Book Reviews

The Mycota: A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research. Edited by K. Esser and P. A. Lemke. Vol. I. Growth, Differentiation and Sexuality, volume editors J. G. H. Wessels and F. Meinhardt. ISBN 3540577815. Vol. II, Genetics and Biotechnology, volume editor U. Kuch. Springer-Verlag, Berlin. xv+431 and xv+375 pages. Price DM 298£129.50 FF1123 per vol. ISBN 3540580034.

Few geneticists will be attracted by the word Mycota (actually, it just means Fungi), but there is, nevertheless, a great deal of genetical interest in these first two volumes of Esser and Lemke's projected sevenvolume encyclopedia. Volume I (with 25 articles) includes reviews of genetic control of the yeast cell cycle, genetic barriers to heterocaryon formation and yeast mating type switching, and several contributions deal with the molecular analysis of mating-type genes in other fungi. Volume II (20 articles) starts with reviews of genetic methodology for some of our favourite fungi (Neurospora, Aspergillus, Coprinus, yeast), and goes on to a series of more molecular topics, including transformation with DNA, systems of gene regulation, plasmids, viruses and retroelements.

The authors all write with authority and are generally clear and concise. Brevity sometimes leaves gaps – for example the review of yeast meiosis by S. Klein et al. hardly does full justice to this rich and complex field – but all chapters contain a lot of information, much of it usefully tabulated. The full contents lists preceding the individual chapters partly compensate for the relative sparsity of entries in the subject index.

One's main reservations concerning this well-edited and handsomely produced series are the usual ones that arise with productions of this kind: the price, and the publication lag. But if your library can afford it, it could spare you a lot of hunting through the pre-1994 journals.

J. R. S. FINCHAM Institute of Cell, Animal and Population Biology University of Edinburgh Internet for the Molecular Biologist. Edited by S. R. SWINDELL, R. R. MILLER and G. S. A. MYERS. Horizon Scientific Press. 1996. 187 pages. Price £19.99 US \$32.50. ISBN 1 898486 02 6.

Few areas of biology have made such extensive use of the Internet as molecular biology. The wealth of databases and facilities for sequence analysis is remarkable and increases day by day. To the Internet novice or occasional user this near-endless resource can seem intimidating. This book is designed for the user who wants to get a rough idea of what is out there and how to get started. Does it succeed?

The book is divided into two main parts. Nearly a third of the book is a guide to what the Internet is, how it works and how to get yourself connected. These chapters are quite heavy going, with few illustrations. Much the same information can be found in an easy to follow pictorial format in the wide range of Internet magazines at the newsagent or in the regular features found in the national newspapers. Nevertheless, if you plough through the text you will probably get yourself to a position where you can use the resources covered in the rest of the book. Most of us would probably give up after ten minutes, track down your local Internet guru and plead ignorance.

The remainder of the book is divided into chapters covering different molecular biological specialities. These range from vertebrates and invertebrates right through to plants and fungi. Each chapter is the same in style; lists of internet resources, many of them Uniform Resource Locators (URLs) from the World Wide Web with a brief description of the site below each entry. Nothing is more frustrating to the novice user than typing long meaningless URLs; why not give away a floppy disk with the book with the internet sites as bookmarks for Web browsers? One chapter is devoted to BioMOO, a computer generated virtual world for biologists. This chapter is written by some of the true inhabitants of BioMOO at the Weizmann Institute in Israel and conveys the pleasures of interacting with other scientists around the globe in this virtual reality meeting place.

Sadly, what is lost in this book is the excitement of using the information superhighway. The Internet is dynamic; it is constantly changing, frequently updated, new sites and facilities appear that are breath-