TAXONOMY AND BIOGEOGRAPHY OF THE GENUS *NAVICULA* S.S. IN (SUB-)ANTARCTIC INLAND WATERS

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Diatoms (Bacillariophyceae) comprise one of the most diverse and abundant algal groups in the Antarctic and sub-Antarctic freshwater ecosystems. A critical revision of literature reports of *Navicula* s.s. taxa in the Maritime Antarctic and Sub-Antarctic Region indicates that, despite the large number of records (Kellogg & Kellogg 2002), the genus is rather species-poor in the Sub-Antarctic and Antarctic when a more fine-grained taxonomy is applied.

A revision of all records of the *Navicula* s.s. species in inland water samples from the Sub-Antarctic (Crozet Archipelago, South Georgia) and the Maritime Antarctic Region (South Shetland Islands, South Orkney Islands, James Ross Island) based on Kellogg & Kellogg (2002) resulted in a confirmed presence of only 14 taxa, five of which needed to be described as new species, viz. *Navicula australoshetlandica* Van de Vijver sp. nov., *N. dobrinatemniskovae* Zidarova & Van de Vijver sp. nov., *N. cremeri* Van de Vijver & Zidarova sp. nov., *N. conveyi* Van de Vijver sp. nov. and *Navicula bicephaloides* Van de Vijver & Zidarova sp. nov. (Van de Vijver et al. 2011). The poster shows several of these new species.

From a biogeographical point of view, there is a clear separation between the Sub-Antarctic localities in the southern Indian Ocean and the islands in the southern Atlantic Ocean, with several species showing a restricted biogeography.

References:

Kellogg T.B. & Kellogg D.E. (2002) Non-marine and littoral diatoms from Antarctic and subantarctic regions. Distribution and updated taxonomy. Diatom monographs 1: 1-795.

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