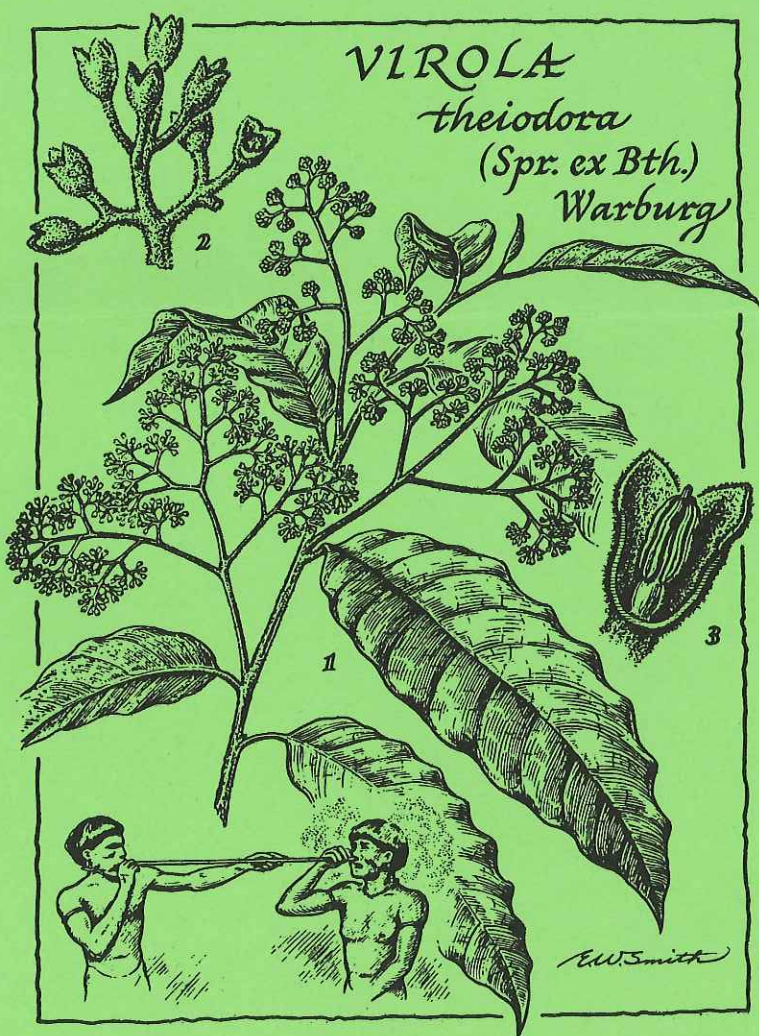


THE American

Society of Pharmacognosy

News Letter



EDITORIAL

The gestation period of the new format for the Newsletter was much longer than we normally associate with the human, perhaps it more closely approximated that of the elephant. Following that, the pangs of birth proved to be extremely difficult. Now that we are in the neonatal phase of the Newsletter things have not become much easier. We would like to look forward to an easy and enjoyable adolescence and for this to occur we would appreciate input from the membership. It is only with your interest and input that we will be able to evolve to the normal three yearly publications of the Newsletter. There is a need for response and input from the membership. Two articles by Drs. Floss and Farnsworth, both provocative and interesting elicited no response - either pro or con. I cannot believe that certain statements did not cause feelings that our membership wished to put into words. There have been no letters to the editor. Not only are you free to make declarative statements in Letters to the Editor, but there are many other categories that you might wish to respond to.

Listed below you will find the categories into which the Newsletter is divided. Please contribute to any or all.

- 1) EDITORIALS - By the Editor, President and selected guest editors. These editorials will hopefully reflect concerns of pharmacognosists which need to be aired and discussed.
- 2) COMMENTARY SECTION - To provide a forum for areas of concern for which an editorial is not the proper forum: teaching improvements; suggestions, with discussion, to the Society which can air major concerns; and news and views from the President and Executive Committee to allow dialog with the membership.
- 3) LETTERS TO THE EDITOR - To provide a forum for the membership to reflect their concerns with Society policy, to respond to opinions expressed in the Editorial section, or to allow members the chance to provide commentary on subjects that they feel should be aired to the reading audience.

4) MEETING REPORTS - Brief reports on meetings to provide a synopsis of interesting invited speakers and presented papers that have a bearing on interests of some segment of the membership. These reports will hopefully capture novel developments and new trends surfacing at such meetings, particularly in workshops or invited symposia to which only a limited number of members have access.

5) ARTICLES OF INTEREST - These are to be short of formal journal papers and should make either informative or amusing reading for pharmacognosists. These could be short technical papers (alerting the membership to, or describing newer techniques) or simply broad interest articles.

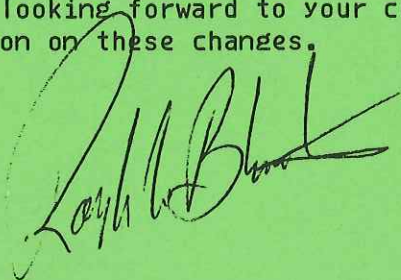
6) SOCIETY NEWS - A section where decisions of the Executive Committee can be presented, matters dealing with the Society's Journal, future meeting plans, calls for papers and the like.

7) REVIEW ALERTS - Reviews of major review articles that have been published and should serve to aid the membership, particularly if they were published in a language other than English.

8) NEW EQUIPMENT - A section that will include brief descriptions, prices, manufacturer and pertinent data that will bring to the attention of the membership new equipment that the respondent has found useful in his/her work.

9) NEWS AND NOTES - This will be very much like the old format and will include: new appointments, promotions, sabbaticals, deaths, new products, grants funded and other personal news, i.e. recent and upcoming activities of members.

It is hoped that the Newsletter will benefit by these changes. You will note that with the expanded format, we are very much dependent on the membership for input. I am looking forward to your comments, pro and con on these changes.



FUTURE MEETINGS

ANNUAL MEETING OF THE AMERICAN SOCIETY OF PHARMACOGNOSY: As you all realize, the annual meeting this year will be a joint meeting with the Phytochemical Society of Europe and the Association Francaise des Enseignants de Matiere Medicale, and will be held in Strasbourg, France, July 6-11, 1980. This year's meeting will be significantly different from those of the past because there will only be plenary lectures and poster presentations. The short scientific lectures that are the norm for most of us and which we know so well, will be absent this year. Plenary lectures at this congress will be broken into five areas: (1) Microbial Natural Products; (2) Natural Products of Higher Plants; (3) Biologically Active Natural Products; (4) Marine Natural Products and Ethnopharmacology; and (5) Future Biological Production of Medicinal Agents.

The Plenary Topics are listed below.

MONDAY, JULY 7th:

"Methodological Problems of the Study of Traditional Drugs. Examples from Chinese and Russian Remedies" by Prof. G. Ourisson (Univ. Louis Pasteur, Strasbourg, France)

Microbial Natural Products

"Recent Advances in the Chemistry and Biology of Thienamycin" by Dr. T. Salzmann (Merck Sharp and Dohme Research Laboratories, Rahway, New Jersey, USA)

"Recent Development in the Chemistry of Sideramines and Sideromycins" by Prof. W. Keller-Schierlein (ETH, Zürich, Switzerland)

"Alkaloid Biosynthesis and its Regulation in *Penicillium cyclopium*" by Prof. M. Luckner (Univ. of Halle, DDR)

TUESDAY, JULY 8th:

Natural Products of Higher Plants

"The Use of Computers for Compound Identification" by Prof. G.W.A. Milne (National Institute of Health, Bethesda, Maryland USA)

"Droplet Counter-Current Chromatography, an Ideal Method for the Isolation of Natural Products by Dr. K. Hostettmann (ETH, Zürich, Switzerland)

"Secondary Metabolites of Insecticides" by

Prof. D.M.X. Donnelly (Univ. of Dublin, Ireland)

"The Story of the Antitumor Alkaloids of the Madagascan Periwinkle" by Dr. P. Potier (CNRS, Gif/Yvette, France)

"Recent Advances in the Isolation and Structure Elucidation of Antineoplastic Agents From Higher Plants" by Dr. J.M. Cassady (Purdue Univ., West Lafayette, Indiana, USA)

WEDNESDAY, JULY 9th:

Biologically Active Natural Products

"Natural Products Receptors and Ligands" by Dr. B. Witkop (National Institutes of Health, Bethesda, Maryland USA)

"Modulation of Natural Substances in Order to Improve Their Pharmacokinetic Properties" by Prof. C.G. Wermuth (Univ. Louis Pasteur, Strasbourg, France)

"Natural Products With Antihepatotoxic Activity" by Prof. H. Wagner (Univ. of München, FRG)

"Pycnogenols: Recent Advances in the Therapeutical Activity of Procyanidins" by Prof. H. Masquelier (Univ. of Bordeaux, France)

"The Vincamine Skeleton: Structure-Activity Relationships in the Cerebral Circulation" by Dr. E. MacKenzie (Synthelabo, Bagneux, France)

"Brain Disorders and Vasoactive Substances of Plant Origin" by Prof. H. Haas (Mannheim, FRG)

"Natural Substances With Central Cardiovascular Effects: New Therapeutic Perspectives?" by Dr. P. Bousquet (Univ. Louis Pasteur, Strasbourg, France)

"Snake Venoms as Therapeutic Agents in Vascular and Coagulation Diseases" by Dr. B.B. Vargaftig (Institut Pasteur, Paris, France)

THURSDAY, JULY 10th:

Marine Natural Products and Ethnopharmacology

"Biologically Active Substances From Australian Marine Species" by Dr. R. Wells (Roche Research Institute of Marine Pharmacology, New South Wales, Australia)

"Steroidal Glycosides From Asteroides" by Prof. L. Minale (Univ. of Naples, Italy)

"Ethnopharmacology" by Prof. E. Tyler (West Lafayette, Indiana, USA)

(Continued on page 2)

FUTURE MEETINGS (continued)

"Traditional Experiences of Chinese Herb Medicine: Its Application in Drug Research and Novel Drug Searching" by Prof. Pei-Ken Hsiao (Chinese Academy of Medical Sciences, Peking, China)

"Evaluation of Traditional Pharmacopoeias" by Prof. P. Delaveau (Univ. René Descartes, Paris, France)

"Ethnopharmacology: Objectives, Principles and Perspectives" by Dr. J. Bruhn (Univ. of Stockholm, Sweden)

"Problems and Limitations of Using Ethnopharmacological Promising Fertility Regulating Plants" by Prof. N.R. Farnsworth (Univ. of Illinois, Chicago, USA)

FRIDAY, JULY 11th:

Future Biological Production of Medicinal Agents

"Techniques of Recombination of DNA Molecules" by Prof. W. Goebel (Univ. of Würzburg, FRG)

"Microbial Production of Animal Proteins" by Dr. T. Fraser (Upjohn Company, Kalamazoo, Michigan, USA)

"Antimitotic Activities of *Catharanthus roseus* Tissue and Cell Cultures" by Dr. Petiard (Synthelabo, Tours, France)

"Potential of Cell Cultures for Pharmaceutical Production" by Prof. W. Barz (Institut für Biochemie der Pflanzen, Münster, FRG)

Full papers of plenary lectures will be printed in a separate volume published jointly by *Planta Medica* -- *Journal of Medicinal Plant Research* and *Journal of Natural Products* (Lloydia).

THE SIXTH INTERNATIONAL FERMENTATION SYMPOSIUM in conjunction with the Fifth International Symposium on Yeasts will be held in London, Canada on July 20-25, 1980. The following is a list of the areas of interest in which symposia will be presented:

Microbial Cultures; Recombinant DNA and Genetic Engineering; Functions of Secondary Metabolites in Producing Organisms; Antibiotics; Immobilized Enzymes and Cells; Tissue Cultures; Amino Acids, Vitamins and Nucleotides; Biosurfactants, Biopolymers and Biopigments; Mycotoxin Fermentations;

Microbial Oxidation of Hydrocarbons; Single Cell Protein and Related Bioconversions; Fermentor Design and Operation; Bioenergy and Biofuels; Fermentation Economics; Marketing and Technology Transfer; Biological Waste Treatment and Environmental Pollution; Continuous Culture; Biotechnical Advances in Developing Countries; Education and Training in Biochemical Engineering; Traditional Fermented Foods; and Fermentation Process, Dynamics and Modeling.

International Symposium on Yeasts Topics: Industrial and Agricultural Uses of Yeast; Genetics of Yeast; Conjugation and Sporulation; Yeast Cell Cycle; Taxonomy and Ecology and Biochemistry.

ANNUAL MEETING OF THE PHYTOCHEMICAL SOCIETY OF NORTH AMERICA will be held in conjunction with the American Society of Plant Physiologists from August 3-7, 1980 at Washington State University, Pullman, Washington.

The Symposium is entitled "Phytochemistry of Cell Recognition and Cell Surface Interactions. Topics of the Symposium are:

Part I. Interactions at the Chemical and Biochemical Levels: The Structure and Biosynthesis of Lipopolysaccharides and Glycoproteins by Alan Elbein; Plant Derived Lectins by Irwin J. Goldstein; Host-Pathogen Interactions by Peter Albersheim; Cell Surface Lipoglycopeptides by John Gamder and Enzymic Properties of Phytohemagglutinins by Leland M. Sherron and Charles Hankins.

Part II. Interactions at the Biological and Ecological Levels: Plant Protoplast Agglutination and Immobilization by Phillip J. Larkin; Recovery of Glycoproteins from Plant Tissues by Robert G. Brown; Bacterial Attachment to Plant Cell Walls by Marianne Whatley; Pollen-Stigma Interaction by R. Bruce Knox; Lectins and Herbivore-Plant Interaction by Daniel H. Janzen; and Cell Surface Interactions and Pattern Formation in the Cellular Slime Mold by Daniel McMahon.

ANNUAL MEETING OF THE SOCIETY OF INDUSTRIAL MICROBIOLOGY will meet August 10-15, 1980 at Northern Arizona University in Flagstaff, Arizona.

As the membership will note, one can travel from France to Canada to Washington to Arizona and attend meetings from early July to mid-August. Unfortunately we were unable to find meetings to cover the remaining time until classes started for certain of our Academic members.

MEETING REPORTS

INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN NATURAL PRODUCTS RESEARCH

Reporter: Dr. Geoffrey A. Cordell, Univ. of Illinois

The second International Symposium on Recent Advances in Natural Products Research was held in Seoul, Korea from December 14-16, 1979 in commemoration of the Korean Society of Pharmacognosy and the 40th anniversary of the foundation of the Natural Products Research Institute, Seoul National University (SNU). The proceedings opened with the reading of congratulatory messages from several organizations in Korea, and a number of foreign organizations including the Pharmaceutical Societies of Japan, the Philippines, the Republic of China and Hong Kong, and the Gesellschaft für Pharmazeutische Arzneimittellehre. Professor Jim Robbers, the President of the American Society of Pharmacognosy also sent a message which was read by Dr. Geoffrey Cordell.

The scientific proceedings began with "A survey of the response of medicinal plants on drug metabolism" by Dr. K.H. Shin and W.S. Woo of the Natural Products Research Institute (NPRI), SNU and continued with "Biodegradation mechanism of capsaicinoids" by Dr. S.S. Lee, Dean of the College of Pharmacy, SNU, who reported on the structure of metabolites of capsaicin produced by *Aspergillus niger* and a rat liver microsomal enzyme system. Dr. U. Sankawa of the Univ. of Tokyo described some of his groups' recent work on the isolation of bio-active compounds from Chinese medicinal drugs, including the isolation of synephrine in high yield from several *Citrus* species, onjisaponin F from *Polygalae Radix* and two active norlignans from *Anemarrhenae Rhizoma*. Drs. Han (NPRI) and Sankawa discussed the development of a radioimmunoassay for ginsenoside Rg1 which is one of the major active saponins of Korean ginseng. *Zizyphus jujuba* seeds have been used as a treatment for insomnia and Dr. Woo reported that the high content of spinosin, a new flavonoid and three of its acylated derivatives were responsible for the mild sedative activity. Drs. Yun and Chang (NPRI) reported some of their preliminary results on the hepatotoxic activity of *Plantago* semen including the isolation of several compounds from active fractions. The ¹³C-NMR spectra of phenolic compounds and

its application to the spectra of catechin dimer and trimer were discussed by Dr. B.J. Ahn of the Korea Research Institute of Chemical Technology. The chemical and biosynthetic progress that has accrued from 20 years of studying the alkaloids of *Catharanthus roseus* and the recent developments in the synthesis and isolation of new bisindole alkaloids were discussed by Dr. G.A. Cordell (U. of Illinois). Limettin is a photodynamic coumarin and Dr. Shim of the Korea Advanced Institute of Science reported on the photochemistry of limettin in the presence of tetramethylethylene, thymine and thymidine.

Dr. Chen of the Brion Research Institute of Taiwan reviewed isolation studies in Taiwan on sixty-seven local medicinal plants by a number of research groups. The formation of i-steroids with a variety of alcohols and thiols was discussed by Dr. E.B. Lee of the Department of Chemistry, SNU, the aim being to study the potential for functionalizing the steroid side chain.

The isolation of new hypotensive grayanotoxins from rhododendron leaves was described by Dr. Pachaly of the Pharmazeutisches Institut der Universität, Bonn. From *Andromeda polifolia* three iridoid glycosides were obtained including two new esters of monotropein. α -Trans-atlantone was synthesized efficiently by Dr. Park of the Korea Tobacco Research Institute, and Dr. Hahn of Chung-ang University described the isolation of lignan and secotriterpenoid glycosides from *Acanthopanax* species. Drs. Chung and Im of the College of Pharmacy, SNU, described the isolation of a new furanosesquiterpenoid, holabinenone, from *Chloranthus japonicus* and Drs. Kong and King discussed the *in vitro* uterotonic activity of dehydroevodiamine hydrochloride and rutaecarpine from *Evodia rutaecarpa*.

The final lecture was presented by Dr. Tanaka of Hiroshima University who described his recent work on the sweeteners, particularly the rebaudiosides, of *Stevia rebaudiana* with a view to establishing the structure-sweetness relationships.

YOUNG'S LAW:

ALL GREAT DISCOVERIES ARE MADE BY MISTAKE.

COROLLARY:

THE GREATER THE FUNDING, THE LONGER IT TAKES TO MAKE THE MISTAKE.

COMMENTARY

FLOSS WINNER OF THIRD VOLWILER AWARD IN NATURAL PRODUCTS RESEARCH

This "news item" is slightly out dated since Professor Floss received the award at the American Association of Colleges of Pharmacy meeting on July 11, 1979. However, the Editor feels that the entire membership should be aware that this award, given in recognition of outstanding research accomplishments to a faculty member of a School of Pharmacy, was presented to Dr. Heinz G. Floss of Purdue University. Professor Floss has been a prime mover within the Society and has been unflagging in his desire to have the membership use research in an effort to improve their relationships with academic colleagues and to improve their input to quality pharmaceutical education. Although this award was presented in July, 1979 it still bears strongly on the conscience of the membership this year because of the AACP meeting to be held in Boston, Mass. this July. At that time, the Second International Congress on Pharmacy Education will be held prior to the AACP meeting and the theme issue of the AACP meeting is "Bridging the Gap Between the Basic Sciences and Clinical Practice". I imagine many of us have not been as active as we should and certainly not as much as Prof. Floss. He called us to task, in his ASP presidential address, for not keeping our discipline viable within schools of pharmacy, through our research efforts. As strange as it seems, recent figures show that 85% of pharmacy basic science faculty have never submitted a grant application. He seems to be a prophet, not only in our field but in others.

I would like to include, for your perusal, parts of the citation on the award that appeared in Volume 7, No. 6 of the AACP News.

"Heinz Floss has established a distinguished reputation in his work on natural products. This reputation is based on the fact that he has been innovative in his approaches to science and, consequently, he has been responsible for major scientific advances in the biochemistry of natural products.

Dr. Floss has made major contributions in the elucidation of the biosynthetic pathways leading to coumarins, furanocoumarins, xanthones and amino acids in higher plants, and

the antibiotics, indolmycin, pyrroinitrin, chlorothricin and spectinomycin. His work is mainly responsible for the elucidation of the biosynthetic pathway leading to the formation of the ergot alkaloids; however, his interests are not exclusively on the molecular level. The research on ergot has led to the development of new potential drugs in this series and has provided the pharmaceutical industry with a fermentation procedure for the more economical production of a new drug in the ergoline series. In addition, he has undertaken research in the area of metabolic regulation of the production of secondary metabolites. Dr. Floss' discovery that tryptophan induced the formation of ergot alkaloids has stimulated other work on the regulation of secondary metabolites, since it was the first proven occurrence of this phenomenon taking place in nature.

Dr. Floss has been a pioneer in the study of the enzymatic mechanism of biosynthetic reactions by using stereospecifically labelled precursors. This approach was applied to elucidation of the stereochemical aspects of the shikimate pathway of aromatic amino acid biosynthesis and discovery of novel variants of this pathway in nature.

Recently his work has led to the elucidation of the steric course of a number of important enzyme reactions including pyridoxal phosphate containing enzyme and thymidylate synthetase. Most recently and most importantly, Dr. Floss has established the steric course of methyl transferase reactions leading to the biosynthesis of indolmycin. These transmethylation reactions are widespread in nature but little was known about the mechanistic details of this process. This most recent work should stimulate further research in this important area.

In addition to several letters of nomination from faculty and administrators at his home institution, Professor Floss was nominated for the prize by investigators at Cambridge University, University of Wisconsin, University of California-San Francisco Medical Center, University of Kansas, University of Connecticut and Rice University.

Honors are hardly new to this distinguished researcher for in 1977 he was recognized by the Purdue Board of Trustees as the first Lilly Professor of Medicinal Chemistry. The Purdue Chapter of Sigma Xi honored its
(Continued on next page)

COMMENTARY (continued)

colleague in 1976 by presenting him with the Faculty Research Award. The American Pharmaceutical Association-Academy of Pharmaceutical Sciences have presented Dr. Floss with their Research Achievement Award in Natural Products. From 1969 to 1974, Professor Floss held a U.S. Public Health Service Career Development Award.

In addition to his AACP membership, Dr. Floss has been active in the American Chemical Society, serving as President of the ACS Purdue Chapter. He has served as President of both the Phytochemical Society of North America and the American Society of Pharmacognosy. His current editorial board assignments include: *Lloydia - Journal of Natural Products*, *Biochemie und Physiologie der Pflazen*, and *Applied Microbiology*. He has served the National Institutes of Health as a member of the Special Biochemistry Study Section and Medicinal Chemistry B Study Section.

Dr. Floss, a U.S. citizen, was born and educated in Germany. He received the equivalent of a bachelor and a masters degree from the Technical University of Berlin (Technische Universität) and a doctoral degree in organic chemistry from the Technical University at Munich. Professor Floss earned a second doctoral degree at Munich in biochemistry. During his years of graduate study, Dr. Floss served on the staffs of several German technical institutes. He came to the United States in 1964 as a Postgraduate Research Biochemist at the University of California at Davis. He joined the Purdue faculty as an associate professor in 1966 and was advanced to the rank of professor in 1969.

Professor Floss is married to the former Inge Sauberlich and is the father of four children. They reside in West Lafayette, Indiana.

HARVARD LAW:

UNDER THE MOST RIGOROUSLY CONTROLLED CONDITIONS OF PRESSURE, TEMPERATURE, VOLUME, HUMIDITY, AND OTHER VARIABLES, THE ORGANISM WILL DO AS IT DAMN WELL PLEASES.

HERSH'S LAW:

BIOCHEMISTRY EXPANDS TO FILL THE SPACE AND TIME AVAILABLE FOR ITS COMPLETION AND PUBLICATION.

BOOK REVIEWS

NEW CONCEPTS IN SAFETY EVALUATION, PART 2, Edited by M.A. Mehlman, Mobil Oil Corporation, R.E. Shapiro, National Institute of Environmental Health Sciences, and H. Blumenthal, Food and Drug Administration. Hemisphere Publishing Corporation, 1025 Vermont Avenue, N.W., Washington, D.C. 20005. 1979. xiii + 191 pp. 16 x 23.5cm. \$24.50.

This book is the second part of the first volume in the series, "Advances in Modern Toxicology" published in memory of the late Leon Friedman. The chapters in this volume, according to the editors, "continue to reflect our concern with issues that may affect public health and means for their evaluation and containment."

Perhaps a more appropriate title for this book would have been "New Concepts in Environmental Carcinogenesis" since a majority of the chapters (7 out of 11) deal with environmental chemicals suspected of inducing cancer in humans: "Environmental carcinogenesis - priorities and perspective" (P. Shubik), "Role of epidemiology in identifying environmental carcinogens" (J. Higginson), "Evaluating the role of environmental chemicals in human cancer" (J.L. Radomski), "Extrapolation and risk estimation for carcinogenesis" (D.W. Gaylor and R.E. Shapiro), "Current concepts in the toxicology of nitrates, nitrites, and nitrosamines" (L. Lijinsky), "Animal experiments with hormones relevant to experience in humans" (T.E. Shellenberger), and "Reinterpretation of the linear nonthreshold dose-response model in terms of the initiation-promotion mouse skin tumorigenesis" (R.E. Albert, F.J. Burns, and B. Altshuler).

The remaining four chapters deal with miscellaneous topics: "Interaction of metals and tissues" (A. Furst and I. Harding-Barlow), "Approches to toxicity evaluation of biomaterials with emphasis on primary acute toxicity tests" (J. Autian), "Target organ studies" (J.C. Calandra and O.E. Fancher), and "Program implications of illicit drug screening" (B. Davidow).

Although this book has a publication date of 1979, a look at the bibliography suggests that most chapters were written in 1975-1976. Since there has been extensive research in
(Continued on page 6)

BOOK REVIEWS (continued)

The field of chemical carcinogens in the past couple of years, most of the chapters dealing with this topic need to be updated. A prime example would be the outdated statement regarding carcinogenicity of amines and nitrites, "...neither becomes a carcinogen without the presence of other under special circumstances," in the chapter on toxicology of nitrites and nitrosamines.

The pharmacognosists and medicinal-pharmaceutical chemists interested in keeping up with new concepts in safety evaluation of drugs and chemicals (as may be implied by the title) will be disappointed with this book. With the possible exception of the chapter on illicit drug screening which gives an excellent review of TLC, GLC, and the EMIT procedures, this book is only of peripheral interest.

With the shortcomings described above noted, this book may be recommended for general reading in environmental and biomaterial toxicology. In the plus side, all chapters are well written, include alphabetical list of references complete with full titles, and the volume is well produced and moderately priced.

G. Subba Rao, Ph.D., Research Institute American Dental Association Health Foundation, Chicago, Illinois 60611.

Books Received April 1, 1979 - December 31, 1979

(1) Atomic Absorption, Fluorescence and Flame Emission Spectroscopy. A Practical Approach. K.C. Thompson, Chief Scientist for a U.K. Public Authority, and R.J. Reynolds, H. M. Chemical Inspector of Factories. Halsted Press, John Wiley and Sons, Inc., 605 Third Avenue, New York, N.Y. 10016. 1979. x + 319 pp. 16 x 24 cm. \$39.95.

(2) Guide to Basic Information Sources in Chemistry. Authur Anthony, Science-Engineering Library, University of California, Santa Barbara. Halsted Press, John Wiley and Sons, Inc., 605 Third Avenue, New York, N.Y. 10016. 1979. vii + 219 pp. 14 x 21.5 cm. \$14.95.

(3) Laboratory Handbook of Chromatography and Allied Methods. O. Mikes, Czechoslovak Academy of Sciences, Prague. Halsted Press, John Wiley and Sons, Inc., 605 Third Avenue, New York, NY. 10016. 1979. 764 pp. 16.5 x 24 cm. \$89.50.

(4) Bioorganic Chemistry. ed. E.E. van Tamelen, Department of Chemistry, Stanford University, Academic Press, Inc., 111 Fifth Avenue, New York, N.Y. 10003. 1978. xx + 371 pp. 15.5 x 23.5 cm. \$43.00.

(5) Marine Natural Products. Chemical and Biological Perspectives. Volume II. ed. Paul J. Scheuer, Department of Chemistry, University of Hawaii. Academic Press, Inc., 111 Fifth Avenue, New York, N.Y. 10003. 1978. xiii + 392 pp. 16 x 23.5 cm. \$38.00.

(6) Carbon-13 NMR Shift Assignments of Amines and Alkaloids. Maurice Shamma and David M. Hindenlang. The Pennsylvania State University, University Park. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1979. xi + 303 pp. 16 x 23.5 cm. \$29.50.

(7) Biosynthetic Products for Cancer Chemotherapy. Volume 3. George R. Pettit and Richard H. Ode, Arizona State University, Tempe. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1979. viii + 197 pp. 16 x 23.5 cm. \$32.50.

(8) Alkaloid Biology and Metabolism in Plants. George R. Waller and Edmond K. Nowacki, Oklahoma State University, Stillwater. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1978. xvii + 294 pp. 16 x 23.5 cm. \$22.50.

(9) Isoquinoline Alkaloids Research 1972-1977. Maurice Chamma and Jerome L. Moniot, The Pennsylvania State University, University Park. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1978. xvii + 425 pp. 16 x 23.5 cm. \$39.50.

(10) Recent Advances in Phytochemistry. Volume II. The Structure, Biosynthesis, and Degradation of Wood. Edited by Frank A. Loewus, Washington State University, Pullman, and V.C. Runeckles, The University of British Columbia, Vancouver. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1972. xii + 527 pp. 16 x 23.5 cm. \$49.50.

(11) Recent Advances in Phytochemistry. Volume 12. Biochemistry of Plant Phenolics. Edited by Tony Swain, Boston University, Jeffrey B. Harborne, University of Reading, England, and Chris F. Van Sumere, University of Ghent, Belgium. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1979. ix + 651 pp. 16 x 23.5 cm. \$49.50

(Continued on next page)

BOOK REVIEWS (continued)

- (12) Marine Natural Products Chemistry. Edited by D.J. Faulkner and W.H. Fenical, Scripps Institute of Oceanography, University of California, San Diego. Plenum Press, 227 West 17th Street, New York, N.Y. 10011. 1977. x + 433 pp. 17.5 x 25.5 cm. \$42.50.
- (13) Botanical Dermatology. John C. Mitchell, University of British Columbia, and Arthur Rook, Addenbrooke's Hospital, Cambridge. Lea and Febiger, 600 South Washington Square, Philadelphia, Pa. 19106. 1979. xiii + 787 pp. 15 x 23 cm. \$39.50.
- (14) Recent Developments in Chromatography and Electrophoresis (Chromatography Symposia Series - Volume 1). Edited by Alberto Frigerio, Mario Negri Institute for Pharmacological Research, and Leika Renoz, Belgian Society for Pharmaceutical Sciences. Elsevier Scientific Publishing Company, P.O. Box 211, Amsterdam, The Netherlands, and 52, Vanderbilt Avenue, New York, N.Y. 10017. 1979. ix + 357 pp. 17 x 24.5 cm. \$58.50.
- (15) High Performance Liquid Chromatography. Chemical Laboratory Practice. Heinz Engelhardt. University des Saarlandes, Saarbrücken, Springer-Verlag, 175 Fifth Avenue, New York, N.Y. 10010. 1979. xii + 248 pp. 17 x 24.5 cm. \$29.80.
- (16) Biological/Biomedical Applications of Liquid Chromatography. Edited by Gerald L. Hawk, Waters Associates, Inc. Marcel Dekker, Inc., 270 Madison Avenue, New York, N.Y. 10016. 1979. xv + 736 pp. 16 x 23.5 cm. \$45.00.
- (17) Secondary Metabolism. J. Mann, University of Reading. Oxford University Press, 200 Madison Avenue, New York, N.Y. 10016. 1979. xi + 316 pp. 14 x 22.5 cm. \$26.00.
- (18) Herbal Drugs in Indian Pharmaceutical Industry. S.L. Kapoor and R. Mitra, National Botanical Research Institute, Lucknow. Economic Botany Information Service, National Botanical Research Institute, Lucknow 226001, India. 1979. 85 pp. 21.5 x 27.5 cm. RS 14.00.
- (19) The Alkaloids. David R. Dalton, Department of Chemistry, Temple University. Marcel Dekker Inc., 270 Madison Avenue, New York, N.Y. 10016. 1979. x + 789 pp. 18.5 x 26 cm. \$49.50.

LETTERS TO THE EDITOR

While the two letters printed below are not technically letters to the Editor, they were forwarded from Dr. David I. Kingston, Book Review Editor for the Society and its Journal, The Journal of Natural Products. As you realize, since the January-February 1979 issue, the Journal has been publishing Book Reviews under his aegis. We wish to thank him for allowing us to see some of the backstage goings on and giving an insight into the problems of reviewing.

"Dear Dr. Kingston,

This is an answer to the review of our book, "Medical Botany". I have written this statement after checking with the Medical School's Urologist, Dr. Fair, who originally reviewed the chapter and he still believes my original statement valid for the reasons I list below.

We would like to thank Dr. Paul I. Schiff for his review of our book, Medical Botany - Plants Affecting Man's Health. However, as a chlamydiologist who has carried out research on chlamydial infections, particularly those of the genital tract for more than a decade, I must take exception to Dr. Schiff's dogmatic statement regarding the efficacy of tetracycline in NSU therapy. It has been my observation, those of the clinicians I have worked with and others in the field that a significant, but small number of individuals do not respond well to tetracycline therapy, and that these refractory cases are not related to either reinfection or to the development of antibiotic resistance. It should be noted that most Chlamydia infections are by nature latent and recurrent and thus the usual course of the disease is characterized by periods of remission and exacerbation. This feature is related to the fact that Chlamydia reproduce intracellularly; and likely reside in cells during periods of latency. Although tetracyclines inhibit Chlamydia protein synthesis by interfering with binding of aminoacyl-tRNA to the ribosome-mRNA complexes; this activity can be reversed after the removal of the antibiotic. Thus antibiotics of this nature are only inhibitory when they are present in infected cells. It is well known that antibiotics do not diffuse well into all areas of the urogenital tract, particu-

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LETTERS TO THE EDITOR (Continued)

larly the prostate; and thus it is likely that these refractory cases are the result of inhibitory concentrations of the drug not being realized. Hopefully new drugs or different modes of treatment will overcome these difficulties. Understanding these problems, one would err to be dogmatic rather than qualified in referring to the present status of therapy.

Sincerely yours,
Memory Elvin-Lewis, Ph.D.
Head: Microbiology
Washington University School
of Dentistry

Dear Dr. Kingston:

I would like to thank Dr. Memory Elvin-Lewis for the reply to my recent review of the book "Medical Botany-Plants Affecting Man's Health" by Walter H. Lewis and Memory P.F. Elvin-Lewis.

Anyone who routinely deals with the broad area of biology knows that the terms "always" and "never" are rarely applicable. Hence, my statement concerning the use of tetracyclines in the treatment of chlamydial urethritis was certainly not meant to be dogmatic and all inclusive. As a matter of fact, one would be ill-advised to make that type of dogmatic statement concerning any disease state and its corresponding drug therapy. I am indeed aware that the chlamydiae are obligate intracellular parasites with an apparent growth cycle of about 48 hours and that they have a limited metabolic capability. I am also aware that there exists an element of latency or inapparent infection with many chlamydial diseases. I am further aware of the difficulty of attaining suitable prostatic levels of antimicrobial agents. My point was that the statement in the book "This recurrent disease is difficult to control with known antibiotics, such as tetracycline, and only new therapeutic measures will assure complete resolution." intimates to me, at least, that chlamydial urethritis is not adequately treated with currently available drugs in most patients. Although the optimum dosage regimen may not have been established with certainty, it has been suggested 14-21 day therapy of tetracycline at 1 gram per day is adequate to eradicate the infection in most patients. Furthermore,

erythromycin in a divided daily dosage of 1 gram for 21 days has been used successfully as well as the anti-infective agent sulfisoxazole. Dr. Elvin-Lewis even states in the letter that a ----"small number of individuals do not respond well to tetracycline therapy,"----clearly implying that a clear majority do respond to adequate therapy.

In conclusion, I am neither a clinician nor a chlamydiologist, nor do I pretend to be, but that does not mean I am unaware of the disease state or its present therapeutic status. I hope my position is clear and that Dr. Elvin-Lewis now understands that my statement is not now nor ever was intended to be dogmatic.

Sincerely,
Paul L. Schiff, Jr., Ph.D.
Professor and Chairman

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PARKINSON'S FIFTH LAW:

IF THERE IS A WAY TO DELAY AN IMPORTANT DECISION, THE GOOD BUREAUCRACY, PUBLIC OR PRIVATE, WILL FIND IT.

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