

preservation of individual, idiosyncratic views is appropriate, but it is distracting to read in a single book that the family has 13,000 species (p. vii; a misprint?), 25,000 species (p. 27), 15,000 species (p. 111), 20,000 species (p. 143), and 22,000 species (p. 1107), the last figure based on the estimates in these volumes. A more standardized format for systematic presentations concerning different tribes would have made information easier to find and would have eliminated the problem of genera left hanging between different tribes. A consolidated list of genera (by Turner) is, however, presented in an appendix.

In summary, the book presents a very useful review of the available information on a family of plants that has more species than any group of land plants other than angiosperms. It has already served as a stimulus for further research and doubtless will continue to do so.

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## Insects in the City

**Perspectives in Urban Entomology.** Papers from a symposium, Washington, D.C., 1976. G. W. FRANKIE and C. S. KOEHLER, Eds. Academic Press, New York, 1978. xviii, 418 pp., illus. \$21.50.

It is estimated that within 22 years 80 to 90 percent of the U.S. population will reside in urban areas. Urban dwellers generally have a low tolerance for insects and arachnids whether on their ornamental plants, in their homes, or on their bodies. This low tolerance level extends to recreational areas, such as national and state parks and campgrounds. Despite their antipathy toward most arthropods, urbanites are becoming concerned about the environmental and health problems associated with conventional chemical control, including the hazards to beneficial arthropods. Many urbanites are also concerned with broad environmental problems, including the study and preservation of endangered species. Thus this volume, which deals with basic and applied entomological research in urban environments, comes at a very appropriate time.

The range of topics touched on in the 17 chapters comprising the volume is extensive—from the influence of urban development on the ecology, diversity, distribution, and abundance of insects to the management of insects by means of chemical pesticides, chemicals that mod-

ify behavior (of bark beetles), insect-resistant plants, biological control (of shade tree pests), and integrated pest management (of cockroaches, flies, and termites).

The editors make no claim that the range of topics is comprehensive. Nevertheless, it is disappointing that the book does not have a section on the current state of entomological research in domestic and commercial greenhouses; this is a well-studied subject in both Europe and North America. Despite this and some other omissions that individual readers may regret, the book gives a fine survey of recent studies pertaining to urban entomology.

The main value of the book is that it summarizes past findings, identifies current problems, and delineates, with a fresh viewpoint, developing areas of research. For example, several chapters show that urban areas present an excellent opportunity for studying the effect of habitat alteration on evolution in both plant-eating and medically important insects. Merritt and Newson's chapter develops a convincing case for considering the arthropod fauna when plans are made to develop new recreational areas. Ehler presents a thoughtful development of the idea that the small-scale, labor-intensive urban agricultural technology practiced in the United States can be used on small farms in less developed countries.

Frankie and Levenson make a fine start in combining an entomological and a sociological approach to the difficult task of defining the highly variable public attitudes toward insect problems. A noteworthy finding is that attitudes toward pests and the use of pesticides are not especially rigid and are greatly influenced by popular articles and television programs. These media offer an effective means of altering public attitudes toward pest control.

Because of the wide array of topics it deals with it is particularly unfortunate that the book has no subject, species, or author index. Aside from this deficiency the editors have done a fine job; the chapters are generally concise and clear. Many of the contributions are appropriate for the general reader, for the specialist, and for researchers in complementary fields of applied and basic biology. The book will be of considerable value for anyone interested in the biological consequences of the interaction between urbanization and insect activity.

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**Annual Review of Biochemistry.** Vol. 47. Esmond E. Snell, Paul D. Boyer, Alton Meister, and Charles C. Richardson, Eds. Annual Reviews, Palo Alto, Calif., 1978. x, 1316 pp. \$18.

**Application of Solar Technology to Today's Energy Needs.** Vol. 1. Office of Technology Assessment, Washington, D.C., 1978 (available from the Superintendent of Documents, Washington, D.C.). viii, 526 pp., illus. Paper, \$7.

**Aspects of Civil Engineering Contract Procedure.** R. J. Marks, R. J. E. Marks, A. A. Grant, and P. W. Helson. Pergamon, New York, ed. 2, 1978. xiv, 236 pp. Cloth, \$16.50; paper, \$9. Pergamon International Library. To order this book circle No. 579 on Readers' Service Card

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**The Budget and National Politics.** Dennis S. Ippolito. Freeman, San Francisco, 1978. xii, 218 pp. Cloth, \$12; paper, \$6.

**Calcium Transport and Cell Function.** Papers from a conference, New York, Sept. 1977. Antonio Scarpa and Ernesto Carafoli, Eds. New York Academy of Sciences, New York, 1978. viii, 656 pp., illus. Paper, \$68. *Annals of the New York Academy of Sciences*, vol. 307.

**Cardiovascular System Dynamics.** Proceedings of a conference, Valley Forge, Pa., Apr. 1975. Jan Baan, Abraham Noordergraaf, and Jeff Raines, Eds. MIT Press, Cambridge, Mass., 1978. xiv, 618 pp., illus. \$70.

**Coal Age Operating Handbook of Coal Surface Mining and Reclamation.** Nicholas P. Chironis, Ed. McGraw-Hill, New York, 1978. vi, 442 pp., illus. \$19.50. Coal Age Library of

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