BLOOM OF *THALASSIOSIRA* SP. IN THE SOUTHWESTERN ATLANTIC OCEAN: A NEW SPECIES?

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The Southwestern Atlantic Ocean is recognized as one of the most productive areas in the world and supports a very rich fishery. In order to study the biodiversity and seasonal dynamics of phytoplankton in Argentinean continental shelf and slope waters, a cooperative research Project has been established (GEF- Patagonia, Argentina). As part of this project, both qualitative and quantitative samples collected during spring 2005, were examined using light and scanning electron microscopy. An extensive bloom of a small *Thalassiosira* sp. was observed along shelf waters from 39-48°S, reaching concentrations up to $4.5x10^6$ cells l^{-1} and representing more than 90% of total phytoplankton abundance. The observed specimens are small (8.5-12.0 µm), solitaires, rectangular in girdle view, and with numerous discoid chloroplasts. The valve face shows a single strutted process slightly subcentral and others in one ring located between the valve face and mantle (3-4 per valve). The strutted processes are externally surrounded at their base by areolae with robust walls, and internally have four satellite pores and long tubular extensions. One labiate process is situated adjacent to the subcentral strutted process. The areolae pattern shows tendency toward fasciculation (20-23 in 10 µm), sometimes with radial ribs. The cingulum is composed of numerous copulae with vertical rows of pores and a valvocopula with a similar ornamentation. The morphological features of these specimens are compared with other related taxa like *Thalassiosira* (*Shionodiscus*) *bioculatus* var. *exiguus*, *T. bioculatus* var. *raripora, T. oceanica*, *T. oestrupii*, *T. perpusilla*, *T. rosulata* and *T. spinulata*.

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