

BOOK REVIEW

Biology of Plants. Peter Raven, Ray F. Evert, and Susan Eichhorn. 1999. 6th ed. W. H. Freeman Co., New York. 994 pp., \$84.45 (cloth). ISBN 1-57259-041-6.

Biology of Plants by Peter Raven, director of the Missouri Botanical Garden, and co-authors has been a leading introductory botany textbook for nearly three decades. The various editions, recognized by their van Gogh-clad covers, have justifiably become the standard against which competing texts are judged.

One naturally compares this latest edition with the previous one. Even though the sixth edition has undergone "the most revision that *Biology of Plants* has undergone" the overall sequence of topics is retained: cells, energetics, genetics and evolution, diversity, structure and development, followed by ecology.

Among the numerous changes is the addition of sections titled "Secondary Metabolites" (Chapter 2), and "A New Millennium: the Transition to Sustainability" (Chapter 34). The topic of cell division (mitosis) has been expanded and moved from the plant cell chapter to a new separate one. The term "eudicot" appears for the first time.

Recent taxonomic developments have resulted in more atten-

tion given to cladistics. The authors now recognize three Domains: Bacteria, Archaea, and Eukarya.

Pedagogical aids are more extensive than in previous issues. Each chapter opens with an overview followed by "check-points," which lists questions the student should be able to answer after completion of the chapter. There are dozens of new illustrations, most in full color, and new summary tables.

As with most texts which go through several editions, *Biology of Plants* has become increasingly encyclopedic; there are 944 pages (versus 791 for the fifth edition). The result is a sophisticated and immensely comprehensive textbook that is ideal for a demanding, full-year botany course, or as a reference, but one that is frustrating when used for a shorter course. For such courses, one would wish that a version reduced in size (and price) also were available.

Thomas E. Hemmerly
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