

Diversity of crabs and molluscs macrofauna in mangrove of Wouri estuary (Douala - Cameroon)

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Abstract

According to their specific richness and multiple ecological roles, crabs and molluscs appear, with trees, as most significant biotic components in the functioning of these ecosystems. Mangroves of the Wouri estuary undergo for decades important damages and data available on invertebrates are fragmented and gone back up to more than thirty years. The aim of this work is to check off and to identify crabs and molluscs which colonize mangrove of Douala city. Two intrusive methods of capture (sight Harvest and excavation) have been used in 10 × 10 m² plots for crabs. Two quadrats of 1 × 1 m² were surrounded inside every plot for molluscs counts. 2046 crabs and 14405 molluscs have been inventoried on 600 m² and 12 m² respectively. 16451 individuals belong to 24 species fairly distributed between both groups. Five families of crabs and six families of molluscs were identified. The family of Sesarmidae (eight species) and Pachymelaniidae (four species) are the most diversified whereas Sesarmidae (94.6%) and Potamididae (45.6%) are the most abundant taxa. Also, *Sesarma angolense* (23.6%) and *Tympanotonus fuscatus* (38%) are the most abundant species while *Perisesarma alberti* and *Pachymelania fusca* are the most frequent species. The current study enriched the inventory of the Cameroon macrofauna with nine species (three of crabs and six of molluscs), one genus (*Melanoïdes*) and one family (Melanopsidae) to molluscs.

Keywords

abundance, excavation, inventory, macrofauna, sight harvest