BOOK REVIEWS, continued

information, and occasional textbook perennials which should have been weeded out some 30 years ago. The authors devoted several pages to the chemical properties and molecular structure of humus constituents. Yet, they failed to even mention the ectorganic soil horizons or to emphasize the radical difference between the humus-enriched and the leached layers (p. 164). This is a case of not seeing the soil profile for the molecules.

A rather unexpected feature of the book is its unusually wide use of Russian papers, particularly those published during the last few decades. More than 25% of all quoted authors are Russians. Thus, our Hungarian colleagues have transmitted to us much information which otherwise may not have ever been penetrated through the language curtain. On the other hand, the authors should be reminded of the omissions of pertinent works published in English language, e.g., those of Bradfield, Jackson, Kelley, and more recent papers of Marshall. Chapter 2 of the second part would have been benefited by a summary of research conducted by Deuel and Flair.

There is little doubt in the reviewer's mind that subsequent editions of this fundamental work will provide ample opportunity for a correction of the present minor deficiencies. With certain rejections, this book should be by far a more eligible candidate for translation into English than some of the monographs which have recently enjoyed this privilege.—S. A. Wilde, University of Wisconsin.

Arbeiten aus dem Gebiet der Micromorphologie des Bodens (Research from the Realm of Soil Micromorphology)


This attractive, beautifully illustrated volume includes contributions of European scientists who took part in the 1955 Brunswick-Mayorkoje conference of soil micromorphologists organized by Dr. W. L. Kubiena. The 28 papers provide much valuable information on the principles and methods of micromorphological soil research, as well as on important, obscure characteristics of a variety of genetic types of soils and organic layers.

Although the subject matter of the book is highly diversified, all papers reflect one common feature—a profound infatuation of the authors with their topics. These researchers are using jeweler-like techniques to detect with a painstaking exactness the minute minero-organic and biotic features of soils; they labor to broaden the scope of pedology and perhaps to gradually deliver this scientific discipline from its present critical state of terminological delirium.

The text includes English summaries of each paper, a highly desirable supplement. Unfortunately the brevity and wording of some of these summaries fail to do justice to the original contributions. A slight additional effort and a few extra pages would have transmitted the valuable contents of this book to most soil scientists of the world. It is hoped that this shortcoming will be corrected in the second edition of the volume. —S. A. Wilde, University of Wisconsin.

Doklady, Soil Science, 1961

A translation of articles in the Soil Science Sections of the Proceedings of the Academy of Sciences of the USSR and the Higher Education Institutes of the USSR. Printed in January, 1957, by the Scripta Technica, Inc., 1000 Vermont Ave. N.W., Washington 5, D. C. The translation and publication of this journal is a project of the American Institute of Biological Sciences. Project was supported by the National Science Foundation.

Doklady Soil Science is a journal publication that was translated from Russian into English dealing with subjects in soil science for the year 1961. Copies of Doklady Soil Science were mailed to the subscribers of Soil Science. Twenty-two articles appear in the issue covering subject matter in soil physics, water and soil management, plant nutrition, soil chemistry, soil microbiology, genesis and classification of soils, salted soils, soil mineralogy, forest soils, and history of soil science. Articles are brief, 3 to 5 pages long. About half of the 96 pages printed consist of tables and graphs. Judging from the past issues of the Russian Doklady, the articles are a prelude to a more detailed publication that will be forthcoming in other journals. Soil scientists will find one or more articles in the journal that will be more than passing interest. Articles appear to be the current research work in soil science in Russia.—A. P. Mazurak, University of Nebraska.

SOIL BRIEFS, continued

A Further Note on the Efficiency of Soil Moisture Neutron Probes

The efficiency of soil moisture measuring devices using the neutron method indicates the proportionality between count rate and the product of source strength and moisture content. It is an objective and useful method to characterize different forms of equipment.

C. H. M. van Bavel, SWCRD, ARS, USDA, Tempe, Ariz.


Brief Concluding Comments About Neutron Probe Sensitivity

Sensitivity of neutron soil moisture probes is shown to be related to the slope of the calibration curve in counts per minute per unit volume fraction of soil moisture.
