

Echinoid and Ophiuroid species in Taklong Island National Marine Reserve (TINMR), Guimaras

EUGENIE MARIE A. ALMIRA
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MARIE FRANCES J. NIEVALES (Adviser)

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Division of Biological Sciences
College of Arts and Sciences
University of the Philippines VISAYAS
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ABSTRACT

Taklong Island National Marine Reserve (TINMR) in Guimaras is one of the Philippines' marine protected sites established to ensure continuity and productivity of marine organisms such as echinoderms. The study aims to determine the community structure of echinoid and ophiuroid species in selected shallow coastal sites around Taklong Island within TINMR. Sampling was done twice (June 2014 and Jan 2015) using belt transect method for echinoid species in three selected sites and random quadrat method for ophiuroid species in two sites. A total of twelve (12) echinoid and six (6) ophiuroid species were recorded. The most numerous echinoid and ophiuroid were *Echinotrix calamaris* and *Ophiocoma erinaceus*, respectively. The diversity of echinoids ($H' = 0.37-0.95$) and ophiuroids ($H' = 0.53-1.40$) in Taklong Island was relatively low. Presence and abundances of many echinoids and ophiuroids in a site varied with sampling time. Variation may be due to differences in substrate characteristics such as sea grass cover and coral cover as well as environmental factors.