COMMUNITY STRUCTURE OF MANGROVES IN SELECTED BARANGAYS IN SEBASTE, ANTIQUE

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Mangroves are higher plants that are primarily found predominantly in the intertidal areas such as estuaries and lagoons of the tropical and subtropical shorelines. This study was conducted to assess the community structure of mangroves in Barangay Callan, Barangay Idio, Barangay Poblacion, Barangay Abiera, and Barangay Bacalan, Sebaste, Antique, using the transect line method. Specifically, it aimed to determine selected physical and chemical factors such as salinity, pH, temperature for water and soil as well as characterization of the substrate; identify and classify true mangrove species present in the area; and describe the community structure in terms of stand basal area, stems per hectare, relative density, relative frequency, relative dominance, importance value, Shannon index of diversity, zonation patterns, seedling and sapling density. No study has been done to document the community structure of mangroves in Sebaste, Antique thus, this study was done to provide vital information needed for its proper management. Three stations were selected in Sebaste, Antique. Four (4) species of true mangroves were identified belonging to three (3) families: Palmae – *Nypa fruticans*; Rhizophoraceae – *Rhizophora apiculata, Bruguiera gymnorrhiza*; and Euphorbiaceae – *Excoecaria agallocha.*

The study area had a water salinity range of 0.6 ppt to 15.3 ppt; water temperature range of 28.3°C to 35.4°C; water pH range of 7.1 to 7.7; soil temperature range of 28.3°C to 34.7°C; and soil pH range of 6.5 to 7.2.

Basal area ranges from 3.16 m^2/ha (*Rhizophora apiculata*) to 5.88 m^2/ha (*Excoecaria agallocha*) to 8.19 m^2/ha (*Bruguiera gymnorrhiza*) . The species with the highest average of stems per hectare were *Excoecaria agallocha* and *Bruguiera gymnorrhiza* with 300 as well as the highest average density value of 100 for *Excoecaria agallocha*. *Nypa fruticans* had the highest relative frequency and relative dominance. Among the four species, the most important species was *Nypa fruticans*. The Shannon Index of Dominance was 0.403 which was quite low in terms of diversity as influenced by the dominance of *Nypa fruticans.*