THE BIOLOGY OF BLUE-GREEN ALGAE

EDITED BY

N. G. CARR
B.Sc. D.Phil.
Department of Biochemistry,
University of Liverpool,
England

AND

B. A. WHITTON
M.A. Ph.D.
Department of Botany,
University of Durham,
England
CONTENTS

Contributors vii
Preface ix

1 Synthesis of Metabolic Intermediates
   A.J.Smith 1

2 Metabolic Control and Autotrophic Physiology
   N.G.Carr 39

3 Arrangement and Structure of Thylakoids
   N.J.Lang & B.A.Whitton 66

4 Photosynthetic Reactions and Components of Thylakoids
   D.W.Krogmann 80

5 Fine Structure and Chemical Composition of the Cell Envelopes
   G.Drews 99

6 Cytochemical Examination
   G.W.Fuhs 117

7 Lipid Composition and Metabolism
   B.W.Nichols 144

8 Biliproteins and Bile Pigments
   D.J.Chapman 162

9 Structure and Function of Nucleic Acids
   C.K.Leach & M.Herdman 186

10 Mutagenesis and Genetic Recombination
    C.VanBaalen 201

11 Phycoviruses
    R.S.Safferman 214

12 The Heterocyst
    P.Fay 238

13 Nitrogen Fixation
    W.D.P.Stewart 260