

*LABELLICULA* OR *OLIFANTIELLA*? A NEW ENIGMATIC SPECIES FROM THE ANTWERP HARBOUR (FLANDERS, BELGIUM)

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The Antwerp harbour is one of the largest in the world but contrary to most international harbours, it is located at more than 100 km from the sea and only connected to the North Sea by the river Schelde, resulting in a mixture of fresh, brackish and marine water flowing through the different docks. During an extensive analysis of the diatom flora in 2008, several unknown or so far unidentified taxa were found. One of the unidentified taxa is presented on this poster.

It is a small biraphid species bearing several unusual features. The valves are typically slightly domed with the apices pointing downwards. The striae appear uniseriate with alveoli continuing from the raphesternum to the mantle, interrupted at the valve face/mantle junction. Most characteristic are the presence of a small, rounded internal central nodule between the central raphe endings and the presence of a stigma next to this central nodule (visible in SEM on the outside as a small slit and on the inside as a round thickening). The raphe is filiform with simple terminal and central endings. The internal structure is rather complex. The areolae are covered by hymenes whereas the valve margin seem to fold back inwards and reconnect to the valve interior. The girdle consists of perforated copulae. The valvocopula possesses an enlarged pars interior. It is so far unclear to what genus this species belongs. Two genera can be suggested: *Labellicula*, described from the sub-Antarctic Region (Van de Vijver et al. 2005) or *Olifantiella* recently described from the Indian Ocean (Riaux-Gobin et al. 2009).

The poster discusses the morphology of the unknown taxon, illustrating its ultrastructure and comparing it with the description of both *Labellicula* and *Olifantiella*.

*References:*

Riaux-Gobin C. & Compère P. (2009) *Olifantiella mascarenica* gen. & sp. nov., a new genus of pennate diatom from Réunion Island, exhibiting a remarkable internal process. *Phycological Research* 57: 178-185.

Van de Vijver B., Frenot Y., Beyens L. & Lange-Bertalot H. (2005) *Labellicula*, a new diatom genus (Bacillariophyta) from Ile de la Possession (Crozet Archipelago, Subantarctica). *Cryptogamie, Algologie* 26(2): 125-133.

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