BOOK REVIEWS

Annual Review of Nutrition—Vol. 1, 1981. Edited by William J. Darby, Harry P. Broquist and Robert E. Olson. Published by, Annual Review Inc., 4139 El Camino Way, Palo Alto, California 94306, U.S.A. Pages: 475.

This is a new addition to the Annual Review series in the biological sciences. Nutrition is not an isolated science. It extends into various branches of science, and even into humanities. It is therefore understandable that a potpourri of topics have been selected for presentation in this book. The annual review is also not patterned to maintain a continuity of thought among the succeeding chapters. Nevertheless, one would have welcomed an attempt at a more integrated approach in the presentation of the diverse topics. The pattern adopted by the Annual Review of physiology, of grouping together allied topics, would help readers, in easy identification of topics of their own interest.

As in the other Annual Reviews, the present book also contains a prefatory note, purported to be a philosophical one. However, the political overtones in the prefatory note, 'The moral dimensions of the world's food supply', are hard to miss. It is disconcerting to encounter statements such as, "We do not extend the rules of these forms of Darwinism to the competition for survival between human beings, where Darwin originally meant his theory of the survival of the fittest to apply" or "for some it (survival) is no more than elemental biological survival. For others, it is a total way of life. The right to do whatever is necessary for survival means one thing for a poor Asian and something quite different to an affluent Westerner", or "The rich require a high rate of consumption...".

The book contains five review on minerals. The other chapters consist of diverse topics such as germ-free animals, food colorants, cultural nutrition, etc. Many of the chosen themes are of recent and continuing interest, such as "nutritional significance of fructose", "role of nutrition in toxicology", and "regulation of energy balance".

All reviews are comprehensive, highlighting recent research in concerned areas. Each review is followed by an exhaustive bibliography.

The Annual Review of Nutrition will be a welcome addition to libraries although there is very little that touches upon nutrition problems of the Third World.

KAMALA S. JAYA RAO

Deputy Director,
National Institute of Nutrition,
Hyderabad.

Medicinal and Aromatic Plants Abstracts—Vol. 3, No. 6, 1981. Edited by S. Nagarajan, Publication and Information Directorate, CSIR, New Delhi. Pages 87. Price Rs. 40/- (Annual subscription).

The quantum of research work carried out in India on different aspects of Medicinal and Aromatic Plants is assuming enormous proportions. There is no source from where a researcher can immediately trace the required information on a particular plant except by referring to the Chemical and Biological abstracts, which is often time consuming. This important vacuum is filled in by the timely bi-monthly publication of Medicinal and Aromatic Plants abstracts. The abstracts collates information from various journals which is aptly categorised under various sections like Agronomy, Botany, Breeding & Genetics, Diseases & Pests, Physiology & Biochemistry, Pharmacognosy, Clinical Studies, Pharmacology & Toxicology, Antimicrobial Activity, Insecticidal & Piscicidal Activities, Phytochemistry, Chemotaxonomy, Ethnomedicine, Analytical & Processing Techniques, Miscellaneous and New Publication, thus covering a very wide range of aspects. Each abstract provides the gist of the paper in a lucid manner.

In addition to the regular abstracting of papers, a detailed bibliography on a selected plant is provided in each issue which is very useful. For easy reference to the abstracts, an author and key word subject index is provided. As many as 294 national and international scientific journals and periodicals are referred to covering a wide spectrum of the research work carried out world wide.

The abstracts will be useful to scientists working in diversified fields and is recommended to find a place in all research institutions. In view of the reasonable price, it is also within the reach of individual research worker.

S. N. YOGANARASIMHAN

Regional Research Centre,
Jayanagar, Bangalore 560 011.

Annual Review of Microbiology—Vol. 35, Edited by Mortimer P. Starr, John L. Ingraham and Albert Balows. Published by Annual Reviews Inc., 4139, El Camino Way, Palo Alto, California 94306, U.S.A. Pages: 684. Price: USA $20 elsewhere $21.

In the traditional get up, this volume also contains 22 chapters commencing with the Odyssey of a Soil Microbiologist as the prefatory chapter. As in the past, the coverage of topics in the volume is sufficiently wide and serves useful reference and reading material for the average scientist.

In the introductory chapter, Boyd Woodruff provides the interesting biographical sketch of a microbiologist born as a farmer boy and who made a distinguished career in industrial research. In this article Woodroff has stressed on the desirable characteristics of an applied approach to research, the accomplishments possible in working towards practical objectives. At the same time he is cautious about the pleasure success brings with it, especially in the industrial research activities. To quote his own words, "one misses the opportunity to act as an individual, creativity, with long periods of thought—assured that when success is achieved it is your success, not a conglomerate of the ideas of many". Talking about the skill and excellence of Japanese applied microbiologists, from his own personal experience, Woodroff comments that they are hard working and engage directly in laboratory activities, make careful notes and investigate every anomaly that is observed. I am tempted to compare, if the statement were to be extended to an Indian Applied microbiologist. The production of fermented foods in India, more so exclusive items like *Idly* or *Dosai* is known and widely practised. But how much do we know about the microbiology of the fermentation processes associated with these or what improvements have we brought up on these processes over the years? While these nonacademic research ideas may not be challenging enough for the basic scientist, shouldn't the industrial—or food microbiologist open up his eyes and look at these problems more realistically? Isn't it time yet?

The variety of topics included in this volume embrace genetics and molecular biology, immunology and pathogenesis, virology and parasitology as well as physiology and biochemistry. Each one of these articles appears adequate in all-roundedness and is written by a well known specialist in that area. Undoubtedly this volume is a useful addition to the collection of a microbiology teacher or research worker.

K. P. GOPINATHAN
Microbiology & Cell Biology Laboratory,
Indian Institute of Science,
Bangalore 560 012.

Thonner's analytical key to the families of flowering plants: Edited by R. Geesink, A. J. M. Leeuwenberg, C. E. Ridsdale and J. F. Veldkamp. (A joint publication of PUDOC, Wageningen and Martinus Nijhoff, The Hauge), 1981, Pages XXVI+ 231. Price: $21.00

This analytical key for the identification of the families of flowering plants by Franz Thonner (*Anleitung Zum Bestimmen der Familien der Blutenpflanzen*, 2nd edn., 1917) has been translated into English and updated by four botanists of the Netherlands. It covers plant families of the whole world with special emphasis on the tropics and subtropics. Thonner originally based his family concept on Engler and Prantl's *Die naturlichen Pflanzenfamilien* which itself is a monumental work and provides means for the identification of all the known genera of plants of the world from algae to the most advanced seed plants. The present editors have updated this key with the help of recent and relevant literature.

A brief life sketch and bibliography of Franz Thonner and number of taxa named after him appear in the beginning. Information regarding the key and methods to be followed for the identification of the families is also neatly described.

Each family has been described using vegetative, floral and fruiting characters. A total of 364 major families (Gymnospermae, 14, Monocotyledones, 51 and Dicotyledones, 299) of flowering plants have been described in this book. The segregated families are mentioned in brackets. Geographical distribution is given in many of the families only for truly indigenous plants. A small glossary for the technical terms used finds a place at the end of the book.

This key with full illustrations would have been most welcome. However, the book will be very useful for the students of botany. It has a good get up with excellent typography and quality paper. This book should definitely find a place in all the libraries of botanical institutions.

R. N. BHAT
Indian Institute of Horticultural Research,
Bangalore 560 080.

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