

ABSTRACT

CITA DWI TORIAN. 2024. ***ANALYSIS OF MACROZOOBENTHOS DIVERSITY: GASTROPODA CLASS AS A POTENTIAL BIOINDICATOR OF ENVIRONMENTAL POLLUTION IN CIBEUREUM LAKE, TASIKMALAYA DISTRICT.*** *Biology Education Department, Faculty of Science and Teacher's Training, Siliwangi University of Tasikmalaya.*

*Gastropods are one of the biota that can be used as biological parameters in determining the condition of a water body. This study aims to analyze the diversity of macrozobenthos Gastropoda class as a potential bioindicator of water environment pollution in Situ Cibeureum Tasikmalaya Regency. The study used a survey method with a qualitative descriptive approach, totaling 3 stations. Sampling in April 2024. Gastropod samples were taken at 3 stations with different characteristics, Gastropods were washed, documented and then identified. The results showed that the highest number of individuals found at station II was 175 individuals, station III 148 individuals, and the lowest number at station I found 104 individuals. Gastropod species found consisted of 3 families namely Viviparidae, Lymnaeidae, and Ampullaridae with a total of 6 Gastropod species including *Filopaludina javanica*, *Bellamnya javanica*, *Lymnaea rubiginosa*, *Pilla ampullacea*, *Pilla polita*, and *Pilla scutata*. The lowest diversity index value is found at station I of 0.96 which is included in the low category. The highest diversity index value at station II is 1.50 included in the medium category, and the diversity index value at station III is 1.24 included in the medium category. The low value of diversity at station I is due to several factors, namely based on differences in environmental conditions at each research location which can be characterized by high community activity, the low number of individuals found, and a high pH value of 9.2 indicating moderately polluted waters at station I. Based on the diversity index value obtained during the study, the water condition of Situ Cibeureum is classified as moderately polluted at station I and lightly polluted at stations II and III. This study proves that the higher the level of water pollution, the lower the Gastropods obtained as in station I which has a low diversity index value of 0.96.*

Keywords: Bioindicator; Gastropod Diversity; Environmental pollution