

DIVERSITY OF THE GENUS *DIADESMIS* IN THE ANTARCTIC REGION

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Species belonging to the genus *Diadasmus* are quite abundant in the entire Antarctic Region, both in number of species as in number of individuals. Most of the species in this genus have small valve dimensions, uniseriate striae composed of one, usually elongated areola and a simple raphe structure. When the genus was first erected in 1990 (Round et al. 1990), only seven species were grouped together, subdivided into two subgenera, *Diadasmus* and *Paradiadasmus* (Rumrich et al. 2000).

The past few years, a large number of new species have been described worldwide, several of them apparently endemic to the Antarctic Region (Van de Vijver et al. 2002). During a recent survey of the diatom flora of several islands in the southern Atlantic and southern Indian Ocean, the diversity of the genus *Diadasmus* was re-investigated. While the taxonomy of the *Diadasmus* species in the southern Indian Ocean is rather well-defined, the status of most taxa in the southern Atlantic Ocean is much more uncertain with several taxa showing affinities but also differences to their southern Indian Ocean relatives.

This poster shows the most recent results on the taxonomy and the diversity of this typical aerophilic genus using both LM and SEM observations. Several questionable taxa are discussed and a preliminary biogeography is suggested.

References:

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POSTER