

ASTARTIELLA SOCIETATIS SP. NOV. (BACILLARIOPHYTA) ON HOLOTHURIA ATRA JAEGER (TAHITI ISLAND, SOUTH PACIFIC) AND OTHER ASTARTIELLA FROM INDO-PACIFIC BASIN

Catherine Riaux-Gobin¹, Andrzej Witkowski² & Oscar E. Romero³

¹LABEX "CORAIL", USR 3278 CNRS-EPHE, CRIOBE-Perpignan University

²The Faculty of Geosciences, Palaeoceanology Unit, University of Szczecin

³Instituto Andaluz de Ciencias de la Tierra (CSIC-UGR)

Several taxa of *Achnanthes* Bory (Bacillariophyta) bearing one stigma to several stigmata on their raphe valve were recently transferred to *Astartiella* Witkowski, Lange-Bertalot & Metzeltin (in Moser et al. 1998). During a survey of the diatom community associated with coral reefs of Tahiti Island (17° 52' S-149° 56' W, Society Archipelago, South Pacific), a few taxa pertaining to *Astartiella* were found on a sample scraped from the teguments of a large specimen of *Holothuria atra* Jaeger, upon which a new and small taxon, *Astartiella societatis* sp. nov. is described. Some other *Astartiella* taxa were also found on nearby marine sediments. We compare the *Astartiella* assemblage from Tahiti Island with those found in similar latitudes of the Indian Ocean (Juan de Nova, Scattered Islands, 17° 03' S-42° 43' E and Mascarene Archipelago, 21° 30' S-55° 30' E). So far, *Astartiella societatis* has been only found in Tahiti. This taxon is close to *Astartiella bremeyeri* (Hustedt) Witkowski et al. but shows several unique features. *Astartiella societatis* is common on the epizoic sample while it is absent on nearby marine and freshwater sediments. We also propose the transfer of *Achnanthes heterostriata* Hustedt to *Astartiella*, since this taxon was shown (Simonsen 1987) to also possess a stigma.