

Editors' preface

In 1967, a special editorial committee constituted by the Phycological Society of America proposed a four-volume handbook series that would treat culture methods and growth measurements, biochemical and physiological determinations, cytological procedures, and field-oriented techniques. The first volume of the proposed series, *Culture Methods and Growth Measurements*, was edited by Janet R. Stein (University of British Columbia), the second volume, *Physiological and Biochemical Methods*, by Johan A. Hellebust (University of Toronto) and James S. Craigie (National Research Council of Canada), and the third volume, *Developmental and Cytological Methods*, by Elisabeth Gantt (Smithsonian Institution). The three texts were published by Cambridge University Press in 1973, 1978, and 1980, respectively. All three treatments have been well received by the phycological community as valuable reference sources.

This handbook on ecological methods for macroalgae, with its field-oriented perspective, is the fourth volume in the series and follows the original concept proposed by the first editorial committee of the Phycological Society. The inclusion of planktonic microalgal techniques was contemplated, but the prior publication in 1978 of an excellent and thorough manual on ecological methods for phytoplankton research (edited by A. Sournia) fulfilled this requirement. The editing of the present volume began with the receipt of the first manuscript draft in 1981 and progressed slowly but consistently. We sincerely appreciate the cooperation and valuable help of the editorial committee throughout the time-consuming process of reviewing contributions to the volume, which augmented our own efforts considerably. The committee's suggestions of topics and contributors were instrumental in broadening the overall coverage, and their critiques, along with those of additional reviewers selected from among the phycological community, resulted in numerous significant improvements.

The final product, with 27 chapters contributed by 37 scientists, was possible only because of the synergistic cooperation among many individuals. We are extremely grateful for the enthusiastic efforts of the authors and for the high quality of their chapters. We regret

that, because of space and time constraints, many excellent potential contributors could not be invited to participate.

Gratitude is extended for the financial support of the Phycological Society of America. We also acknowledge the Department of Botany, Smithsonian Institution, for considerable logistic support and Cambridge University Press for patience, cooperation, and help.

The scholarly opinions expressed in this work are those of the authors, who were asked to cite materials and equipment that they currently use. Equipment items are listed for reference only, and their inclusion should not be construed as an endorsement over other materials available at the time of writing or developed since. Lists of suppliers and their current addresses are updated annually for the United States in *Science* (American Association for the Advancement of Science, 1515 Massachusetts Ave., N.W., Washington, D.C. 20005) and for Canada in *Research and Development* (MacLean Hunter, 418 University Ave., Toronto 101, Ontario, Canada) and in *Laboratory Products News* (Southern Business Publications Ltd., 1450 Don Mills Rd., Don Mills, Ontario, Canada).

Mark M. Littler
Diane S. Littler

*Department of Botany
National Museum of Natural History
Smithsonian Institution
Washington, D.C.*

Editorial Committee

Keith E. Arnold, Department of Biological Sciences, California State Polytechnic University, Pomona, California, 91768

Boudewijn H. Brinkhuis, Marine Sciences Research Center, State University of New York, Stony Brook, New York, 11794

Robert E. De Wreede, Department of Botany, University of British Columbia, Vancouver, B.C., Canada V6T 2B1

Michael S. Foster, Moss Landing Marine Laboratory, P.O. Box 223, Moss Landing, California 95039

Janet R. Stein, Department of Botany, University of British Columbia, Vancouver, B.C., Canada V6T 2B1

General references

Gantt, E. (ed.). 1980. *Handbook of Phycological Methods: Developmental and Cytological Methods*. Cambridge University Press, Cambridge. 425 pp.

- Hellebust, J. A., and Craigie, J. S. (eds.). 1978. *Handbook of Phycological Methods: Physiological and Biochemical Methods*. Cambridge University Press, Cambridge. 512 pp.
- Sournia, A. (ed.). 1978. *Phytoplankton Manual*. UNESCO, Paris. 337 pp.
- Stein, J. R. (ed.). 1973. *Handbook of Phycological Methods: Culture Methods and Growth Measurements*. Cambridge University Press, Cambridge. 448 pp.