

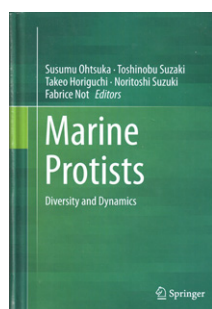
BOOK REVIEW

Marine Protists: Diversity and Dynamics

Ohtsuka, S., Suzuki, T., Horiguchi, T., Suzuki, N. & Not, F. (eds)

2016. Springer, Tokyo. 648 pp. Hardcover, ISBN 978-4-431-55129-4, \$249.

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This book appears with impeccable timing given the attention marine protists are currently receiving. Until recently, interest in the ecological roles and diversity of marine protists appeared to have faded somewhat compared to the booming years of the 1980s & 1990s. However things have changed considerably in the past few years. The advent of relatively low cost high throughput sequencing and results of the *Tara*

and *Malaspina* expeditions literally have put protists on the covers of *Science* and *Nature*. This book on marine protists, while not a comprehensive guide, brings us up to date on a large number of taxa and topics that have been occupying scientific headlines.

The editors compiled a large volume (over 600 pages) of 26 multiauthored chapters. In my view, the chapters are of two sorts, either “Topical Reviews” or “Taxon-Specific Reviews”. As one can see from the chapter titles given below, a large variety of taxa and topics, some general and some quite specialized, are treated. The page lengths noted are indicative of the depth of treatment. For most of the chapters, the references appear to be up to date through 2014. Protist groups especially well covered are rhizaria and dinoflagellates. The reviews of planktonic foraminifera, radiolarians (including acantharians), and phaeodarians are especially useful. Parasitic and symbiotic groups, often neglected, such as thraustochytrids, apotome ciliates, parasitic and symbiotic dinoflagellates, are the subjects of distinct chapters. Overall, the book is very well produced with many color illustrations throughout. While one might lament some notable ‘holes’ in the coverage of marine protists (e.g., benthic foraminifera, ameba, benthic taxa in general), I believe most everyone working with marine taxa will want this book.

TAXON-SPECIFIC REVIEWS

Biology of Symbiotic Apotome Ciliates: Their Diversity and Importance in the Aquatic Ecosystems (23 pp)
Diversity and Ecology of Thraustochytrid Protists in the Marine Environment (15 pp)

Diversity and Phylogeny of Marine Parasitic Dinoflagellates (23 pp)
Biology of Symbiotic Dinoflagellates (19 pp)
Unusual Features of Dinokaryon, the Enigmatic Nucleus of Dinoflagellates (23 pp)
Taxonomy and Distribution of the Unarmored Dinoflagellates *Cochlodinium polykrikoides* and *C. fulvescens* (15 pp)
Paralytic Shellfish Poison (PSP)–Producing Dinoflagellate and PSP-Infested Organisms (29 pp)
Biology and Paleontology of Coccolithophores (Haptophytes) (19 pp)
Phaeodaria: Diverse Marine Cercozoans of World-Wide Distribution (27 pp)
Biology and Ecology of Radiolaria (43 pp)
Planktic Foraminifera (49 pp)
Planktonic Ciliates: Diverse Ecological Function in Seawater (33 pp)
Basal Lineages of Green Algae – Their Diversity and Phylogeny (17 pp)
Typical Features of Genomes in the Mamiellophyceae (21 pp)

TOPICAL REVIEWS

Protistan Diversity in Environmental Molecular Surveys (19 pp)
Diversity of Microbial Eukaryotes in Deep Sea Chemosynthetic Ecosystems Illuminated by Molecular Techniques (15 pp)
Biology, Diversity and Ecology of Free-Living Heterotrophic Flagellates (25 pp)
Ecology and Distribution of Protists in Brackish Water Lakes (11 pp)
Photosymbiosis in Marine Planktonic Protists (35 pp)
Oldest Fossil Records of Marine Protists and the Geologic History Toward the Establishment of the Modern-Type Marine Protist World (37 pp)
Interactions Between Harmful Algae and Algicidal and Growth-Inhibiting Bacteria Associated with Seaweeds and Seagrasses (23 pp)
Relationships Between Aquatic Protists and Humans (17 pp)
Biology of Parasitic Heterotrophic Nanoflagellates: Parasitoids of Diatoms (13 pp)
Marine Protist Viruses (17 pp)
Fish and Shellfish Diseases Caused by Marine Protists (17 pp)

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