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## Raspberry Yellows and Cane Blight Prof. J. E. Howitt, O.A.C., Guelph

THESE are two serious diseases of raspberries that are becoming prevalent in Ontario, and about which very little is known. The writer has found Raspberry Yellows in the Niagara District and in gardens near Guelph. Canes attacked by Yellows have been sent to the Botanical Department from Green River, Stirling, and Whithy, Ontario. It would seem, therefore, that Raspberry Yellows is pretty widely distributed in the province. Cane Blight up to the present time has been observed only in the Niagara District.

The cause of Raspberry Yellows has not yet been determined. The name Yellows is given to this disease not because it is supposed to have any relation to Peach Yellows, but because it describes the appearance of affected plants. This disease is reported by Prof. Stewart, of the New York Agricultural Experiment Station, as being most destructive to the Marlboro, but by no means confined to this variety. writer has found Yellows destroying King and Cuthbert.

The first indication of the presence of Raspberry Yellows is the curling downwards of the margin of the upper leaves which later become faintly mottled with yellow. As the disease progresses the plants become stunted and yellow, and the berries dry up without ripening or remain small and tasteless. The Yellows seems to spread through a patch in a comparatively short time, as correspondents report that they noticed only a few plants, here and there, in the rows the first season, and the next season found a considerabl, portion of their plantation stunted and vellow-

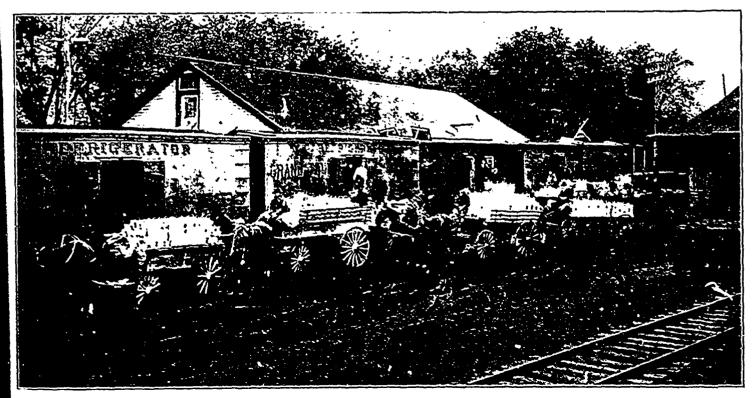
No remedy or prevention for Raspberry Yellows is known. Spraying with Bordeaux mixture has been tried, but does not prevent the disease. As Yellows appears to spread quite rapidly care should be taken to dig out and burn any canes showing signs of the disease. If these are left, the probability is that in a comparatively short time the whole plantation will be rendered useless by the disease. Raspberry Yellows is an important disease, and careful investigations should be made to discover the cause and means of preventing it.

Raspberry Cane Blight, while common in the Niagara District, has not become so serious or so widespread as to attract much attention as yet. It has been proved to be a fungus disease. It attacks both the red and the black varisties of the raspberry. In New York State it has been found that Cuthbert, Marlboro, Ohio, Gregg, and Kansas are varieties susceptible to Cane Blight, while Columbian is notably resistant.

APPEARANCE OF AFFECTED PLANTS

The leaves and fruit on plants attacked by Cane Blight wither and dry up from the tops downward, and the canes become brittle and easily broken. The diseased canes are easily seen in the rows, and are often mistaken for those destroyed by the Snowy Tree Cricket or injured in cultivation. If the diseased canes are examined, the bark is seen to be lighter in color and near the base will be found discolored dead areas, in which numerous minute black dots, the fruiting bodies of the fungus, can be seen. Frequently these diseased areas are discolored and smoky, due to the presence of immense quantities of exceedingly small spores.

Very little is known in regard to the control of Cane Blight. The results with spraying have not proved satisfactory, and the only practical methods of preventing the disease appear to be:



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