

SCIENCE.

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IN the closing paragraph of the article in the Science column of the MONTHLY for March, merely a hint was given as to what the nature of a course in Botany for a teacher's certificate should be. We now return to the subject in order to indicate more fully what a teacher should know of Botany in order successfully to prosecute his work in Nature Study, and Agriculture. The present trend of botanical study is to enable the student to become acquainted with plant life in relation to its surroundings.

We in our school work in this province in the past have largely spent our time in the examination, description and classification of plants, but for one reason or another we have paid but little attention to the habits of plants, their manner of growth, the conditions favorable and unfavorable to plant life and the economic importance of our ordinary plants. If more attention were given to this class of work in the study of Botany an already interesting subject would take on new interest and assume a place in our schools that its importance demands.

How shall this end be gained? It is of importance that the pupil should learn to recognize the plants of his neighborhood.

In order that he may be able to do so the present work in description and classification must be retained, although the amount of time spent on it under the guidance of the teacher might be reduced. A pupil once having acquired a certain facility in this work can with very little assistance prosecute it himself by leaving the teacher free to direct the work into other channels.

Almost from the outset of this work in classification the student should be required to note carefully the surroundings, such as soil, moisture, slope of the land, time of year, and so on in which the plant is found, or in other words he should study the plant in relation to its environment. This work should include an examination into the conditions of plants during the winter season, also closely allied with this work would come a simple course in plant physiology, especially an investigation of the conditions which influence plant growth. This work could be carried on during the winter months, when the field work is to a large extent suspended. At the same time a course in histology, such as is required at the present time, could be taken up by the student.

Recently there has come from the press of Ginn & Co., of Boston, a book by Prof. Bergen, instructor in Biology in the English High School, Boston, entitled, "The Foundations of Botany." This admirable book gives an excellent idea of the present tendency of botanical study, and would serve as a guide for the prosecution of the course I have been outlining. The object of the author and his methods can best be given by some extracts from the preface.

"The author has attempted to steer a middle course between the advocates of the out-of-door school, and of the histological school of teaching botany. He has endeavored never to use a technical term where he could dispense with it, and on the other hand, not to become inexact by shunning necessary terms."