Species Composition and Abundance of Sea Urchins in Selected Island Barangays of San Vicente, Northern Samar, Philippines

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***Abstract*— San Vicente island is one of the most popular island in the province of Northern Samar blessed and surrounded with different abundant marine resources and beautiful beaches.**

This study identified the species composition and determined the most abundant sea urchins in the three selected island barangays of San Vicente, Northern Samar during the month of October, 2023 and January, 2024. It focused on the identification of the species composition, distinguished the edible and non-edible species, described the environmental parameters, such as: temperature, salinity, pH, current, depth and substrate, know the economic uses of sea urchins, and determined their distribution in different habitats: coral reefs, intertidal zone, and seagrass beds.

Sixteen (16) sea urchin species are found in the selected island barangays of San Vicente, namely: *Astropyga radiata, Echinothrix calamaris* (black banded sea urchin), *Echinothrix calamaris*; *Diadema setosum, Echinometra mathaei* (burrowing urchin), *Echinometra mathaei* (shortspine urchin), *Echinometra mathaei* (white tip urchin), *Echinometra mathaei* (rock-boring urchin), *Lytechinus varietatus* (green sea urchin); *Salmacis sphaeroides, Mespilia globulus*; *Toxopneusis pileolus, Tripneustes gratilla* (collector urchin), *Tripneustes gratilla* (white brown), *Tripneustes gratilla* (black red), and *Tripneustes gratilla* (salawake), which are 13% only of the 210 Philippine sea urchins species officially identified..

***Keywords*: Abundance, Edible, Non-Edible, Sea Urchins, Species Composition**

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