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Residual Study on Several Gastropod Mollusks Species in the Intertidal Zone on the Reclamation Coast of Manado Bay

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Abstract: Coastal waters are a place to store various potential wastes from various human activities both on land and at sea, so that these ecosystems can be used as indicators in monitoring and assessing the condition of natural resources and the environment. The aim of the study was to determine the heavy metal content of lead, cadmium, and mercury in the clams *Cellana testudinaria* and *Cellana radiata*, which contain lead, cadmium, and mercury in the waters of the reclamation coast of Manado Bay. The problems to be studied were: (1) whether the population of *C. testudinaria* and *C. radiata* increases, (2) how much residue flows into the waters of the bay, and (3) whether changes in coastal structure have a large effect on species diversity. The results of heavy metal analysis showed that *C. testudinaria* had higher cadmium (0.53 mg/kg) than *C. radiata* (0.372 mg/kg) and the results of analysis of heavy metals lead showed that *C. testudinaria* had higher lead (2 mg/kg) and also the results of heavy metal analysis mercury showed that *C. testudinaria* had higher mercury (1.01 mg/kg) compared to *C. radiata* (0.83 mg/kg) The content of these heavy metals is below the threshold determined by National Standardization Agency of Indonesia (Badan Standardisasi Nasional, BSN) (2014).

Keywords : Lead, cadmium, Mercury, Cellana testudinaria, Cellana radiate.

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