

Biodiversity of Indigenous Ornamental Fishes of Saint Martin's Island of Bangladesh.

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A thesis submitted in the partial fulfillment of the requirements for the degree of Master of Science in Marine Bioresource Science

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This is to certify that we have examined the above Master's thesis and have found that is complete and satisfactory in all respects, and that all revisions required by the thesis examination committee have been made

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ABSTRACT

Saint Martin's Island is a unique island in the northern part of the Bay of Bengal. The island is rich in fish biodiversity. There are some ornamental fishes can be found in the island. The demand of ornamental fishes is growing up day by day. The study was done on the assessment of the indigenous ornamental fishes of the island from January 2019 to January 2020. The criterion for the selection of the study area was identifying suitable geographical area for wider variety of ornamental fish biodiversity according to fishermen. Different PRA tools like focus group discussion, personal interview was used during data collection. Shannon Biodiversity index was used for data analysis. Different statistical tools such as Pie chart and Table was used to represent the findings. There are 69 species was recorded under 30 family. The species of Chaetodontida (17%), Terapontidae (10%), Serranidae (7%), Lutjanidae (6%), Pomacentridae (11%), Pomacanthidae (4%), Mullidae (4%), Labridae (8%), Tripterygiidae (4%), Ephippididae (3%), Acanthuridae (3%), and Gobiidae (3%) are abundant family. The Shannon index was found 3.89308. Which indicates the biodiversity of the indigenous ornamental fishes of the island is very good. The study found Shannon's Equitability $(E_H) = 0.92$. It indicates that this sample has pretty high equitability.

Keywords: St. Martin's Island, Biodiversity, Ornamental fish, Indigenous