BOOK REVIEWS

HUMAN SCHISTOSOMIASIS. By Peter Jordan and Gerald Webbe. Springfield, Ill. Charles C. Thomas, 1970. xii, 212 pp. $8.75.

Failure is the word that best describes human effort to master schistosomiasis. In 1000 B.C. schistosomes infected man, proof being recovery of calcified ova from dated Egyptian mummies. Earlier by a thousand years, vesical schistosomiasis was prevalent, to judge from references to hematuria by the local medical profession. By A.D. 1969 the world incidence of schistosomiasis was at least 150 millions. Three to four thousand years of work by the medical and public health professions produced this most unimpressive result. Complacency in regard to the "control of communicable diseases" is widespread, but it should be realized that the medical and allied professions are presently incapable of dealing effectively with a large number of infectious diseases. Schistosomiasis, with its documented millennial history and composite of social and scientific difficulties which impede progress, provides a particularly rich case history of an unsolved problem.

The present book is a highly condensed survey of present knowledge, said to be intended for "the man in the field." Accordingly it is strong in breadth. The wide representation of viewpoints and findings and the description of the complexities of the control problem are of special value.

The section on chemotherapy enumerates the compounds now available, the variable results obtained, suggests reasons for these variations and cites associated dangers. Apparently the authors do not consider that there is any one best drug, and the interested reader will have to consult elsewhere. There is an interesting section on the concept of "suppressive management" with potassium antimony dimercaptosuccinate (Astiban). This involves a period of monthly spacing of injections during which the patient is improved, possibly cured, toxic reactions reduced and transmission interrupted. Niridazole (Ambilhar) is considered a great advance in the therapy of Schistosoma haematobium; local physicians will be interested that, "In the treatment of S. mansoni, acute confusional states and epileptic form attacks have been reported in adults in most trials." Related doses and incidence rates are not given.

Cancer of the bladder associated with S. haematobium infection of the same organ is observed in abnormally high incidence in Egypt. Whether the relationship is causal has been undecided for about 60 years. It still is, and the reports of lack of correlation in other areas of Africa suggest that multiple factors may play a part in Egypt. Speculations concerning chemical carcinogens in the helminths or in patients are mentioned, no experimental work dealing with the problem is cited.

In summary, the book does well what it sets out to do: review succinctly the literature on the subject. Those who need more will have to look elsewhere, which they can do with the aid of the extensive bibliographies.

DAVID WEINMAN

PRINCIPLES AND METHODS OF PLANT BIOSYSTEMATICS. By Otto T. Solbrig. New York, The Macmillan Company, 1970. xiii, 226 pp. $9.95.

There are about half a million different kinds of plants generally recognized and obviously some system has to be devised to classify them in a logical
way. Most modern systematists try to construct natural systems of classifications which purport to show the interrelatedness of the various groups of organisms and how they evolved from one another. To arrive at their schemes, systematists must consider vast quantities of information drawn from such widely divergent fields as morphology, genetics, biochemistry, mathematics and geology. It is a difficult field in which there are many differences of opinion and unresolved questions. 

In recent years there have been several very good books produced by systematists who have presented their arguments for one or another schemes of classification of either all plants or the higher vascular plants. Solbrig feels that most of these textbooks unduly stress the classificatory aspects and neglect, to at least some extent, the theoretical aspects of the field. He has tried in this text to present the underlying scientific phenomena used by systematists in constructing their schemes. The book can either stand alone as a text for taxonomy courses or as a companion or adjunct volume to existing taxonomy books. The author knows his field well and writes entertainingly and clearly. Even as a non-taxonomist I found myself caught up in some of his discussions on the techniques and problems of the systematist.

ARTHUR W. GALSTON

Breathing: Hering-breuer Centenary Symposium. A Ciba Foundation Symposium. Edited by Ruth Porter. London, J. & A. Churchill, 1970. xiv, 402 pp.

One of the more distressing aspects of today's scientific textbooks is that the long publication delays create a situation in which the average book may be two to three years out of date at the time of publication. This one is a notable exception to this phenomenon. Published in 1970, this volume offers a timely exposition of current thinking in respiratory neurophysiology.

The list of contributors is impressive and the subject matter includes many innovative concepts such as the role of J receptors (Paintal) and Epithelial Irritant Receptors (Mills, Sellick, and Widdecombe). An excellent list of references accompanies each paper and this further enhances the value of this book as a resource text. Illustrations and photographic plates are numerous and clear. The discussion sections following each paper provide the reader with insight into current speculation concerning problems such as breathlessness and the role of the vagus in the control of respiration. Of necessity much in these discussions is conjecture, but this serves to stimulate the reader and does not detract from the book's value.

One aspect of the book that this reviewer did find irrelevant was the inclusion of an opening chapter concerning the personal lives of Hering and Breuer. Their translated papers were included in the text of the book and I felt that the detailed account of their lives was unnecessary.

Clearly, this book is intended to be read by experts and as such, may be considered to be a reference text. Although selected chapters may be of interest to those with only limited knowledge of the field, the major portion of the book assumes a sophisticated background in physiology. For those with expertise in this subject, Breathing is a valuable addition to the available literature.

FRED SACHS