



**SPECIES DIVERSITY OF SEAWEEDS IN CORRELATION WITH THE
PHYSICOCHEMICAL CHARACTERISTICS OF MARINE WATER
IN CALATAGAN, BATANGAS, PHILIPPINES**

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ABSTRACT

This study investigated the diversity of seaweed species in correlation with the physicochemical characteristics of the marine water in Calatagan, Batangas. Seaweeds identified were *Acanthophora spicifera*, *Caloglossa leprierii*, *Gracilaria bloettii*, *Gracilaria heteroclada*, *Gracilaria salicornia*, *Laurencia papillosa*, *Padina australis*, and *Sargassum iliciflium*. The seaweed species found to be the most abundant is *Sargassum iliciflium* having 17.8% of the total relative abundance of the species while the seaweed species found to be the least abundant is *Laurencia papillosa* having only 10.1% of the total relative abundance. The parameters have all positive correlation coefficient except for the water pH having a negative correlation. There is a substantial relationship or moderate correlation between the frequency of seaweeds with salinity, TDS, DO, and nitrite. There is a small relationship or low correlation between water temperature, conductivity and nitrate and the frequency of seaweeds while there is a slight correlation or almost negligible relationship regarding phosphate and hardness. The diversity of these seaweeds indicates the tolerance of the species to the marine environment.



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