

### Theme 3: Biodiversity – Terrestrial, Aquatic

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## BRACHYURAN DIVERSITY IN SUB LITTORAL ZONE OF TROPICAL ESTUARY, KARWAR, WEST COAST OF INDIA

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Kali estuary ( $14^{\circ}50'21''$  N  $74^{\circ}09'05''$  E) ,one of the productive ecosystems of Uttara Kannada, - located in the west coast of India, is known for its verdant mangrove diversity. Totally 13 species of true mangrove - belonging to 8 genera and 6 family were recorded inhabiting this area.. In addition to this, there is associated mangrove flora - comprising 7 species (5-genera and 3-family). Among mangroves, family Rhizophoraceae represents 5 species and 3-genera where as in associated flora dominant family was Fabaceae. This mangrove ecosystem harbours diversified fin and shell fish but present study focused mainly on brachyuran crab diversity. In all, 20 species of crabs belonging to 14 genera and 6 families have been recorded from sub littoral zone of the estuary. Dominant genera represented are Ocypode and Sesarma. But, Scylla serrata is the only commercial species found amidst the rich floral growth of Rhizophora apiculata and Avicennia sp. associated with soft mud. Some crab species are site specific with respect to mangrove flora. Portunus sanguinolentus and P. pelagicus were absent in this biotope. Sesarma edwarsi and Varuna litterata were observed especially during the rainy season when low salinity regime is established (between 2 to 5 psu). Crab fishery, their landing and culture aspects along the estuary is also discussed briefly to give some information on their culture potentials. Conversion of mangrove area into shrimp farm, industrialization, sand mining and excavation of shell fossils are major threats to crab diversity in this area.

**Keywords:** Brachyuran, Mangrove, Estuary, Crab fishery and Diversity.