

The Orchard and Vineyard

Contributed by the Horticulture Division

Orchard Notes

Harvesting the Fruit Crop

DURING the coming month fruit harvesting will occupy the attention of many orchardists who produce stone fruit and early varieties of apples and pears, and time will be required in preparing for harvesting the main crop of pip fruits.

Although this important work must receive attention, a continuation of spraying, particularly for the control of insect pests, is very important, as January may be regarded as a critical month, and nothing should be left to chance through pressure of work in other directions; otherwise severe losses in the main crop may occur. Hot, dry days, and especially warm nights, favour codlin-moth activity, and much infection could occur if a satisfactory coverage is not maintained.

Pests and Diseases

Spraying of apples and pears should follow along the lines indicated in previous notes. The general recommendation is for the continued use of a fungicide, preferably lime-sulphur plus colloidal-sulphur, but to reduce the strength of lime-sulphur as the season progresses. The maximum strength for the remainder of the season should be 1-200, with colloidal-sulphur 2lb. to 100 gallons. Trees showing any signs of a weakening in foliage or a suspicion of spray injury are better sprayed with colloidal-sulphur as the only fungicide, leaving out lime-sulphur altogether.

Arsenate of lead must be added to all general spray applications, using not less than 1½lb. to 100 gallons. Hydrated lime should be added to the

arsenate of lead before combining it with the sulphur spray. The quantity of hydrated lime used should be 2lb to every pound of arsenate.

In more humid districts, and where bitter rot (*Glomerella*) occurs, it may become necessary (and is advisable) to replace sulphur sprays with a weak Bordeaux mixture, strength 1½-3-50. No danger of russetting from the use of Bordeaux can accrue if used at the strength recommended at this time of the year.

Timing the Spraying

It is necessary to anticipate possible picking dates for apples and pears, and thus to time the last spray application of arsenate of lead on any particular variety to avoid having an excessive spray deposit on the fruit when harvested. Especially is this necessary on early and mid-season varieties, as in some districts it is necessary to continue spraying right into the harvesting season to secure control of codlin-moth. In most cases, spraying of late varieties ceases some time before the time for harvesting, and little trouble occurs.

As already indicated, January may be regarded as a month for greater insect activity. In addition to increased danger of codlin-moth infection, trees may suffer from foliage pests, including red mite and apple leaf-hopper, and their activity may extend up to the end of March.

The most effective summer control for red mite is to spray with summer-oil at 1 per cent. dilution. Summer-oil used at that strength will destroy not only adult mite, but also summer eggs.

Success depends on thoroughness in application, however, and any failure to secure control from spraying is an indication of incomplete coverage due to either carelessness in applying or inadequate appliances.

Examine the Foliage

Frequent examinations of foliage are necessary to guard against red mite becoming so well established as to cause material damage before control measures are applied. Once bronzing of foliage through red mite injury occurs, the pest has perhaps passed its peak on the particular trees affected and is rapidly on the wane, but the damage done is irreparable for that season, and the crop is seriously reduced in size and appearance.

Apple leaf-hopper is another insect pest which causes serious damage to foliage and fruit at times, and growers may be caught unawares unless on the alert. The control is to apply nicotine sulphate 1-800 before the insects become winged. Once the insects are on the wing, control by spraying is not practicable. Apart from the weakening effect from foliage injury caused by apple leaf-hopper, much of the fruit is so seriously marked that it is quite unsaleable without cleansing.

Cultivation and Cover Crops.

Light cultivation should continue at least until the end of January, when the final cultivation should provide a good seed bed for a cover crop. Blue lupin is the most favoured crop for enriching land deficient in humus, but it