
Plant Anatomy. *Katherine Esau.* John Wiley & Sons, Inc., New York. 1953. viii+735 pp. \$9.00.

Miss Esau has achieved in this book the same high degree of excellence which characterizes her extensive research in the field of plant anatomy. The book is developmental in approach, sufficiently comprehensive in scope, accurate in most details, thoroughly documented, superbly illustrated and well written. The reader will find this book satisfying in that he will find answers to most of his questions, if the answers are known.

A good balance between topics has been achieved. The cell, cell types, tissue types, meristems, and the principal organs (except the hypocotyl) have been discussed separately in detail. Throughout the discussion of each, attention has been directed to its origin, and its significance with respect to the growth and attainment of form of the living plant. The physiological significance of the various structural phenomena are frequently called to the attention of the reader.

Some will say that the book contains too much material and too many details to be covered in a one quarter, or one semester course in plant anatomy. This is true—but this very fact makes the book more useful. This allows the instructor complete freedom to choose and to teach those topics which he believes to be most essential for his particular group of students. The book will serve as a broad and sound base upon which to construct a general course in plant anatomy which will serve the very real needs of the plant physiologist, horticulturalist, forester and entomologist. *Plant Anatomy* presents and elucidates the developmental and three-dimensional concepts of plant structure which every plant scientist must comprehend in order to completely and successfully relate the dogmas of his own special field to the growing plant. Miss Esau's book sets a new pace for plant anatomists and provides the means by which any plant anatomist may raise the level of understanding achieved by his students. *Plant Anatomy* has rendered the static, the cut-and-look, the paleobotanical, and the phylogenetic approaches to plant anatomy as archaic as a taxonomic approach to a general botany course.

R. A. POPHAM

The Scientific Adventure. Essays in the History of Philosophy of Science. *Herbert Dingle.* Philosophical Library, Inc., New York. 1953. ix+372 pp. \$6.00.

A Textbook of General Botany. *G. M. Smith, E. M. Gilbert, G. S. Bryan, R. I. Evans, and J. F. Stauffer.* Macmillan Co., New York. Fifth edition, 1953. x+606 pp. \$6.25.

Engineering Descriptive Geometry. *Charles E. Rowe and James D. McFarland.* D. Van Nostrand Co., Inc., New York. Second edition, 1953. ix+352 pp. \$4.25.

Modern College Physics. *Harvey E. White.* D. Van Nostrand Co., Inc., New York. Second edition, 1953. xiii+823 pp. \$6.75.