proteases, and essential biological inhibitors such as nisin (the rennin genes have already been cloned). Whey is the largest by-product of the cheese industry and improved methods for its utilization are needed.

There is a great deal of value in this book, though much of the information could doubtless be extracted from recent reviews. It is well worth dipping into for its general interest, and only the very high price prevents me from recommending it to the University departmental library. The authors are for the most part working for, or related to, the production sector in their field, and they appear to leave the consumer out of account. One would like to have a final volume entitled 'Biotechnology and the Consumer'.

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Fungal Differentiation, A Contemporary Synthesis (Mycology Series, Volume 4). Edited by J. E. SMITH. Basel: Dekker. 656 pages. 1983. £84.70. ISBN 0 8247 1734 1.

Fungi are a diverse group of organisms exhibiting a wide range of forms. This book, which is the fourth volume in a mycology series under the general editorship of P. A. Lemke, concentrates on a description of morphogenetic events at the biochemical and cellular level. The genetic analysis of differentiation receives rather less attention; thus for example, in a forty-page chapter on 'The cell division cycle of Yeasts', only six pages of text are devoted to the genetics of the process.

The book consists of 19 chapters, eight of which are concerned with the analysis of particular morphogenetic events within a genus or group. There are, for example, chapters on 'The Blastocladialean γ particle' and on 'Ascospore formation in Yeast'. The eleven remaining chapters are concerned with morphogenetic events in the fungi as a whole. There are, for example, chapters on 'Asexual differentiation in the Fungi' and 'Fungal Pheromones'. The result is a book which is a little unbalanced, containing a mixture of some very specialized and other quite generalized reviews. I think this is why I found it difficult to become absorbed in this book; some articles, such as the one on 'Hyphal Growth Patterns', I found interesting and thought provoking, but others were less stimulating.

This book is an ambitious attempt to cover a large field. Those topics which are covered are dealt with in a sound, solid manner. The weaknesses are, in my view, mistakes of omission. The likely impact of cloning developmentally regulated genes on our understanding of differential gene action is not really dealt with. The analysis of differentiation in *Neurospora* and *Aspergillus*, too, receives comparatively little attention. For example, the analysis of the genes involved in conidiation in *Aspergillus* by Timberlake, and the analysis of perithecial development in *Neurospora* by Johnson both receive only very brief passing reference.

However, despite these weakenesses this work is a valuable compilation. It is well indexed and should prove to be a useful information source. At £84.70 this book is obviously too expensive for most individuals to contemplate buying it, but, even in these days when resources are severely limited, it should have a reasonably high priority for libraries and institutions with an interest in this area.

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