Minnesota Algæ. I. The Myxophyceæ of North America and Adjacent Regions, Including Central America, Greenland, Bermuda, the West Indies and Hawaii. By JOSEPHINE TILDEN. Pp. iv + 328, pl. 1–20. 1910.

This book, with the modest title of "Minnesota Algæ," treats of the blue-green algæ of North America and adjacent regions. It appears as a Report of the Survey, Botanical Series, No. 8. As the author states in the preface, it is largely compiled from numerous publications, though she has also drawn on her long experience in the study of the algæ. It has been published chiefly for the purpose of encouraging students in the collection and study of this group of algæ about which so little is at present known in this country, and to provide students, who do not have access to the numerous publications, with descriptions of all the species thus far accredited to the region. Illustrations of many of the species are also presented which should aid in the determination. These illustrations are largely copied (by means of photographs and tracings) from the classic monographs by Bornet & Flahault, Gomont, etc., though some of them are original. The illustrations, therefore, in general should be valuable for their accuracy, though they have suffered somewhat from an artistic point of view.

The descriptions are said to follow, in general, those of Gomont, Bornet, Thuret and Flahault. Keys to the genera and species will assist the student in the recognition of the species.

Four paragraphs are usually given to one species. The first one gives the name of the plant with a few references to works where it is described. The second paragraph is usually a long one giving references to articles (with full title of the article) or works in which the plant in question figures in a list or description. Some synonymy is also mixed in with this bibliography of the species. As the author suggests, there is a certain convenience in having these references under each species, but they thus occupy a large part of the book because of repetition, and the example could probably not be followed in many cases except where funds for publication are freely available. The third paragraph gives a description of the species, while the fourth one gives the distribution by states or countries, including the particular local habitat, which in some instances is quite definitely indicated.

Since the use of double plates renders it impossible to have descriptions of figures on a page facing the plate, references to the figures would have been rendered much easier if names and corresponding figure numbers had been printed at the bottom of each plate.

It is to be inferred from the Introduction that the author contemplates another volume on the same group of algæ sometime in the future which is to be of a monographic nature. If the present work succeeds in interesting a sufficiently large number of persons in different parts of the country who have the time to collect, study and preserve the material in their region, and if the author can make a thorough and critical study of all this material, comparing it with type material or authenticated specimens in the herbaria of Europe, and bring it together with the accuracy, judgment and finish shown by some of her European predecessors, it will furnish us with an exceedingly valuable contribution to American algology. GEO. F. ATKINSON

A Study of the Absorption Spectra of Certain Salts of Potassium, Cobalt, Nickel, Copper, Chromium, Erbium, Praseodymium, Neodymium and Uranium as affected by Chemical Agents and by Temperature. By HARRY C. JONES and W. W. STRONG. Johns Hopkins University. Pp. 159, 98 plates. Publication No. 130, Carnegie Institution of Washington.

In this monograph the authors have recorded the results obtained from the study of about three thousand solutions of salts of potassium, with a colored anion, cobalt, nickel, copper, chromium, erbium, praseodymium, neodymium and uranyl and uranous uranium.

"The effect of the addition of free acids and foreign salts on the absorption spectra is studied at some length and in considerable detail and results have been obtained which