



Uppsala, 17 February 2010

CERTIFICATE

To whom it may concern

Raino-Laus Albert

has participated in the

Nordic Diatom intercalibration 2009

The intercalibration included the preparation and counting of four Swedish diatom samples. Preparation followed SIS (2003) SS-EN 13946. Identification and enumeration of the diatoms followed the Swedish Standard method using diatoms for environmental monitoring (Naturvårdsverket 2009). The method is based on the European standard SIS (2005) SS-EN 14407. The counts were evaluated according to Kelly, M. (2001). The results were compared and discussed with Amelie Jarlman, Jarlman Konsult AB Lund, one of the auditors. Second auditor was Bernt Sandell, BS Sötvattenkonsult Jönköping. Maria Kahlert, Associate Professor, Dept. of Aquatic Sciences and Assessment, SLU, was the overall organizer and calculated the results. Both SWEDAC (Swedish Board for Accreditation and Conformity Assessment) and the Swedish Environmental Protection Agency support the intercalibration.

Results

sample	stream	Hills N2	Bray-Curtis
1	Lillån, Bassakär, Hallands län 2007	8,8	0,69 (0,62 ex FOK)
2	Svartån, Turbinbron, Västmanlands län 2007	16,2	0,60
3	Lillån Bosgård, Hallands län 2008	3,1	0,29
4	Ådalsån, Västernorrlands län 2008	7,1	0,72

Raino-Laus Albert results can be assumed to be replicates of the auditors'.

Overall result:

Amelie Jarlman

Dr. Maria Kahlert

Maria Kahlert

Organizers:

NorBAF - Nordic network for Benthic Algae in Freshwater – (www.norbafe.net) & Dept. of Aquatic Sciences and Assessment, SLU, Maria Kahlert

References:

Kelly, M. (2001): Use of similarity measures for quality control of benthic diatom samples. Wat. Res. Vol. 35 (11), 2784-2788.

Naturvårdsverket Påväxt i rinnande vatten – kiselalgsanalys [online] (Version 3:1: 2009-03-13) Available from:

http://naturvardsverket.se/upload/02_tillstandet_i_miljon/Miljoovervakning/undersokn_typ/sotvatten/pavaxt.pdf [2010-02-12]. Short English description in 'Environmental Quality Criteria – Lakes and Watercourses. Swedish EPA, report no. 5050.

SIS (2003) SS-EN 13946. Water quality. Guidance standard for the routine sampling and pre-treatment of benthic diatoms from rivers.

SIS (2005) SS-EN 14407. Water quality - Guidance standard for the identification, enumeration and interpretation of benthic diatom samples from running waters.

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