

**DIVERSITY AND POPULATION STRUCTURE OF SEA CUCUMBER SPECIES IN
TAKLONG ISLAND MARINE RESERVE, GUIMARAS**

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ABSTRACT

The increasing demand of sea cucumbers in the market leads to the global exploitation of this animal. Marine reserve protects the marine biodiversity and teaches the people in the communities to manage their marine resources wisely. This study examined the diversity, species characteristics and population structure of sea cucumbers in five sites around Taklong Island Marine Reserve namely, Binabaywan, Kalirohan, south side of 2nd sandbar, north side of 2nd sandbar and Tarakpan. The species composition and abundance were determined through transect walks and plot along transects. Sea cucumber density was estimated by randomly positioned 1 square meter plots in each site. There were 11 sea cucumber species found. There were 9 species under Order Aspidochirota all in 1 Family Holothuriidae and 2 species in Order Apodida in 1 Family Synaptidae. A total of 64 individuals were sampled in 5 sites. The most widespread and the dominant species was the non-commercially valuable *Synapta maculata* (n = 32) followed by the low-value *Holothuria pulla* (n = 9) and *Holothuria atra* (n = 8). Kalirohan had the most number of species ($\Sigma s = 6$) and individuals of sea cucumbers. The low number of holothurian species encountered in the Marine Reserve might be due to the limited sites surveyed, cryptic behaviour of the species and the possibility of poaching in the area.