

REVIEWS

Chromatography of Antibiotics. By G. H. WAGMAN and M. J. WEINSTEIN. *Journal of Chromatography Library* Volume 1, American Elsevier, 52 Vanderbilt Ave., New York, NY 10017, 1973. 238 pp. 20 × 27 cm. Price \$26.00.

This volume is an auspicious start for a new series: *The Journal of Chromatography Library*. The authors of the *Chromatography of Antibiotics* are the discoverers of the antibiotics gentamicin and sisomicin. They both have wide experience in the chromatography of antibiotics, especially from the point of view of a microbiologist searching for new antibiotics. The first two chapters demonstrate the authors' interest in this activity. The first section, which deals with the classification of antibiotics by chromatography, is a general review of the literature on this subject with little critical evaluation by the writers. The second section, which deals with the detection of antibiotics on chromatograms, is devoted mainly to bioautographic techniques. This section is an improvement over the first part because the authors present some good suggestions for using this often troublesome, but valuable, technique.

The rest of the book is devoted to a literature search on the TLC, paper chromatography, electrophoresis, countercurrent distribution, and GLC of most known antibiotics. The procedures are presented in a concise, standardized, outline form. Only essential details are presented. However, separation and R_f data reported in the original papers are detailed. Literature references are included, which is helpful for obtaining more details on the procedures cited. In my opinion, this part of the book would have been strengthened if the authors had included some of their own experiences in chromatography. Perhaps they should have indicated which methods they have used and what merits these methods possessed.

This volume does not have any section on the theory, practice, or equipment of chromatography. This lack is not important since so many other sources on how-to-do chromatography are readily available.

Most workers in chromatography will find this a handy, concise compendium of the methods used to chromatograph antibiotics. Scientists searching for a method for separating antibiotics will probably consult this volume before any other.

Reviewed by George B. Selzer
National Center for Antibiotics
Analysis
Washington, DC 20204

Pharmacology of Gastrointestinal Motility and Secretion, Volumes I and II. PAMELA HOLTON, Section Editor. Pergamon Press Ltd., Headington Hill Hall, Oxford, England, 1974. iv + 665 pp. 14 × 22 cm. Price \$54.00

The two volumes represent the continued effort of the International Encyclopedia of Pharmacology and Therapeutics to provide a critical and comprehensive survey of present knowledge in various specific areas.

Volume I contains 10 chapters and each chapter represents a complete presentation of a single subject. The subject matter is related to that of other chapters but is presented so that each chapter can stand by itself in an encyclopedic manner.

Salivary secretion and factors influencing it are presented in Chapter 1. Histamine and its effects on gastric acid secretion in the rat and nonrodents are discussed extensively in Chapters 2 and 3, respectively. Chapters 4 and 5, respectively, concern effects of substances on gastric acid secretion in animals and humans. Experimental methods for the bioassays are included. Chapter 6 presents extensively the pharmacology of isolated amphibian gastric mucosa, secretory stimulation, and inhibition by various agents. The chemical structure and actions of gastrin and other naturally

occurring proteins are discussed in Chapter 7. Chapter 8 deals with the effects of the catecholamines on gastric secretion and its constituents in both animals and humans. Chapter 9 discusses drugs used in the treatment of peptic ulcer and briefly the pathophysiology of peptic ulcer, while Chapter 10 concerns the pathogenesis of gastric ulcers largely from the aspect of mucosal blood flow. Experimental ulcer models are described.

Volume II contains Chapters 11 through 18. Chapter 11 discusses the chemistry, physiology, and clinical testing application of secretin, whereas Chapter 12 similarly deals with cholecystokinin. Chapter 13 deals with the use of isolated GI muscle, the actual bioassay procedures, solutions utilized, and methods of determining drug action. Various drugs are included and their effects are discussed. Chapter 14 presents drug treatment for the many disorders of motility of the human GI tract, along with a brief discussion of the disorders themselves. Chapter 15 is an extensive presentation of the pharmacology of GI motility, including myogenic and neurogenic methods. The role of adenylyl cyclase in the activity of the GI tract is presented in Chapter 16 along with a valuable addendum. Chapter 17 deals with the action of carbonic anhydrase inhibitors at different levels of the GI tract. Chapter 18, the concluding chapter, deals with some endocrine tumors capable of producing GI symptoms; tests, diagnosis, and treatment are presented.

Throughout both volumes, there are many current references and in some chapters there is an addendum with even more recent references. There are many tests and procedures presented throughout both volumes along with some brief history and introduction. Chapters 13 and 15 were found to be especially satisfactory from this standpoint. Considering the survey type of approach in an encyclopedic manner, the volumes would be a valuable compilation for GI studies. The individual authors have compiled a great quantity of material. The aspect of further needed investigation in some areas is included in many chapters and complements the presentation. The volumes would be a valuable reference addition for anyone working in GI research.

Reviewed by Theodore H. Eickholt
School of Pharmacy
Northeast Louisiana University
Monroe, LA 71201

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Drugs in Current Use and New Drugs, 1974. Edited by W. MO-DELL. Springer, 200 Park Ave. S., New York, NY 10003, 1974. 179 pp. 14 × 21 cm. Price \$4.75.

Chemically Induced Magnetic Polarization. Edited by A. R. LEPLEY and G. L. CLOSS. Wiley, 605 Third Ave., New York, NY 10016, 1973. 416 pp. 16 × 24 cm. Price \$19.95.

Actualités de Dermopharmacologie. By H. THIERS and J. COTTE. Centre Europeen de Dermopharmacologie, B. P. n° 10 Lyon-Mouche, 69342 Lyon Cedex 2, France, 1973. 295 pp. 16 × 24 cm. (French)

Biosynthesis of Acetate-derived Compounds. By N. M. PACKTER. Wiley, 605 Third Ave., New York, NY 10016, 1973. 203 pp. 16 × 24 cm. Price \$14.50.

Radioactive Isotopes in Biological Research. By W. R. HENDEE. Wiley, 605 Third Ave., New York, NY 10016, 1973. 356 pp. 16 × 24 cm.

American Drug Index 1974. By C. O. WILSON and T. E. JONES. Lippincott, East Washington Square, Philadelphia, PA 19105, 1974. 796 pp. 14 × 21 cm. Price \$10.75.

International Symposium on Histamine H₂-Receptor Antagonists. Edited by C. J. WOOD and M. A. SIMKINS. Research and Development Division, Smith Kline & French Laboratories Ltd., Welwyn Garden City, England, 1973. 412 pp. 16 × 21 cm.