

\*FRESH-WATER ALGÆ OCCURRING IN THE  
VICINITY OF THE ISLAND OF MONTREAL.

By Clare Rothwell Miller, M.A., (Mrs. Hardolph  
Wasteneys).

INTRODUCTION.

In order to secure data in regard to the algal flora of Montreal Island, collections of material were made, during the autumn of 1911, from pools, ponds and streams in different localities and a number of aquaria containing the algæ were maintained in the Botanical Laboratory of McGill University, during the winter. Records were kept of the progress of the different cultures, the forms which had been collected were studied and classified, and a number of experiments were made with nutrient media.

The results of these observations are given in the following pages, with as full notes as possible in regard to the habits, associations and relative abundance of the forms described. The importance of such ecological data has been strongly emphasized by Fritsch<sup>1</sup> in his work upon the Algal Flora of the Tropics. The relation of certain of my results to the work of Benecke,<sup>2</sup> Danford,<sup>3</sup> Copeland,<sup>4</sup> and Fritsch and Rich<sup>5</sup> has been considered. Some observations of rhizoid formation in *Spirogyra* are given. A systematic list of the various species of the fresh-water algæ collected completes the account. The determination of the species in the systematic list has been based on standard taxonomic works and has been corroborated by Professor Derick, under whom the work has been done. I have been greatly aided in these studies by the advice and criticism of Professor Derick,

---

\*Read before the Natural History Society of Montreal,  
April 29th, 1912.