Book Reviews

**DYNAMIC DER MITTELEUROPAISCHEN MINERALBODEN**

*(Dynamics of the Central European Mineral Soils)*

By W. Laatsch. Ed. 4. The Steinkopff, Dresden and Leipzig, 280 pp., illus., 1957.

The fact that the 3rd and 4th editions of this book are separated by only 3 years indicates the popularity of the text among German-speaking students of soils. The author, Professor of Soils at the Forestry School, University of Munich, is to be commended.

As stated in the preface, this book is not intended to serve directly the aims of agriculture or forestry, but rather to provide basic information on the physical and chemical aspects of soil development to scientifically trained agronomists and foresters. Agricultural chemists, soil surveyors, and plant ecologists. Accordingly, about 100 pages of the volume are devoted to clay minerals and soil humus. Description of genetic soil types consumes 80 pages and the remaining space covers the geological characteristics of soils, textural and structural properties, moisture relations, soil chemistry, and other subject matter. The text is soundly written in a concise language and is well illustrated. It is an interesting and valuable contribution to the literature on soils.

One phase of soil dynamics which was not discussed, but which has paramount practical importance in cultivated and uncultivated soils, is the mobility of nutrients, particularly bases and nitrogen. This phase of soil behavior was studied in detail by Zakharov and many others. The inclusion of at least a general picture of the translocation of nutrient ions in soil profiles would help to justify the otherwise questionable title of the book. In fact, the title is the Achilles’ heel of the treatise, for its three German words imply four ambiguities.

A totally inadequate treatment of the most essential dynamic factor of soil fertility and soil development—soil organisms—may also be disappointing to biologically minded students of soils.

Another note of discord may arise in regard to the classification of soils on a genetical basis. By and large, the author follows the classification introduced by Kubiena, and can be held responsible only for the dissemination of certain erroneous concepts and questionable terminology.

While the reviewer is very favorably predisposed toward the acceptance of folk nomenclature, an introduction of new terms should not reach the proportions of promiscuity. This is especially true when innovations are made by scientists not sufficiently familiar with the languages from which they borrow. For example, the term “Borowina”, used for designation of calcareous meadow soils, refers in Polish and Czech, as well as in Russian, to pine woods, a forest type that is foreign to meadow soils.

The footnote explanation that the Russian word “podzol” is derived from “pod”, meaning “under”, and “zola”, meaning “ashes”, is incorrect. The first syllable refers to the old Slavic word “poda” or “soil”, a word which gave rise to the German “Boden”; and the literal translation of the term “podzol” is “soil ashes”. This misinterpretation of the term, incidentally, has crept into several English publications.

The most unfortunate term, accepted by many European pedologists, is the expression “podzolized brownearth”. This type of soil may occasionally be formed as the result of an artificial reforestation of brownearth soils with podzol-forming conifers. As a rule, however, the transitional zone between the brownearths of the plains and podzols of the high mountains is occupied by podzolic soils which never passed through the brownearth stage of development, and are in no way dissimilar to the podzolized soils of northern Eurasia and America.

Disregarding the minor details, Dr. Laatsch’s book well fulfills its purpose of providing an account of recent achievements in the field of Soil Science, particularly those pertinent to soil colloids and moisture relations, and it is to be recommended to soil specialists as well as students of advanced standing. Both the contents and the unusually clear language make this text admirably well suited for students who wish to fulfill a graduate language requirement.—S. A. Wilde.

**MANAGING SOUTHERN SOILS**


This is one of three books published in the “Southern Farm Series.” In the words of the author, “This book has been prepared primarily for agricultural students, farmers, and farm leaders who are interested in the management of Southern farm soils.” While it will be used mostly by vocational agricultural students, any person desiring a broad picture of Southern soil management and agriculture will find it interesting.

General descriptions are presented of soils and their characteristics, the physiographic regions of the South, and problems involved in managing soils for conservation and crop production purposes. The complexities of soils and their management are presented in a relatively simple manner. Many excellent pictures are included.

The wide Southern climatic variations, as they affect soil management and cropping, are handled well by devoting chapters to special problems. Two of these are: “Managing Soils for Special Uses” and “Managing Soils in Dry Regions.” Other chapters of special interest to vocational agriculture groups are: “Classifying and Judging Land,” “Buying Farm Land,” and “A Forward Look.”

The various aspects of soil management are effectively covered in different chapters of the book, but organizationally some chapters could have been combined to give a more comprehensive coverage of the subject. Chapter 7, “Nature and Properties of Soils,” could have been more inclusive in covering physical and chemical properties, to set the stage for the subsequent soil management discussion.

The author is to be commended on his coverage of a complex subject.—R. D. Munson.

**POLLEN AND SPORE MORPHOLOGY, PLANT TAXONOMY—GYMNOSPERMAE, PTERIDOPHYTA, BRYOPHYTA**


An excellently illustrated companion volume to “Pollen morphology and Plant Taxonomy—Angiosperms” by the same author.