

Citrus trees affected with scale or thrip should be sprayed now with red-oil emulsion, 1-40, provided the trees have not commenced young autumn growth, which in many localities this season will be rather irregular.

Spraying for the month generally is recommended as follows:—

Peach, nectarine, and plum: Commercial lime-sulphur, 1-125, or self-boiled, 8-8-50—as fruits commence to ripen and further as circumstances demand.

Apple, pear, and quince: Commercial lime-sulphur (33° tests), 1-100, in conjunction with arsenate-of-lead paste, 1½ lb., or powder, ¾ lb., to 50 gallons water—every twenty-one days.

Lemon and orange: bordeaux, 4-4-40—if not already applied when blossom petals have fallen from main-crop flowers; red-oil emulsion, 1-40—when a minimum of young growth is showing.

—J. W. Collard, Orchard Instructor, Auckland.

HAWKE'S BAY.

Very little can be added to my last month's notes for the control of orchard pests and diseases. Spraying for codlin-moth, leaf-roller caterpillar, and leech must be continued right through the month of March, as much fruit is often wasted by neglecting to spray late in the season. Keep woolly aphid well under control; spray a second time if this has not been already done.

Further sprayings for the control of fungus diseases will depend largely on the weather. Always anticipate trouble following any wet spell, and thereafter keep a sharp lookout for black-spot development. Spray even if the infection is the size of a pin's head. Spraying for powdery mildew, plum-rust, and fungus diseases of stone-fruits should be followed up.

The compounds and strengths indicated in last month's notes are recommended for the control of both insect pests and fungus diseases.

—G. Esam, Orchard Instructor, Hastings.

NELSON.

Cultivation: With the autumn rains and the busy picking-time, opportunities to cultivate the soil when in proper condition are few and far between. Indeed, where cultivation has been thorough during summer less cultivation now will allow the young wood and fruit to ripen better.

Liming: Lime may be applied at this season with great advantage. Applied at the rate of 1 ton to the acre and harrowed in, it becomes assimilated during winter. Stone-fruit trees particularly require this dressing; a lot of fruit-dropping experienced in spring would be avoided if the application were made. It should be broadcasted over the whole area between the trees.

Cover-crops: With lessened cultivation the natural weeds will grow unless a cover-crop is planted. Should the soil possess plenty of humus and no troublesome weeds the latter will do no harm but, on the contrary, some good, specially on hilly country subject to scouring by winter rains. In other cases a cover-crop should be grown to feed the trees and smother troublesome weeds. The following cover-crops are grown successfully in Nelson orchards: Red clover, lupins, vetches, peas, white mustard, and oats. The legumes—red clover, lupins, vetches, and peas—require the land to be in good heart and well provided with lime; they should be sown without delay: blood-and-bone and superphosphate, about 3 cwt. to the acre, is a suitable manure on land that has been limed. Oats make a good and cheap cover-crop; they may be sown later than the legumes; the variety known as Algerian is rust-resistant and very suitable generally for the purpose. White mustard as a cover-crop has the advantage of being cheap and very quick-growing; under some circumstances it comes in very useful.

Spraying: Pip-fruits will require further applications of arsenate of lead to keep them clear of leaf-roller caterpillar. Black-spot fungus sometimes makes its appearance during March; an application of lime-sulphur should be made as soon as it is detected. The campaign against woolly aphid should be carried out energetically at this season, which is the most effective period of the year. Kerosene emulsion or Blackleaf 40 make good washes; if the latter is used alone the soap ingredient should not be omitted. After the apples are picked red-oil emulsion, 1-50, is excellent for control. Whatever spray is used, results are chiefly due to the *thoroughness* of the application.

Stone-fruit trees affected with fungus blight of any kind are much improved if sprayed after the fruit is gathered with bordeaux 2-3-40.