Book Reviews

SOIL—IT'S USE AND IMPROVEMENT

This book on soil is a most valuable compilation of background material for anyone who is interested in the future welfare of our country.

The historical story of erosion down through the ages and the erosion that man brought about here in the United States to date is not an encouraging picture. However, we do now know how erosive forces act.

The idea of each raindrop being a “bomb” will be surprising to many. But everyone has seen mud splattered three feet up on a wall. However, we do now know how erosive forces act.

Wind has the same effects as water. The exact method by which wind moves soil is also clearly explained in the text and by well selected photographs.

Soil Conservation Districts and Watershed Plans help in developing farm plans. It is clearly shown how the local people through the organized groups bring together for use in helping to develop the basic conservation practices. A close adherence to the exercises of the suggested exercises at the end of each chapter in this book will enable students to answer questions which follow the exercises.

The comparative value of the various agricultural plants and crops, their arrangement in effective erosion control patterns, and the best management of all residues for protection and improvement of the soil, are given the rightfully prominent place. Grassland farming is now being recognized as the basis for a sustaining prosperous agriculture.

The need for protective measures and the kinds of measures required to make the ranges and the woodlands more productive are well covered. With this information the student can develop the necessary local adaptations from local experience and study.

The practical value of the foregoing studies is seen as they are brought together for use in helping to develop a basic conservation plan. It is clearly shown how the local people through the Soil Conservation Districts and Watershed Plans help in developing adapted practices with specifications for establishment that meet local conservation needs.

The inter-relationship of soil, plants, and water is brought out in the chapters on Water Disposal, Irrigation and Drainage.

The student, conservation farmers and agricultural workers will be more effective conservationists after reading and studying this book.—T. C. MAURER.

THE AUSTRALIAN WHEAT GROWING INDUSTRY
1788-1948

As implied by the title this book is a history of the development of the wheat industry in Australia. Emphasis is on the impact of development on the individual wheat grower as well as the wheat growing economy. Although devoted to tracing the economic and social development of the wheat farmer and the industry in Australia many data are included which would be of significant interest to plant ecologists and to agronomists interested in the impact of their science on the economic development of a country.

Two things immediately strike the reader. One is the availability of a considerable amount of data relative to acreage, production, and economic conditions of wheat production in Australia. The other is Professor Dunsford's determination to evaluate every piece of data which he is able to locate by applying tests of significance and by analytical comparisons. This work obviously was not prepared by an amateur historian. Statements appeared to be well documented as evidenced by the fact that very few of the 536 pages appear without at least one footnote citing an original source.

The book was written for those with a genuine interest in the development of the wheat economy in Australia. At the same time it is not laborious and will provide interesting reading for a wide readership including most agronomists as well as students of economic development.

The book is divided into two parts. In one the wheat grower is the center of the stage and the development of his fortune in Australia is outlined in considerable detail. In the second the economic forces which have influenced the wheat growing in Australia are given primary attention with only secondary consideration being given to the role of the wheat grower.

The book is divided into chapters. The first six chapters, which constitute part one, are arranged by chronological order. They are: Foundation, 1788-1793; The establishment of a wheat market, 1793-1824; The period of insufficient expansion, 1825-1855; The period of declining yield, 1855-1896; The period of rapid expansion, 1896-1930; and International domination and governmental intervention, 1930-1948.

The next five chapters constitute part two and are titled: Trends and fluctuation; Cost of producing wheat; Wheat growing in the National economy of Australia; and Population and wheat-growing. Each book is concluded with an appendix giving some original data as well as comments on previously presented information.—LEONARD W. SCHUBEN, Kansas State College.

FUNDAMENTALS OF HORTICULTURE
Second Edition

The first edition of this book was published in 1951 from teaching materials used in the beginning general horticulture course of Clemson Agricultural College. It is divided into three parts: (I) the study of fundamental processes, (II) application of fundamental processes to horticultural practices, and (III) discussion of principal horticulture crops.

The book reiterates the basic botany principles of plant growth and considers some of the fundamentals of plant chemistry, soils and water sciences related to horticulture. Enough plant physiology is included to understand the many horticultural practices used.

The new edition brings practices and statistics up-to-date, modernizes questions at the end of each chapter, presents material on the use of plant regulators in the apple orchard and includes a revised section on Citrus Fruit. The book is designed for students in beginning horticulture and although such information seldom becomes outdated the new edition to keep the material current should be welcomed by those interested in teaching or studying fundamental horticulture.

BOTANY: AN INTRODUCTION TO PLANT SCIENCE
Second Edition

This complete introductory textbook in botany, first published in 1950 has been revised, improved and modernized. Special attention has been given to new illustrations including color plates. All levels of plant life are discussed. The subject of botany is approached by studying the plant as a whole living, functioning organism. The second edition gives increased emphasis to plant physiology with simple yet completely illustrated drawings of the photosynthesis and respiration processes. A complete glossary of botanical terms is included.

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