BOOK REVIEW

Marine Dinoflagellates

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The dinoflagellates, which constitute the phylum Dinoflagellata are mostly planktonic occurring both in the freshwater and marine habitats. In terms of number of species, dinoflagellates form one of the largest groups of marine eukaryotes. Some species as endosymbionts of corals play an important part in the biology of coral reefs and are responsible for this exquisite reef environment which is described as the planet's greatest attractions and beautiful presentation on earth. Now the dinoflagellates are in the news quite often as they are responsible for producing blooms resulting in a visible coloration of the water colloquially known as red tide. They bloom in concentrations of more than a million cells per millilitre. Under such circumstances, they can produce toxins (generally called dinotoxins) in quantities capable of killing fish and accumulating in filter feeders such as shellfish, which in turn may be passed on to people who eat them causing shellfish poisoning. These organisms cam reproduce rapidly and copiously on account of the abundant nutrients in the water. The toxins can cause both fatal and non-fatal illnesses in Man. The blooms also cause mass mortality of fishes. In view of the both medical and economic perspectives, many countries have implemented monitoring programmes on HAB (harmful algal blooms). Many researchers have also been studying the bioluminescence of dinoflaggellates to make use of the biological light they produce for a gainful purpose.

There is increased research interest on these organisms worldwide and many research initiatives are in the offing in various countries. The basic requirement of all the researchers besides students and at the time of blooms for policy makers and executives notwithstanding general public is a standard text book on Marine Dinoflagellates which will be helpful in the identification of flagellates. While there are many on plankton in general, there is no publication which gives a comprehensive information on marine dinoflagellates covering besides identification various types of shellfish poisoning (DSP, PSP, CFP, PTX, NSP and AZP), toxins responsible for shellfish poisoning, their characteristics, mode of action, symptoms and management and treatment besides information on outbreaks of such shellfish poisoning world over and the organisms contaminated by the toxins. Excellent photographs add to the value of this book.

I conclude with great optimism that this book will be received well by a wide section of people interested in learning the nuances of plankton in general and dinoflagellates in particular. This book will also definitely encourage further research on marine diniflagellates. In my opinion this book demonstrates the rich scholarship of the author who keeps tab on emerging scenarios in marine research. Naturally he has taken enormous efforts to put together his intellectual resources to bring the book to this shape. Without doubt the researchers, teachers, students, administrators and planners will find this book indispensable in their understanding of HAB. Simple style and language make the reading a delight. This book will survive the passage of time.

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