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Studies on the Ecology of Sea Grasses in Uppanar Estuary, South East Coast of India

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Abstract : Seasonal variations of sea grasses and physico-chemical parameters were studied from April 2011 to March 2012. Samples were collected in four different seasons, namely post monsoon (January-March), summer (April-June) premonsoon (July-September) and monsoon (October-December) from the Uppanar estuary. Three species of sea grass biomass were measured during the study period: Halophila ovalis (215.3 g/m2 - 38.5 g/m2), Halophila beccarii (75.2 g/m2 –30.1 g/m2) and Halodule pinifolia (65.4 g/m2 - 26.5 g/m2), respectively. Canonical Correspondence Analysis (CCA) showed that NO2, NO3 PO4, and SiO4 influenced Halophila ovalis biomass distribution, whereas for Halophila beccarii and Halodule pinifolia, atmospheric temperature, water temperature, salinity, pH and DO proved important.

Keywords : sea grass, species biomass, Uppanar estuary, water quality
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