Diversity of Invertebrates and Vertebrates Intertidal Zone and Watu Lumbung Beach Cave

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ABSTRACT

Indonesia has been known as one of several countries with high biodiversity. One of the equatorial ecosystems that rich in diversity other than tropical rain forest is Intertidal Zone with coastal area as its ecological buffer. Research in the intertidal zone and the coastal area diversity has been very limited until recent years. This research aims to study the diversity of invertebrates and vertebrates found in the intertidal zone and cave on Watu Lumbung Beach, one of the beaches in Gunung Kidul, Yogyakarta with unique ecosystem.

This research is an observational study. The research was conducted at the Watu Lumbung Beach and its coastal ecosystems at the full moon at the maximum low tide. This research is conducted in two steps. The first stage is surveyed and sampling (collection), invertebrates and vertebrates in the field, while the second stage is an identification and data analysis in the laboratory. Analysis of the data used includes abundance, diversity index, uniformity index, dominance and richness. Overall, 2 types of bats were found, namely *Rhinolophus affinis* and *Rhinolopus pusillus*. Based on the results of data analysis, it is known that the coastal area of ??Watu Lumbung is relatively stable with additional information on the type of bat. The Rhinolopidae family has the longest sound duration or echolocation when compared to other families of Michrochiroptera bats.

Kata Kunci: *Invertebrates, Vertebrates, Intertidal zone, Coast area, Watu Lumbung Beach*