

## BOOK REVIEW

### The Biology of Marine Fungi

Edited by S T Moss

Cambridge University Press: Cambridge  
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This book is the outcome of the Fourth International Marine Mycology Symposium held at Portsmouth Polytechnic, UK, in August 1985. Symposia on marine mycology are being held since 1968 at an interval of 5-6 y. The volumes brought out after each such symposium have proved to be very important sources of information and ideas for marine mycologists. Therefore, even if for no other reason, this book is a must for all those interested in the subject. But this book is also commendable for many other reasons.

There are 30 chapters, based on invited papers by acknowledged experts in the field. Most of these are research papers. There are also quite a few review papers. A wide range of topics on marine mycology is covered in this volume. However, the value of a symposium volume such as this cannot be judged by whether all the topics in the subject have been reviewed or not. This purpose is well served by books and there are at least two excellent books on aquatic and marine mycology. This volume, hence, should be viewed in the light of new directions to research that it can provide in its field and therefore, its relevance. Looked at from this angle, this volume is an important contribution. There are excellent discussions and interesting speculations by the contributors on many important aspects of marine mycology. There are several interesting articles on the modern trend in the taxonomy of marine fungi. The ultrastructure and phylogeny of Thraustochytriales and Labyrinthulales have been discussed in detail, as well as modern biochemical approaches to their taxonomy. A critical appraisal of the taxonomic characters of this group at the light microscopic level, is unfortunately, still a lacuna in this area. The rationale in using different characters, including ascus and ascocarp structures, spore appendages, telemorph/anamorph and even exoenzyme spectra in the taxonomy

of marine Ascomycetes has been discussed extensively by various authors. The present trend towards the understanding of physiological functioning of marine fungi in their environment is evident from several articles. The potential importance of marine fungi in biotechnology is indicated in articles on their enzymes and secondary metabolites. There are two very interesting papers on the application of modern techniques such as ELISA, and fatty acid analyses in the study of ecology of marine fungi.

There are also three fascinating reviews on the present status of research on mycoses of marine animals. Each article approaches the topic from a different angle. This is obviously a very fertile and important area for marine mycologists as well as marine biologists. Two fine papers on algal diseases highlight this area of research. Several papers towards the end are devoted to the ecology and biology of the important group of wood degrading fungi. There are a few areas on which one wishes to have seen more papers. There is only one review on the important topic of hydrocarbons and fungi. There are none at all on the ecology or taxonomy of marine yeasts. One hopes that these areas fostered by eminent marine mycologists earlier catch up with others in future. This book would give new directions to this field of marine research, which is gaining importance. S.T. Moss has done a praiseworthy job of editing and mistakes are hard to find. All in all, this book is a must not only for those actively interested in marine mycology but also to libraries of all institutions carrying out research in marine biology.

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