

POPULAR EDITION.

BULLETIN No. 357.

FEBRUARY, 1913.

New York Agricultural Experiment Station.

GENEVA, N. Y.



PRUNING FAILS TO CONTROL A CURRANT DISEASE.

SUMMARIZED BY

F. H. HALL

FROM BULLETIN BY

F. C. STEWART.

PUBLISHED BY THE DEPARTMENT OF AGRICULTURE.

PRUNING FAILS TO CONTROL A CURRANT DISEASE.

F. H. HALL.

An old, obscure disease.

More than twenty years ago, a disease was discovered which has become today a very destructive trouble in the currant plantations of the Hudson Valley. The cause of this disease remained long unknown; but careful study by botanists of this Station and the Cornell Station proved it to be due to a fungus which has three distinct spore forms. Of these, the basal form is *Botryosphaeria ribis*, so that this stands as the scientific name of the fungus which causes currant blight, currant cane blight, or currant cane necrosis. Usually, the discovery of the cause of a disease soon leads to a remedy, but in this case no preventive or remedial treatment can yet be recommended.

Symptoms of the disease.

On certain canes, or portions of the canes, the leaves wilt, turn brown and die. An affected cane will show a section of dead wood from one to four inches long where the bark has been killed and wood and pith invaded by the mycelium of the fungus. This hinders the ascent of sap and thereby causes all the upper part of the plant to wither and die. The general appearance is very similar to that caused by borers in the canes, but when this insect is responsible, a distinct burrow will be found and the larva, itself, may be present. In fungus-blighted canes, neither burrow nor larva can be found, but on careful examination, especially with a microscope, fine, whitish, cobwebby threads may be discovered in the discolored pith at the point of attack.

An unsuccessful remedy.

This localization of the injury made it seem possible that summer pruning to remove the diseased wood, with destruction of the affected portions, might check the progress of the disease. Accordingly, two experiments with this apparently promising method of control were begun in the spring of 1907. Within a year or two it was found that the method offered no chance of success in an old plantation. However, the second test, begun in a plantation only one year set, has now been continued for six years, all canes showing signs of the disease being pruned out from two to four times each season. This work was done by the Station botanists with great care, but at no time during the progress of the experiment has the disease been noticeably checked. The infections seemed as numerous and as injurious on the treated as on the untreated plats, and the yield of fruit was even smaller on the treated plats. Accordingly, summer pruning can no longer be recommended for the control of necrosis. In fact, no method of treatment can be confidently recommended at present, although experiments in spraying are being continued.

* This is a review of Bulletin No. 357 of this Station on An Experiment on the Control of Currant Cane Necrosis by Summer Pruning, by F. C. Stewart.