Seagrasses from northeastern coast of Bay of Bengal, Indian Ocean: five new global records and ecological aspect

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Abstract

The coastlines of Bay of Bengal are highly productive in terms of nutrient input, which promotes the coastal living resources. These coastal areas comprised of variety of aquatic macrophytes i.e., seagrass which grow in the intertidal and littoral zone. The coastlines and estuarine coastal water logged areas of Bay of Bengal harbor at least five species of seagrass; *Halodule univervis* (Forsskal) Aschersons, *Halophila decipiens* Ostenfeld, *Halophila beccarii* Ascherson, *Ruppia maritima* Linnaeus, *Halophila pinifolia* (Miki) den Hartog. The earlier two i.e., *H. univervis* and *H. decipiens* were reported nationally, but not reported globally. The rests were recorded in 2006 during the investigation of coastal and estuarine resources in the northeastern area of Bay of Bengal, Indian Ocean. The seagrass, *H. beccarii* (Ascherson) was found in the intertidal area and riversides. Seagrass *H. beccarii* was found in an accreted area and co-existing with mangroves (*Avicennia alba* and *A. marina*), salt marsh grass, and scattered sparsely in the estuarine habitat and macro-algae *Ulva intestinalis*. Seagrass *R. maritima* was recorded in the aquaculture ponds and water logged areas while *H. pinifolia* was found patchily in the sandy area of Saint Martin’s coral bearing reef at the south tips of the country near Myanmar. The ecological, morphological and ecosystem significant of these seagrasses were discussed and assessed. The future research activities and strategic approaches are needed to conserve and manage this important resource in the coastal area of Bay of Bengal is been proposed.

**Keywords:** seagrass, biodiversity, ecology, Bay of Bengal, Indian Ocean