

TO: Laboratories analyzing phytoplankton

## INTERLABORATORY PROFICIENCY TEST PHYTO 14/2020 – Phytoplankton analysis

Proftest SYKE will organize a phytoplankton proficiency test in December 2020 – January 2021.

The target groups of the proficiency test are consultants and environmental authorities who analyse phytoplankton samples from inland waters or the Baltic Sea as well as phytoplankton analysts working in research institutes and universities. Proftest SYKE organizes phytoplankton proficiency tests every third year. 25-35 laboratories are expected to take the test.

Previous virtual proficiency test of SYKE was organized in 2017: 39 participants from 32 laboratories and 11 different countries participated in that test. (<https://helda.helsinki.fi/handle/10138/233179>).

Proftest SYKE is organizer PT01 ([www.finas.fi](http://www.finas.fi)) of the proficiency tests accredited by the Finnish Accreditation Service FINAS. The activities of SYKE follow the requirements of SFS-EN ISO/IEC 17043 (2010). The organizing of this test is included in the accreditation scope.

### SAMPLE MATRICES

The test includes three components: 1) species identification from virtual samples (video-clips), 2) counting test from virtual samples (video-clips), and 3) biovolume estimation from preserved water samples. The test material represents phytoplankton taxa that typically occur in the lakes in northern Europe and the Baltic Sea.

### TIMETABLE

Registration	<b>9th September 2020 – 30th September 2020</b>
Sample dispatch date	1st December 2020 (see Chapter 4 <i>Sample delivery</i> )
Analysis of the samples	Latest on 8th January 2021
Reporting of the results	<b>29th January 2021</b>

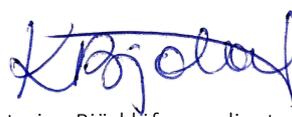
### PARTICIPATION FEE

The participation fee is **550 € (+ VAT)** including all measurements and samples. See detailed information in Chapter 9 *Participation fee*.

Helsinki, Finland      September 9, 2020



Marko Järvinen, coordinator



Katarina Björklöf, coordinator

Proftest SYKE is proficiency testing provider PT01  
(EN ISO/IEC 17043:2010) accredited by FINAS  
(Finnish Accreditation Service, [www.finas.fi/sites/en](http://www.finas.fi/sites/en)).



## ORGANIZING THE PROFICIENCY TEST

### 1 ORGANIZER

Proftest SYKE, Finnish Environment Institute SYKE, Laboratory Centre

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#### Contact

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### 2 SAMPLES AND DETERMINATIONS

The phytoplankton proficiency test includes three obligatory components\*:

- 1) Phytoplankton identification
  - Baltic Sea phytoplankton (Baltic\_id): 20 video-clips from Lugol preserved or live samples
  - Lake phytoplankton (Lake\_id): 20 video-clips from Lugol preserved or live samples
  - It is possible to participate in both the lake and the Baltic Sea taxa identification or alternatively only the lake taxa or the Baltic Sea taxa identification test.
- 2) Phytoplankton counting
  - counting of three taxa from 30 video-clips (fields of view) taken from Lugol preserved samples. The video-clips also include other algal taxa.
- 3) Biovolume estimation
  - biovolumes of three taxa are measured from Lugol preserved water samples. In addition to measured taxa, the sample may also include other algal taxa.

\* Phytoplankton identification and counting parts of the proficiency test can be done using a computer, but the biovolume estimation part of the test requires microcopy in the laboratory. If the microscopy is not possible as a result of the coronavirus situation, then the participant can conduct only the video-parts of the test and receive a certificate for that. However, this does not influence the participation fee of the proficiency test (chapter 9 *Participation fee*).

### 3 REGISTRATION

**The registration for this proficiency test is open until 30th September 2020.**

Registration is done via the electronic client interface, ProftestWEB: <https://wwwp5.ymparisto.fi/Labtest/en>. If there are problems when using ProftestWEB or you need username and password, please contact [proftest@environment.fi](mailto:proftest@environment.fi).

#### 4 SAMPLE DELIVERY

A digital material for the identification and counting components of the test will be available in the internet between December 1, 2020 – January 8, 2021. A link to this material will be sent to participants by latest December 1, 2020. Water sample for the measurement of biovolume will be posted to participants on December 1, 2020. If the test material has not arrived by December 8, 2020 or if the material is damaged, please contact Marko Järvinen ([marko.jarvinen@environment.fi](mailto:marko.jarvinen@environment.fi)). Excel spreadsheet for reporting the test results will be available in the web pages of Proftest SYKE on December 1, 2020.

#### 5 SAMPLE ANALYSIS

Guidance for the analysis of test samples in different components of the test is given in the Excel spreadsheet.

#### 6 REPORTING THE RESULTS

The participant results are reported to Proftest SYKE latest on **8th January 2021**.

Proftest SYKE delivers the preliminary result report to the participants 29th January, 2021. The final report will be published latest in April 2021 and it is then available on ProftestWEB and on Proftest SYKE website ([www.syke.fi/proftest/en](http://www.syke.fi/proftest/en)). The availability of the report will be informed to the participants.

#### 7 ASSIGNED VALUES AND EVALUATION OF THE RESULTS

For the counting and biovolume components of the test, the robust mean value of the test results is set to a reference value. Estimation of results is based on a z value. The preliminary standard deviation used in the calculation of the z value will be given in the cover letter which will be posted together with the test material.

#### 8 CONFIDENTIALITY

The results of participants are treated anonymously.

#### 9 PARTICIPATION FEE

The participation fee is **550 €/person**. If the person participates in only the lake taxa or the Baltic Sea taxa identification in the identification component of the test, the registration fee is **450 €/person**. The price is subjected to VAT (0 %). All participants take also part the counting and the biovolume estimation components of the test. Only the biovolume estimation component of the test requires microscopy in the laboratory. If the microscopy is not possible as a result of the coronavirus situation, then the participant can conduct only the video-parts of the test and receive a certificate for that. However, this does not influence the participation fee of the proficiency test.

The invoice will be sent after reporting the preliminary results.

NOTE! In Finland VAT is 24 %. Further, if the invoicing address or any other additional information has to be corrected after the invoicing, the extra handling cost will be charged. The participant is also responsible for possible custom clearance or customs fees of the samples.