



## Book reviews

**Micromycetes in foodstuffs and feedstuffs.** By Zdenka Jesenská. Elsevier, Applied Science Publishers, Amsterdam, 1993. x + 226 pp. ISBN 0-444-98684-7. Price: US\$184.50.

This book which is volume 28 of the series *Progress in Industrial Microbiology*, is primarily a compilation of the experience of the author based on studies at the Institute of Preventive and Clinical Medicine, Bratislava. Dr Jesenská was first involved with fungi as a medical mycologist studying dermatophytes and pathogenic yeasts but, over the past 30 years, the author has been concerned with the much broader impact of microfungi on health care and medicine, including their significance in food, animal feeds, water and the working environment.

An introductory chapter sets the scene and provides a brief overview of the significance of yeasts and filamentous fungi on human health with particular emphasis on mycotoxins. The following chapter is the most extensive and reviews the occurrence of fungi in a wide range of foods and animal feeds in a systematic manner dealing with both floristic and quantitative aspects. There is a lot of information arising from work carried out in the author's laboratory and it is enriched with information reviewed from the literature. Indeed there is a considerable bibliography of source material on the many aspects covered by the book.

There are chapters on the ecology of mycotoxin-producing species of fungi, thermoresistant fungi and osmophilic yeasts (the latter being very short and serving simply to highlight that there are such organisms and that they may have a role in food spoilage). Chapter 6 covers the methodology for the study of microfungi in foods and feeds including a compilation of recipes for media routinely used in the laboratory. There is also a significant chapter on the use of anti-fungal substances in the preservation of foods and feeds which includes a review of some of the evidence that some biocides, inappropriately applied, can enhance mycotoxin formation although partially inhibiting mould growth.

A major disappointment in the production of this book is the quality of the 36 figures of fungi included. None of them provide any information on the magnification used for the photomicrographs and the detail is frequently very grainy. The book is expensive, though poorly produced, and it is probable that the price will preclude this potentially useful source of information

from being widely available in food mycology laboratories although, as a volume in a well respected series, it should be found in the libraries of scientific institutions.

Maurice O. Moss

**Modern Methods in Food Mycology.** Edited by R. A. Samson, A. D. Hocking, J. I. Pitt and A. D. King. Elsevier Applied Science Publishers, Amsterdam, 1992. 400 pp. ISBN 0-444-88939-6. Price: US\$160.00.

This book reports the proceedings of the Second International Workshop on Standardization of Methods for the Mycological Examination of Foods held in August 1990, and since many of the world's leading food mycologists are contributors, it is likely to attract wide interest. Although it is well produced, ordering its purchase unseen may lead to disappointment because most of the fifty or so contributions are reported of experiments, which in my opinion, should have faced the rigours of being submitted for publication in a peer-reviewed journal. The most important twenty five pages of the book (the summary of the First International Workshop, the recommendations agreed at the Second International Workshop and the appendix of media recipes) could have been more usefully published in one of the wide circulation review journals. Recommendations were made to standardize procedures and evidence was presented of the variability of media in Seiler's important paper on the monitoring of mycological media. It was surprising, therefore, that several of the reported comparative studies on the performance of media and procedures were presented without recipes of media or sources of ingredients being given. Furthermore, some multilaboratory comparisons were not subjected to statistical analysis 'because of the perceived variability between the different laboratories'. Despite these and other criticisms there are interesting points in the contributions. There are sections on methods for enumeration of fungi in foods; methods for xerophilic fungi; heat resistant fungi; immunological detection of fungi in foods; media and methods for mycotoxigenic fungi; new and alternative techniques for detecting fungi in foods; recommendations; and an appendix listing recipes and references for eighteen media.

The book is hard bound, well printed, has extensive reference lists and a reasonable index but its content does not justify to me the high cost of purchase.

R. W. A. Park