University of the Philippines Visayas
College of Arts and Sciences
Division of Biological Sciences
Miagao, Iloilo

Abundance, Distribution, and Composition of Macrobenthos in Banate Bay, Iloilo, Philippines

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By

Mylin M. Bernasol
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ABSTRACT

In order to characterize the macrobenthic community in Banate Bay, quarterly sampling was done from December 2012 to December 2013 in nine (9) stations of the study area. Samples were collected using a hand-held mud corer measuring 0.15m in diameter. Samples were sieved in the field using a 0.5mm mesh, preserving all retained organisms in a plastic container containing 10% buffered formalin with Rose Bengal dye. Two (2) replicate samples per station in June and September 2013 were processed in the laboratory. A total of 38 taxa were sorted and identified with overall mean density of 821 ind/m^2. Cluster Analysis using the program COMM grouped species according to their abundances and stations based on their relative location from the shore. T-test for 2 sample means showed that densities in June and September did not differ significantly ($p=0.42$). ANOVA showed that densities per station did differ significantly ($p=0.05$). Correlations identified salinity, dissolved oxygen, turbidity, and organic matter content to have negative effects on macrobenthos density in the Bay. In spite of low density, diversity particularly of polychaetes appeared to be relatively high. This can be attributed to the intensity and fluctuations of the harsh environment in the Bay still being within limits.