BOOK REVIEWS

THE CLIMATE NEAR THE GROUND


"The Climate Near the Ground," originally published in German, and now translated into English, is a comprehensive survey of microclimatic problems. It covers many of the microclimatic problems of practical consequence in a descriptive method of presentation. At the present time it practically stands alone in its field.

The book can be divided into two broad divisions. The first, covers the basic meteorological physics of the air layer near the ground and also certain soil properties. Radiation, wind, and humidity are among the items discussed. Material is presented with a minimum of mathematics. The second covers the microclimatic effects in relation to topography, plant cover, and man. The significance of microclimatology to zoology is discussed very briefly. To some readers, the second division may seem somewhat lacking in physical explanations. The book is written so that the reader needs little mathematics or physics.

This book is of great interest to specialists in the field of microclimatology, and would be of considerable value to specialists in many other fields, such as agriculture, botany and forestry. It is particularly recommended for those with an interest in microclimatical problems, but with a limited knowledge of mathematics and physics.—R. H. Shaw

INTRODUCTION TO AGRONOMY


This book was written primarily as a text for an introductory course in Agronomy at the collegiate level but can serve as a general introduction for any person interested in this field. The first chapter traces the development of agronomic science by presenting many of the classical contributions. The use of direct quotations throughout the text to present subject matter introduces the reader to many agronomists who have made significant contributions.

The book is divided in four parts: (1) The Agronomist and His Crops. (2) The Agronomist and His Soils. (3) Production Factors, and (4) Production Hazards. Rather than attempt to present a complete treatment of any subject the author has chosen to introduce the reader to many of the basic principles in each area and to challenge him with problems remaining to be solved. Cultural practices are not discussed in this text. To many this will seem to be a serious omission.

The format of the book is excellent with pictures and tables being used effectively. Each chapter is concluded with references of Literature Cited and Suggested Reading. This will be of value to students who wish to do additional reading on any of the subjects presented.

Where the philosophy of the beginning course is similar to that of the author, this should prove to be an effective text for introducing students to the science of Agronomy.—D. G. Hanway.

POTASH SYMPOSIUM, 1956

Proceedings of the Annual Meeting of the Board of Technical Advisors of the International Potash Institute, London 1956

This is a series of papers on the behavior of potassium in the plant given at a London meeting under the chairmanship of Sir E. John Russell. The papers were presented by European authorities and hence provide a good opportunity to become better acquainted with the thinking of these scientists. Some interesting ideas are presented which should be of considerable value to those concerned with plant nutrition studies. The titles of the papers are as follows: Selective Absorption of Alkali Cations by Storage Tissues and Intact Barley Plants; Potassium in Tissue Cultures; Potassium in the Cell; Some Aspects of Potassium Deficiency in Plants; The Significance of the Potassium Content of Plants; The Physiological Basis of the Effect of Potassium on Crop Yield; Visual Symptoms of Potassium Deficiency in Crops and Relation of Potassium to Magnesium in Plant Nutrition; The Effect of Potassium on Crop Yield; The Influence of Potassium on the Quality of Food Plants with Special Regard to the Biological Value; and The Effect of Potassium on Parasitic Plant Diseases. Six of the papers are in English and summaries of all papers are given in four languages including English.—Werner L. Nelson

PLANT ANALYSIS AND FERTILIZER PROBLEMS, Vol. II.


This is a volume of prepared papers presented at a symposium organized by the Institut de Recherches pour le Huile et Oleagineux and under the auspices of the Sixth International Congress of Soil Science.


A second group of papers dealing specifically with minor element problems include the following authors: P. A. Vlassjuk, U.S.S.R.; E. Beyers, U. S. Africa; J. Maistre, France; N. Wells, New Zealand; R. Gasser and J. Muller, Switzerland.

A third group of papers are concerned with the relation of soil and plant analyses. Authors include: R. L. Mitchell, J. W. Reith and I. M. Johnston, Great Britain; M. Ollagnier and P. Prevot, France; H. R. Oppenheimer, Israel; W. S. Iljin, Venezuela.

A fourth group of papers is concerned with plant analysis and fertilizer problems of perennials, and a fifth with annual plants.