

becoming brown as the infested tissues die, and on the under side mouldy or frost-like, being covered with a delicate white film. When badly attacked the leaves fall off in about two weeks, and in this way the vines frequently lose all their leaves, thus preventing fruit development, even if the clusters themselves are not attacked. The treatment for Black Rot is recommended for this trouble also.

POWDERY MILDEW (*Uncinula spiralis*). This fungus attacks leaves, young shoots and fruit; it appears as white or greyish mealy patches on the upper surface of the leaves and on the fruit. Towards the end of the summer the fruits become yellowish and finally almost black; the attacked grapes crack and ultimately wither up. The treatment for Black Rot will also keep the Powdery Mildew in check.

ANTHRACNOSE, or BIRD'S-EYE ROT (*Sphaceloma ampelinum*). This disease is found on all green parts of the Grape, but more especially on the canes, where it appears as small brown marks which sometimes unite and form lengthened spots. When the berries are affected, they show brownish or blackish specks with a more or less circular outline; the centres of these become grey and surrounding this a conspicuous red ring with a dark border on the outside of it sometimes appears. Berries attacked do not wither or turn brown as those referred to in "Black Rot" or "Brown Rot," but the portion affected becomes somewhat wrinkled, and the berries assume an irregular shape. The spores pass the winter on leaves, fruit or shoots. Thorough spraying with Bordeaux mixture as for Black Rot will keep this fungus under control.

INSECTICIDES.

The following instructions for the preparation of the various insecticides referred to in these pages are those that on the whole have been found the most effective in practice. Experiences will no doubt differ and some prefer a variation in the quantities prescribed, but as already stated, a great deal depends upon the care which is exercised in the preparation and the skill with which it is applied. In this, as in other things, practice makes perfect, and a remedy should not be discarded because it has not proved absolutely effective on its first application.

A Bulletin recently prepared by Professor Harecourt and Mr. Fulmer of the Ontario Agricultural College and published by the Department of Agriculture. "Insecticides and Fungicides," Bulletin 154, should be procured and studied by every fruit-grower.

LIME-SULPHUR WASH.

This is made with 22 pounds of fresh lime, 18 pounds sulphur (flowers), and 40 gallons of water; another formula is 20 pounds of lime and 15 pounds sulphur. The sulphur should be made into a paste with warm