

Marine Macrophytes as Foundation Species

Editor

Emil Ólafsson

Senior Researcher – Marine Benthic Ecology
Spanish Institute of Oceanography (IEO)
Centro Oceanográfico de las Baleares
Palma
Spain



CRC Press

Taylor & Francis Group
Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an Informa business

A SCIENCE PUBLISHERS BOOK

Contents

Preface

v

I. Macroalgae and Seagrasses as a Source of Biodiversity

- 1. Microbial Biodiversity Associated with Marine Macroalgae and Seagrasses** 3
Franz Goecke and Johannes F. Imhoff
- 2. The Role of Chemically Defended Seaweeds as Biodiversity Sources** 26
Renato Crespo Pereira, Bernardo Antonio Perez da Gama and Daniela Bueno Sudatti
- 3. Epibiont-Marine Macrophyte Assemblages** 43
Carol S. Thornber, Emily Jones and Mads S. Thomsen
- 4. The Role of Floating Plants in Dispersal of Biota Across Habitats and Ecosystems** 76
Martin Thiel and Ceridwen Fraser
- 5. The Role of Drifting Algae for Marine Biodiversity** 100
Nina Larissa Arroyo and Erik Bonsdorff

II. Production of Macrophytes

- 6. Macrophyte Productivity and the Provisioning of Energy and Habitat to Nearshore Systems** 133
Michael H. Graham, Michael D. Fox and Scott L. Hamilton
- 7. Secondary Production** 161
Hartvig Christie and Kjell Magnus Norderhaug

III. Human Threats to Macrophytic Foundation Species

- 8. Eutrophication and the Challenge of Changing Biotic Interactions** 179
Eva Rothäusler and Veijo Jormalainen
- 9. Threats to Ecosystem Engineering Macrophytes: Climate Change** 201
Thomas Wernberg, Francisco Arenas, Celia Olabarria, Mads S. Thomsen and Margaret B. Mohring

10. Ecological Interactions between Marine Plants and Alien Species	226
<i>Mads Solgaard Thomsen, Thomas Wernberg, Peter A. Staehr and David Schiel</i>	
11. Physical Threats to Macrophytes as Ecosystem Engineers	259
<i>Walker D.I. and Bellgrove A.</i>	
<i>Index</i>	273