
Botany: Principles and Problems. *Edmund W. Sinnott and Katherine S. Wilson.* McGraw-Hill Book Company, Inc., New York, 1955. vii+519 pp. \$6.75.

The authors have succeeded admirably in their attempts to modernize this fifth edition of a well established and widely adopted text of botany. One who has successfully used the previous editions of this book will find to his delight that there is a much more thorough survey of the information about plants which has accrued to science in recent years. The entire format of the book has undergone radical alteration much the better for the student reader. The pages are larger and the text is arranged in two columns. This has resulted in a considerable number of desirable and important changes in the order and content of chapters. Questions for thought and discussion follow each chapter but there are no summaries.

The chapter on the History of Botany has been expanded because of its importance and is shown as a good example of how most sciences develop. The chapter treating on the cell and protoplasm has been revised and has in addition new figures which better illustrate its new title which is the Physical Basis of Life.

The chapter on Metabolism has been completely rewritten and different emphasis is given the subjects of photosynthesis and respiration treating them simply but in professional style without oversimplification or obscuring them in technical detail.

The section, chapter four, of the older editions of the text which dealt with Soils has been transferred to the chapter on Environment in the new edition and the treatment of soils as factors of the environment has been greatly expanded considering modern discoveries of conditioners, fertilizers, mycorrhizal relationships of roots and fungi, and of new soil biotic factors.

There is no glossary of botanical terms, but the book includes a well developed Appendix of Greek and Latin roots from which plant science terms are derived and a very accurate index.

The quality and organization of the illustrations in this book have improved so much that it is difficult to recognize the text as the one which has had so many previous editions. The pleasant color of the binding of this book, its modern cover, larger size, and complete renovation all combine to extend this book above and beyond its previous meritorious position. It should prove to be of inestimable value as a text for general botany courses and if the reviewer is any judge will be very well received.

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