

## Studies on Identification of Different Species of Brown Seaweeds available in the Coastal Region of Jaffna Peninsula

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Seaweeds are macroscopic algae, which form an important component of the marine living resource. Brown algae are economically important type of seaweeds which can be utilized in the food industry and clinical medicine. Quantitative surveys carried out in the early eighties reviewed that extensive beds of brown seaweeds were found in coastal region surrounding the Jaffna peninsula. Therefore, this study was carried out to identify the sites in Jaffna peninsula which are currently rich in brown seaweeds and to identify the important species in these regions. Initially three visits were made along the coastal area of Jaffna peninsula to identify the sampling sites of brown seaweeds. Coastal regions of Allaipiddy, Mandaitivu and Karainagar were selected as the sampling sites based on the availability of brown seaweeds. Sample collection was made from the coastal edge up to 100 m towards the ocean. Collected samples were identified based on their morphological, anatomical and reproductive features with the help of standard key in the laboratory. Five different species of brown seaweeds each were identified in the coastal region of Allaipiddy, Mandaitivu and Karainagar. A total of 7 different species of brown seaweeds were identified from these sites. The identified species of brown seaweeds include *Sargassum tennerimum*, *Sargassum polycystum*, *Turbinaria ornata*, *Turbinaria conoides*, *Turbinaria murayana*, *Padina gymnospora*, and *Canistrocarpus crispatus*. Further studies need to be carried out to find out the potential uses of identified species.

**Keywords:** Brown seaweeds, Coastal region, Jaffna peninsula, Species