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Normunds Stivrins, Janne Soininen, Ilmar Tõnno, Rene Freiberg, Siim Veski, Veljo Kisand

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Towards understanding the abundance of non-pollen palynomorphs: A comparison of fossil algae, algal pigments and *seda*DNA from temperate lake sediments

Normunds Stivrins^{a,b,c*}, Janne Soininen^b, Ilmar Tõnno^d, Rene Freiberg^d, Siim Veski^e, Veljo Kisand^{d,f}

^aDepartment of Geography, Faculty of Geography and Earth Sciences, University of Latvia, Riga, Jelgavas street 1, LV-1004, Latvia

^bDepartment of Geosciences and Geography, University of Helsinki, P.O. Box 64, Helsinki, FI-00014, Finland

^cLake and Peatland Research Centre, Purvisi, Puikule, Aojas District, Latvia

^dCentre for Limnology, Institute of Agricultural and Environmental Sciences, Estonian University of Life Sciences, Rannu, 61117 Tartu County, Estonia

^eInstitute of Geology, Tallinn University of Technology, Ehitajate tee 5, 19086 Tallinn, Estonia

^fInstitute of Technology, University of Tartu, Nooruse 1 50411, Tartu, Estonia

*Corresponding author, E-mail: normunds.stivrins@lu.lv, Tel.: +371-2685-9295

Abstract

Given the increased interest in non-pollen palynomorphs (microscopic objects other than pollen identified from pollen slides) in palaeoecological studies, it is necessary to seek a deeper understanding of the reliability of these results. We combined quantitative information of algal pigments and sedimentary ancient DNA (*seda*DNA) of phylotaxonomical resolution to validate the richness and abundance of fossil algae in the sediment of a small temperate lake. For the first time, fossil and *seda*DNA algae data were combined in a composite data-set and used to reconstruct algae

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