DIVERSITY AND ZOOCHEMICAL PROPERTIES OF OPHIURIDA (BRITTLE STARS) AT BRGY. CULAT, CASAPSAPAN BEACH, CASIGURAN, AURORA, PHILIPPINES

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ABSTRACT

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This study aimed to identify, classify and determine the zoochemical properties of the different brittle star species at Barangay Culat, Casapsapan beach, Casiguran Aurora. Abiotic factors were determined such as salinity, temperature and pH using multiparameter probe. Ecological and habitat assessment were computed such as: Frequency, Relative Frequency, Density, Relative Density, Dominance, Relative Dominance, Shannon's Diversity Index and Hill's Number. Methanol was used as a solvent for zoochemical analysis and Thin Layer Chromatography was the method used in assessing its secondary metabolites.

Brittle stars were identified and classified into five (5) species namely: *Breviturma brevipes, Ophiocoma scolopendrina, Breviturma dentata, Ophiocoma aethiops* and *Ophiocoma erinaceus. B. brevipes* was observed to have the highest frequency of 24.21%. However, *B. dentata* listed the most dominant with the value of 36.80%. The computed diversity index was 1.49 which is considered very low. Secondary metabolites were determined using Thin layer chromatography and different brittle star extracts revealed the presence of anthraquinones, anthrones, tannins, flavonoids and alkaloids.

The result of the study demonstrated the possibility of obtaining pharmacological property in brittle stars.

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