Fourth International Phytoplankton Workshop
Salten Skov, Silkeborg, Denmark, 19-27 May 1982

Conference report

The 4th International Phytoplankton Workshop arranged by the International Association for Phytoplankton Taxonomy and Ecology (I. A. P.) took place at Salten Skov Field Station, kindly put at our disposal by the Freshwater Biological Institute of the University of Copenhagen. Financial support to the workshop was given by the Danish Natural Science Research Council, the International Union of Biological Sciences, and by the Danish Ministry of Education. Organizers were Jørgen Kristiansen, Institute of Plant Anatomy and Cytology, University of Copenhagen, and Kirsten Olrik, Water Quality Institute, Academy of Technical Sciences, Hørsholm. Besides phytoplankton in general, the main topics of the workshop were dinoflagellates and desmids, and invited specialists within these fields were:
Jiří Popovský, Czechoslovakia
Peter Coesel, Netherlands
Dieter Mollenhauer, Federal Republic of Germany
Participants in the workshop were the following:
A. Bailey-Watts, Scotland
H.-R. Bürgi, Switzerland
G. Cronberg, Sweden
C. Czernin-Chudenitz, Austria
G. Deisinger, Austria
M. Dokulil, Austria
B. Hickel, Federal Republic of Germany
F. Hindák, Czechoslovakia
D. Klaveness, Norway
H. Kling, Canada
Aa. Kristiansen, Denmark
E. Kusel-Fetzmann, Austria
G. Malicky, Austria
G. Nygaard, Denmark
O. Reymond, Switzerland
E. Rott, Austria
A. Skogstad, Norway
U. Sommer, Federal Republic of Germany
The programme comprised excursions, microscopy, lectures and contributed papers, as well as discussions.

The field station is situated in the moraine area of Central Jutland, at the border of the Third (Weichsel) Glaciation. Thus within short distances there are both acid lakes on diluvial sand and alkaline lakes on young moraines. These morphological features of the area in combination with various degrees of eutrophication and pollution have resulted in a wide range of different lake types. 16 lakes representing as varied a spectrum as possible were visited on excursions and phytoplankton samples brought to the laboratory for examination. The laboratory work included microscopy of the phytoplankton as a whole and discussions on identification problems. Special attention was paid to the dinoflagellates and desmids, and the three specialists gave surveys on the species found in the lakes and their diagnostic characters.

Introductory lectures were given by the scientific leaders:

P. Coesel: The significance of desmids as indicators of the trophic state of freshwaters.
D. Mollenhauer: Actual systems of desmids and remarks on desmid taxonomy.
J. Popovský: Remarks on the taxonomy and systematics of Dinophyceae.

Other contributions on these main topics were:

P. Coesel: Oligotrophication and eutrophication tendencies in some Dutch moorland pools as reflected in their desmid flora.
P. Coesel: Structural characteristics and adaptations of desmid communities.
B. Hickel: Water blooms of dinoflagellates in Pluss-See.
J. Kristiansen: History of desmid investigation in Denmark.
K. Olrik: Occurrence of Dinophyceae in relation to water chemistry and morphology of six North Zealand lakes.

A poster on rare dinoflagellates was exhibited by G. Cronberg. The following papers on other phytoplankton subjects were contributed:

A. Bailey-Watts: Loch Leven phytoplankton ecology.
G. Cronberg: Peat mining project in Jamaica.
D. Klaveness: Studies of freshwater Cryptophyceae.
J. Kristiansen: The Tridentata parasite in Mallomonas teilingii.
E. Kusel-Fetzmann: Ducellera: Alge oder Pilz?
G. Nygaard: How to determine if a measured material is normally distributed.
O. Reymond: Techniques to isolate algae for clonal cultures.
O. Reymond: Preparation of permanent microscopical slides for light microscopy and electron microscopy, a new way to keep samples.
E. Rott: Sind die Veränderungen im Phytoplanktonbild des Piburger Sees Auswirkungen der Tiefenwasserableitung?
A. Skogstad: Spiniferomonas species from localities in the Oslo area.
U. Sommer: Growth and decline of spring bloom phytoplankton species in Lake