

Ontario Department of Agriculture

ONTARIO AGRICULTURAL COLLEGE

BACTERIAL BLIGHT

Of Apple, Pear and Quince Trees.

By D. H. JONES.

INTRODUCTION.

Owing to numerous and repeated inquiries from fruit growers in various parts of the Province of Ontario regarding the cause of and remedy for the blighting of their apple and pear trees, it was decided in the spring of this year that the writer should devote as much time as possible to investigation in connection with the disease.

In accordance with this decision, the Ontario Agricultural College orchard has been under constant surveillance during the season; orchards in the Niagara, Grimsby, St. Catharines and Winona districts have been visited three times, orchards in the neighbourhood of Belleville and Pickering visited once, and numerous experiments in the College orchard and in the laboratory have been carried on.

Conditions throughout the season have proved very favourable for the investigation; the disease has been plentiful in all its stages in the various districts of the Province visited, and in the College orchard, which, at our request, was not treated for blight throughout the season, material for study has been abundant.

HISTORY OF THE DISEASE.

The disease which is known under the various names of Fire Blight, Twig Blight, Blight Canker, Pear Blight, and possibly others of local application, is of long standing on the North American continent. It has wholly destroyed many pear orchards, and has been very destructive to the apple and quince crops in nearly all parts of Canada and the United States where these fruits are cultivated.

In the volume, "Cultivation of Fruit Trees," published in 1817, which is said to be the oldest American book on fruit culture, William Coxe writes of the "fire blight which frequently destroys trees in the fullest apparent vigour and health, turning the leaves suddenly brown as