

are currently in use. The descriptions of tube-type subcarrier discriminators and tube-type magnetic tape recorders could be misleading, even if there were an acknowledgment that the models described were introduced at least 7 or 8 years ago. The failure to mention the 2.2-Gc to 2.3-Gc telemetry band is difficult to understand. By 1970, telemetry users must vacate the 215-Mc to 260-Mc band, and many programs are now operating in the higher frequency band.

The format of the book is attractive, and the text is easy to read. I noted few typographical errors.

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Mycology

The Fungi. An advanced treatise. vol. 1, *The Fungal Cell*. G. C. Ainsworth and Alfred S. Sussman, Eds. Academic Press, New York, 1965. xviii + 748 pp. Illus. \$24.

This volume, the first in a projected series of three, fills a long-felt need for an authoritative, up-to-date summary of information on the structure and the biochemical and physiological activities of the fungus cell. The first two chapters, which can scarcely be considered as advanced, constitute the introduction and provide a historical background and a review of the structures and reproduction of fungi. These are followed by a 12-chapter section entitled "Cell Components," and a one-chapter section called "Gene Action." The chapters are well organized in sequence as well as in content, with numerous subheadings, and they are well documented with recent references. An author index, a subject index, and an index to organisms complete the volume.

The illustrations are excellent. Most of the reviews are well written, but some have a tendency to be choppy, with subject matter in as many as four subdivisions being discussed on a single page. Each chapter is by a specialist in the subject treated. For the most part the authors have been content to review the literature and their own research. I would appreciate (and others probably would also) more discussion of the author's viewpoint on the topic that he considers and his

ideas on current and future problems in the area. Only one chapter includes such discussion.

Topics that will be of specific interest to the teacher of mycology include the structure of the cell wall, flagella, the ultrastructure of the cells, and nuclear behavior during mitosis and meiosis. Several topics deal specifically with biochemical activities—"Chemical Constituents of the Cell," and "Carbon Metabolism" (an extensive review). Certain topics will be of special interest to the fungus physiologist who may be concerned primarily with the growth of fungi—uptake and translocation of materials, various phases of the chemical environment, factors of the physical environment, kinetics of growth, mechanism of extension and branching, growth rhythms, and special techniques. The review of gene action deals almost entirely with *Neurospora*.

Although the primary purpose of this volume appears to be to serve as a reference for the teacher and researcher, the advanced graduate student who is interested in fungi will find it equally valuable. In brief, the volume represents a remarkably successful attempt to bring together under one cover the vast amount of information on the fungus cell. This book should be on the desk of every research-minded mycologist and fungus physiologist, but the price of the volume will prevent it from reaching the bookshelf of all of the biologists who may wish to refer to it frequently.

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New Books

General

Adolescents and the Schools. James S. Coleman. Basic Books, New York, 1965. 135 pp. Illus. \$4.50.

Air Conservation. Report of the Air Conservation Commission of the AAAS. AAAS Publication No. 80. Richard Landau, Ed. AAAS, Washington, D.C., 1965. 347 pp. Illus. Cash price to members, \$7; others \$8.

Awareness of Dying. Barney G. Glaser and Anselm L. Strauss. Aldine, Chicago, 1965. 319 pp. \$6.95. Observations Series, edited by Howard S. Becker.

Behaviour in Uncertainty: And Its Social Implications. John Cohen. Basic Books, New York, 1965. 207 pp. Illus. \$5.50.

Better Report Writing. Willis H. Waldo. Reinhold, New York, ed. 2, 1965. 284 pp. Illus. \$10.

British Miniature Electronic Components Data 1965-66. G. W. A. Dummer and J. Mackenzie Robertson, Eds. Pergamon, New York, 1965. 1000 pp. Illus. \$28.

The Challenge of Science. George Boas. Univ. of Washington Press, Seattle, 1965. 113 pp. \$2.95.

The Correspondence of Henry Oldenburg. vol. 1, 1641-1662. Translated and edited by A. Rupert Hall and Marie Boas Hall. Univ. of Wisconsin Press, Madison, 1965. 544 pp. \$12.50.

Crosscuts Through History. Dagobert D. Runes. Philosophical Library, New York, 1965. 126 pp. \$2.75.

Decision-Making for Defense. Charles J. Hitch. Univ. of California Press, Berkeley, 1965. 91 pp. \$2.95.

Famous Problems of Mathematics. Solved and unsolved mathematical problems from antiquity to modern times. Heinrich Tietze. Translated from the second revised German edition (1959). Beatrice Kevitt Hofstadter and Horace Komm, Translation Eds. Graylock Press, New York, 1965. 383 pp. Illus. \$10.

The Free World Colossus. A critique of American foreign policy in the cold war. David Horowitz. Hill and Wang, New York, 1965. 451 pp. \$6.95.

Gardening in Hot Countries. Arthur Thomas. Faber and Faber, London, 1965. 207 pp. Illus. 30s. Botanical Monographs, vol. 4, edited by W. O. James.

The Giant Canada Goose. Harold C. Hanson. Southern Illinois Univ. Press, Carbondale, 1965. 250 pp. Illus. \$9.75.

Growth. James M. Tanner, Gordon Rattray Taylor and the Editors of *Life*. Time Inc., New York, 1965. 200 pp. Illus. \$3.95. A volume in the *Life* Science Library.

Handbook of California Birds. Vinson Brown and Henry G. Weston, Jr., Naturegraph, Healdsburg, Calif., ed. 2, 1965. 160 pp. Illus. Paper, \$2.95; cloth, \$4.50.

The Heinz Handbook of Nutrition. Benjamin T. Burton. Published for H. J. Heinz Company by McGraw-Hill, New York, ed. 2, 1965. 472 pp. Illus. \$6.75.

A History of Parasitology. W. D. Foster. Livingstone, London; Williams and Wilkins, Baltimore, 1965. 210 pp. Illus. \$8.25.

How To Succeed in High School: And Score High on College Entrance Examinations. George Weigand. Barron's Educational Series, Great Neck, N.Y., 1965. 135 pp. Illus. Paper, 95¢.

Life Beyond the Earth. Samuel Moffat and Elie A. Shneour. Natl. Science Teachers Assoc., Washington, D.C., 1965. 156 pp. Illus. Paper, 50¢. Vistas of Science Series, No. 11.

Lighthouse of the Skies. The Smithsonian Astrophysical Observatory: Background and history, 1846-1955. Bessie Zaban Jones. Smithsonian Institution, Washington, D.C., 1965. 355 pp. Illus. \$5.

Mr. Tompkins in Paperback. G. Gammow. Cambridge Univ. Press, New York, 1965. 198 pp. Illus. Paper, \$1.95.

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