

**MEIOFAUNAL ASSEMBLAGES IN THE MANGROVE
HABITAT IN TAKLONG ISLAND, NUEVA VALENCIA,
GUIMARAS**

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Abstract of undergraduate thesis entitled

**Meiofaunal Assemblages in the Mangrove Habitat in
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Meiofauna are metazoans that can pass through a sieve with a mesh of 0.5mm but retained in a mesh of 0.063mm sieve. These organisms are interesting to benthic scientists due to their capacity to determine the extent of pollution in the area and their role in the foodweb of an ecosystem. This study aims (1) to come up with a list of meiofaunal species present in the mangrove substratum (2) to determine their density and abundance, and (3) to describe the meiofaunal environment in terms of temperature, salinity, pH, and oxygen content.

The study was conducted in the mangrove habitat in Taklong Island Guimaras in February 1997. Thirty core samples were collected with a modified PVC core (diameter=2.0 cm, length=15cm) from 3 areas: seaward, middle and landward portion of the mangrove.

There were eight broad groupings of meiofauna considered: nematodes, copepods, malacostracan, polychaetes, gastrotrichs, kinorhynchans, sipunculids and others (including forams). The nematodes of which there were 2 species observed were the most abundant and comprised 42.14%. The copepods had 3 species observed and comprised 31.05%, 2 species of polychaetes comprised 5.04%, 2 species of gastrotrichs comprised 3.86% and malacostracans were 6.66%, kinorhynchans were 3.26% and sipunculids were 0.89%. Unidentified organisms which included foraminiferans were 8.01%.

Range of meiofaunal density (number of individuals per cm^{-3}) in three transects were 0.0042-0.1549 in the seaward area, 0.0085-0.0785 in the middle area and 0.0021-0.0679 in the landward area. The nematodes had the highest density and the sipunculids had the lowest density from the seaward to the landward area.