

In the Orchard and Vineyard

Orchard Notes

Spraying for the Control of Diseases

OPERATIONS in the orchard during this and the following months will be directed mainly to the production of a good crop. Spraying for the control of disease, cultivation of the soil, and thinning of the crop must be given full attention, for it is upon these operations that the health and vigour of the trees depend, and without which best quality fruit cannot be produced.

From this period onwards fruit trees will be in heavy foliage and it will be more difficult to effect a complete spray coverage, but every part of the tree must be completely wetted if maximum results are to be obtained. This can be accomplished only by attention to pressure, spray nozzles, discs, and thorough application of the spray. Sufficient pressure to ensure good penetration to all parts of the tree should be the aim of every fruit-grower.

Codling Moth

Codling moth will become more active as the warmer weather approaches, and unless the spraying is thorough, complete control cannot be expected. Spraying at regular intervals should be carried out as the season advances so that the growing fruit will always be well covered.

Slight modifications to the spray programme recommended in previous notes may be necessary mainly because of weather conditions and prevalence of disease. To guard against foliage injury, lime sulphur should be reduced in strength to 1:180 with the addition of colloidal sulphur at strength 2:100. In many cases it may be preferable to delete the lime sulphur from now on, using only colloidal sulphur, especially on such varieties of apples as Cox Orange Pippin, Dunns Favourite, and other varieties known to be susceptible to spray injury. Should wet weather intervene soon after spraying operations, it is advisable to apply an extra spray rather than risk the disease spreading throughout the orchard.

This is the season when the apple leaf hopper usually becomes active. Although the hopper may not be noticed, the mottling of the foliage caused by these insects in the nymph stage will indicate its presence, and steps

should be taken for its control. Impairment of the foliage is likely to cause considerable dropping of fruit at a later stage. The addition of nicotine sulphate to the ordinary spray programme at strength 1:800 is effective for the control of apple leaf hopper.

Red Mite

Red mite not destroyed by sprays applied during the dormant period will become active during this month, especially if warm weather is experienced. The injury caused to the foliage by this pest is reflected in the quality of the fruit produced, both size and colour being affected. Its first appearance may be noticed by the bronzing of the foliage, impairing it to such an extent that functioning powers are greatly diminished. No effort should be spared to rid fruit trees from the ravages of red mite. The only spray recommended up to this stage of growth is summer oil at strength 1:100. One spray will suffice if it is applied thoroughly and the mite has not gained too strong a hold, otherwise a further application at the same strength

will be necessary. Care must be taken not to apply an oil spray within from ten to twelve days after a sulphur spray has been applied, otherwise considerable damage to both fruit and foliage will be done.

Much damage is caused by leaf-roller caterpillar, more especially towards the end of the season, and it is advisable to keep a close watch for this pest. It may be necessary to apply an extra lead arsenate spray or lessen the intervals between sprays should leaf-roller become troublesome. Reports indicate that where lead arsenate at strength 1½ lb.:100 has been applied earlier in the season than is the case with many growers, leaf-roller caterpillar has been kept to a minimum.

Spraying Pear Trees

Spraying as previously recommended should be continued during the month and future months for the control of pests and diseases of pear trees. Where Bordeaux mixture is used on some of the hardier varieties and those more susceptible to black-spot in preference to lime sulphur, the strength

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