

BOOK REVIEWS

EDITOR: K. T. KISS

KARTHICK, B., HAMILTON, P. B. and KOCIOLEK, J. P. (2013): An illustrated guide to common diatoms of Peninsular India. – Gubbi Labs, Gubbi, 206 pp.

This is the first book from India, which is a lack of a one-stop guide to introduce most common diatom species of Peninsular India. This book is not aimed to be an exhaustive flora of the diatom of India, but rather serve as an introduction to the common species, which can be found in fresh and brackish inland waters.

There are seven main parts of the book: Preface; Introduction; References; General morphological features of diatoms; Terminologies used in diatom taxonomy; Species index; Common diatoms of Peninsular India.

The Introduction chapter of the book represents the diatoms and their ecology, furthermore, the collection and enumeration of freshwater diatoms. The next two chapters contain key terms, which make the identification for beginners easier. The chapter of the species index is helping us transparency the species. The last chapter presents 136 plates along with dimensions, characteristics and ecological descriptions of each taxon. In this identification guide nearly 200 species are illustrated with light and scanning electron micrographs. The photos were taken usually in good quality but in some cases they are dark and out of focus, which could make the identification difficult. Some of common taxa are endemic, including species of *Gomphonema*, *Neidium*, *Nitzschia*, *Surirella* and *Urosolenia*.

This guide provides a comprehensive view of the Indian diatom communities. I recommend this book for all algologists and those who wish to begin a study of the diatom flora of Peninsular India.

A. FÖLDI

NOVAIS, M. H., BLANCO, S., MORAIS, M., HOFFMANN, L. and ECTOR, L. (2015): Catalogue of continental diatoms from Portugal, including the Archipelagos of Azores and Madeira: updated nomenclature, distribution and bibliography. – In: WITKOWSKI, A. (ed.): *Diatom Monographs*, Vol. 17A-C. Koeltz Scientific Books, Königstein, 611 pp. (ISBN: 978-3-87429-447-8).

This volume of the *Diatom Monographs* is a catalogue. It was aimed to collect all the information available on continental diatoms (recent and fossil) in Portugal, containing the two autonomous regions of Azores and Madeira Archipelagos. The first information noticed in this book was made from the middle of the 19th century until 2010.

Many sorts of publications can be found in this volume such as reports, scientific papers, PhD theses and post-doc studies. Only non-marine diatoms were taken into account, namely this catalogue includes information about diatoms in streams, rivers, fountains, sources, reservoirs, lakes, lagoons, ponds and upper reach of estuaries. The total number of taxa listed in this catalogue is 1381. For the distribution of the diatoms to be introduced in details the authors created regions, subregions, municipalities (districts), sites and finally, references; additionally, particular maps are also added to each taxon. These maps comprehensive the municipalities where every taxon has been cited, showing the geographical distribution of each taxon in Mainland Portugal and in the Madeira and Azores Archipelagos.

This catalogue gives a hand for those who want to carry out diatom investigations in Portugal or in islands belonging to this country because it shows clearly which sites in Portugal have not been explored by means of diatoms (from the analysis of the map it is evident that more than 50% of the territory is unexplored, which shows the lack of studies about diatoms in the country).

Zs. TRÁBERT

VILIČIĆ, D. (2014): *Ecology and composition of phytoplankton in the Adriatic Sea*. – Koeltz Scientific Books, Königstein, 367 pp. (ISBN 978-3-87429-474-4)

A comprehensive study appeared about the phytoplankton of the Adriatic Sea, which provides information not only on taxonomic composition but presents a general ecological approach in the oceanic, Mediterranean Sea and Adriatic environment. The Adriatic Sea is the northernmost arm of the Mediterranean Sea which is under great continental influence, it is a dilution basin for the Mediterranean Sea due to freshwater gains such as rivers and rainfall.

The book is composed of four big chapters, after a short introduction the author presents regulation effect of the environmental conditions, published and unpublished results on phytoplankton composition and its distribution in the Adriatic Sea, a short phytoplankton cellular anatomy and in the second half of the book an illustrated catalogue of phytoplankton taxa identified by light and electron microscopy. At the end of the work a long list of references is found. The information is determined during the last 20 years of the author's research, mostly the eastern part of the Adriatic Sea.

This book describes first of all the environmental conditions that regulate pelagic production and phytoplankton distribution. The knowledge of pelagic ecology may help in the evaluation of possible ecosystem changes in the future. The expected changes may be primarily revealed in a shallow marine environment, like the Adriatic Sea.

On the whole, this book provides a valuable collection of information on the phytoplankton of the Adriatic Sea and it is amusing to read. It is a good starting literature for advanced research in ecology and phytoplankton diversity of the Adriatic Sea. It can be

recommended to everyone interested in this area, especially for students studying marine microbiology and ecology.

A. HIDAS

WITKOWSKI, J., WILLIAMS, D. and KOCIOLEK, P. (eds) (2015): Diatoms and the continuing relevance of morphology to studies on taxonomy, systematics and biogeography. Celebrating the work and impact of Patricia A. Sims on the occasion of her 80th birthday. – Nova Hedwigia, Beiheft 144. J. Cramer in der Gebrüder Borntraeger Verlagsbuchhandlung, Berlin, Stuttgart, 228 pp.

The collection of papers in this book comes from a diverse number of authors all focusing on one or another aspect of diatom taxonomy and systematics. The inspiration for the collection was to mark the 80th birthday of Patricia A. Sims (in 2012), with a complete bibliography of her scientific life work. Amongst these papers there are some ones which describe new species, both fossil and recent, marine and freshwater; bibliographic matters, necessary for taxonomic priority issues as well as specimen recognition; structural – functional interpretations of the silica parts. This volume is richly illustrated, and new genera and species are proposed. It is full of detailed photos taken by light and electron microscope. For example one of the papers includes a particular micrograph series about the formation of the silica frustule of the diatoms.

This book can be useful for all those who are interested in diatoms; either for algologists working with diatom taxonomy or for those who study the ecology of this algal group.

Zs. TRÁBERT