

ABSTRACT

RESA KEVIRA MUSTIKASARI. 2023. STUDY OF THE ASSOCIATION OF GASTROPODS WITH MACROALGAE IN THE LITORAL ZONE OF SINDANGKERTA CIPATUJAH BEACH AS A SUPPLEMENT FOR BIOLOGY TEACHING MATERIALS. *Biology Education Departement. Faculty of Teacher Training and Education. Siliwangi University. Tasikmalaya.*

*Sindangkerta Cipatujah Beach has a high diversity of marine biota such as gastropods and macroalgae. Gastropods use macroalgae as habitat, shelter and spawning grounds so that the presence of macroalgae plays an important role in the life of gastropods. Therefore, this study aims to determine the association of gastropods with macroalgae in the littoral zone of Sindangkerta Cipatujah Beach. This research uses a quantitative method with a survey research type and the sampling technique used is purpose sampling. The sampling method uses a belt transect 100 meters long with a plot size of 1x1 meter. The stations used in this research are in three different areas, namely Station I is located behind the Sindangkerta Regional Government Mess office, Station II is near the tourist entrance, while Station III is located near the estuary and lighthouse. The station determination is based on differences in substrate and distance, namely 300 meters between one station and the next. The research results showed that the gastropods found in the littoral zone of Sindangkerta Beach consisted of 5 orders, 8 families, 11 genera, 12 species and 459 individuals. The macroalgae found in the littoral zone of Sindangkerta Beach consist of 9 orders, 10 families, 14 genera, 18 species and 26,858 individuals. The results of the Chi-square test showed 26 positive associations, 11 negative associations, and 179 no associations. Then the highest association is in the combination of *Tricleocarpa fragilis* species with *Trochus stellatus* with an X^2 count value of 73.74 and a degree of association value of 0.46 so the association is positive. Positive association because gastropods and macroalgae have a mutually beneficial relationship between the two groups of organisms in an ecosystem and provide benefits for both or for the ecosystem as a whole. The conclusion of this research is that there is an association between gastropods and macroalgae in the littoral zone of Sindangkeerta Cipatujah Beach.*

Keywords: *Gastropods; Macroalgae; Association of Gastropods with Macroalgae*