Book Reviews

The Freshwater Fishes. vol. I. Key to the game and commercial fishes of the Province of Quebec. Vianney Legendre. Quebec Biological Bureau, Montreal, Engl. ed. 1, 1954. 180 pp. *Les Poissons d'Eau Douce,* Tome 1. Deuxième édition française.

This is an excellent book dealing with the identification of the fresh-water fishes of the Province of Quebec. The key characters are splendidly illustrated. There are 74 full-page illustrations of species, mostly reproduced from the State of New York Biological Survey. The distribution of some of the species in the Province is shown on page-size maps. There is a detailed glossary, a partial bibliography, and a complete index. The printing is well done on good paper.

Some ichthyologists may take exception to the systematics, which are apparently based largely on the work of L. S. Berg. Although I am in sympathy with "condensation," I am inclined to be reluctant to make changes until substantial data are presented in support of such. For example, I accept "Salvelinus namaycush" in view of the paper by Morton and Miller in *Copeia* [No. 2, 5 May 1954]. On the other hand, I hesitate in regard to the suppression of the family Coregonidae and the genera *Leucichthys* and *Prosopium.* However, these are matters that are open for discussion among specialists and do not detract from the great usefulness of the publication.

The author is to be congratulated on the production of a contribution of outstanding merit.

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Advances in Protein Chemistry. vol. VIII. M. L. Anson, Kenneth Bailey, and John T. Edsall, Eds. Academic Press, New York, 1953. 529 pp. Illus. $10.50.

The arrival of a new volume of *Advances in Protein Chemistry* has become an important event in the biochemical year. The latest of a worthy line, volume VIII maintains the quality of its predecessors. The number of contributors is not large, but the scope ranges from virus reproduction to physical methods. Perhaps the most dominant theme is that of protein synthesis. In three of the papers, those by Borsook, Putnam, and Gale, this vital problem is approached from quite different viewpoints.

Bricas and Fromageot give an exhaustive account of naturally occurring peptides of bacterial, plant, and animal origin. Glutathione is treated in some detail as well as the pteroylglutamic acid family. A useful table of uncommon amino acids is included.

Borsook's study on peptide-bond formation examines the energetics of the process in different classes of peptide synthesis. The question of amino-acid incorporation into proteins by exchange or by synthesis of new protein is discussed.

Putnam contributes a fine article on the nature and reproduction of bacteriophages. As a point of convergence of so many different disciplines, the phages are a fruitful, if difficult, field for survey. Biochemical studies of the infected cell are correlated with the results of electron microscopy and cytological studies, with an emphasis on the isotopic tracer technique.

Gale summarizes the work of his school on the assimilation of amino acids by bacteria and its relation to protein and nucleic-acid synthesis. On the basis of the effect of drugs and antibiotics on these processes, Gale has been able to put forward a tentative integrated scheme.

In an article unusual for the series, Arthur discusses the properties and economic importance of the peanut proteins. Since the annual crop contains about 3 million tons of these proteins, and new applications of this abundant raw material are increasing, particularly in the artificial fiber field, the article is well warranted.

Weber gives the most comprehensive account of his new fluorescence polarization method yet published. The relative experimental simplicity of the method and its independent approach make it a valuable addition to the methods already available in the field of protein molecular shapes and sizes and should insure a far wider application than it has so far enjoyed.

In their paper on zone electrophoresis, Tiselius and Flodin summarize recent developments in the separation of ions on paper by an electric field, a technique that is assuming an importance comparable with paper chromatography. The application to proteins, which is discussed, shows signs of becoming a precise method.

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A Monograph of the Fungus Genus Cercospora. Charles Chupp. Charles Chupp, Ithaca, N.Y., 1954. 667 pp. Illus. $10.

This long-awaited monograph of the genus *Cercospora* is the culmination of more than 30 years of painstaking study by Charles Chupp in field, laboratory, and herbarium in the United States and Europe. Chupp, a distinguished plant pathologist and former president of the American Phytopathological Society, is the recognized authority on *Cercospora.*

The book is prefaced by an exceptionally clear discussion of the characters that define the genus and its species and by definitions of the taxonomic criterions employed in the species' descriptions. More than 1900 species of *Cercospora* are listed according to the principal host attacked; the hosts are arranged alphabetically by family. Each species is fully described, its hosts listed, the type collection identified, the geo-