

**P3.31****Study of the fauna structure of invertebrates associated with roots of the mangal trees of the cassende community.**

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**Abstract**

Mangal is a coastal ecosystem, in transition between terrestrial and marine environments.

Characteristic of tropical and subtropical regions, and known as a nursery for various aquatic organisms. The study of the fauna associated with the mangrove is a complex task due to the wealth of organisms present, and also the great influence that environmental variations have on the organisms that colonize these habitats.

The present work aims to characterize the invertebrate fauna associated with the mangrove roots in Cassende; establishing spatial patterns of macroinvertebrates and relating them to environmental variables, identifying anthropogenic pressures in the mangrove ecosystem and promoting conservation.

For the sampling of the macrofauna, samples of roots and sediments were collected at two points, located inside the tidal channel, point 1, fully immersed, and at point 2 exposed during low tide in a mangrove community established by the method of Braun Blanquet.

Abiotic data such as sea water temperature, dissolved oxygen, pH and salinity were measured using a multiparametric probe. Data analysis was performed using software: R version 3863.2.2, correspondence analysis (AC), PRIMER 6 © v 6.1.6 and the diversity indexes were determined: Specific wealth (S), Shannon-Wiener ( $H'$ ), Pielou ( $J'$ ), Margalef (d) and Simpson ( $\lambda$ ).

The mangrove is composed of Rhizophora mangle L., Rhizophora mucronata, Laguncularia racemosa (L.), Avicennia sp. and Avicennia germinans.

A total of 365 individuals from the botanical family were found on these species in three botanical families, three genera and five species. 1365 benthic organisms belonging to Mollusca, Cnidaria, Echinodermata, Chordata, Annelida and Artropoda were identified.

The occurrence of the associated fauna was higher at point 1 on the sub-coast, compared to point 2 on the supralittoral.

**Keywords**

Mangal, Associated fauna, Macrofauna, Cassende