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**Preliminary Assessment of Seaweed Diversity in an Extended Beach Rock Ecosystem,
Bopitiya, Ja-Ela**

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Abstract

Bopitiya Beach located in Gampaha District, Western Province (between 7°05'38.0"N, 79°50'46.9"E and 7°04'08.5"N, 79°51'05.9"E), the beach comprises with an extended beach rock which makes a diverse range of habitats including rock pools, creases, and float rock surface. Rocky shores display a remarkable biodiversity as a result of its immense microhabitat diversity. However, in Sri Lanka, only a limited amount of literature is available regarding the biodiversity assessment of rocky shore ecosystems. The present study was conducted to fulfil this gap. The study was conducted from February to June 2023. Samples were collected once a month during the low tide period. The study area was divided into seven sites Line transects method and field observations were used in the study. A line transect (50 m) was employed parallel and perpendicular to the shore and randomly placed quadrats (50 cmx50 cm) were used and the number of individuals falls within the quadrat area has been counted. For seaweeds, visual estimation of percentage cover has been determined using Braun-Blanquet scale. Standard guides and catalogues were used to identify flora. During the study, 24 seaweed species taxa have been identified, representing three classes and seventeen families and three classes. *Sargassum sp.*, *Ulva pertusa* Kjellman 1897., *Padina boergesenii* Allender et Kraft, *Jania intermidea* P. Silva in Silva et al. 1996, *Caulerpa racemosa*, *Carpopeltis maillardii*, *Champia ceylanica* Harvey 1857, *Gracilaria corticata* J. Agardh 1852, *Dermonema virens*, *Gracilaria hikkaduensis* Durairatnam 1962, *Ahnfeltiopsis pygmaea* P.C. Silva et DeCew 1992, *Padina minor* Yamada 1925, and *Grateloupia lithophil*, were among the dominant common species in the study area.

Keywords: Beach rock, Biodiversity, Seaweed