

CONTENTS

Contributors	vii
Preface	xi
Contents of Volumes 35–63	xv
1. Diversity and Ecology of Eukaryotic Marine Phytoplankton	1
Fabrice Not, Raffaele Siano, Wiebe H.C.F. Kooistra, Nathalie Simon, Daniel Vaultot and Ian Probert	
2. Diversity and Evolution of Algae: Primary Endosymbiosis	55
Olivier De Clerck, Kenny A. Bogaert and Frederik Leliaert	
3. The Evolution of Algae by Secondary and Tertiary Endosymbiosis	87
John M. Archibald	
4. The Role of Microalgal Symbionts (<i>Symbiodinium</i>) in Holobiont Physiology	119
Michele X. Weber, and Mónica Medina	
5. The <i>Ectocarpus</i> Genome and Brown Algal Genomics	141
The <i>Ectocarpus</i> Genome Consortium:	
J. Mark Cock, Lieven Sterck, Sophia Ahmed, Andrew E. Allen, Grigoris Amoutzias, Veronique Anthouard, François Artiguenave, Alok Arun, Jean-Marc Aury, Jonathan H. Badger, Bank Beszteri, Kenny Billiau, Eric Bonnet, John H. Bothwell, Chris Bowler, Catherine Boyen, Colin Brownlee, Carl J. Carrano, Bénédicte Charrier, Ga Youn Cho, Susana M. Coelho, Jonas Collén, Gildas Le Corguillé, Erwan Corre, Laurence Dartevelle, Corinne Da Silva, Ludovic Delage, Nicolas Delaroque, Simon M. Dittami, Sylvie Doulbeau, Marek Elias, Garry Farnham, Claire M.M. Gachon, Olivier Godfroy, Bernhard Gschloessl, Svenja Heesch, Kamel Jabbari, Claire Jubin, Hiroshi Kawai, Kei Kimura, Bernard Kloareg, Frithjof C. Küpper, Daniel Lang, Aude Le Bail, Rémy Luthringer, Catherine Leblanc, Patrice Lerouge, Martin Lohr, Pascal J. Lopez, Nicolas Macaluso, Cindy Martens, Florian Maumus, Gurvan Michel, Diego Miranda- Saavedra, Julia Morales, Hervé Moreau, Taizo Motomura, Chikako Nagasato, Carolyn A. Napoli, David R. Nelson, Pi Nyvall-Collén, Akira F. Peters, Cyril Pommier, Philippe Potin, Julie Poulain, Hadi Quesneville, Betsy Read,	

Stefan A. Rensing, Andrés Ritter, Sylvie Rousvoal, Manoj Samanta, Gaele Samson, Declan C. Schroeder, Delphine Scornet, Béatrice Ségurens, Martina Strittmatter, Thierry Tonon, James W. Tregear, Klaus Valentin, Peter Von Dassow, Takahiro Yamagishi, Pierre Rouzé, Yves Van de Peer and Patrick Wincker

6. Genomics of Volvocine Algae 185

James G. Umen and Bradley J. S. C. Olson

7. Genomics and Genetics of Diatoms 245

Thomas Mock and Linda K. Medlin

8. Microalgae, Functional Genomics and Biotechnology 285

Jean-Paul Cadoret, Matthieu Garnier and Bruno Saint-Jean

9. Genomics of Algal Host-Virus Interactions 343

Nigel H. Grimsley, Rozenn Thomas, Jessica U. Kegel, Stéphan Jacquet, Hervé Moreau and Yves Desdevises

10. Environmental and Evolutionary Genomics of Microbial Algae: Power and Challenges of Metagenomics 383

Eve Toulza, Romain Blanc-Mathieu, Sébastien Gourbière, and Gwenaél Piganeau

Author Index 429

Subject Index 457