PHYTOSOCIOLOGICAL STUDY OF ROMULO ISLAND AND LITTLE ISLAND IN TAKLONG ISLAND NATIONAL MARINE RESERVE, NUEVA VALENCIA, GUIMARAS

ENYA LOU M. ANAS

An Undergraduate Special Problem Presented
to the Faculty of the
Division of Biological Sciences
College of Arts and Sciences
University of the Philippines Visayas

In Partial Fulfillment of the Requirements
for the Degree of
Bachelor of Science in Biology

SEPTEMBER 2017

Anas, E. L. M. 2017. Phytosociological Study of Romulo Island and Little Island in Taklong Island National Marine Reserve, Nueva Valencia, Guimaras. An Undergraduate Special Problem Presented to the Faculty of the Division of Biological Sciences, College of Arts and Sciences, University of the Philippines Visayas, Miag-ao, Iloilo, Philippines. May 2017.

ABSTRACT

Taklong Island Marine National Reserve encompasses not only marine and mangrove ecosystems, but also small islands that are made up of beach forest species. In this study, small islands Romulo and Little Island were surveyed to assess and compare the species composition, community structure and diversity of their vegetations in terms of their stand height, stand basal area, basal cover, plant density and importance value along with ecological indices like species richness and Shannon-Wiener Index of Diversity. The phytosociological study was achieved through the establishment of random plots and measurement of diameter at breast height (DBH) of the identified plants found in both islands. Results show that 11 species belonging to 7 families were identified in Romulo Island, with *Syzigium confertum* having the highest importance value. Little Island, on the other hand, have 26 identified species belonging to 18 families, with *Cerbera manghas* having the highest importance value in the island. Moreover, results also show that Little Island is more diverse and more even than Romulo Island based on the diversity indices. These results are attributed to environmental factors like climate, island size, wave action and wind exposure unique to both islands. Moreover, dispersal mechanisms of the plants and anthropogenic activities also contribute to the survival of plants on the islands.

Keywords: phytosociology, community structure, small island, Taklong Island National Marine Reserve