

**MANGROVE COMMUNITY STRUCTURE SURVEY
IN ILOILO RIVER**

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Mangroves are highly productive forests growing along tropical tidal mudflats and shallow water coastal areas where water is generally brackish. The structure of the mangrove stand in the Iloilo River was studied using the transect line plot method with 55 plots established in the 3 out of 4 stations of the river. Community Structure is described in terms of the following parameters: basal area, stems per hectare, relative density, relative frequency, relative dominance and importance value of the species and the Shannon Index of Diversity. Variations in these parameters are correlated with certain physico-chemical factors- soil and water temperature, soil and water pH, and water salinity. Nineteen (19) true mangrove species were found in the area belonging to 10 families. These include Mysinaceae family represented by *Aegiceras corniculatum*; Avicenniaceae family represented by *Avicennia alba*, *Avicennia marina*, *Avicennia officinalis* and *Avicennia rumphiana*; Euphorbiaceae family represented by *Excoecaria agallocha*; Sterculiaceae family represented by *Heritiera littoralis*; Combretaceae family represented by *Lumnitzera racemosa*; Palmae family represented by *Nypa fruticans*; Rhizophoraceae family represented by *Bruguiera cylindrica*, *Rhizophora apiculata*, *Rhizophora mucronata*, and *Rhizophora stylosa*; Sonneratiaceae family represented by *Sonneratia alba*, *Sonneratia caseolaris*, and *Sonneratia ovata*; Rubiaceae family represented by *Scyphiphora hydrophyllacea* and Meliaceae family represented by *Xylocarpus granatum*, and *Xylocarpus mekongensis*. *Avicennia officinalis* has the highest total basal area of 650.69m²/ha. *Avicennia alba*, *Aegiceras corniculatum*, *Avicennia marina*, *Avicennia officinalis*, *Avicennia rumphiana*, *Excoecaria agallocha*, *Lumnitzera racemosa*, *Rhizophora apiculata*, *Rhizophora mucronata*, *Rhizophora stylosa*, *Sonneratia alba* and *Xylocarpus moluccensis* have equal relative frequency of 0.074. *Avicennia marina* obtained the highest stems per hectare with a value of 38933.33, relative density of 0.405 relative dominance of 0.332 and importance value of 0.913. The index of diversity is 1.010, indicating that the area is diverse.