

The *Whitesmith* is probably the best of the English varieties grown to any extent in Ontario. It, and *Industry*, are commonly supposed to be freer from mildew than other English varieties. The experience of Mr. Macoun was that they both mildewed rather badly at Ottawa. Thorough spraying, however, will control the mildew.

Mr. R. B. Whyte, of Ottawa, has several very promising varieties of English gooseberries and seedlings of the same in his garden. The value of those that succeed with him for other parts of the Province is, however, hard to estimate, as the conditions under which his gooseberries grow would be impracticable for commercial culture. His best varieties and seedlings are, however, certainly worthy of trial.

THE MOST IMPORTANT DISEASES OF CURRANTS AND GOOSEBERRIES.

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POWDERY MILDEW OF THE GOOSEBERRY (*Sphaerotheca mors-uvae*).—This disease is the greatest obstacle to the successful growing of European varieties of gooseberries in Ontario. It attacks the American varieties also, but only to a very small extent, and is sometimes found on currants, rarely doing much damage to them. Affected gooseberry plants show the disease first on the young leaves and tender tips of the new growth. It then spreads to the young fruits soon after these are formed. All the diseased parts are soon covered over with a white powdery substance from which numerous summer spores are carried by the wind from place to place. Later in the season this whitish covering begins to brown and thicken, forming a dense felted coat over the affected parts including the fruit. In this brown substance the winter spore cases are formed and from these in spring the disease is spread. As a result of the fungus the growth of the twigs is stunted and the affected fruits dwarfed and rendered useless. Frequently nearly the whole crop is ruined.

It is usually believed that warm climates and lack of air circulation favor the disease.

Means of Control.—Bordeaux mixture has given poor results. Potassium sulphide, 1 ounce to 2 gallons, has given fair satisfaction, but the best results have been obtained from lime-sulphur. At least three applications should be given. The first should be shortly before the buds begin to burst, using the same strength as for the dormant spray on apples, namely commercial lime-sulphur diluted about 1 gallon to 9 or 10 gallons with water, or a specific gravity strength of about 1.030. The second application should be soon after the leaves appear, but before the blossoms open. Use lime-sulphur specific gravity 1.015 (commercial diluted 1 gallon to 20). The third shortly after the fruit has set. Use lime-sulphur specific gravity 1.010 (commercial 1 gallon diluted to 30). The fourth application may be made in about 10 days after the third and may be a little weaker. Care should of course be taken to see that every particle of the plants is covered each time. It will also help to prune the plants or support them so that no branches will rest on the ground.

CURRANT ANTHRACNOSE (*Pseudopeziza ribis*).—This disease attacks the various kinds of currants, being most destructive on the white and red, and usually doing much less damage to the black. It seems to be only rarely found on the gooseberry. The leaves alone are attacked. On them the disease causes small brown areas, chiefly on the upper surface. When these spots are very abundant the leaves