

almost oblong in shape. The diseased portion of the bark then becomes dry and brittle, and a sharp line of demarcation is formed between the healthy and diseased tissue. Upon the surface of the canker numerous pustules, containing the spores of the fungus, appear. During the next year the cankered area may drop out, leaving the wood beneath bare and exposed. The canker is an annual, and reinfection by means of spores must take place in order to again produce the disease.

A rot of the fruit in storage is also caused by this fungus, which, in favourable seasons, may also be found upon the apples on tree.

CONTROL.

Preventive sprays must be used, as, after it has once established itself, spraying will not reach the seat of the trouble. Bordeaux mixture has proved most satisfactory for the canker, and for this purpose should be used in double strength (8 lb. stone-lime, 8 lb. copper-sulphate, and 40 gallons of water). It must be applied before the fall rains begin. In districts where the disease is bad this should be followed by another about a week later. Winter varieties of apples are not recommended for these districts, because after the fruit is picked it is too late to obtain the best result from sprays.

Lime-sulphur is recommended as a spray where the disease is present, but not serious. Proper pruning is desirable to allow entrance of light and air, and bad crotches are particularly to be avoided, as such places furnish a favourable place for spores to lodge. Avoid injuries to the bark from careless cultivation, and keep down other fungous diseases and insect pests. Destroy fallen fruit by burning or feeding to stock. Endeavour to keep a thrifty condition by proper cultivation.

APPLE-MILDEW.

The apple-mildew is pretty widely distributed, but only rarely proves of much importance. It is most serious as a disease of nursery stock, and to these it is sometimes found doing appreciable damage.

It appears on the stem as dense, persistent, greyish-white patches. On the leaves it covers both sides, and is most common on those at the tips of the branches.

CONTROL.

Bordeaux or lime-sulphur sprays are effective.

SILVER-LEAF.

This disease has been observed in British Columbia upon apple, plum, peach, and pear trees, and has also been reported on our cherries. In Europe it is said to be most severe on plum-trees, but here the apple seems to suffer most. Plums are commonly attacked, but pears and peaches only rarely.

The characteristic symptom of the disease is the silvery appearance of the leaves, the upper surfaces of which lose their green colour, and take on the silvery gloss which gives the disease its name. Closer observation reveals the fact that the upper epidermis is more brittle than normal, and a cross-section shows it to be broken away from the underlying tissue. Air-cavities are thus formed beneath the cuticle, and this is probably responsible for the silvery appearance of the leaf. Sometimes only a single limb will be attacked, sometimes the whole tree.