

A list entitled "The Lichens of Manitoba" containing the names of 90 species was published by K. S. Wright as a special chapter in "The Fungi of Manitoba".⁶⁹

Fungi.

Regarded from a consideration of the number of species contained within it, this is doubtless by far the largest subdivision of the plant kingdom in Canada. A realization of this fact is probably the reason why no census list of the species found in the Dominion has ever been published. Consequently only sectional lists for various parts of the country can be referred to here.

The chief descriptive work dealing with the larger forms is that of Güssow and Odell⁷⁰ in which the characteristic features of 62 genera and 174 species are outlined accompanied by numerous photographs. Fraser⁷¹ has described the characters of the various developmental stages of 104 species of rusts occurring in Nova Scotia. The distribution of fungi in this province has also been indicated by MacKay^{72,73} in two lists of considerable length and more recently in a series of three papers by Wehmeyer and his associates.⁷⁴ The general list of Hay⁷⁵ for New Brunswick contains the names of 66 species of the larger saprophytic forms.

For the province of Quebec, Campbell⁷⁶ has enumerated 129 species all of which, except 4 species of *Ascomycetes*, belong to the *Basidiomycetes*, while Pomerleau⁷⁷ has described the characters and distribution of 32 species of *Pyrenomycetes* for the same province.

For the region around Ottawa, including parts of the provinces of Quebec and Ontario, Odell⁷⁸ has published a somewhat extensive list including 338 species of *Basidiomycetes*, 42 species of *Ascomycetes*, and one species of *Myxomycetes*. In contrast with the foregoing, a list of 28 genera and 110 species and varieties of *Myxomycetes* has been described for the province of Ontario by Currie,⁷⁹ the largest genus being *Physarum* with 20 species.

For the province of Manitoba a comprehensive list of 1,989 species (including bacteria and *Myxomycetes*) has been published by Bisby and associates.⁶⁹ Not only are the substrata indicated on which the saprophytic species occur, but also the hosts of the parasitic species. There is in addition a list of fungi observed on man and the higher animals.

A further contribution to the study of rusts in Canada is that of Fraser and Conners⁸⁰ who have recorded the occurrence, with names of hosts, of 161 species in the Prairie Provinces.

A total of 131 species has been recorded by Dearness⁸¹ and others for the Arctic Region together with the host plants or substrata on which they occur. No *Myxomycetes* or *Phycomycetes* are mentioned and only 9 species of rusts and one of the smut group. The others are distributed as follows: 58 species of *Ascomycetes*, 36 species of *Basidiomycetes*, and 27 species of *Fungi imperfecti*.

Algæ.

Comparatively few persons realize how great is the economic importance of this group of plants. It is well known in the case of the higher animals that in the last analysis their food supply consists of plants, but probably it is not so evident in the case of aquatic animals, such as fishes, seals, porpoises, whales, etc. The larger specimens prey on the smaller and these in turn live on crustaceans, etc., and finally a point is reached where the very minute species live on microscopic plants such as diatoms. In this connection Lowe⁸² states: "The phytoplankton of