

**DISTRIBUTION, ABUNDANCE AND ASSOCIATED
BENTHIC FAUNA OF SEaweEDS AT POLHENA
REEF, MATARA**

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ABSTRACT

Seaweeds are one of the major living resources that is frequently found in Polhena reef, Matara and it is vital because of the coral reef enriched with many coral species, seaweed species, sea grass species and marine fauna. Seaweeds are a natural resource exist in the Polhena reef and is important ecologically and commercially.

But their growth and distribution throughout the coral reef is not even and abundance of species varies depending on many factors. Significantly external environment factors can influence the distribution, growth and abundance of seaweeds and these factors can influence the inhabiting marine fauna species in seaweeds.

Therefore, this research is focused on making out the seaweed species that exist in considered environment, their distribution, diversity, abundance of seaweeds and associated macro fauna species using Line transect method.

For the study 3 km area of the reef was selected and five parallel transect lines were laid. Both seaweeds and macro fauna were identified up to the species level and statistical analysis was done.

The selected area was rich with 19 seaweed species and showed variation in seaweed cover with the site and season within the top part (0-10m) of the sites. The variation of seaweed cover shows a difference only in terms of site and no difference with season at the bottom area (10-20 m) of the site.

The highest growth of seaweed species was found in month July and the site that gave the highest seaweed cover was site 03. According to the results, the selected area of Polhena reef is rich with seaweeds and associated benthic fauna.