

THE MANGROVE TREES IN SIPAWAY ISLAND,
NEGROS OCCIDENTAL AND THE MOLLUSKS
ASSOCIATED WITH THEM

A Thesis

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Master of Science in Biology

by

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This Thesis entitled "THE MANGROVE TREES IN SIPAWAY ISLAND, NEGROS OCCIDENTAL AND THE MOLLUSKS ASSOCIATED WITH THEM" prepared and submitted by ABIGAIL F. ONIOT in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN BIOLOGY, has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

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ABSTRACT

Mangrove plants in Sipaway Island, Negros Occidental and the mollusks associated with them. Oniot, Abigail Analeigh F. M.S. Biology. University of San Carlos, 1995. 94 pp. Adviser: Franz Seidenschwarz, Ph.D.

This study aimed to identify the species of mangrove plants and their dominance on the different substrates. It also attempted to identify the species of mollusks and their dominance in association with the different species of mangrove plants.

Line transect sampling or quadrat sampling was used with the descriptive survey method. Three transect lines which were 500 meters apart each other were established with three quadrat plots each. The quadrat plots were 10m² and placed at the center of each station: one (sandy substratum), two (sandy-muddy substratum) and three (muddy substratum). The dominance of the species of mollusks and mangrove plants were determined based on Braun-Blanquet's cover-abundance and sociability scales.

Representatives of each species were collected and pictures were taken. Identification of species of mangrove plants was based on Flora Maleysiana by Steenis-Kruseman (1950) and Guide to Philippine Flora and Fauna by de Guzman, et al. (1986). The methods of preservation were based on the Technical Bulletin by Buot (1991). Identification of species of mollusks was based on the books of Kira (1965), Habe (1968), Eisenberg (1981), Springsteen and Leobrera (1986). The preservation of specimen was based on the methods of Walls (1979).

There were three species of mangrove trees found on the three stations. The most abundant species on the three substrates was Avicennia marina. Sonneratia alba was the less dominant on sandy and sandy-muddy substrates and Rhizophora mucronata on muddy substratum. There were seven species of mollusks which thrived on the three mangrove species. These were Cerithium tenellum, Clypeomorus patulum, Littorina scabra scabra, Monodonta labio, Nerita planospira, Terebralia sulcata and Thais sp. The most dominant species of mollusks were L. scabra scabra on A. marina the three substrates while C. patulum was the less dominant species. On the three substrates, C. patulum was dominant on R. mucronata while C. tenellum was less

dominant. L. scabra scabra and M. labio were dominant on S. alba while C. patulum was found less.

Results from the collected raw data showed that the type of substrate affected the zonation pattern of mangrove plants and that different species of mollusks were associated with certain species of mangrove plants. Other factors which were not included in the study like pH, salinity, temperature, frequencies of tidal influx, time and amount of exposure to sunlight, etc. might have affected the results of the study and are worth investigating for.

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