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## Influence of the physicochemical composition of water on algae cover in an area of the Gulf of Morrosquillo, Colombian Caribbean

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**Abstract :** The influence of the physicochemical composition of the water on the cover of algae in an area of the Gulf of Morrosquillo was analyzed. The temperature, pH, salinity and dissolved oxygen were measured; Different species of red, green and brown algae, the mosaic chart for algae species was used, then the canonical correspondence analysis to measure associations between quantitative variables, as well as to measure association between two categorical variables and to characterize individuals with categorical variables and not Categorical. The P-value indicates that the null hypothesis between sampling zones and algal species is rejected, showing a relationship between sampling areas and algal abundance, characterizing algal species with respect to sampling areas and Environmental variables. There are no significant relationships between the physicochemical variables and the environmental variables for the abundance of algae species in the studied area.

**Keywords :** Canonical correspondence analysis, Water quality, Algae cover, Descriptive statistics, Physicochemical variables.

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