BOOK REVIEWS, continued

Anhydrous Ammonia—Aspects of Its Technology and Uses as a Fertilizer


Anhydrous ammonia is the least processed and lowest-cost unit nitrogenous fertilizer available. For this reason, a committee representing both private and public concerns of the agricultural industry organized the Anhydrous Ammonia Symposium held December 15–17, 1970 at the National College of Agricultural Engineering, Silsoe, Bedford.

Topics covered in the sessions were: Session 1-distribution and farm handling—production and marketing of ammonia on a worldwide basis and distribution of ammonia in the United Kingdom; Session 2-agronomic effects—biological effects of ammonia, anhydrous ammonia for cereal crops in East Scotland, anhydrous ammonia for potatoes, and nitrate accumulation during nitrification of ammonia and ammonium; Session 3-field application—agronomic aspects of ammonia application, including grassland and arable crops, tine design and traction, engineering aspects of applicator design, and the design of grassland knives; Session 4—economics and management—anhydrous ammonia used from a farm management point of view and the economics and use of ammonia on an intensive grassland farm.—PE

The Australian Environment—4th Edition


This book was first published in 1949, and has now reached its fourth edition. Most of the chapters have been rewritten by the authors, the general historical chapter has been omitted, and three new chapters appear, namely on forests, native animal life, and on tropical pastures.

The 11 chapter headings are: landscape; the history and geography; the flora and fauna; the landforms; the climates; the soils; the water and irrigation; the vegetation; the animals; the forest as a crop; and the native animal life.

The first edition in 1949 was prepared for the International Congress (British commonwealth agricultural conference). The second edition in 1950 and the third edition in 1960 were essentially a reprinting of the first edition. The fourth edition brings up-to-date and enlarged information.

The 20 authors prepared this book as a reference for students in geography, agriculture, and land use in Australia and elsewhere.—PE

Die Physikalische Untersuchung von Böden


This paperback book by Germany's foremost soil physicist describes methods of measuring soil physical properties. It consists of 12 chapters plus topic and author indexes. Each chapter deals with a specific topic such as determination of particle size, pore space, bulk density, water retention curves, aggregate stability and structure, water conductivity, water potential in situ, or resistance to deformation. Typical format of a chapter is a statement of the problem, principle of the method, equipment needed, making the measurement, calculation of results, possible errors, a short description of other methods, and finally literature cited.

Prof. Hartge's book is intended for use by students and soil scientists who are not specifically soil physicists. It is well-written and well-documented with ample sketches of good quality. A refreshing aspect of this book is that the sketches and graphs show equipment and set-up variations as well as ways of presenting results that are different than the stereotypes most Americans are accustomed to.—GEORGE R. BLAKE, Professor of Soils, University of Minnesota, St. Paul, Minn.

Synthetic Streamflows

Water Resources Monograph


This new monograph series published by the American Geophysical Union is designed to be an effective medium for disseminating current knowledge in hydrology, water resources planning and management to those engaged in the everyday need for water resources development. This new volume will emphasize the application of research to the practical problems of water resources development.

Synthetic Streamflows summarizes many of the concepts for generating synthetic streamflows, presents examples, and offers proposals for their application to hydrologic engineering problems. The book addresses the following topics: tools of operational hydrology; evaluation of the usefulness of a model; and other considerations in the application of hydrology. An appendix covers mathematical models. The authors are on the staff of Harvard RCD.