

**SPECIES DIVERSITY AND VEGETATIVE STRUCTURE OF MANGROVES  
ALONG THE GORAI CREEK, MUMBAI, MAHARASHTRA, INDIA**

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**ABSTRACT**

The mangroves of Gorai Creek, Mumbai coast have dense mangrove vegetation which have recently witnessed significant degradation. Although studies on mangrove floristics of Mumbai coast started early in 1905, no comprehensive efforts have been made to assess the vegetative structure and regeneration pattern. A research work carried out during June 2017 to May 2018 on the mangrove diversity, using quadrat method in the Gorai Creek of Mumbai coast, is reported here. During the study period, a total of 10 species of mangroves, belonging to 5 families and 8 genera were recorded in all the 3 areas marked along the creek. The average mangrove density was recorded to be 435 individuals ha<sup>-1</sup> varying from 222 to 467. The basal area of mangroves was recorded to be 9.51 m<sup>2</sup> ha<sup>-1</sup>, varying between 5.80 and 29.16 m<sup>2</sup> ha<sup>-1</sup>. *Avicennia marina* constituted 70% of the Important Value Index, 68% of mangrove density, 81% of basal area and 79% of the total juvenile density, indicating the dominance of this species in the mangroves of Gorai creek. The estuarine embayment harbours fragmented strands of mangroves with species *Sonneratia alba*; *Avicennia officinalis*; *Rhizophora apiculata*; *Bruguiera cylindrica*; *Kandelia candel* and *Acanthus ilicifolius* with other species scattered. These mangrove ecosystems are home to a large number of fauna including rare migratory birds and herpetofauna. As a matter of fact, mangroves have been noted to have narrowed down continuously in density and it is essential to initiate conservation and management immediately.

**Keywords:**

*Avicennia marina*, Gorai creek, Mangroves, Mumbai