Book Reviews

A STORY OF HOOSIER SOILS. By T. M. Bushnell, Purdue University Agricultural Experiment Station, 430 Russell Street, West Lafayette, Ind. 104 pp. $1.50. 1958.

This publication is a modification of "The Story of Indiana Soils," Special Circ. No. 1, Purdue University Agr. Exp. Sta., June 1944. It includes many changes and considerable new material, much of it reflecting the author's views, particularly those on soil classification. The first half of the book deals with Indiana soils, their formation, development, classification, and general soil regions as related to drainage, parent material, type of farming, etc. This section is amply illustrated with photographs, maps, charts and drawings and will be of interest to all who have had occasion to visit "Hoosierland." The second half of the book deals with soil classification in general, presenting many of the author's views on this topic. Dr. Bushnell takes issue with some of the "modern" or "official" ideas on soil classification and profile description. He suggests that pedology have a "taxonomic code," similar to that used in botany, which should be devised and sponsored by national and international scientific societies which would control developments in this field. A table of contents and better use of section headings would improve the book. All the many friends of Dr. Bushnell will want a copy of this book as will many of the younger pedologists not acquainted with his ideas.

—RCD

STATUS OF AGRICULTURAL EXPERIMENTS. By V. G. Panse, Statistics Division, Food and Agriculture Organization, Rome, Italy. 41 pp. plus tables and appendix. 1936. (Columbia University Press, 2960 Broadway, New York 27, N. Y., and other FAO agents.)

"As part of its programme to help countries improve their statistical service in agricultural research, the FAO carried out in 1954 a survey of the status of agricultural experiments in different countries... [to obtain] information concerning the objects, treatments, statistical design and other details of experiments conducted in recent years... Data from 547 agronomic experiments were received from 21 countries in the Far East, Southeast Asia, the Middle East, and Africa."

This booklet summarizes some of the findings of this survey and makes suggestions for the improvement of statistical services in the several countries. The tables show the distribution of the 547 experiments by crops and countries, the land use in the various countries, and other pertinent information. The questionnaire form is given as an appendix.


This volume contains the major addresses and symposium papers presented before the 50th Anniversary Meeting of the American Phytopathological Society held at Bloomington, Indiana, in August 1958. It is the Society's Golden Jubilee volume and quite adequately covers the many facets of plant pathology.

The book is divided into 10 parts. The first contains the major addresses and the remaining parts the 9 symposia, each devoted to a major division of plant pathology. The chapters in each part are written by specialists who are among the most distinguished in their fields. It is significant to note that of the 51 chapters, 20 are written by scientists from Australia, Canada, England, Germany, Honduras, Mexico, South Africa, and The Netherlands. The major addresses are devoted to the historical and developmental aspects of plant pathology. Topics such as international aspects of plant disease study and controlling plant diseases by host resistance are of particular interest to agronomists. The symposium on the genetic approach to elucidation of mechanisms governing pathogenicity and disease resistance is of cardinal importance to plant breeders with interest in breeding for disease resistance. Here are presented stimulating chapters on genetic controls of host-parasite interactions in rust, smut, and other diseases. Lucid descriptions of heterokaryosis and parasexual recombination are given in a chapter on mechanisms of fungus variation in relation to host-parasite interactions. Two chapters are devoted to induced mutations, first of pathogens and then in host plants. Readers of the Agronomy Journal also will find a wealth of information in the papers given in the symposia devoted to physiology of parasitism (6 papers), soil microbiology and root-disease fungi (6 papers), concepts and problems of nematology (5 papers), and epidemiology of plant diseases (5 papers). Other symposia on fungicides, the chemistry of fungicides, the structure of viruses, and the multiplication of plant viruses are of interest, not only to the specialist, but also to the general reader. Introductions, discussions, and epilogues supplement the main chapters. Each chapter contains a bibliography of selected references.

The book is easily readable. The illustrations are excellent. As a reference work of the highest order, it is a monument to a half century of progress in plant pathology. It contains something of value to all who are interested in the past, present, and future developments of agriculture and biology.—A. L. Hooker, University of Illinois.