

of systematic questions in order to provide explanations about the diversity of organisms within the frame of the theory of evolution." A very brief historical outline of the development of plant systematics concludes the chapter. Chapter 2 is devoted to the structure of natural populations, mutations, recombination, selection, and gene flow. Chapter 3, "Patterns of phenetic variability," deals with the interaction between heredity and environment. Subsequent chapters are devoted to "Breeding systems," "Speciation," "Hybridization," and "The species problem and classification."

In part 2 four chapters are devoted to major experimental techniques—genetics, cytology, chemistry, and mathematics and statistics. The final chapter reviews the combinations of techniques that may be needed for interpreting biosystematic relationships among diverse groups of plants. A glossary and a bibliography follow.

The author has obviously devoted much thought to the organization and writing of this volume with the student reader particularly in mind. Carefully selected examples illustrate basic principles, and no attempt is made to be exhaustive. The clearly written text reflects the author's thorough mastery of his subject, and his frequent mention of the still very incomplete state of our knowledge of plant relationships should serve to stimulate students to explore on their own. Solbrig's book is most timely and fills an urgent need in teaching a relatively new and highly promising field of botany.

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## Books Received

**Advances in Heterocyclic Chemistry.** Vol. 11. A. R. Katritzky and A. J. Boulton, Eds. Academic Press, New York, 1970. xii, 572 pp., illus. \$27.50.

**African Politics and Society.** Basic Issues and Problems of Government and Development. Irving Leonard Markovitz. Free Press, New York; Collier-Macmillan, London, 1970. xx, 492 pp. Cloth, \$8.95; paper, \$4.95.

**The Arbaugh Affair.** Darrell Garwood. Macrae Smith, Philadelphia, 1970. viii, 280 pp. \$5.95.

**Big Juniper House.** Mesa Verde National Park, Colorado. Wetherill Mesa Excavations. Jervis D. Swannack, Jr. National Park Service, Washington, D.C., 1969 (available from the Superintendent of Doc-

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**Building the Health Bridge.** Selections from the Works of Fred L. Soper, M.D. J. Austin Kerr, Ed. Indiana University Press, Bloomington, 1970. x1, 568 pp., illus. \$17.50.

**A Century of Weather Service.** A History of the Birth and Growth of the National Weather Service 1870–1970. Patrick Hughes. Gordon and Breach, New York, 1970. xii, 212 pp., illus. Cloth, \$10; paper, \$5.

**The Chemistry of Life.** Eight Lectures on the History of Biochemistry. Robert Hill, Malcolm Dixon, E. F. Gale, Kendal Dixon, F. G. Young, Leslie J. Harris, Mikulas Teich, and Rudolph Peters. Joseph Needham, Ed. Cambridge University Press, New York, 1970. xxxii, 216 pp. + plates. \$9.50.

**Choosing and Using Ship's Radar.** A Brief Guide. F. J. Wylie. Elsevier, New York, 1970. 152 pp. + plates. \$8.

**Computer-Based Library and Information Systems.** J. P. Henley. Macdonald, London; Elsevier, New York, 1970. viii, 84 pp., illus. \$5.75. Computer Monographs, vol. 12.

**Computing and Computer Science.** A First Course with PL/I. T. D. Sterling and S. V. Pollack. Macmillan, New York; Collier-Macmillan, London, 1970. xvi, 416 pp., illus. \$9.95.

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**The Crazy Ape.** Written by a Biologist for the Young. Albert Szent-Györgyi. Philosophical Library, New York, 1970. 96 pp. \$3.95.

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**Education for Peaceful Uses of Nuclear Explosives.** A symposium, Tucson, March–April 1969. Lynn E. Weaver, Ed. University of Arizona Press, Tucson, 1970. xii, 348 pp., illus. \$8.50.

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**Human Vigilance Performance.** D. R. Davies and G. S. Tune. Elsevier, New York, 1969. 292 pp., illus. \$11.50.

**Intermetallic Semiconducting Films.** H. H. Wieder. Pergamon, New York, 1970. x, 362 pp., illus. \$16. International Series of Monographs in Semiconductors, vol. 10.

**Introductory Experimental Chemistry.** Robert J. Ouellette, Carole W. Bohn, and John S. Swenton. Harper and Row, New York, 1970. vi, 186 pp., illus. Paper, \$4.95.

**Lightning.** D. C. Pritchard. Elsevier, New York, 1969. vi, 98 pp., illus. \$7.95. Environmental Physics Series.

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**Manpower Planning.** A Bibliography. C. G. Lewis, Ed. Elsevier, New York, 1969. viii, 96 pp. \$7.25.

**The Nucleolus.** Harris Busch and Karel Smetana. Academic Press, New York, 1970. xviii, 626 pp., illus. \$29.50.

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