken place in most orange-groves and in the majority of lemon-orchards. The blossoming, however, is rather later than usual this season, doubtless owing to the wet weather experienced. Growers will therefore have to time their bordeaux application for the control of fungoid diseases accordingly, bearing in mind that the most opportune time to make the necessary application is when the majority of the blossoms have dropped from the petals. It can be anticipated that the humid conditions existing at the present time may cause such disease to give slightly more trouble than is usually the case, and, that being so, it may be necessary to make a second application of bordeaux, 4-4-40, which should be carried out some three weeks to a month after the first.

Thrip has been rather troublesome in some lemon-groves, and recently it is noticeable that Eureka and Villa Franca suffer the most in this regard. Where the red-oil emulsion, 1-40, has not been fully effective an application may be made, with benefit, of nicotine sulphate, at the rate of 1-750. Such spray will also control any black aphis that may be present.

The spray applications referred to may be considered to be the most important of the season, and, as pointed out in previous notes, the very best results are obtained by the use of a power sprayer, using spray guns. The infection of citrus-trees by either fungoid disease or insect pests is always much in evidence on the under portion of the leaves. It becomes necessary, therefore, that this portion of the trees should be very well covered with spray, and the best results are obtained in this respect as mentioned.

With regard to cultivation, the chief work will be scarifying and hoeing around the trees where necessary, the latter applying chiefly to young growing trees.