BOOK REVIEWS

Resource Conservation Glossary

The 1976 Resource Conservation Glossary, published by the Soil Conservation Society of America, is an extensive revision of the 1972 edition. The glossary is designed to be of aid to all conservation professionals, students, administrators, and clerical personnel. The new edition contains over 2700 terms from 18 technologies, including agronomy, biology, conservation, ecology, economics, engineering, fish and wildlife management, forestry, geology, hydrology, land use planning, mining, pollution control, range science, recreation, soils, waste management, and watershed management.

The glossary was provided free to all members of the Soil Conservation Society of America in the July-August (1976) Journal of Soil and Water Conservation. It is available as a separate publication at the following prices: Single copy—$5.00; 2-9 copies—$3.00 each; 10-49 copies—$2.50 each; 50-99 copies—$2.00 each; and 100 or more copies—$1.50 each. The publication can be ordered from the Soil Conservation Society of America, 7515 N. E. Ankeny Road, Ankeny, IA 50021.

Soils of the West African Savanna—The Agronomy of the Major Tropical Crops, and Improvement of their Fertility


If you imagine that the Tropical Zone is covered by secondary, infertile soils which are inherently poor, then you are likely to be wrong. The soils of the West African Savanna have high internal fertility. There are, however, some soils which are inherently poor, but they are rare. The major problem is not the fertility of the soils themselves, but the management of the land. The soil fertility can be improved by a variety of methods, but the most important is the use of organic matter.

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Corn Improvement, Seed Production, and Uses


In 1958, The Food and Agriculture Organization published Hybrid Maize Breeding and Seed Production authored by Robert W. Jugenheimer. Corn Improvement, Seed Production, and Uses is a rewritten and expanded version of this earlier volume. The opening section consists of six chapters covering the subjects of population and food dilemma, production practices, origin and evaluation of corn, genetics of corn, heterosis, and mutations. There are four subsequent sections comprising a total of 24 additional chapters which are titled: (i) Breeding Methods for Corn Improvement, (ii) Selection for Economic Characteristics, (iii) Development and Evaluation of Hybrids, and (iv) Seed Production, Processing, and Distribution. Each section provides coverage of a particular aspect of corn improvement, production, or use. The last section entitled, Seed Production, Processing and Distribution typically illustrates this as it contains eight chapters spanning 179 pages. The chapter titles indicate the comprehensiveness of the coverage: (i) Training Seed Technologists, (ii) Production of Hybrid Seed, (iii) Planning an Efficient Seedcorn Processing Plant, (iv) Harvesting, Processing, and Storage of Seed, (v) Marketing Seed, (vi) Foundation Seed Stock Organization, (vii) Seed Certification, and (viii) Policies and Legislation.

The book is well done. For example, a discussion of the development of inbred lines is supplemented with a pictorial demonstration of both tassel bag and bottle methods of hand pollination. Many of the chapters contain technical information that can be of immediate use to college-trained readers. One of the best chapters in this respect is Chapter 15 which lists and discusses 22 leaf diseases and their symptoms. Many of these diseases are illustrated with photographs. The chapter also contains similar coverage of stalk rot, ear rot, and smuts. Chapter 16 which deals with insect resistance and tolerance is not as extensive but it is well written and useful.

The book is encyclopedic in its treatment, being 670 pages in length with little repetition among chapters. As must be the case with a volume discussing a subject with so many ramifications, some topics are covered only briefly. Some readers, for example, may feel that chapters such as 20 and 21 which deal with statistical methods and experimental designs could have been omitted since they are generally discussed and briefly treated. To this reviewer, they appear to offer the reader a generalized understanding of an important aspect of corn production that might otherwise be overlooked. One of the chief merits of this volume is its comprehensiveness and its careful attention to detail.

The Agronomy of the Major Tropical Crops


Every professional person who is making decisions, conducting research, resident teaching, or extension education in agriculture, forestry, or who plans to do so, should have this book on his shelf. Dr. C. N. Williams, the author, is a lecturer in agricultural science at the University of Malaya.

The application of information presented here will require billions of dollars spent on projects that were not adapted to the tropical environment. While this book is not addressed primarily to that subject, it does deal with many soils problems which could increase the full potential of the tropical climate can be brought to bear on crop—production—problems about which some agriculturalists who have worked in Temperate Zone agriculture, have rather poor understanding of the tropical environment. While this book is not addressed primarily to that subject, it does deal with many soils problems which could increase the full potential of the tropical climate can be brought to bear on crop—production—problems about which some agriculturalists who have worked in Temperate Zone agriculture, have rather poor understanding of the tropical environment.

Throughout the book the author's personal experience is combined with technical information that can be of immediate use to college-trained readers. One of the best chapters in this respect is Chapter 15 which lists and discusses 22 leaf diseases and their symptoms. Many of these diseases are illustrated with photographs. The chapter also contains similar coverage of stalk rot, ear rot, and smuts. Chapter 16 which deals with insect resistance and tolerance is not as extensive but it is well written and useful. Also, brief treatments of complex topics sometimes stimulates the reader to seek more complete information.