The third chapter summarizes the microbiological aspects of peat. This section includes a very adequate, although rather brief, discussion of the role of microorganisms in peat formation, peat decomposition, microbial transformations in peat and phytopathological aspects in crop production on peatlands.

Chapters 4 through 10 are concerned with various management problems where peat is used for crop production both in the field and in the greenhouse (glasshouse culture). The various subject matter discussed includes nutrient requirements, problems with weed control, peatland crops, machinery for field crops on peat soils, cultural practices, vegetable and nursery crop management, peat mixes for container-grown and bedding plants, and special peat products for plant propagation. The last chapter discusses the use of moss peat as a soil conditioner, as a growing medium for various culture systems, and as mushroom casing material.

Chapter 4 on lime and fertilizer requirements for peats is co-authored by Dr. S. Lucas, Riecke, and Shuckluwa of Michigan State University and Andy Cole of the Irish Agricultural Institute, Lullymore, Ireland. This chapter is very well written and gives quite specific recommendations as to lime, fertilizer, and minor nutrient needs for both vegetable crops in the field and for greenhouse crops. A section deals with soil testing methods for peat and peat mixes.

The appendices in the book lists the various materials used as peat composites and provides a glossary of technical terms concerning peat as well as a multilingual list of commonly used terms.

This book is highly recommended for those in peat research, teachers of horticulture, soil scientists, and consumers of peat such as gardeners, florists, and commercial vegetable and sod growers. Interested readers should find this an excellent reference text on all aspects of the use of peat in horticulture.

The only criticisms I can find of this book is that the editors have inadvertently omitted the discussion of some important work being done with peat in places such as California, Florida, Israel, Holland, Germany, and elsewhere. This is understandable in case of this book, however, since it had its origin as a result of a rather limited conference in Ireland—ROUSE S. FARNHAM, Department of Soil Science, University of Minnesota, St. Paul, MN 55105.

**Glossary of Soil Science Terms**

In Russian "Tolkovyy slovar po pochvorevedeniyu"  


Dr. Rode and his 13 associate editors were charged with compiling a comprehensive glossary of soil physics and technology, soil chemistry, soil biology, agrochemistry and soil fertility, soil genesis and classification, soil mollification, soil mineralogy, and soil erosion. Nearly 100 soil scientists are listed in the acknowledgement as participants in compiling the glossary.

About 1,917 terms are defined in the Russian glossary. Many Russian terms have English equivalents but several Russian terms have no English equivalents. Hence, the Russian terms must be transliterated such as Ber-

The Russian Soil Group is Podbel and Podbur are defined. Soil minerals are described as to its chemical composition, refractive index, X-ray diffraction pattern, DTA pattern, particle density, and their relative amounts in soils. Many concepts in soil science are explained such as "human theory of plant nutrition." The glossary is very useful and is recommended for libraries and for soil scientists reading Russian—A. F. MAZURAK, Professor of Agronomy, University of Nebraska, Lincoln, NE 68503.

**Land and Land Appraisal**


This book is not very well organized. It consists mainly of lengthy notes from conference summaries, from literature reviews, and from other studies with which the author had contact during work for FAO in Asia. Little in the book is original; the work, however, does draw together many references, concepts, and ideas from recent publications (mostly in English) in Asia which are not generally available to soil scientists in the USA. The geographical scope of the book includes mainland southern, southeastern, and eastern Asia (from Pakistan to China and Korea) and equatorial monsoon islands of Sri Lanka, Indonesia, Malaysia, The Philippines, Taiwan, and Japan.

The book discusses definitions of land, the ecosystem as a biological entity, evaluation of physical and biological and economic components, use of land in rural ecosystems, assessment of land capability, some surveys planned or completed, and education in appraisal of land resources. Long quotations from the various references occupy much of the book; readability could have been much improved with further editing and revision. A table of contents is given, plus an additional three pages of "contents of chapters" with numbered subdivisions. An index to subjects, an index to authors and contributors cited, and a key to abbreviations are included at the back of the book. The paperback book is printed on glossy paper of high quality.

The reader of this book gets the impression that the author did a great deal of traveling to many FAO conferences, but had some difficulty in organizing all of the material he gathered. Considerable parts of the book include extracts from conference proceedings and lists of items from other sources. The book does have 41 illustrations, but many of these figures are merely systems diagrams of complex interactions of various developmental processes. Only three aerial photographs of patterned crop failures are given; more photos could have been used in the book to good advantage.

On page 3, for example, a source is quoted as showing "the effect of overgrazing" in a "NASA satellite photo," but the photo is not included in this book for the reader to see.

The book does have a number of interesting maps and tables from various sources, including a schematic soil map of China (page 91), a theoretical vegetation map of China (page 144), a map of incidence of malaria in India (page 220), and a list of factors affecting agricultural development (page 245)—all taken from various other references. Most of these extracts are not discussed at any great length by the author. Interested readers, however, can use this book as an initial source for attempting to procure the other references. At the end of each chapter a reference list of several pages is given to help the readers achieve this goal. In all of the book about 42 pages of references are given.

This compilation makes an interesting book for its collection of sources and lists, but the book should not be regarded as the final authority on land and land appraisal. The book should be of interest to American soil scientists who are unfamiliar with the work in Asia, and who want to get a view of the projects and progress in that part of the world. The review slip lists the price as 100 Dutch guilders, but that must surely be an error at an exchange rate of 2.73 guilders to $1.00.—GERALD W. OLSON, Department of Agronomy, Cornell University, Ithaca, New York 14853.