

REPORT OF THE
STUDY GROUP ON AN ICES/IOC
MICROPLANKTON PROTIST LIST
By Correspondence

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TABLE OF CONTENTS

Section	Page
1 TERMS OF REFERENCE FOR 2001 (C. RES. 2000/2C10)	1
2 REPORT ON PROGRESS OF THE WORK	1
3 RECOMMENDATIONS FOR 2002	1
ANNEX 1 - ICES STUDY GROUP ON PHYTOPLANKTON CHECKLIST	3

1 TERMS OF REFERENCE FOR 2001 (C. RES. 2000/2C10)

The Study Group (Chair: Dr L. Edler, Sweden) will work by correspondence in 2001 to:

- a) compile a complete relational database of Microplankton and Protists, on the basis of the regional checklists;
- b) check that the species meet the criteria to be included in the Database;
- c) consider the options for publication and distribution of the Database.
- d) prepare for a meeting to evaluate the taxonomy of the species included in the Database.

SGPHYT will report by 1 August 2001 for the attention of the Oceanography Committee and ACME.

2 REPORT ON PROGRESS OF THE WORK

During 2000 the questionnaire in which phytoplanktologists were asked to give their opinions on specific items of information to be included in the list was sent out (Annex 1). The low response makes it necessary to do it again. It was sent out in spring 2001. L. Edler and G. Hällfors will compile the results and a discussion within the Study Group will eventually result in the layout of the list. This process is anticipated to take time and may certainly include the necessity of a workshop at some point. The planning of content and dates for such a workshop has not started as yet.

It has been suggested that Guy Hällfors takes over the chair of SGPHYT. The reason is that Guy Hällfors is currently working with a comprehensive phytoplankton checklist for the HELCOM area. This list will be accessible from the Internet. At the Working Group on Phytoplankton Ecology (WGPE) meeting in March 2001 Guy Hällfors gave a presentation of the outline of the HELCOM checklist, which has been submitted for printing and will be available in autumn 2001. The structure of the checklist easily permits its expansion, i.e., to include all species in the ICES area. The database includes only published data and its editing is restricted.

At the WGPE meeting in March 2001 it was recommended that the SGPHYT should continue its work and to expand the HELCOM checklist to include similar checklists from the ICES area that are already available from previous work of the SG.

At the WGPE meeting there was also a discussion on the name of the study group. As microplankton are defined by the size 20–200 µm, it rules out a considerable part of the phytoplankton and microheterotrophs. Therefore it was agreed to ask the study group to reconsider the content of the list and to change the name once more; this time to *Checklist of Phytoplankton and other Protists*.

At this time checklists from ICES countries has been identified and the control work to see that the species meet the criteria to be included in the list has started. The work of SGPHYT has clear connections to the work of other institutes, working groups and organisations. Apart from the above mentioned checklist G. Hällfors is working with there are e.g., the ICES/HELCOM Workshop and Training Course of Phytoplankton which for several years has been working with the biomass transformation and size class grouping of phytoplankton in the Baltic Sea. This work is continuing and the outcome can be of considerable help for SGPHYT. At ICES a new format for data reporting of phytoplankton is being developed. Much of the details to be reported into the database are specifics that can be or has to be included in the SGPHYT list, or actually the other way around.

As the initial work with results from questionnaires, compilation and controlling of criteria has taken such a long time and is not finished as yet the ToRs c and d have not yet been considered.

3 RECOMMENDATIONS FOR 2002

The Study Group on an ICES/IOC Microplankton Protist List [SGPHYT] is recommended to be renamed the Study Group on a ICES/IOC Checklist of Phytoplankton and Other Protists [SGPHYT]

The Study Group recommends that the Chair be taken over by Dr Guy Hällfors, Finland.

The Study Group recommends that the Study Group will work by correspondence in 2002 to:

- a) Continue compilation of a relational database of Phytoplankton and other Protists, on the basis of the regional checklists

- b) Continue to check that the species meet the criteria to be included in the Database
- c) Consider the options for publication and distribution of the Database.
- d) Prepare for a meeting to evaluate the taxonomy of the species included in the Database.
- e) Consider the possibility to expand the terms of reference to include meetings, to review reports, to merge with other groups, to have workshops, where e.g., new techniques are discussed and to focus on special topics for certain periods of time.

SGPHYT will report to the Oceanography Committee and ACME at the 2002 Annual Science Conference

Supporting Information

Priority:	Work essential to the development of international databases on phytoplankton, especially those dealing with the effects of man-induced variability and change
Scientific Justification:	The incoming results from phytoplanktologists with regard to their opinion of specific items of information to be included in the checklist are underway. It is anticipated that the criteria and format of the list will be ready this year. At that time the list of existing checklists will also be presented. From there on the compilation of the new complete list will start. The first step will be the control that the species a) meet the criteria to be included and b) are taxonomically sound. This work will initially be done by correspondence, but at a later stage workshops are anticipated.
Relation to Strategic Plan:	This work is relevant to the quantifying of human impacts on the marine ecosystem. Especially in terms of the evaluation of the ecosystem consequences of contaminants and eutrophication. A checklist of this kind will be a valuable tool in pelagic monitoring programmes.
Resource Requirements:	None specific, but publications and database maintenance might accrue.
Participants:	This relatively small group intends to initiate broader participation via its questionnaire.
Secretariat Facilities:	None
Financial:	None
Linkages To Advisory Committees:	ACME
Linkages To other Committees or Groups:	None
Linkages to other Organisations	The work of this group is undertaken in close collaboration with IOC's HAB programme. The resultant checklist will be known as an ICES/IOC Checklist on Phytoplankton and other Protists.

ANNEX 1

ICES STUDY GROUP ON PHYTOPLANKTON CHECKLIST

Working by correspondence

Chair:

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QUESTIONNAIRE ON THE OUTLINE OF A COMPREHENSIVE LIST OF PHYTOPLANKTON AND OTHER MICROPANKTON ORGANISMS BELONGING TO THE GROUP OF PLANKTONIC PROTISTS

Institutes/laboratories are asked to collect information the and send information to Lars Edler. The idea is to make a checklist that will cover different regions, with very specific species compositions.

The Group was set up by the Oceanography Committee at the Annual Science Conference 1999, after a recommendation from ICES Working Group on Phytoplankton Ecology.

The aim of the Study Group is to:

- revise the current lists of taxonomics groups of algae
- set up new lists of taxonomics groups of algae
- to prepare clearly formulated criteria for inclusions in the list

The preliminary idea is to make one "complete" list, covering all areas, but then also to divide it into regional areas, such as the Baltic, the Mediterranean, the North Sea and so on.

When discussing this we have asked a number of questions which we would like to have your opinion of.

Please give your comments and respond to the above mentioned address.

The checklist content:

Species name

Synonyms

Author

Year

Literature

Autotroph/Heterotroph/Mixotroph

Pictures

Sizes

Shape

Volume (ref)

Plasma volume (ref)

Formula for volume

Formula for plasma volume

Surface area (ref)

Formula for surface area

Estimated carbon content

Equipment for identification

Unit to be counted (cell, chain, colony)

Distribution area

Seasonality

In order to develop a consistent quality assured monitoring system SGPHYT asks you to answer what information should be included in the final list..

The results will be compiled and then delivered to each of the Institutes/laboratories answering the questionnaire.

Please send the filled questionnaire by mail, fax or E-mail to:

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