

Book Reviews

Botany

AQUARIUM PLANTS

by Niels Jacobsen. 1979. Sterling Publishing Company (Two Park Avenue, New York 10016). 160 p. \$8.95.

Junior and senior high school life-science teachers will find this small guide a useful reference book. This book not only provides information necessary for the selection and care of aquarium plants, but also for the identification of some freshwater plants that might be encountered in a study of North American freshwater ecosystems.

The initial chapter could also be used as an introduction to a unit on botany. The author briefly explains systematics, plant nutrition, and plant reproduction. There is a short glossary of botanical terms, as well as a brief bibliography.

The identification is accomplished by a sixty-four page section of color illustrations of 134 specific plants drawn by Danish artist, Verner Hancke. These illustrations are followed by a section containing a brief description of each plant and additional related species. Included in the descriptions are the scientific name, the common English name, distribution, type of plant, habitat, and optimal growing conditions. The identifications are arranged in systematic order and line-drawings are used to supplement the species descriptions.

This book is not written as a comprehensive study but rather a simple, concise compilation of basic botanical information and common aquarium plants encountered by the aquarist or life-science teacher.

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GROWING INDOORS: A GUIDE TO FLOWERING AND FOLIAGE PLANTS

by Susan Heller Conder, (ed.), consulting editor, Edwin F. Steffek. 1979. The Viking Press (625 Madison Avenue, New York 10022). 120 p. \$12.95.

Growing Indoors is one among a great variety of attractive books about care and cultivation of house plants. As using

plants for decoration has increased, so has the publication of "how-to" books on plant care.

Though the layout and color photographs are excellent and make the book attractive, I find the text lacking in a number of respects. The book stresses that knowledge of the original habitat of a plant is necessary for proper cultivation, but it fails to provide this background for most plants in the section on specific cultivation information.

The first section of the book on basic needs of plants is general and often oversimplified. Occasional errors also detract from the usefulness of this section. On page 12, for example, there is a contradiction between the text and photograph regarding the function of the bulbs of clivias—whether they store water during periods of drought or whether they store food for the plant.

The usefulness of this book for biology teachers is limited. It does provide some information on care of individual plants and on plant propagation which can add interest in the classroom or greenhouse. Because of this it may stimulate some ideas for experiments possible in growth and propagation of plants by students.

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Cell and Molecular Biology

THE ORIGIN OF LIFE: A WARM LITTLE POND

by Clair Edwin Folsome. 1979. W.H. Freeman and Company (660 Market Street, San Francisco 94109). 168 p. \$10 hardback; \$5.50 softback.

The author offers refreshing insight into a controversial topic and proposes that life is neither rare nor unique. Astronomical, physical and chemical data are pooled to generate a controversial idea that the formation of life on earth was unremarkable and inevitable.

This short but concise text is a presentation of the author's ideas on (1) the origin of plants, (2) first primeval atmosphere, (3) meaning of chemical evolution experiments, (4) protocell—

first argument, and (5) evolution of the genetic mechanism.

Folsome speculates (models) on design requirements and properties for organic astomata and relates the model to origin of early protobionts. He pushes hard for the protobiont theory while examining the ideas of A.I. Oparin, Sidney Fox, and J.D. Bernal. A full chapter is devoted to a definition of life from an ecological viewpoint and to the concept of a universal chemistry.

Although no specialized knowledge is required to read this text, it would benefit most readers whose collegiate educational experiences were in basic sciences. An excellent bibliography is provided.

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Ecology and Environmental Issues

INTRODUCTION TO FOREST BIOLOGY

by Harold W. Hocker, Jr. 1979. John Wiley and Sons, Inc. (One Wiley Drive, Somerset, New Jersey 08873). 467 p. \$21.95.

The focus of this text is forest biology. It provides a background for silviculture including such topics as evolution and genetics of forest trees, forest stands, forest sites and forest biotic population and influences. The material is presented so that a student with limited background will understand the principles.

Included in the text is a bibliography and an index of authors with their outstanding works indicated. This alone would save time and effort for the student of forest biology. Another study help is the common and scientific name reference section.

The author should provide different levels of questions so that students will have available a means of self-evaluation.

Although the content is rather specialized by nature, the book would be a welcome resource for students studying silviculture.

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