XIII Congresso de ECOLOGIA
III International Symposium of Ecology and Evolution
Múltiplas ecologias: evolução e diversidade
08 a 12 de outubro de 2017 • UFV - VIÇOSA | MG

NEMATODES AS BIOINDICATORS OF ENVIRONMENTAL QUALITY IN BEACHES OF RIO DE JANEIRO STATE

Raíssa Vieira Corrêa[1]*, Tatiana Fabricio Maria[2]

1. Graduanda em Ciências Biológicas, Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro, Brasil; 2. Departamento de Ecologia e Recursos Marinhos, Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro, 22290-240, Brazil. *Correspondência com raahvcorrea@gmail.com.

Tema/Meio de apresentação: Ecologia de comunidades/Pôster

Sandy beaches are costal ecossystems occuring in tropical and temperate countries, which are mainly used for recreation and tourism. Due to it, this ecosystem is subjected to different types of anthropic impacts. This work aims to assess the impact of human density on the nematofauna of three sandy beaches exposed to different trampling rates. Besides to assess if the impact occurs similarly in two distinct moments (high and low seasons). Samples were collected in summer (high season) and winter (low season) at Copacabana, Barra da Tijuca and Restinga da Marambaia beaches, which trampling rates ranged from intense to low, respectively. Meiofauna's samples were collected in 10 stations of the intertidal area using a corer of 10cm² till 10cm deep and processed according the common protocol for meiofauna. Density, generic richness (S) and Maturity Index (MI) were calculated and compared between beaches and seasons. The community structure was visualized by a nMDS, SIMPER was applied to calcuted dissimilaraty between beaches and seasons, beta diversity was visualized by a K-curve. Barra Beach showed lower densities in both seasons, S was significantly higher in Restinga during winter and MI was significantly higher during winter, regardless the studied beach. The nMDS indicated differences among beaches' communities at different seasons: Copacabana and Barra beaches presented similar assemblages in both seasons, while Restinga presented completely different assemblages comparing to the others, showing the lowest dissimilarity (76,6%) when comparing both seasons at this beach. The K-curve indicated lowest diversity at Barra Beach during winter and higher diversities for Restinga and Barra beaches during winter and summer, respectively. These result indicated that the nematofauna shows better conditions in relation to S, MI and diversity during low season. Nevertheless, when the nematofauna was exposed to intense anthropic impact conditions (summer), the used indexes seems not reflet the impact.