BENTHIC INFAUNA DIVERSITY IN THE INTERTIDAL FLATS OF BGRY. CAROT, ANDA, PANGASINAN

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ABSTRACT

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Benthic infauna are organisms that supports the ecosystem in various ways, filtering the water, breaking down organic matter to its simplest form, source of nutrient and energy for larger predators, and many more. Different taxonomic classifications make up the benthic infauna community such as mollusk, annelids, crustaceans, echinoderms, etc. Brgy Carot, Anda, Pangasinan is a place that is part of Lingayen Gulf where fishing and aquaculture are the main source of living. The objective of this study is to assess the diversity of benthic infauna in the intertidal flats of the study area and to analyze the physico-chemical parameters of the water in the area. Three 50m transect were placed in the intertidal flats of the area as a collection point. 202 individuals of benthic infauna that consists of 5 families were collected in the study area using transect line method namely; Neritidae, Cerithidae, Potamididae, Naididae, and Strombidae. 8 species of benthic infauna were collected and identified including *C. oulienense, C. dispar, C. retropictum, C. scabridum. L. canarium, T. semistriata, C. bifasciata*, and *T. tubifex.* Simson's Diversity Index were used to assess the diversity of benthic infauna in the study area, resulting to D=0.68, means that the diversity of benthic infauna in the study area is moderately high.

temperature and pH level of the 3 Transects are within the permissible level according to DENR Administrative Order – 2016. The only parameter that is not within the permissible level is the total dissolved solids which are slightly higher.

Keywords: Benthic Infauna; Intertidal Flats; Physico-Chemical Parameter; Simson's Diversity Index (SDI).

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