



# NEWSLETTER

A PUBLICATION OF THE AMERICAN SOCIETY OF PHARMACOGNOSY - EDITED BY MELVIN R. GIBSON

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Officers Elected. The following officers were elected in a mail ballot by the Society and will assume their offices following the June meeting of the Society: Vice President: Elmore H. Taylor, University of Tennessee; Secretary: Rolf S. Westby, Eli Lilly and Company; Treasurer: Leonard R. Worthen, University of Rhode Island; and Member of the Executive Committee: William J. Kelleher, University of Connecticut.

Annual Meeting and Teachers' Seminar. The Eighth Annual Meeting of the Society will be held on the campus of the University of Michigan June 26 and 27. In addition to the business meeting, the program will consist of contributed papers on original research. The first announcement inviting papers has been mailed, a second will be mailed in March. Persons wishing forms for submitting titles and abstracts should address the chairman of the Scientific Program Committee, Govind J. Kapadia, College of Pharmacy, Howard University, Washington, D.C. 20001. The Teachers' Seminar on Pharmacognosy, held under the auspices of the AACP and sponsored by the American Foundation for Pharmaceutical Education, will be on the University of Michigan campus immediately following the Society meeting. This will be June 28-30. A preliminary announcement of the Seminar has been sent to all members, and detailed registration and housing information will be mailed early in May. The Seminar has been titled "Interrelationships Among Pharmacognosy and Other Pharmaceutical Sciences."

International Congress. The 27th International Congress of Pharmaceutical Sciences will be held in Montpellier, France, September 4-9, 1967. "The Influence of Formulation on the Absorption of Drugs" has been chosen for the theme for the lectures during the convention. In addition, original papers will be given in the usual sections, including pharmacognosy. Persons wishing further information should contact Secretariat du XXVII Congres International des Sciences Pharmaceutiques, Faculte de Pharmacie, 34 Montpellier, France.

Economic Botany Meeting. The Eighth Annual Meeting of The Society for Economic Botany will meet June 5-8, University of Miami, Coral Gables, Florida. Persons wishing further information may contact Julia F. Morton, P.O. Box 8204, Coral Gables, Florida 33124. The symposium planned for the meeting is titled "Integrated Research in Economic Botany VII: Protein for Food."

Psycho-active Drug Meeting. John K. Brown, Drake University, reported on the meeting "Ethnopharmacologic Search for Psycho-active Drugs" held January 28-30 at the University of California San Francisco Medical Center made possible by a grant from the National Institute of Mental Health. Titles of papers presented included "Historical Survey," "Problems in Ethnobotany," "Empiricism and Magic in Aztec Pharmacology," "Use and Abuse of Psychoactive Agents," "Function of Kava in Modern Samoan Culture," "Recent Observations on the Use of Kava in the New Hebrides," "Chemistry of Kava," "Pharmacology of Kava," "The Effect of Kava in Normal Subjects," "Technographical Aspects of Kava," "Introduction to Nutmeg," "Nutmeg as a Psycho-active Drug," "The Chemistry and Psychopharmacology of Nutmeg and of Several Related Phenylisopropyl Amines," "The Pharmacology of Myristicin and Nutmeg," "Anthropological Survey of the Use of South American Snuffs," "Botanical Origin of South American Snuffs," "Vilca and Its Use," "Chemical Constituent and Pharmacology of South American Snuffs," "Discussion of the Various Tryptamine Derivatives," "Psychotropic Properties of the Harmala Alkaloids," Film:

"The Making of the Hallucinogenic Drink from Banisteriopsis Cuapi in Northern Peru," "Chemical Compounds Isolated from Banisteriopsis and Related Species," "Fly Agaric and Man," "Psycho-active Principles in Amanita Muscaria," and "The Pharmacology of Amanita Muscaria." It is anticipated that the proceedings of this meeting will be published within the next three or four months.

Symposium Support. Gordon H. Svoboda, Eli Lilly and Company, reports that the Symposium on Natural Products and Cancer Chemotherapy to be held April 10, 1967, in Las Vegas (See last issue of Newsletter for program), which is cosponsored by the Society and the Section on Pharmacognosy and Natural Products of the Academy of Pharmaceutical Sciences, is being supported by funds from the National Cancer Institute of NIH and Eli Lilly and Company.

New Course at Harvard. R. E. Schultes for the first time next year will offer in the Biology Department at Harvard University the course "Plants in the Development of Modern Medicine." The course will be open to graduates and qualified undergraduates. The description of the course is "The importance of plants (especially the higher plants) in medicine. Historical, ethno-botanical, biological and chemotaxonomic aspects of the role of plants in the development of modern medicine; consideration of the Plant Kingdom as a source of new physiologically active compounds of promise; evaluation of recent and current phytochemical and natural products surveys."

Purdue Program. The preliminary draft of a brochure soon to be distributed by the Natural Products Section, Department of Medicinal Chemistry, School of Pharmacy and Pharmaceutical Sciences, Purdue University indicates the availability of programs leading to the M.S. and Ph.D. degrees in natural products. Prospective students for these programs must have completed requirements for the bachelor's degree in either pharmacy, chemistry, biochemistry, plant physiology, microbiology or a related field. If a student's academic background has not included basic courses in analytical chemistry, biochemistry, and physical chemistry, he will be required to take such courses during his first semesters in residence. There will be no minimum credit hours stipulated for either degree. In designing the programs of study special concern will be given to achieve a bridging between organic chemistry, biochemistry, and biology. It is suggested that every student take a number of core courses consisting of advanced biochemistry, qualitative organic chemistry, advanced organic chemistry, microbiology, plant physiology, analytical instrumentation, and natural products. According to his interests the student will select electives of advanced courses in medicinal chemistry, pharmacology, radioisotope tracer techniques, plant biochemistry, theoretical organic chemistry, cellular physiology, genetics, mycology, microbiology, and plant systematics. Additional information and application forms may be obtained from Gustav E. Cwalina, Head, Department of Medicinal Chemistry, School of Pharmacy and Pharmaceutical Sciences, Purdue University, Lafayette, Indiana 47907.

Connecticut Lectures. The following lectures were presented at the University of Connecticut under the sponsorship of a natural products training grant and the pharmacy lecture series: "Conformational Analysis in Nitrogen Heterocyclics" by A. R. Katritzky, University of East Anglia; "Methods and Results of a Search for New Antibiotics in Molds" by V. Betina, Slovak Polytechnical University; "Biosynthesis of the Tetracycline Antibiotics" by Nestor Bohonos, Lederle Laboratories; "Recent Advances in the Chemistry of Tumor Inhibitors of Plant Origin" and "Intramolecular Catalysis in Enzyme Model Systems" by S. M. Kupchan, University of Wisconsin.

Index Available. Frank R. Stermitz, Department of Chemistry, Utah State University, Logan, Utah indicates that he has available mimeographed indexes, alphabetized by genera, of the plants listed in "Alkaloid-Bearing Plants and Their Contained Alkaloids" by J. J. Willaman (USDA Tech. Bull. #1234) in which plants are indexed only through families. Those persons having this bulletin may be interested in this offer. Unfortunately the bulletin is permanently out of stock from the Government Printing Office.

of the 2nd Meeting of the Foundation of European Biochemical Societies, Vienna, April, 1965, Vol. 3, Edited by G. Billek (Pergamon Press, 1966, \$4.50). Progress in the Chemistry of Fats and Other Lipids, Vol. 8, Part 3, Chromatography, Edited by R. T. Holman (Pergamon Press, 1966, \$6.50). Chemotaxonomie der Pflanzen, Band 4, Dicotyledoneae: Daphniphyllaceae - Lythraceae by Robert Hegnauer (Birkhauser Verlag, Basel and Stuttgart, 1966). The semi-annual Bibliography of Thin Layer Chromatography (January, 1966) compiled by Kensington Scientific Corporation, 1165 Sixty-Seventh Street, Oakland, California 94608 is available on request. The Fungi, An Advanced Treatise, Edited by G. C. Ainsworth and Alfred S. Sussman, Vol. 1, The Fungal Cell (Academic Press, 1965, \$24), Vol. 2, The Fungal Organisms and Vol. 3, The Fungal Population Ecology in preparation. Regulation of Metabolic Processes in Mitochondria, Proceedings of a Symposium held at the University of Bari, Italy, April, 1965, Edited by J. M. Tager, S. Papa, E. Quagliariello, and E. C. Slater (Elsevier, 1966, \$27.50). Flavins and Flavoproteins, Proceedings of a Symposium of the International Union of Biochemistry organized by the Royal Netherlands Academy of Science, June, 1965, Edited by E. C. Slater (Elsevier, 1966, \$27). Allergy Guide Book: A Practical Program of Prevention and Control by Harry Swartz, (Ungar, 1966, \$5.50). Fundamentals of Immunology by William C. Boyd (John Wiley, 1966, \$14). Molecular Insights into the Living Process by David E. Green and Robert F. Goldberger (Academic Press, 1966, \$9.75). Concepts in Biochemistry, A Programmed Text by William K. Stephenson (John Wiley & Sons, 1966, \$2.75). The Chlorophylls, Physical, Chemical, and Biological Properties, Edited by Leo P. Vernon and Gilbert R. Seely (Academic Press, 1966, \$25). Tobacco Alkaloids by J. Von Euler (Wenner-Gren symposium on the chemistry, physiology, and pharmacology) (Pergamon Press, 1964, sale price \$10). Cells and Tissues in Culture, Vol. 3, Edited by E. N. Willmer (Academic Press, 1966, \$29). Protein Biosynthesis and Problems of Heredity, Development and Ageing by Xhores Medvedev (Plenum Press, 1966, \$25). Biological Effects of Magnetic Fields, Edited by Madeleine F. Barnothy (Plenum Press, \$16). UV Atlas of Organic Compounds (Plenum Press, 1966, Five volumes at \$115 or \$27.50 each). Biology and Information Elements of Biological Thermodynamics by K. S. Trincher (Plenum Press, 1965, \$17.50). Chromosome Manipulations and Plant Genetics, Edited by Ralph Riley and Kenneth R. Lewis (Plenum Press, 1966, \$8). Chromosomes Today, Vol. 1, Proceedings of the First Oxford Chromosome Conference (Plenum Press, 1966, \$11.50). Analysis of Normal and Abnormal Cell Growth: Model-System Formulations and Analog Computer Studies by Ferdinand Heinmets (Plenum Press, 1966, \$12.50). New journal: Biochemical Genetics, Edited by Charles R. Shaw (Sample copies available from Plenum Press, 227 West 17th Street, New York, New York 10011). Current Topics in Bioenergetics, Vol. 1, Edited by D. R. Sanadi (Academic Press, 1966, \$11.50). The Use of Radioautography in Investigating Protein Synthesis, Edited by Charles Leblond and Katherine Warren (Academic Press, 1966, \$14.50). Methods in Enzymology, Vol. 8, Complex Carbohydrates, Edited by Elizabeth F. Neufeld and Victor Ginsburg (Academic Press, 1966, \$26). Aspects of Insect Biochemistry, Edited by T. W. Goodwin (Academic Press, 1966, \$6). Chemistry of Vegetable Tannins by E. Haslam (Academic Press, 1966, \$8). Gray Herbarium Index (in book form) (G. K. Hall & Co., 70 Lincoln Street, Boston, 1966, \$4.85 in the US, \$533.50 outside the US). Biochemical Studies of Antimicrobial Drugs, Edited by B. A. Newton and P. E. Reynolds, The Sixteenth Symposium of the Society for General Microbiology held at the Royal Institution, London, April, 1966 (Cambridge University Press, 1966, \$11.50). Progress in Nucleic Acid Research and Molecular Biology, Edited by J. N. Davidson and W. E. Cohn (Academic Press, 1966, \$14). Cryobiology, Edited by Harold T. Meryman (Academic Press, 1966, \$25). Biochemistry of Copper, Edited by Jack Peisach, Philip Aisen, and William E. Blumberg (Academic Press, 1966, \$20). Weeds of the World: Biology and Control by Lawrence J. King (John Wiley and Sons, 1966, \$18). Biochemistry of Parasites by T. von Brand (Academic Press, 1966, \$16). Biochemistry of Chloroplasts, Proceedings of a NATO Advanced Study Institute held in Aberystwyth, Wales, Edited by T. W. Goodwin (Academic Press, 1966, Vol. 1, \$18, Vol. 2, \$28). Review of Physiological Chemistry, 10th Ed. by Harold A. Harper (Lange, 1965, \$6.50). Contact Dermatitis by Alexander A. Fisher (Lea & Febiger, 1966, \$12). Blackwell's, Broad Street, Oxford, England in their catalogs list the following books which may be of interest: Plants of the World: Higher Plants, Vol. 1 by H. C. D. De Wit (84/-); Oxford Book of Flowerless Plants by F. H. Brightman (42/-); Microbial Transformation of Steroids (Biologia et Industria, Vol. 3) by A. O. Capek, O. Hanc, and M. Tadra (45/-); A Molecular Approach to Phylogeny by M. Florkin (70/-) Anti-Tumoral Effects of Vinca Rosea Alkaloids, Proceedings of the First Symposium of the

European Cancer Chemotherapy Group, Paris, June, 1965, Edited by E. M. Sproston (70/-); Drug and Tracer Kinetics by A. Rescigno and G. Seare (68/-); Bibliography of Seeds, Edited by L. V. Barton (72/-); Plant Viruses, Edited by A. B. R. Beemster and J. Dijkstra (70/-); The Natural History of Palms by E. J. H. Corner (90/-); Plant Diversification by T. Delevoryas (18/-); Reproductive Biology and Taxonomy of Vascular Plants by K. G. Hawkes (30/-); A Dictionary of the Flowering Plants and Ferns, Seventh Edition, by J. C. Willis (16). Allergy and Anaphylaxis as Metabolic Error by Z. Z. Godlowski (Immuno-metabolic Press, Chicago, 1966, Vol. 1, \$17, Vol. 2, \$17, Set, \$30). Antibiotics and Chemotherapeutic Agents in Clinical and Laboratory Practice by Victor Lorian (Thomas, 1966, \$15.50). Flavor Chemistry, A symposium, Detroit, April, 1965, Edited by Irwin Hornstein (ACS, 1966, \$8). Oils, Fats and Fatty Foods: Their Practical Examination by K. A. Williams (Elsevier, 1966, \$18.50). Phantastica, Narcotics and Stimulating Drugs. Their Use and Abuse by Louis Lewin (E. P. Dutton, 1964, \$5.95). Plant Biochemistry by James Bonner and J. E. Varner (Academic Press, 1966, \$19). The Separation of Biological Materials (Medical Department, The British Council, 65 Davies Street, London, W. 1, England, 1966, \$5). Introduction to Nucleic Acids and Related Natural Products by T. L. V. Ulbricht (Oldbourne Press, London; Davey, New York, 1966, \$7). An Annotated Bibliography of Mexican Ferns by George Neville Jones (University of Illinois Press, 1966, \$5). The Peyote Religion Among the Navaho by David F. Aberle (Aldine, Chicago, 1966, \$10). Actions of Chemicals on Dividing Cells by Bengt A. Kihlman (Prentice-Hall, 1966, \$10). The Chemistry of Fats and Other Lipids, Vol. 9, Edited by Ralph T. Holman (Pergamon, 1966, \$7.75). Studies in Plant Chemistry: Including Chemical Taxonomy, Ontogeny, Phylogeny, etc. by James B. McNair (Reprints of papers published in various journals between 1916 and 1945) (The Author, Los Angeles, \$12). The Pictorial Encyclopedia of Plants and Flowers by F. A. Novak (Hamlyn, London: Crown, New York, 1966, \$10). Drug Adulteration: Detection and Control in Nineteenth-Century Britain by Ernst W. Stieb (University of Wisconsin Press, 1966, \$7.50). The Origin of Cultivated Plants by Gerd von Wahlert (transl.) (Harvard University Press, 1966, \$4.75). Cell Synchrony: Studies in Biosynthetic Regulation by Ivan L. Cameron and George M. Padilla (Academic Press, 1966, \$15). The Chemistry of the Antibiotics Used in Medicine by R. M. Evans (Pergamon Press, 1966, \$6.50). Drug Identification by C. A. Johnson and A. D. Thornton-Jones (Pharmaceutical Press, London, 1966, 35/-).

Material Needed. A. Nelson & Co., Ltd., 73 Duke Street, Grosvenor Square, London, W. 1, England is interested in having someone undertake the assignment at their expense to procure the following items: about eight ounces of the dried sap or a pint of the fresh sap and two pounds of the fresh shoots of Pinus Lambertiana; about five pounds of the fresh plant of Onosmodium Virginianum. Persons wishing to undertake this project should contact A. Nelson & Company, Ltd.

AAAS Meeting. Arnold C. Neva, Duquesne University, has reported on the meeting of the pharmacy section of the AAAS in Washington, D.C. December 26-31. The meeting had as its title "Photographic and Microphotograph Applications in the Biomedical and Pharmaceutical Sciences - Instructional." This involved a preliminary report on photographic and microphotographic applications in teaching and research in the biomedical and pharmaceutical sciences and included slide demonstrations on plant histology, plant morphology, chemical crystallography, chemical toxicology, and micrometry.

Recommended Articles. Rustem S. Medora, McGill University, recommends the following articles to Society members: "Food Relations of Woody Plants," The Botanical Review, 32, 293-382 (1966); "Antibiotics Produced by Fungi," ibid., pp. 219-242; "Botany and Medicine," MD of Canada, p. 93, Sept., 1966.

Personal. Novencido Escobar, Botany Department, University of Panama, has recently completed the manuscript of the book The Toxic Flora of Panama. Professor Escobar has been a Guggenheim Foundation Fellow working with R. E. Schultes at the Harvard Botanical Museum. . . Dean Varro E. Tyler, Jr., Purdue University, gave two invited addresses at Oregon State University, November 21 entitled "Recent Advances in the Chemistry of Higher Fungi" and "Poisonous and Edible Mushrooms." Dean Tyler also spoke to the undergraduates at OSU on November 22 on "Hallucinogenic Plants." . . . Norman R. Farnsworth, University of Pittsburgh has received a one-year grant-in-aid of \$3,840 for the support of studies of isolation, characterization and structure elucidation of natural products. . . R. Raffauf, SKF, and Ara Der Marderosian, PCP, have collaborated in preparing a display which is being sponsored by SKF entitled "Poisons, Plants, and People" at the Academy of Natural Sciences. Dr. Raffauf will be the speaker at a dinner-lecture at the Academy opening the exhibit April 26. . . Georgia J. Persinos, Director of the Division of Phytochemistry, Research Pathology Associates, Rockville, Maryland, recently returned from a trip to the Peruvian Amazon where she did field work under a contract with the Amazon Natural Drug Company. . . Anna Koffler Wannamaker received a research grant from the Harrington Fund and the Research Committee of the American Institute of Homeopathy in 1966 which has been renewed for 1967. Dr. Wannamaker is working on the effects of sulfur dynamizations on the morphology and chemical composition of onions. . . W. I. Taylor, Ciba Pharmaceutical Company, is currently a guest investigator at the Rockefeller University. . . Ikram Hassan has been promoted to associate professor of Pharmacognosy at Fordham University. . . Norman R. Farnsworth, University of Pittsburgh, addressed the meeting of Sigma Xi at Fordham University November 15 on the topic "Search for Newer Biological Compounds Through Primitive Man." . . . Gordon H. Svoboda, Eli Lilly and Company, was elected Chairman-Elect, Section on Pharmacognosy and Natural Products, Academy of Pharmaceutical Sciences, Lynn R. Brady, University of Washington, was elected Vice Chairman, and Jack L. Beal, Ohio State University, who was elected Secretary . . . Dilip K. Santra, formerly head of pharmacy at Birla College, Pilani, Rajasthan, India has accepted the position of professor of pharmacognosy, Faculty of Pharmacy, University of Science and Technology, Kumasi, Ghana. . . Effective July 1, 1967, F. R. Stermitz, Utah State University, will become associate professor of chemistry at Colorado State University . . . Roland H. Thorp, Chairman of the Department of Pharmacology, University of Sidney, spoke at the University of Minnesota under the auspices of the Department of Pharmacognosy on "Cardiac Stimulant Substances." Professor Thorp has a book in press at Academic Press on cardiac stimulant substances. . . T. E. Wallis, University of London, recently celebrated his ninetieth birthday by giving a lecture entitled "Pharmacognosy in Action" at the Chelsea College of Science and Technology. This was attended by many students and friends who presented Dr. Wallis with a television set. A few days later Dr. Wallis was entertained at a special dinner given by the Pharmaceutical Society. . . Mohammed M. Motawi, Dean of the Faculty of Pharmacy, University of Alexandria, has been elected General Secretary of the Union of Arab Pharmacists for a four-year term. . . Jerry L. McLaughlin, University of

Missouri at Kansas City, effective September 15, 1967, has been appointed assistant professor of pharmacognosy at the University of Washington. . . S. K. Sim, University of Toronto, attended the course on the use of radioisotopes in basic research at Oak Ridge Institute of Nuclear Studies, June 20 to July 15, 1966. . . Alvin Segal has been appointed assistant professor of pharmacognosy at the University of Tennessee. Dr. Segal received his Ph.D. from New York University in organic chemistry. Under the sponsorship of the U.S. Public Health Service, he recently completed a postdoctorate in natural products chemistry in the Department of Environmental Medicine of the New York University School of Medicine.

Books. Philip Babcock, Rutgers, recommends the relatively new journal Toxicon (Pergamon Press, \$30/yr.). George E. Trease and William C. Evans, University of Nottingham, indicate that the Ninth Edition of their A Textbook of Pharmacognosy (Bailliere, Tindall and Cox, 1966, 75/) has been thoroughly revised with much more emphasis placed on phytochemistry. Lynn Brady, University of Washington recommends the Seventh Edition of Spot Tests in Organic Analysis by Fritz Feigl (Elsevier, 1966, \$30). Ara Der Marderosian, PCP, recommends the paperback Indole Alkaloids by W. I. Taylor (Pergamon, 1966, \$4.50), Plant Biochemistry by Geza Doby (Interscience, 1966, \$22.60), and Comparative Phytochemistry, Edited by T. Swain (Academic Press, 1966, \$14.75). David W. Hughes and Klaus Genest, Research Laboratories, Food and Drug Directorate, Canada, call our attention to the new quarterly journal Canadian Journal of Pharmaceutical Sciences (175 College Street, Toronto 2B, Ontario, Canada, \$11/yr.). An unidentified member contributed the following suggestions without prices: The Biosynthesis of Natural Products by J. D. Bullock (McGraw Hill, 1965), Advances in Chromatography, Vol. 1 by J. Calvin Giddings and Ray A. Keller (Marcel Dekker, Inc., 1965), Poisonous and Venomous Marine Animals, Vol. I by Bruce W. Halstead (US Govt: Printing Office, 1965), The Molecules of Nature by James B. Hendrickson (W. A. Benjamin, Inc., 1965). Stephen K. Sim, University of Toronto, calls our attention to his booklet entitled Medicinal Plant Glycosides: An Introduction for Pharmacy Students (University of Toronto Press, 1967, \$1.50 US). Professor A. Imbesi, University of Messina, calls our attention to his Index Plantarum Quae in Omnium Populorum Pharmacopoeis Sunt Adhuc Receptae (Libreria Santo Vanasia, 71, Via M. Macchi, Milano, Italy, 1964, \$41.80). This is a unique volume (771 pages) which begins with an extensive discussion (in Italian) of the development of the pharmacopoeias of each country, a listing of plant drugs as mentioned by very early writers, and reproductions of pages of early pharmacopoeias. On page 131 there begins an alphabetical listing of plant drugs by genera and species and plant part with an indication of their listing in the various editions of the world pharmacopoeias. This would be a valuable book for every pharmacy library for historical and reference purposes...George M. Hocking, Auburn University, suggests Strasburger's Textbook of Botany (English Translation) (Longman's Green & Co., 1965, 84/-). German edition of this is available from Gustav Fischer, Stuttgart. Dr. Hocking also recommends Pflanzen Helfen Heilen by Boerngen (Verlag Volk & Geshndheit, Neue Gruenstr. 18, Berlin). Mogens Wellendorf, Copenhagen, recommends A Survey of Current Food Aroma Research in Scandinavia with Bibliography (Nordforsk, 30, Ornevej, Copenhagen NV, Denmark, 1966). Rustem S. Medora, McGill University, recommends A Dictionary of Flowering Plants and Ferns by J. C. Willis, Seventh Edition (Revised by H. K. Airy Shaw) (Cambridge University Press) and Plant Tissue Culture by H. E. Street (Botanical Monograph Series, Edited by W. O. James) (Blackwell Scientific Publications Ltd., Supplier in the US, F. A. Davis Co.). George H. Constantine, Jr., Oregon State University, recommends Biochemical Studies of Antimicrobial Drugs, 16th Symposium of General Microbiology (Cambridge University Press, 1966). An unidentified person suggests Functional Organelles by John H. Morrison (Reinhold Publ. Co., 1966). (Editor's Note: Book suggestions from members will be more meaningful if complete information for each book is given to include complete title, author, publisher, year of publication and price.)

The Editor suggests the following books: Pulver-Atlas der Drogen des Deutschen Arzneibuches by Walter Eschrich of the Pharmacognosy Institute of Bonn University (Gustav Fischer Verlag, Stuttgart, 1966, DM 29 or Intercontinental Medical Book Corporation, 381 Park Avenue South, New York, N.Y., \$7.25). This is a unique spiral-bound book which may be of interest to many Society members. This attractive volume of 216 pages covers 104 drugs with a brief description of the drug parts on one side of a page with handsomely drawn microscopical elements on the opposite page. Most of these drawings are in several colors. Principles of Plant Biochemistry by V. L. Kretovich (English translation of the revised and supplemented fourth edition) (Pergamon Press, 1966, \$15). Biosynthesis of Aromatic Compounds, Proceedings

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