

THE COMMUNITY STRUCTURE OF MANGROVES IN IVISAN, CAPIZ

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An Undergraduate Special Problem
Presented to the
Division of Biological Sciences
University of the Philippines in the Visayas
Miag-ao, Iloilo

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

April 2004

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The structure of the mangrove community in Ivisan, Capiz was studied using the transect line plot method with fifteen plots established. This study aims to assess the community structure of mangroves in Barangay Agustin Navarra and Barangay Balaring, Ivisan, Capiz using accepted ecological indicators. Community structure is described in terms of the following parameters: basal area, stems per hectare, relative density, relative frequency, relative dominance, importance value of the species, and the Shannon Index of Diversity. Variations in these parameters are correlated with certain physico-chemical factors such as air and water temperature, soil pH, and water salinity. Little study has been done to document the mangroves in Barangay Agustin Navarra and Barangay Balaring, Ivisan, Capiz. This is the first systematic study done in the area; thus, the present study will provide vital information needed for its proper management.

A total of nineteen true mangrove species represented by ten families were identified on Barangay Agustin Navarra and Barangay Balaring, Ivisan, Capiz. The true mangroves consisted of *Aegiceras corniculatum*, *Avicennia alba*, *Avicennia marina*, *Avicennia officinales*, *Avicennia rumphiana*, *Bruguiera cylindrica*, *Bruguiera parviflora*, *Camptostemon philippinensis*, *Ceriops decandra*, *Exoecaria agallocha*, *Nypa fruticans*, *Osbornia octodonta*, *Rhizophora apiculata*, *Rhizophora mucronata*, *Rhizophora stylosa*, *Sonneratia alba*, *Scyphiphora hydrophyllacea*, *Xylocarpus granatum* and *Xylocarpus moluccensis*. All the species were present in Station 1 except *Scyphiphora hydrophyllacea*. The species present in Station 2 and in both stations were *Avicennia marina*, *Avicennia rumphiana*, *Exoecaria agallocha*, *Osbornia octodonta*, *Rhizophora apiculata*, *Rhizophora mucronata*, *Scyphiphora hydrophyllacea*, and *Sonneratia alba*.

Avicennia marina has the overall highest relative density of 340 trees per hectare, relative frequency of 22%, relative dominance of 266.655%, and importance value of 628.841%. Seedlings and saplings of *Avicennia marina* dominate the area indicating that the mangrove community is young and regenerating stand. Barangay Agustin Navarra has the highest index of diversity of 0.87 while Barangay Balaring has an index of diversity of 0.47. The overall index of diversity is 0.674.