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## THE PATHOGENIC ACTION OF RHIZOCTONIA ON POTATO

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WITH ONE FIGURE IN THE TEXT

It appears that satisfactory evidence has been lacking in demonstrating the pathogenic action of *Rhizoctonia* (*Corticium*) on various host plants, particularly the potato.

The attention which the well known disease has attracted in the world and more recently in the old, left, in my opinion, quite a number of other investigators, several important questions have been explained. Every pathologist fully recognized the symptoms of the disease which have come to be regarded as typical of *Rhizoctonia*. The unmistakable folding of the leaves of the growth, the brown stem lesions so frequently described, and the formation of aerial tubers or in addition perhaps, the formation of subterranean tubers, are now well known as resulting from an attack of *Rhizoctonia*.

Indeed, the folding of the leaves associated with the disease, and greatly from the curling of the leaves of plants affected by the disease, particularly noticeable is this difference when examining an affected plant. Where, however, doubt existed as to the nature of an affected plant, the stem lesions was looked upon as final proof of a *Rhizoctonia* infection. I must confess, however, that the often surprising superficiality of these lesions, may, often enough than in what was otherwise unmistakably a plant infected with *Rhizoctonia* and not with leaf roll, frequently caused me surprise and to readily convince the farmers on the occasion of field visits of the correctness of the diagnosis—which at times I share with my own belief.

For some time I have endeavored to discover the true nature of this fungus on the host plant. My colleague, Drayton, has shown to my satisfaction the profuse permeation of the tissues of the host plant by the fungus, but even that failed to convince me entirely of the characteristic symptoms, which statement is not in accordance with

<sup>1</sup>Drayton, F. L. The *Rhizoctonia* lesions on potato stems. 1915