

DIVISION OF BOTANY,

OTTAWA, February 18, 1916.

J. H. GRISDALE, Esq., B. Agr.,
Director, Experimental Farms,
Ottawa.

SIR:—I have the honour to transmit herewith a manuscript entitled "The Black Leg Disease of Potatoes caused by *Bacillus solanisaprus*, Harrison," prepared at my request by Mr. Paul A. Murphy, B.A., A.R.C.Sc.I., assistant in charge of the plant pathological Field Laboratory for Prince Edward Island.

The study of the losses with which the potato growers universally have to contend has revealed that, while low yields may be due to unfavourable cultural, climatic, or soil conditions, yet various diseases are far more largely responsible for these often considerable losses. It is quite natural, therefore, that the study of these diseases should receive special attention from the officers of this division, and this activity has already resulted in the reduction of a large proportion of loss. Yet it is essential for the profitable raising of potatoes that there should be placed at the disposal of farmers, short, concise and reliable information regarding the control of those diseases which are most important from an economic standpoint.

Hence, the special treatise on "Late Blight and Potato Rot" submitted to you recently is now followed by one on Black Leg. This disease is readily recognized and moreover easy of control.

The losses due to this disease, now calculated by Mr. Murphy to amount to the still large sum of \$696,255 for the three Maritime Provinces, were, speaking from my personal experience, considerably higher a few years ago. This disease is being reduced every year through our instructions and the special efforts of the farmers, and it is hoped that Mr. Murphy's treatise will assist in further reducing or, preferably, eliminating it altogether from our long list of important plant diseases.

I would respectfully recommend the publication of this manuscript as Circular No. 11.

I have the honour to be, sir,

Your obedient servant,

H. T. GÜSSOW,
Dominion Botanist.