

(98)

Diversity and Distribution of Marine Macro Algae at Dickwella, Bathigama Algal Bed in Southern Sri Lanka**Ganepola G.A.P.R.¹, Bandara K.R.V.^{2,3}, Manage P.M.^{2,3*}**¹*Faculty of Fisheries and Marine Sciences, Ocean University, Colombo, Sri Lanka*²*Centre for Water Quality and Algae Research, Department of Zoology,
University of Sri Jayewardenepura, Nugegoda, Sri Lanka*³*Faculty of Graduate Studies, University of Sri Jayewardenepura, Nugegoda, Sri Lanka***pathmalal@sjp.ac.lk***Abstract**

Seaweeds or marine macro algae are important factors in marine biodiversity of Sri Lanka. They are classified into three divisions as Chlorophyta (green algae), Phaeophyta (brown algae) and Rhodophyta (red algae). Irrespective of the great ecological importance and the higher potential for the economic uses, studies on marine macro algae in Sri Lanka is scanty. The current research was aimed at studying the diversity and distribution of marine macro algae at Dickwella, Bathigama algal bed in Southern coast Sri Lanka. The algal bed of 75 m×5 m were studied using 12 quadrates (0.5 m×0.5 m) distributed systematically with 15 m gap along the four line transects which were located parallel to the coast and with 5 m gap between them. The identification of macro algal species was done according to the standard guidelines and abundance was assessed following the Braun-Blanquet cover abundance scale. According to the results, twenty five species were found including nine Rhodophytes, twelve Chlorophyta, and four Pheophyta. There was greater species richness in intertidal zone and high species diversity was found in upper intertidal zone of beach rock. *Ulva fasciata* and *Caulerpa racemosa* were the highest abundance species. *Sargassum* sp. was very high on intertidal zone covering a large area of the algal bed. Lower intertidal zone of algal platform had a lower species diversity as well as the lower species abundance. *C. racemosa* and crustose coralline algae were the dominant in the study area. *Halimeda* sp. were recorded in the sand portion of the intertidal pools. The results suggests that the continuous survey with monthly intervals to study the seasonal variations of the algal flora and introduce rules and regulations are important to conserve algal diversity in Sri Lankan coastal belt.

Keywords: Bathigama algal bed, Sri Lanka, Diversity, Marine macro algae