

A glance at the table shows at once how little is known of Canadian Freshwater Algae. Many of the species are recorded as being found in Canada for the first time. My work has been handicapped to some extent by imperfect library facilities. Certain papers dealing with the arctic flora, which I wished to consult, I was unable to obtain. Hence it is possible that a few records have been omitted from the table.

There are recorded in the detailed account which follows: 28 species of Myxophyceae from 17 genera; 137 species of Chlorophyceae representing 41 genera (*Cosmarium* 38 species, *Staurastrum* 22 species); and Phaeophyceae and Rhodophyceae with 1 genus and 1 species from each group, making a total of 60 genera and 167 species. There are two new varieties, one new species, and one species transferred from the genus *Cosmarium* to the genus *Staurastrum*.

In concluding the general part of this report I wish to express my indebtedness to Professor A. H. Reginald Buller for encouragement and many useful suggestions; to Dr. Theodor Holm for the Latin descriptions of new varieties and species; to Professor W. A. Setchell for identification of *Scytonema crustaceum* Ag.; to Mr. Frits Johansen for much information regarding the collecting of the material and the localities from which the samples were taken, and for the loan of various publications; and, especially, to the late Professor G. S. West of Birmingham, England, not only for valuable help and advice during the earlier stages of the investigations recorded here, but also for the training and stimulating influence which I received from him during a number of years which I was privileged to spend in his laboratory. Professor West was particularly interested in arctic freshwater algae and was desirous of promoting the investigation of Canadian algae in general. His untimely death in the summer of 1919 was a great loss to the botanical world in general, and especially to Canada, whose freshwaters are still practically unexplored.

The following works were consulted regarding the distribution and for other purposes:—

Börgesen—Freshwater Algae of the Faeroes.

Börgesen and Ostenfeld—The Phytoplankton of the Faeroes.

Collins—The Green Algae of North America.

Cooke—British Desmids.

Cooke—British Freshwater Algae.

Ralfs—The British Desmidiaceae.

Saunders—The Freshwater Algae of the Harriman Alaska Expedition.

Tilden—Minnesota Algae (Myxophyceae).

West—British Desmidiaceae.

Wolle—Desmids of the United States.

Wolle—Freshwater Algae of the United States.

Also "Meddelelser om Grønland," various volumes, and a large number of small works by W. West, G. S. West, Börgesen and other workers.