

Adão H., J.C. Marques (1999). Ecology of meiofauna of the sediments of seagrass beds, *Zostera noltii*, in Mira estuary (Southwest Coast of Portugal). Eurocoast Conference, Sines, Portugal. “ A Zona Costeira do Alentejo “, Associação Eurocoast – Portugal (Ed):123-130.

Abstract

The role of meiobenthos in sediments of the seagrass beds seems to be important in energy flow but the studies concerning the composition and structure of the community of meiobenthos in Portugal are very scarce. The aim of the present study is to investigate the meiofauna of seagrass beds in southwest of Portugal. Therefore, the temporal variation of the meiofauna in the sediments of *Zostera noltii*, in the relation to the temporal variation of important environmental factors is studied on a fortnightly basis. A total of 17 taxa were recorded. The temporal variation of the relative densities of nematodes is high in comparison with other taxa, 87% with maximum of 3800 ind. 10 cm⁻². Copepoda, Polychaeta, Kinorhyncha, Oligochaeta, Ostracoda and Turbellaria appeared with low densities. The seasonal pattern in the nematode genera composition was studied. We found two summers very different in densities and composition of the nematodes and an important distinction in November and December on the genus composition is observed.

Key words- Meiofauna, sediments, *Zostera noltii*, Mira estuary.