

The second spraying is applied when two-thirds of the blossoms have fallen (coinciding with the first codlin-moth spray with arsenate of lead), and is as follows: Bluestone, 5 oz.; lime, 6 oz.; water, 4 gallons.

Black-spot (Pears).—The attack of this fungus is similar to that of black-spot on apples. The treatment is the same as recommended for the latter, excepting that where a severe infestation occurred previously, or on old or neglected trees, it would be advisable, when the buds are swelling in spring, to spray with bordeaux at the following strength: Bluestone, 13 oz.; lime, 10 oz.; water, 4 gallons. Further sprayings to be as for apples.

Black-spot (Apples and Pears).—An alternative treatment for both apples and pears is with lime-sulphur compound as follows: Winter formula—3 pints lime-sulphur to 4 gallons water; spring formula— $1\frac{1}{4}$ pints lime-sulphur to 4 gallons water; summer formula— $\frac{1}{3}$ pint lime-sulphur to 4 gallons water.

Leaf-curl (Peaches and Nectarines).—The fungus causing this disease settles on the buds in early spring, and is most troublesome during cold, wet seasons. It is readily held in check by spraying the trees in spring when the buds are swelling. Bordeaux at the following strength is advised: Bluestone, 13 oz.; lime, 10 oz.; water, 4 gallons, mixed as directed.

An alternative treatment for leaf-curl is as follows: Winter formula—Lime-sulphur, 2 pints; water, 4 gallons.

DIRECTIONS FOR PREPARATION OF BORDEAUX MIXTURE.

The following directions apply to the quantities of bluestone and lime already given:—

Dissolve the bluestone in 2 gallons of water; slack the lime slowly in another vessel, and make up to 2 gallons; then pour both solutions *simultaneously* into a third vessel. In using the mixture during the dormant season it should show a slight acid reaction—that is, when tested with litmus paper.

Bluestone is readily soluble when placed in a piece of sacking and allowed to touch the surface of the water or suspended an inch or so below it, or by using hot water.

The efficiency of bordeaux mixture depends upon the intimate blending of the two solutions obtained by pouring both of them simultaneously into a third vessel. It is imperative that the chemicals used be pure and the lime fresh. The best results are obtained when the application is made as soon as possible after blending the two solutions. If allowed to stand for more than eight hours the fungicidal properties of the mixture largely depreciate.

Over one hundred calves—Milking Shorthorns and Jerseys—are being reared at Ruakura this season.

Calcium carbide refuse is slaked lime, and can be used beneficially as a soil-dressing. If, however, kept for any length of time before use it will lose a large amount of its causticity by becoming recarbonated with the carbon dioxide of the air.