

Biodiversity Assessment of Littoral Macrozoobenthos in Laguna de Bay, Philippines

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Laguna de Bay is home to various macroinvertebrates which play an important part in freshwater ecosystems. These macroinvertebrates or macrozoobenthos participate in the decompositional pathways and interact with the fish and zooplankton communities in water systems. Due to their restricted mobility, they are crucial bioindicators that detect trends in pollutant concentrations and their biodiversity typically reflects changes in the local environment. Despite their ecological importance, macrozoobenthos are still understudied and researches conducted on the effects of changes in water physicochemistry on their communities remain to be poorly known in the Philippines. Thus, this study gathered samples of macrozoobenthos species from 33 littoral sites of Laguna de Bay to determine the richness and diversity of the macrozoobenthos species present in the lake. The results have recorded 6 identified families (Ampullaridae, Corbiculidae, Pachychilidae, Planorbidae, Thiaridae, and Viviparidae) of macrozoobenthos and one unidentified species. Computation of Shannon–Wiener index (H') showed the highest diversity which was recorded from Pinagdilawan, Binangonan ($H' = 1.20$) while the lowest was in Pulong Ligaya, Bogombong, Jala-Jala ($H' = 0.04$). The output of this study serves as an update on the biodiversity of littoral macrozoobenthos present in Laguna de Bay.

Keywords: Laguna de Bay, Macrozoobenthos, Biodiversity, Shannon–Wiener index