

***PSAMMOTHIDIUM MANGUINII*: FROM ONE TO SIX...**

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Psammothidium manguinii Hustedt is a common constituent of the limno-terrestrial diatom flora of the Antarctic Region with records ranging from the Maritime Antarctic region in the southern Atlantic Ocean to the belt of sub-Antarctic islands in the entire Southern Ocean. The species shows a broad variability in several morphological and morphometrical features such as valve outline, valve width, striation pattern and length/width ratio.

Hustedt originally described the species as *Achnanthes manguinii* in 1952 from several samples collected on Iles Kerguelen, the largest sub-Antarctic archipelago in the southern Indian Ocean. Two years later, Manguin (in Bourrelly & Manguin 1954) separated the more elliptical forms as *A. manguinii* var. *elliptica* Manguin. The material of the latter taxon, however, contained two morphologically distinct taxa with only one being similar to the original drawings.

The present poster shows the morphological analysis of the type material of both *A. manguinii* (Hustedt material) and *A. manguinii* var. *elliptica* (Manguin material) together with an analysis of a large number of *P. manguinii* populations from the sub-Antarctic Region (with samples from all major islands in the southern Atlantic, Indian and Pacific Ocean).

The results led to a clear morphological revision of the species. The original variety *elliptica* was split off the nominate form as *P. ellipticomanguinii* Van de Vijver. Four new species are described, *P. acutomanguinii* Van de Vijver, *P. antarcticum* Van de Vijver, *P. mannensianum* Van de Vijver and *P. hodgsonii* Van de Vijver et Verleyen. The morphology, ecology and distribution of all species are discussed.

Psammothidium antarcticum is the most widespread of all six in the *manguinii*-group and found in both the Maritime Antarctic and sub-Antarctic region. On the other hand, *P. mannensianum* (Campbell Island) and *P. hodgsonii* (Macquarie Island) are restricted to only one island in the southern Pacific Ocean.

Bourrelly, P. & Manguin, E. (1954) Mém. Inst. Scientifique Madagascar, Séries B., Vol. V: 5–58, Hustedt, F. (1952) Bot. Notiser 1952: 366–410.