of isoprene derivatives, phenols, and organic acids. The last three sections deal with proteins and their derivatives. These sections are introduced by an excellent discussion on the general chemistry of amino acids (P. Desnuelle), followed by a similar section on peptides, written by P. Boulanger and G. Bizerte. The same authors also describe the isolation, the properties, and the classification of the proteins; the physical chemistry is treated by Wurmser and Tonnelat. In the section "Heteroproteins" J. Montreuil reports on glycoproteins, on phosphoproteins, and, in collaboration with P. Boulanger, on nucleoproteins; chromoproteins, discussed by Roche, Bar, and Bizerte, are classified as porphyrinic and nonporphyrinic pigments. In the final section of the chapter on proteins various amines and alkaloids are discussed by Nguyen van Thoai and Robin.

I was impressed by the logical, clearcut classification and presentation of most of the material. This makes the work extremely valuable to students and other persons who want to know more about biochemistry than a good textbook can offer. Most of the chapters contain a wealth of references, so the reader can easily find more specific literature.

The question may be raised as to whether in the present era of rapid progress in biochemistry the publication of such a voluminous handbook is justified. An enormous amount of time and effort on the part of outstanding biochemists is consumed in such a project. I feel that the time has passed when handbooks can be written by experts of a single nation, and that the writing of handbooks of this type sooner or later will be a cooperative enterprise to be undertaken by scientists of many nations. Despite my opinion on this point, however, I consider the Traité de Biochimie Générale an admirable survey of the present state of biochemistry and believe it has great value as a didactic and reference work.

Felix Haurowitz

Department of Biochemistry,

University of Indiana

**Ecological Processes.** Alan Mozley. Lewis, London, 1959. xi + 68 pp. 9s.

By "ecological processes," Mozley means groups of changes occurring with respect to time in ecological situations in nature. He illustrates these processes chiefly from studies of fresh-water mollusks harmful to man—his own field of research. Little is said about other organisms in the ecosystems discussed.

The most interesting sections of the book are those dealing with animals in changing environments. Succession in animal communities has not been thoroughly studied. Although no quantitative data are presented or referred to, the author's suggestion that pest species are most successful in intermediate stages of a sere, following disturbances of a habitat, is of both scientific and practical importance.

A number of statements, such as "Personally, I expect the numbers of animals in a given place to fluctuate more or less," detract from the book. Much of the material is not expressed in a quantitative manner, nor are there many references to research reports of original data. This serves to underscore the need for quantitative observations and adequately designed experiments in this field, as the author indicates. However, in some sections—for example, those on fluctuations and population stability—important advances are not mentioned.

In my opinion, population ecologists will not find this slender volume especially stimulating. The book seems intended rather to advance the author's plausible suggestion, based on extensive observations, for controlling intermediate hosts of parasites and other pest animals

Alan J. Kohn

Division of Zoology, Florida State University

Notes of a Soviet Doctor. G. S. Pondoev. Consultants Bureau, New York; Chapman and Hall, London, 1959. iii + 238 pp. \$4.95.

This is an awkward translation of a cloying, chauvinistic "doctor book" written by an elderly Russian physician "for young doctors . . . and medical students." It reads more like a lecture on the facts of life delivered to a group of none-too-bright adolescents by an elderly deacon, not too bright either, but bright enough to stay out of trouble.

A chapter purported to describe the origins of medicine mentions Harvey, ties Darwin and Marx into one sentence, and from there on stays within the Russian borders. It will be interesting to see whether Chinese histories of medicine will contain as many Russian names!

To Western ears, the proud assertions that "the Soviet doctor is a government

agent" and that this gives him freedom and assures "the highest moral standard," sounds like double talk. In our society, the individual and government are competitive, and balance is maintained through a dynamic equilibrium of checks and diversity. In Soviet society, the individual and the government are one, and competition is unthinkable.

In these times, when species suicide is a real possibility instead of a mad dream, an understanding of the differences between the two cultures must be attempted. Reading this book in this context may be of some small assistance, but the road is rough. If only the Soviets could develop a touch of a sense of humor and see the world in colors and shades instead of in the dreary blackand-whites of the Marxist-Leninist religion!

MICHAEL B. SHIMKIN
National Cancer Institute,
National Institutes of Health

Circumpolar Arctic Flora. Nicholas Polunin. Oxford University Press, New York, 1959. xxviii + 514 pp. Illus. \$20.20.

Although the circumpolar arctic flora is a small one in number of species, any attempt to describe it is fraught with discouraging difficulties. The exact location of the southern boundary of "the arctic" is a matter of controversy, so more or less arbitrary limits have to be set in the listing of species. Vast areas in the north are still unexplored or poorly explored from the botanical standpoint. Although there has been a resurgence of arctic botanical investigation during the past three decades, international communication among botanists has not kept pace with it. Last but not least, a relatively large proportion of the species are polymorphic and difficult to define.

Polunin has recognized and dealt with all of these difficulties in the introduction to the present volume. The introduction also includes a map which defines "the arctic" for immediate purposes, an explanation of how the book is to be used, and a statement about the truly impressive source materials upon which it is based. The treatment is confined to the vascular flora and opens with a key to the families. Keys to the genera appear in the ensuing text, and if there are more than eight species in a genus, descriptive keys to these species are provided. All the descriptions of