

SEaweeds in Sri Lanka
A PERSONAL COLLECTION OF MACROALGAE



Malik Fernando
Colombo, Sri Lanka
2021

INTRODUCTION TO THE SPECIES DESCRIPTIONS

The beauty and variety of marine algae—seaweeds—to be seen underwater made a big impression on me when I started SCUBA diving in the UK in the nineteen-sixties. The numerous handbooks available in the bookshops, describing the biodiversity in Britain in colour, included the underwater flora and fauna. This enabled me to understand what was seen during dives. Following my return to Sri Lanka, I was disappointed in the paucity of literature about the country's animals and plants—especially about underwater life. What literature that was available was mostly of a scientific nature with black and white illustrations, making identification difficult for someone not familiar with the subject. It was with this background that I started collecting and identifying, to the best of my ability, the seaweeds, and invertebrates that I saw underwater during my recreational dives. The illustrated articles in this section are based on the collections that I made from the late nineteen-eighties to the two-thousands and are intended as a guide to understanding and identifying some of the underwater flora around Sri Lanka.

Identification of seaweeds was difficult at first, relying on the limited collections of literature in the libraries of the National Museum in Colombo, that of the National Science Foundation and of the National Herbarium in Peradeniya. This was supplemented by books loaned by Dr. M.W.R.N. de Silva of the National Aquatic Resources Agency (NARA) and Prof. B.A. Abeywickrema of the Colombo University. From about 2001 I received copies of original literature from Upali Mallikarachchi who, at that time, was working for his Master of Philosophy degree at the Ruhuna University. He was receiving literature from his supervisor, Prof. Coppejans, at the University of Ghent in Belgium. Discussions and comparing of notes with Upali Mallikarachchi were rewarding. I was later privileged to meet Prof. Eric Coppejans in Sri Lanka and confirm some identifications.

Two people who really put me on my feet, as regards studying seaweeds, were Prof. S.A. Kulasooriya, the Professor of Botany of the University of Peradeniya and Dr. Siril Wijesundara, of the Royal Botanical Gardens, Peradeniya. I met Prof. Kulasooriya in January 1995 when he gave me access to some of the algal collections of (late) Prof. S. Balasubramaniam, who had collected in Jaffna¹ as well as elsewhere. He and Dr. Hemasiri Cooray (MHV Cooray) helped with identifications and technical details of making herbarium sheets.

Dr. Siril Wijesundara, who was then the Director of the Royal Botanical Gardens, Peradeniya, the Superintendent of the Gardens Mr. Dhanasekera and the Curator of the Herbarium Mr Lal Jayaratne gave me their unstinted help in using the Herbarium and in accessing the Classical Collection and the Herbarium Library. My first visit there was in July 1996. During subsequent visits I looked through relevant green (August 1999) and brown algae sheets (October 2001), comparing my collections with those of the early collectors. I was able to look through a few of the red algae sheets too (January 2003), to compare with my collections; red algae proved to be difficult to identify and I did not get far.

I was fortunate in receiving a copy of the *Catalogue of the Benthic Marine Algae of the Indian Ocean* (1996)² in 1999. This was gifted by my nephew Rehan Walgama, who brought it from the USA when he visited, in response to a request for books on seaweeds. From this publication I was able to compile a list of the seaweeds that had been reported from Sri Lanka by various authors.

Having left the study of algae to concentrate on marine molluscs, I have returned to this topic this year (2021) to endeavour to publish the information in my possession online, to be available to anyone interested. Names and classification of species have been updated through the records of AlgaeBase currently available



The first seaweed ever
pressed by me -
12.5.1968, England.

¹ Balasubramaniam, S., 1979. A checklist of the marine algae of Jaffna. *Phyta* (J. bot. U. of Peradeniya) 1(4).

² Silva, P.C., Basson, P.W. and Moe, R.L., 1996. *Catalogue of the Benthic Marine Algae of the Indian Ocean*. University of California Publications in Botany, Vol. 79. University of California Press.

in 2021. Some identifications have been established through the works of U. Mallikarachchi, Eric Coppejans et al and Olivier De Clerck (on the brown algae *Dictyota* spp.)—all published in the 21st century.³

ACKNOWLEDGEMENTS

I thank all those mentioned in the preceding paragraphs, without whose help and advice, including provision of literature, I would not have been able to proceed as far as I have, working independently. Rehan Walgama needs a special word of thanks for his initiative in providing me with a valuable publication that proved to be of great use.

I thank my SCUBA diving colleagues M.W. Rangith N. de Silva and Arjan Rajasuriya for helping me to collect subtidal algae in deeper water and in many locations far from Colombo. My free diving companions of the nineteen-seventies Nileendra Senanayake and Nimal Ratnapala for their companionship and help in the early days of collecting along the Colombo coast in shallow water. Gihan Jayatilaka, Srilal Perera and Prof. Suki Ekaratne were responsible for encouraging me to a more detailed study of marine algae by providing me with a microscope and camera under the MBIOD⁴ project of 1992 – 1995. As part of this project a collection of herbarium sheets were prepared for S. Thomas' College. The drawings and photomicrographs in this work have been executed using this equipment. My own microscope was used after the project ended and the equipment was returned to the school.

Malik Fernando
muhudubella@gmail.com

www.docmalikfern.com

Colombo
February 2021

³ Mallikarachchi, U. 2004. *A study of the taxonomy and distribution pattern of algae on the southwest coast of Sri Lanka with special reference to anthropogenic effects*. Thesis, Master of Philosophy, University of Ruhuna, unpublished.

Mallikarachchi, U. 2013. *Taxonomic survey of seaweeds along the coastal belt of Sri Lanka (Part I - Eastern Coastal Segment)*. Report to Biodiversity Secretariat, Ministry of Environment, Sri Lanka. Marine & Coastal Resources Conservation Foundation.

Coppejans, E., Leliaert, F., Dargent, O., Gunasekara, R. and De Clerck, O. 2009. *Sri Lankan Seaweeds, Methodologies and field guide to the dominant species*, ABC Taxa, Vol. 9, Belgian Development Corporation.

De Clerck, O. 2003. The genus *Dictyota* in the Indian Ocean. *Opera Botanica Belgica*, 13: 205 pp.

⁴ Marine Biodiversity Mapping Project – a joint initiative of the Sri Lanka Sub-Aqua Club and the S. Thomas' College, Mount Lavinia, Diving Club. MBIOD was the brainchild of Srilal Perera.