Assessment of species composition and diversity of macroalgae along selected sites in Dar es Salaam Coast, Tanzania

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Macroalgae are members of giant group of aquatic plants known as algae which lacks true roots, leaves and vascular vessels constantly attached to the hard substratum or ocean floor. Available reports for macroalgae species identified in Tanzania ranges from 300 to 428. However the total number of macroalgae species for specific sites along the Dar es Salaam coast is not known. In recent years some species have been reported to disappear. Anthropogenic activities and climate change have lead to significant changes in the ecology of macroalgae along coast of Dar es Salaam. Therefore this study aimed to assess species composition and diversity of macroalgae and establishing a checklist of all macroalgae species at each selected site (Oyster Bay, Ocean Road, Kunduchi, Mjimwema, Mbudya Island and Bongoyo Island). Macroalgae collection was done during the spring low tide. A transect line was established from the intertidal zone to the upper sub tidal parallel to the shore for all study sites. Specimens from each site were identified by using the guide books. Checklist of macroalgae species in each site was established. A total of 101 taxa of macroalgae species were collected from six sites, 01 Cyanophyta, 22 Chlorophyta, 57 Rhodophyta and 21 Phaeophyta. Glacilaria salicornia and Ulva fasciata were dominant. In all sites, some species identified in previous study were not identified during this study these species might have disappeared. No new species of macroalgae identified, it is advised that in order to collect more data, the study should be done in different seasons of the year using systematic sampling methods.