

Chemical Mutagens: Principles and Methods for Their Detection. Volumes 1 and 2. Edited by A. HOLLAENDER. Plenum, New York—London, 1971. Vol. 1, lxiii + 310 pp., Vol. 2 lxii + 299 pp. Price \$17.50 per volume or \$30.00 for set.

Are there mutagenic substances in man's environment? If so, do they pose a significant threat to the quality of the human gene pool? There is no question that some of the chemicals in our environment are mutagenic, at least to some species. Whether these substances constitute a real threat to the human gene pool is anybody's guess. While no one knows for sure, nearly every one has an opinion on the subject. Some scientists feel that we are already on the road to a genetic disaster, the effects of which will be recognized only in future generations. Others are of the opinion that the present concern over the "mutagenic potential" of our environment is out of proportion to the magnitude of the problem.

The major problem surrounding attempts to answer the pressing questions concerning environmental mutagens is the same one that still plagues us in nearly every other aspect of toxicology, *i.e.*, the poor predictive validity of the available preclinical testing procedures. It is difficult, to say the least, to extrapolate mutagenic effects in bacteria, fruit flies or even human cell cultures all the way up to the germinal tissue of the intact human.

In spite of the present difficulties in determining the clinical significance of mutagen testing in the lower species, it is inevitable that eventually some form of preclinical estimation of mutagenic potential will be required for all environmental chemicals (drugs, food additives, pesticides, *etc.*). For this reason "Chemical Mutagens" is a timely and welcome publication. These volumes, sponsored by the Environmental Mutagen Society, are valuable compilations of chapters on mechanisms of mutagenesis; correlations between mutagenesis, teratogenesis, and carcinogenesis; and methodology for the detection of mutagens. These later chapters will probably be of great value to the relatively uninitiated (with respect to mutagenesis) toxicologist since they contain methodology, tabulations of the effects of numerous chemicals in the various tests, and impressive lists of primary literature references.

Naturally, reading these books will not make a toxicologist an expert in mutagenesis. The stated objective of publishing these books was to provide an organized description of the methods now available for detecting mutagens. The editor and contributing authors have met this objective. In my opinion, the toxicologist, or any other biologically oriented individual who would like or is forced (through new or pending governmental regulations) to learn about mutagen evaluation, would do well to consider these volumes. They are not particularly easy reading but they are extremely informative and would be a good place to start.

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Analysis of Biogenic Amines and Their Related Enzymes (Supplemental volume). Edited by D. GLICK. Wiley, 605 Third Ave., New York, NY 10016, 1971. viii + 350 pp. 15.5 × 23.5 cm. Price \$17.50.

Advances in biology and medicine reflect, to a certain extent, the progress made in quantitative methods of analysis. More sophisticated methods of analysis, in turn, provide a firmer base for future research. The influence of the quantitative analysis of biogenic amines has been significant particularly in the neurosciences.

This supplemental volume of the respected "Methods of Biochemical Analysis" series contains nine chapters covering biogenic amines of particular current interest and the enzymes involved in their biosynthesis and degradation.

Included in this volume are discussions and methods for determining serotonin, amine oxidases, histamine, histidine decarboxylase activity, catecholamines, catecholamine biosynthesis and metabolism enzymes, choline esters, cholinesterase activity, and choline acetylase.

Staff Review ■

Uses of Marijuana. By SOLOMON H. SNYDER, M.D. Oxford University Press, New York, NY 10016, 1971. 127 pp. 14.5 × 21.5 cm. Price \$5.95.

While this book may be of value to the person with no knowledge of the subject at all, it appears to be more readily characterized as an attempt to capitalize on a hot topic. Two of the six chapters are reprinted or adapted from other publications. The book contains 123 pages of text, utilizing a large size type, which includes approximately twenty pages of illustrations.

The potential readership of the book seems poorly defined and may well be the crux of its problems. Apparently in an attempt to develop general appeal, the book covers too much material with too little depth, thus diminishing its overall usefulness.

For example, the legal issues concerning marijuana are covered in less than five pages of text. This kind of simplistic approach to a complex problem is not in the best interests of science writing or science. At \$5.95, this book is no bargain. The interested reader, scientist and nonscientist, would be well advised to look elsewhere for more reasonably priced and more detailed information.

Staff Review ■

NOTICES

Encyclopedia of Industrial Chemical Analysis, Volume 13. Edited by F. D. SNELL and L. S. ETTRE. Wiley, 605 Third Ave., New York, NY 10016, 1971. xiv + 607 pp. 18.5 × 26.5 cm. Price \$45.00.

Rodd's Chemistry of Carbon Compounds, Volume III, Part A. Edited by S. COFFEY. American Elsevier, 52 Vanderbilt Ave., New York, NY 10017, 1971. xx + 559 pp. 16 × 23 cm. Price \$33.75.

Organophosphorous Chemistry, Volume 2. S. TRIPPETT, Senior Reporter. The Chemical Society, Burlington House, London, W1V 0BN, England, 1971. xi + 292 pp. 14.5 × 22 cm. Price £7.00.

Terpenoids and Steroids, Volume I. K. H. OVERTON, Senior Reporter. The Chemical Society, Burlington House, London, W1V 0BN, England, 1971. xi + 557 pp. 14.5 × 22 cm. Price £11.00.

Foreign Compound Metabolism in Mammals, Volume I. D. E. HATHWAY, Senior Reporter. The Chemical Society, Burlington House, London, W1V 0BN, England, 1970. xiii + 455 pp. 14.5 × 22 cm. Price £11.00.

Specifications for the Quality Control of Pharmaceutical Preparations. Second Edition of the International Pharmacopoeia, Supplement 1971. World Health Organization, Geneva, Switzerland, 1971. 112 pp. 16 × 24 cm. Price \$4.00.

Organic Compounds in Aquatic Environments. Edited by S. J. FAUST and J. V. HUNTER. Marcel Dekker, Inc., 95 Madison Ave., New York, NY 10016, 1971. xxii + 638 pp. 16 × 23.5 cm. Price \$20.75.

Subcellular Organization and Function in Endocrine Tissues (Memoirs of the Society for Endocrinology No. 19). Edited by H. HELLER and K. LEDERIS. Cambridge University Press, 32 East 57th St., New York, NY 10022, 1971. xxiii + 1012 pp. 16 × 25.5 cm. Price \$37.50.

Solvent Extraction Reviews, Volume I. Edited by YIZHAK MARCUS. Marcel Dekker, Inc., 95 Madison Ave., New York, NY 10016, 1971. ix + 256 pp. 15.5 × 23.5 cm. Price \$19.50.

The Nitrite Oxides: Versatile Tools of Theoretical and Preparative Chemistry, Volume 13. By C. GRUNDMANN and P. GRUNANGER. Springer-Verlag New York, 175 Fifth Ave., New York, NY 10010, 1971. vii + 242 pp. 16 × 23.5 cm. Price \$28.30.

Oxidation: Techniques and Applications in Organic Synthesis, Volume 2. Edited by R. L. AUGUSTINE and D. J. TRECKER. Marcel Dekker, Inc., New York, NY 10016, 1971. x + 204 pp. 16 × 23.5 cm. Price \$17.50.

Synthetic Methods of Organic Chemistry, Volume 25, Yearbook 1971. By W. THEILHEIMER, Albert J. Phiebig, Inc., U.S. Representative of S. Karger, P. O. Box 352, White Plains, NY 10602, 1971. xvi + 707 pp. 16.5 × 23.5 cm. Price \$78.15.

Injectable Solutions and Additives (Compatibilities, Incompatibilities, Route of Administration). By T. J. FOWLER. Springer, New York, NY 10003, 1971. 32 pp. 15 × 22.5 cm. Price \$3.25 (booklet) and \$3.00 (wall chart).