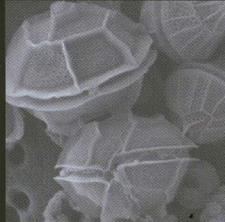
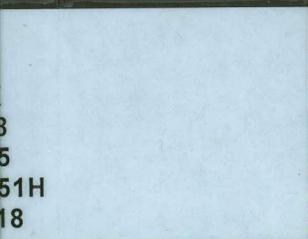


# HARMFUL ALGAE of Malaysia



- NORMAWATY MOHAMMAD NOOR •
- ØJVIND MOESTRUP • CHUI PIN LEAW •
- PO TEEN LIM • GRACE JOY WEI LIE CHIN •
- GIRES USUP •

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# HARMFUL ALGAE of Malaysia

Harmful Algal Bloom (HAB) is a natural phenomenon that has been reported all over the world including in Malaysia. The impact of this event to the human health, economy and tourism industry can be devastated depending on the scale. In Malaysia, HAB cases have been reported since the past decade. Since then, more and more cases were reported covering different geographical areas. This book provides a description of a list of HAB species that has been reported in Malaysia together with colourful photomicrographs, newspaper cutting reporting the event, collection method and its impact. This essential information is a must-know knowledge for those who works on algae especially HAB.

**NORMAWATY MOHAMMAD NOOR**, an Associate Professor of the Department of Marine Science, Kulliyah of Science, International Islamic University Malaysia. Main interests: taxonomy and ecology of algae. She has been working on this field for more than 10 years. Presently work on ecology and taxonomy of HAB species in Malaysia. She has published numerous scientific publications in the field of HAB. **ØJVIND MOESTRUP**, Professor, University of Copenhagen, Denmark. Main interests: taxonomy, ultrastructure and evolution of algae. Toxic algae, presently a project on the fish-killing dinoflagellates of the family Kareniaceae, which are causing problems for marine aquaculture in many parts of the world. Chairman of the committee responsible for the IOC-UNESCO Taxonomic reference List of Harmful Micro Algae. **CHUI PIN LEAW** is a senior research fellow of the Institute of Ocean and Earth Sciences, University of Malaya. Her research falls in the field of marine phycology, focusing on the studies of Harmful Algal Blooms (HABs), spanning from taxonomy, molecular systematics and evolution to the genetics and toxigenesis of harmful microalgae. Her track record in research publications is outstanding. This can be testified by the Publish and Perish Author Impact Analysis with an H-Index of 14 (Web of Science), >500 total citations for over 40 papers (Google Scholar H-index, 18, citations, >920). **PO TEEN LIM** an Associate Professor of the Institute of Ocean and Earth Sciences, University of Malaya, and is currently heading the Bachok Marine Research Station. He involves actively in the regional and international program through IOC SCOR GLOBALHAB Program, IOC WESTPAC Toxic Marine Organism (WESTPAC-TMO) and Harmful Algal Blooms (WESTPAC-HABs) programs. He is also an expert panel of the National Technical Working Group of Biotoxins and HABs. He has published numerous scientific publications in the field of HAB, and organized scientific training workshops on HABs at national and international levels. **GRACE JOY WEI LIE CHIN** is a lecturer in Biotechnology Research Institute, Universiti Malaysia Sabah. Her research focus is algal biotechnology, where she is actively involved in molecular studies of harmful algal bloom species, *Pyrodinium bahamense* var. *compressum* and *Cochlodinium polykrikoides*, as well as on red seaweed species, *Kappaphycus* spp. and *Euचेuma denticulatum*. Besides that, she is also working on screening for potential local microalgal strains for biofuel production and characterization of bacteria isolated from acid mine drainage. **GIRES USUP** is a Professor of Marine Science at Faculty of Science and Technology, Universiti Kebangsaan Malaysia. He has a Bachelor's Degree in Microbiology from Universiti Kebangsaan Malaysia, MPhil in Marine Biology from Heriot Watt University, Scotland, and PhD in Biological Oceanography from Boston University, U.S.A. Dr. Usup was the pioneer in harmful algal blooms research in Malaysia. He also served as a scientific steering committee member of GEOHAB and GlobalHAB. He was also the Chair of the Intergovernmental Panel on Harmful Algal Blooms, the IOC of UNESCO from 2015 to 2019.

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