



RELATIONSHIP BETWEEN SCARUS RIVULATUS ABUNDANCE and MACROALGAE COVER ON CORAL REEF

RESEARCH QUESTION: THE ASSOCIATION BETWEEN REEF GRAZER AND CORAL BENTHOS COMPETITION ON THE REEFS (MACROALGAE).

METHODS:

- ▶ BENTHIC SURVEY: Line Point Transect method was used to identify the percentage composition of reef cover in the 4 different reefs.
- ▶ FISH ID SURVEY: The fish density of each reef was conducted through the Rapid Survey Method in 4 different sites and 3 replicate each to assess the differences.



Graph showing the abundance of *Scarus rivulatus* (Parrotfish) and Macroalgae.

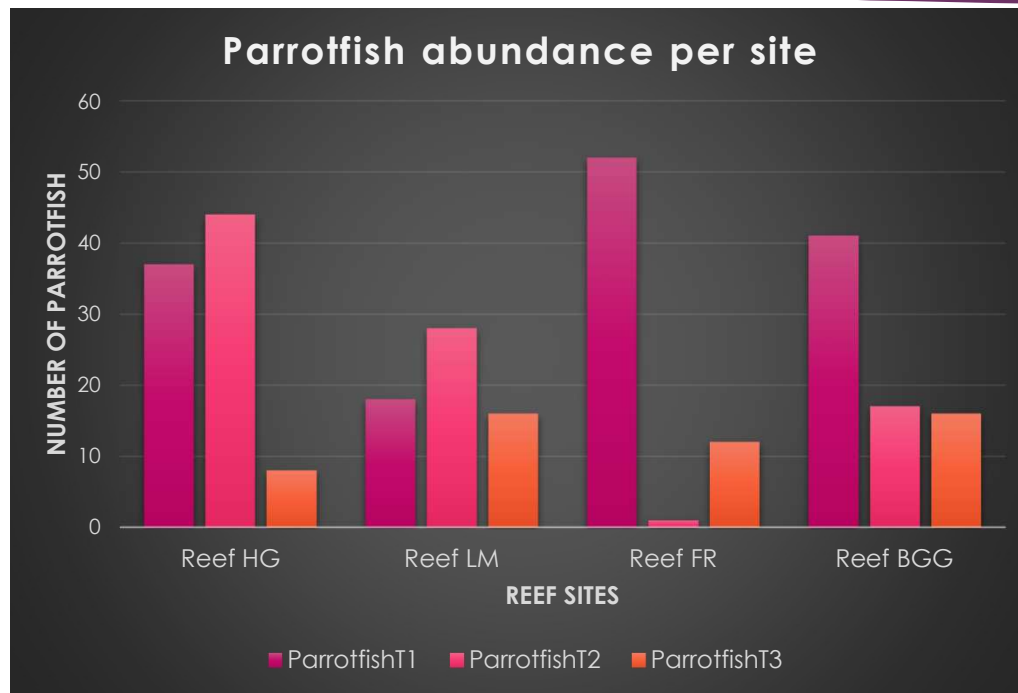


Figure1: Shows the abundance of Parrotfish per sites.

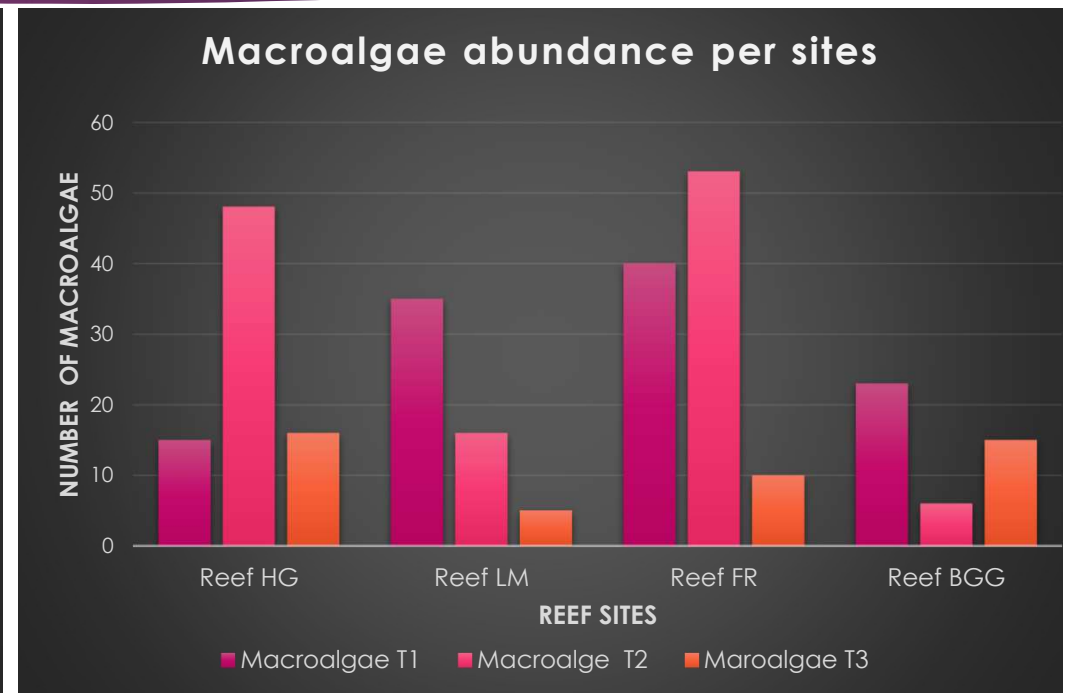


Figure 2: Show the abundance of Macroalgae per sites.

Discussion

- Parrotfish per sites.
 - The F value is less than the critical value of F_{α} for alpha level 0.05, so it fail to reject the null hypotheses by saying:
 - There is no association between the parrotfish abundance between the reef sites.
- Macroalgae per sites.
 - The F value is less than the critical value of F_{α} for alpha level 0.05, so it reject the null hypotheses by saying:
 - There is no association between the macroalgae abundance between the reef sites.

RESULT and IMPLICATION

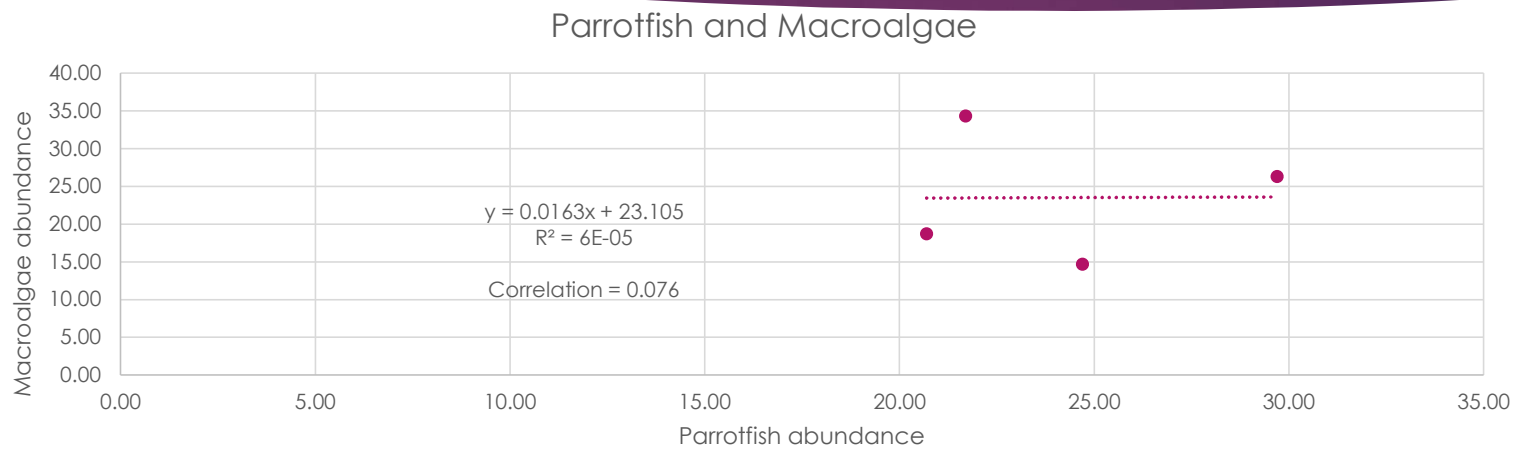


Figure 3: Show the scatted plot diagram of Parrotfish and Macroalgae.

- There is a positive correlation with the calculated value of (0.076)
- There is no relationship between parrotfish and macroalgae.