

**REPORT OF THE
STUDY GROUP ON AN ICES/IOC CHECKLIST
OF PHYTOPLANKTON**

Correspondence

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STUDY GROUP on an ICES/IOC CHECKLIST of PHYTOPLANKTON (SGPHYT)

1 TERMS OF REFERENCE FOR 2000

Chair: Dr L. Edler, Sweden

The Study Group will work by correspondence in 2000 to:

- a) revise current lists of taxonomic groups of algae;
- b) set up new lists of taxonomic groups of algae;
- c) prepare a clearly formulated criteria for inclusion of a species.

SGPHYT will report to WGPE and to the Oceanography Committee at the 2000 Annual Science Conference.

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Justification

The initial work of SGPHYT is not taxonomic but more one of compilation. Only in a later stage will there be a need for taxonomic control of the list. It was suggested that Dr L. Edler should take the lead in the initial step and that the EU project on benthos should be consulted. WGPE identified the importance of clearly formulated criteria for inclusion of a species. A first proposal for criteria will be formulated by L. Edler and circulated for comments.

2 REPORT ON PROGRESS OF THE WORK

During the WGPE meeting in April 2000, the criteria and format of a checklist were discussed. It was concluded that the identification of phytoplankton species is at a stage where optical techniques and molecular probes are rapidly developing. At the same time, it was stressed that there is an ongoing and obvious need for knowledge on species identification from microscopic analysis.

During the discussions of the criteria for inclusion in the checklist, two things became clear. First, what is usually included in the phytoplankton checklists and is analysed as phytoplankton also covers other groups of organisms. Heterotrophic microplankton, e.g., Protozoans, Ciliates, Choanoflagellates, as well as Cyanobacteria, are examples of this. The checklist should therefore not be called a 'Phytoplankton Checklist', but a 'Microplankton Protist List'.

Second, the amount of information that is desired in a list of this kind is so large that it is no longer accurate to call it a checklist. It was suggested to use the working name: 'Relational DataBase of Microplankton and Protists'.

It was also concluded that, although a considerable amount of information, including pictures and sizes of the species, have been suggested for inclusion in the database, the list is not meant to be used for identification.

At present a questionnaire is being compiled, in which phytoplanktologists are asked to give their opinions on specific items of information to be included in the list. It is anticipated that the criteria and format of the list will be ready for presentation at the ASC in September 2000. At that time the 'full' list of existing checklists will be presented. From then on, the work with the compilation of the new complete list will start. The first step will be to control that the species (a) meet the criteria for inclusion, and (b) are taxonomically sound. This work will initially be done by correspondence, but at a later stage workshops are anticipated.

3 RECOMMENDATIONS FOR 2001

The **Study Group on an ICES/IOC Checklist of Phytoplankton** [SGPHYT] will be renamed the **Study Group on a ICES/IOC Microplankton Protist List** [SGPHYT](Chair: Dr L. Edler, Sweden) and 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 to the Oceanography Committee at the 89th Statutory Meeting, and to ACME.

Supporting Information

Priority:	Work essential to the development of international databases on plankton, especially those databases dealing with the effects of man-induced variability and change
Scientific Justification:	Phytoplanktologists will be questioned with regard to their opinion of specific items of information to be included in the checklist. It is anticipated that the criteria and format of the list will be ready to be presented at the ASC in September 2000. At that time the "full" list of existing checklists will be presented. From there on the work with 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.
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.