

# FLORISTIC DIVERSITY AND STRUCTURAL DYNAMICS OF MANGROVES IN THE NORTH WEST COAST OF KERALA, INDIA

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**Abstract:** Mangrove vegetation is recognized worldwide as an epitome of most productive ecosystem and tuned with evergreen forest. The present investigation on floristic diversity of Mangroves of Malappuram district revealed that the presence of 11 species of true mangroves under 7 genera belonging to 5 families. Rhizophoraceae was the leading group with 5 species. *Avicenna officinalis* registered highest density (3045 stems/ha) and lowest for *Rhizophora apiculata* (53 stems/ha). Relative basal area was recorded highest for *Sonneratia caseolaris* (32.37%) followed by *Avicennia officinalis* (27.26%). Structural analysis of the mangroves of Malappuram unveiled that *Avicennia officinalis* having highest Importance value index (IVI) and Relative importance value index (RIVI) among the 11 species distributed all over. Diversity indices for six mangrove sites and for whole Malappuram district indicated that mangroves at Thalakkad-Pariyapuram constituted highest Shannon – Weiner index and Simpson's index (2.764 and 0.831) whereas Mangattiri – Etrikkadavu having lowest value (1.836 and 0.658) respectively. Species richness and species evenness reported for Malappuram was 1.07 and 0.845 respectively. Similarity indices for different mangrove locations in Malappuram were ranged from 0.20 to 0.70.

**Keywords:** Mangroves, Floristic diversity, Structural analysis, Diversity index

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