Book Reviews

The Genus *Mycobacterium*. Proceedings of the Third International Colloquium on the Mycobacteria, Antwerp, Belgium, 1-3 December 1972. Prince Leopold Institute of Tropical Medicine, Antwerp, 1973, 223 p. Available on application to The Library, Prince Leopold Institute of Tropical Medicine, Nationalestraat 155, B-2000 Antwerpen, Belgium.

The first 58 pages of this informal volume are of special interest to this reviewer and present the strategies employed by some of the world's outstanding diagnostic mycobacteriologists for identification of the mycobacteria encountered in their laboratories. A range of philosophies is reflected in these strategies, even though most of the contributors use many of the same diagnostic tests. Thus, W. Kämpfer (East Germany) initiates his entire battery of tests on all cultures he receives, whereas E. Kubala (Czechoslovakia), H. Boisvert (France), and K. H. Schröder (West Germany) each has his own selection of preliminary screening tests and relies on the results of these tests to guide him in the selection of definitive tests to be used. Kämpfer, Kubala, Boisvert, and Schröder carry their identifications down to the level of species, or complexes of closely related species, whereas J. Marks (United Kingdom) uses a fairly small number of tests and is more likely to use broader group designations which correlate with different probabilities of clinical significance. This latter approach appears to be quite dependent on the many years of experience and the close contact Dr. Marks has maintained with the clinicians who refer his case materials.

Papers by J. A. Valdivia (Cuba) and S. R. Pattyn and R. Dommissie (Belgium) deal with *M. habana*, a newly recognized human pathogen. These are welcome additions to the literature, as this species is not yet adequately characterized. (Pattyn's data suggest that *M. habana* is quite distinct from *M. simiae*, a species which has not been implicated in human disease, but the possible synonymy of these two species still remains to be resolved.)

The remaining papers in this volume deal with various approaches to mycobacterial taxonomy and will be of interest to investigators in this field. A report by M. Goodfellow (Great Britain) provides a useful contribution to the discrimination between *Mycobacterium*, *Noncardia*, and related genera. Other papers develop different methodological approaches to myco-

bacterial taxonomy. There is also a section dealing with distribution of different species of mycobacteria in different parts of the world.

The papers and informal discussion are reproduced in the original languages of presentation (English, German, or French) and make enjoyable reading. The transcriptions of discussions provide useful insights into some of the tricks of the trade: (J. F. COSTER: "Ich möchte Herrn Kämpfer noch gerne fragen ob er nie Schwierigkeiten empfunden hat mit dem Nitratreduktasetest . . .") W. KAPPLER: "Ja, wir haben jahrelang Schwierigkeiten gehabt, aber es gibt einen Trick . . .").

This book should be read by anyone who is responsible for identification of mycobacteria isolated from clinical materials. Those who deal with large numbers of such cultures will find information which may help them in planning their own strategies; those who deal with very few mycobacterial cultures may be convinced to abandon their efforts and refer these cultures to laboratories with the experience and skills to do the job well.

Lawrence G. Wayne
Chief, Tuberculosis Research Laboratory
Veterans Administration Hospital
Long Beach, Calif.

Numerical Taxonomy. The Principles and Practice of Numerical Classification. Peter H. A. Sneath and Robert R. Sokal. W. H. Freeman and Co., San Francisco, 1973, 573 p., \$19.50.

The authors chose to treat this as a "new" book rather than as a second edition of their 1963 *Principles of Numerical Taxonomy*. Their decision probably is justified, despite the confusion it may cause future bibliographers and historians, because (in addition to a reversal in the order of authorship) the material has been substantially reorganized. Enthusiasts will be pleased to learn that the readability and comprehensibility of the treatment has thereby been considerably improved over the earlier version. Nevertheless, even those relatively few microbiologists who are deeply interested in numerical taxonomy are likely to find in this volume a great deal more than they really care to know about the topic. Extensive coverage is given many subjects which have little direct interest for microbiologists (e.g., cladistics), or even for biologists (e.g., applications to earth sciences, social sciences, etc.). Furthermore, the