A COMMUNITY STUDY OF MANGROVES IN BRGY. CALILING, CAUAYAN, NEGROS OCCIDENTAL

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ABSTRACT

The species distribution of the mangrove community in Brgy. Caliling, Cauayan, Negros Occidental was studied using the transect line plot method with three plots for each of four stations established. Both stations 1 and 4 were located landward, while stations 2 and 3 were located seaward. Community structure is described in terms of the following parameters; basal area, number of trees per hectare, importance value, relative density, relative frequency, frequency of species and relative dominance. Variations in these parameters are correlated with physico-chemical factors such as the air, water and soil temperature, water depth, salinity and pH.

Ten true species were found in the mangals of the coastal environment of Brgy. Calilling, Cauayan, Negros Occidental. They were *Avicennia alba, Avicennia lanata, Avicennia marina, Campostemon phillipinensis, Excoecaria agallocha, Osbornia octodonta, Nipa fruticans, Brugeria cylindrica, Rhizophora apiculata and R. mucronata.*

Standard Basal Area was highest in Station 3 with 7.54 m/ha. In terms of zonation, the landward zone was found to have the highest Stand Basal Area with 11.15 m/ha. Station 2 had the highest density value of 33.92 %, whereas in terms of zonation, both the middle and seaward zone had the density value of 36.20 %.

Avicennia marina was found to be the most dominant species and was observed to occupy sites with hypersaline conditions, in silty clay to muddy substratum, which may or may not be inundated by tidal flow most of the time.