

the No. 1 spray, has apparently given good results, by destroying the winter spores, and is recommended. It will be found that after the mildew is once subdued, less spraying will be required in following seasons.

Black Knot on cherry and plum trees (*Pterisporia morbosa*) is reported from Keremeos Kelowna and Victoria.

Black knot occurs on the native choke-cherry in the Upper Country, but so far has not attacked cultivated trees to any appreciable extent; however, any cases that occur on orchard trees should be summarily dealt with, and infected wild trees destroyed.

Black knot. The experience of Ontario and the Eastern States, where thousands of plum and cherry trees have been destroyed on account of this disease, should warn us to be prompt and thorough in dealing with it here.

The only successful treatment for a badly infected tree is to take it out and burn it. All knots on trees but slightly infected should be cut out and burned. Do not throw removed knots on the ground, as spores are developed off as well as on the tree. Spots from which knots have been cut should be painted with turpentine or oxide of iron paint, and this method followed up until the disease is thoroughly extirpated.

Brown Rot of plums and cherries (*Monilia fructigena*) is reported from New Westminster, Lulu Island, and Burnaby.

This destructive disease of stone fruits is evidently becoming more troublesome. The annual cycle of the fungus of brown rot is outlined as follows, starting with its attack upon the fruit:—A minute spore falls upon the plum on which there is moisture,

Brown rot. and sends out a germinating tube which penetrates the skin of the fruit.

Once inside, it grows rapidly, pushing its mycelium through the pulp in all directions, absorbing the contents of the cells, and causing the so-called rot. Infected plums at first turn brown in spots, these enlarge gradually until the whole plum becomes brown and rotten. When it has reached this stage, it becomes covered with a brownish or ash coloured velvety coating, which consists of vast numbers of minute spores. These spores are blown about by wind and spread the disease to other fruit, if the conditions are favourable.

The rotten plums continue hanging upon the trees, gradually shrivelling up until they become dry and mummied husks, and many of them remain on the trees through winter. On these mummied plums some spores will adhere until the following season, and in nearly all of them, the mycelium remains in a dormant condition, so that during the warm damp weather of spring this mycelium is able to produce a new crop of spores, which develop on the blossoms, young leaves, and fruit.

The first essential to success in preventing this disease is to gather up and pick off and burn all mummied plums. Then the lime, salt and sulphur wash should be applied while the trees are dormant, to the ground under the trees as well as the trees themselves.

Treatment. Then spray the trees with Bordeaux mixture before the blossoms open; repeat this after the fruit is formed and again after an interval of ten days, where the disease has been troublesome. If later spraying is needed, use the carbonate of copper spray, No. 10.

In packing fruit for market, growers should be especially careful to exclude any plums or cherries in the slightest degree infected with this disease, as it spreads very fast in the packages and there is a great risk of spoiling all the contents.

This fungus disease (*Cylindrosporium padi*) is common on the lower Mainland and parts of Vancouver Island.

Small discoloured spots on the leaves of plum and cherry trees are first seen, usually of a purplish colour; in a short time these spots turn brown, the tissues being destroyed, and later the leaves become yellow, many of the affected areas separate from the surrounding portion of the leaf and fall to the ground leaving holes in the leaves, hence the name "Shot-hole fungus."

Shot hole Fungus. This disease may be prevented by the use of Bordeaux mixture, as advised for "brown rot."