

LIBRI NOVI

LONGMORE'S MEDICAL PHOTOGRAPHY, revised and edited by P. HANSELL and R. OLLERENSHAW, 7th revised edition, 544 p., illustrated. J. B. Lippincott Co., Philadelphia, 1962. Price: \$ 15.—.

This encyclopedic text on medical photography appears here revised, partially rewritten and brought altogether up to date after the untimely death of its original author. The present editors made an outstanding revision aimed primarily at the student and/or junior assistant medical photographer. Section One deals with Photographic Theory. Section Two covers the Photographic Practice, encompassing the photography of skin, teeth, eye, etc. Section Three deals with macrophotography, photomicrography, stereoscopy, cinematography. Finally, Section Four covers the photographic aspects of radiography. The Text is illustrated with 131 figures in black and white and 27 useful Tables. A frontispiece brings the likeness of the original author: THOMAS ALBERT LONGMORE. This excellent work does not need any further recommendation. It should be consulted everywhere where photography of biological objects is practiced.

TIBOR BENEDEK

LAUNDON, G. F. Rust Fungi II: On Aceraceae, Actinidiaceae, Adoxaceae and Aizoaceae. Mycological Papers No. 91: 1—17, 2 plates. Commonwealth Mycological Institute, Kew, Surrey, England. 1963. 7 s. 6 d.

This second part of a continuing series on the rusts of the world considers 27 names of rusts occurring on plants in 4 families. Three species of *Pucciniastrum* are reported on Aceraceae; one of these, *P. magnisporum* is a new name proposed to replace *Melampsoridium aceris* JØRSTAD (1959) which, when transferred to *Pucciniastrum*, becomes preoccupied by *P. aceris* SYDOW (1937). In the Actinidiaceae, one species of *Aecidium* and one of *Pucciniastrum* are recognized. Three species of *Puccinia* are listed in the Adoxaceae. In the Aizoaceae, the author recognizes three species of *Puccinia* and one of *Aecidium*. Three varieties are recognized in *P. tetragoniae* on the basis of uredospore characters. Synonymy, distribution, and complete descriptions are given for each recognized species, as well as lists of specimens on which the studies have been based.

Wm. BRIDGE COOKE

Robt. A. Taft Sanitary Engineering Center
Cincinnati, Ohio, U.S.A.

WESTPHAL, A.: Einführung in die Reflexmikroskopie (Introduction in the reflex microscopy). 46 figures in black and white and one color table. 112 pp. Paper. Georg Thieme Verlag, Stuttgart, West Germany. 1963. Price: DM 30.—

Mycologists are more and more interested in cytological studies of fungi. For a long time only the bright-field and dark-field microscopes were the tools with which mycologists were able to carry on their investigations. The introduction of phase microscopy added a new and important tool for special research into the structure of fungi. At the present microscopical technique objects were seen and studied in biology in transmitted light. With the introduction of this new technique biological objects can be seen also in reflected light. As the excellent illustrative material proves reflex microscopy will signify another great progress beside phase microscopy in the fine structural, especially cytologic studies of biological materials. This work gives the principle of reflex microscopy, discusses the special requirement of the microscope and the quality of the light source. The physical basis of the microscopic image formation in reflex microscopy is thoroughly discussed. This outstanding monograph about a new subject, bringing further progress in the study of fine structure of biological objects is highly recommended for all those who are interested beside the practical use of the microscope in the theoretical principle of image formation.

TIBOR BENEDEK

MORENTZ, J., *Geotrichum Candidum* Link. Taxonomie, Diagnose und medizinische Bedeutung. Mykologische Schriftenreihe, herausgegeben von H. BRAUN, Magdeburg und H. RIETH, Hamburg, Heft 1. (Series of Mycological Publications, edited by H. BRAUN and H. RIETH. Fasc. 1. Morentz, J. *Geotrichum candidum* Link. Taxonomy, diagnosis and medical significance). Johann Ambrosius Barth, Leipzig, 1963. 79 pp. Paper. Illustrated. Price DM. 12,80.

This small monograph gives an excellent, critical treatment of the species *Geotrichum candidum* LINK. After a short history of investigations carried out in the Genus *Geotrichum*, the author gives the micro- and macromorphology of the species. Its physiology and serology are well discussed. Then, the occurrence of *Geotrichum candidum* is presented in the air and the soil, in water and sewage, in industry (bakery, brewery, etc.), in man and animal. Practical diagnosis of the *Geotrichum* species is given. The clinical pictures of Geotrichosis in man are thoroughly discussed (lungs, bronchi, mucous membranes, skin and septicemia). What is known about immunology (serological tests, hyperergy tests), is carefully presented. Finally, infections in animals and therapy of Geotricho-

sis in general are discussed. A list of the species considered as *Geotrichum* closes the text. The few illustrations (eight in number) in black and white are excellent and most instructive. The only objection this reviewer can make concerns the list of references. They are "blind", i.e. the titles of journal articles are not given. This detracts a great deal from the usefulness of the references. It would be desirable that this omission would be corrected in future publications of this series. This monograph can be warmly recommended for working libraries of mycologists and for those of the many disciplines of clinical medicine.

TIBOR BENEDEK

E. F. MORRIS: The Synnematous Genera of the Fungi Imperfecti. Western Illinois University, Series in the Biological Sciences. 3: 1—143. Macomb, Illinois. 1963. By request.

In this volume the author presents drawings of spores, sporophores and synnemata or coremia of 62 of the 93 genera of fungi published for use in the family Stilbellaceae. A brief introduction describes the plan for the book, and the reason for using Stilbellaceae as the repository for these fungi. The author considers the Saccardo system more practical for use in connection with these fungi than the Hughes system. A list is given in which each genus is placed in the proper Saccardoan spore section. The key to genera is based on this list for keys are presented only to those sections that have two or more genera. The larger sections are the Amerosporae of both the Hyalostilbeae and the Phaeostilbeae.

Descriptions and illustrations of each genus are presented in alphabetical order. For each genus the original place of publication, a generic characterization, the type species, the type locality when known, the distribution, habitat, number of species, and references for recent treatments are given. It is suspected by this reviewer that some of the type species are probably lectotypes but this is not stated.

So far as they go, the drawings are excellent. It would have been convenient if the author had emphasized sufficient detail in his original drawings to permit the reader to place the genus, or the species illustrating a particular genus, in its proper perspective with reference to the Hughes system. In many cases this may not be practical from herbarium material, which illustrates the importance of studying these fungi in live culture.

A list of 31 genera not included is appended together with references to their place of original publication. It is not indicated why these genera were not included. A bibliography of 50 titles and an index to the genera mentioned in the text complete the book.

Except for the limitations noted above, this will be a very useful reference work. It may be noted that with the reviewer's personal copy there was a note stating that copies were being forwarded to all

persons on the Mycological Society of America's mailing list and that additional copies were available upon request.

WM. BRIDGE COOKE

Robert A. Taft Sanitary Engineering Center
Cincinnati, Ohio, USA

Symposium on marine microbiology, edited by CARL H. OPPENHEIMER. 769 pp. Charles C. Thomas, Publisher, Springfield, Illinois 1963. Price: \$ 22.50.

Most reports of symposia, conferences, etc., when printed, usually result in a hodge-podge of miscellaneous often unrelated chunks, or worse, slivers, of information concerning a broad topic. This volume is such a report, but fortunately, it is held together far better than most by some very broad, informative papers in the Introduction. These, and particularly the one by ZOBELL on the marine environment as a habitat for marine organisms, well-orient the reader and prepare him for what follows.

The 66 papers making up the volume were all given at a first meeting of some marine microbiologists held in conjunction with the 1961 meeting of the American Society of Microbiologists, and was sponsored by the ONR. A truly international group of investigators participated, as the following breakdown indicates: 13 British Commonwealth; 10 Russia; 6 Germany, 5 France and Algeria, 3 Holland; 3 Japan, 1 Italy; 1 Portugal, and the remainder from the USA.

As indicative of the areas covered and in what depth, there were nine papers on Producers and their Relation to the Chemical and Biological Environment, seven on Geomicrobiological Activities of Marine Microorganisms, 14 on the Ecology of Algae, Protozoa, Fungi and Viruses, 10 on Heterotrophy in Marine Microbiology, 14 on the Distribution and Function of Marine Bacteria and 7 on Marine Bacteriology and the Problem of Mineralization. There is a list of citations after each paper and a cumulative Bibliography at the end of the book. No index was attempted.

In marine mycology, with which this reviewer is somewhat conversant, there are two papers on "fungi" and one on yeasts. The contributions of KOHLMAYER and REYNOLDS are splendid accounts of the activities of the fungi with which they are concerned, namely, Ascomycetes and Fungi Imperfecti. They are, however, all estuarine organisms and of great importance in relation to man's dock-side economy. For some reason, best known to the organizers of the conference, the fungi which *do* play a role in destroying producers in the oceans and hence are of vital significance in the realm of oceanography are passed off with a reference to this reviewer's monograph of the whole group, the Aquatic Phycomycetes, of which they are a small part. True, we know little about these fungi but we do know something.

There are many papers of consuming interest in this volume and in areas not ordinarily considered by the microbiologist. It is well put out and edited and should be available to all interested in the biology of oceans.

FREDERICK K. SPARROW

Department of Botany
University of Michigan
Ann Arbor, Michigan, U.S.A.

OLIVIER, H. R.: *Traité de biologie appliquée. Tome III. Les diagnostics microbiologiques (2e partie).* Pp. 829, 1964. Librairie Maloine, 27, rue de l'Ecole-de-Médecine, Paris-VIe. [Handbook of Applied Biology. vol. III. Microbiologic Diagnostics (2nd part)]. Price: 156F.

The first two volumes of this monumental encyclopedia were already reviewed in this journal (Cf. Vol. XXII, p. 234). This third volume contains three chapters, encompassing Hematology; Pathological Anatomy and Photomicrography; and Allergy. The mycologist will be mainly interested in the second and third chapters. The techniques are remarkably well described and where necessary, also well illustrated. The chapter on Allergy gives an elaborate botanical and mycological background with profuse illustrations. The volume contains 237 figures in black and white, 25 colored plates and 4 in black and white. Paper, print and illustrative material are most excellent. This volume also can be warmly recommended to all those who in command of the French language are interested in what the "neighbor" does and how he thinks.

TIBOR BENEDEK

ROMAGNESI, H.: *Petit atlas des champignons.* Vol. 1, xxxii, 17 figs. + 348 pl. Vol. 2, 418 p., 8 pl. Bordas, Paris, 1962. Price: vol. 1: 56 F, vol. 2: 58 F.

The *Petit Atlas* is presented as a pocket-sized (but not paper-bound) edition of ROMAGNESI's *Nouvel Atlas des Champignons*, a four-volume work published by Bordas beginning in 1956. The first volume of the *Petit Atlas* contains an abridgement of the parent editions' introductory material on the life cycle and sporocarp characters of higher fungi and lithographed aquarelles of almost 400 species, approximately three-fourths of which are agarics and boletes. The plates have been reduced one-half from the *Nouvel Atlas*, and each now carries an indication of scale and of edibility, or lack of it, of the species illustrated. The second volume is devoted mainly to descriptions and discussions of each species, which are presented in a less technical and detailed form than in the *Nouvel Atlas*; it also

contains line drawings of spores and cystidia of several important genera. Both volumes are fully indexed. No keys are included, but they are planned for a later volume as are discussions of toxicology and edibility of fungi.

As a guide to be carried in the field, the *Petit Atlas* has only one drawback of any importance, and that is the location of the aquarelles, the descriptions, and eventually the keys in different volumes. The aquarelles, which were done by several people other than ROMAGNESI, vary in quality, but they are generally well done and leave no doubt as to the fungi intended. North American mycologists will be confronted at times with unfamiliar scientific names for familiar species and with familiar scientific names for unfamiliar species, but such cases, which often reflect the incompleteness of our knowledge of mycological taxonomy, are to be expected. Persons who cannot read French will find the plates of the first volume useful even without recourse to the descriptions of the second.

An impressive feature of the *Petit Atlas* is the inclusion of data on microscopic structures and of line drawings which clearly illustrate these structures. This obviously is of no help in the field, but it should emphasize to the amateur mycologist the importance of microscopic characters in the identification of higher fungi and give him an excellent basis to begin work with a microscope if his interest leads him this far.

ROBERT L. SHAFFER

University Herbarium
University of Michigan
Ann Arbor, Michigan

ERRATUM

in Wynston, L. K. and Tilden, E. B., Chromatographic Fractionation of *Aspergillus* Endotoxins, *Mycopathologia et Mycologia Applicata*, 1963, vol. XX, Fasc. 3-4 August 30, page 281, under Determination of molecular size, paragraph 2, line 3, should read:

"major zone represented the toxin, the calculated sedimentation coefficient *for this peak is 3.24 S. The apparent diffusion coefficient* calculated from data obtained by low speed centrifugation . . ."