

AQUATIC ECOLOGY SERIES

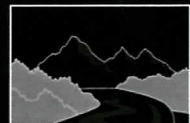
Harmful Cyanobacteria

Edited by

Jef Huisman, Hans C.P. Matthijs and Petra M. Visser



 Springer



CONTENTS

PREFACE	ix
CONTRIBUTORS	xi
1. HARMFUL CYANOBACTERIA	1
From mass mortalities to management measures <i>G.A. Codd, J. Lindsay, F.M. Young, L.F. Morrison & J.S. Metcalf</i>	
2. MOLECULAR BIOLOGY OF CYANOBACTERIAL TOXINS	25
Genetic basis of microcystin production <i>T. Börner & E. Dittmann</i>	
3. DYNAMICS OF CYANOBACTERIAL TOXINS	41
Sources of variability in microcystin concentrations <i>W.E.A. Kardinaal & P.M. Visser</i>	
4. NUTRIENT LIMITATION OF FRESHWATER CYANOBACTERIA	65
Tools to monitor phosphorus limitation at the individual level <i>M. Dignum, H.C.P. Matthijs, R..Pel, H.J. Laanbroek & L.R.. Mur</i>	
5. NUTRIENT LIMITATION OF MARINE CYANOBACTERIA	87
Molecular ecology of nitrogen limitation in an oligotrophic sea <i>A.F. Post</i>	
6. THE ECOPHYSIOLOGY OF THE HARMFUL CYANOBACTERIUM <i>MICROCYSTIS</i>	109
Features explaining its success and measures for its control <i>P.M. Visser, B.W. Ibelings, L.R. Mur & A.E. Walsby</i>	
7. POPULATION DYNAMICS OF HARMFUL CYANOBACTERIA	143
Factors affecting species composition <i>J. Huisman & F.D. Hulot</i>	
8. OPTICAL DETECTION OF CYANOBACTERIAL BLOOMS	177
Shipboard observation and remote sensing <i>H.J. Gons, H. Hakvoort, S.W.M. Peters & S.G.H. Simis</i>	
9. WATER SAFETY PLANS	201
A better approach to prevent human exposure to harmful cyanobacteria <i>I. Chorus</i>	
INDEX	229