Effects of Anthropogenic Activity on Coral Reef Fish Assemblages of the Northern Persian Gulf

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Abstract

The present research was performed to investigate the effects of anthropogenic perturbation on spatial variations of coral reef fish distribution and abundance on a coral reef area in the northern Persian Gulf. For this purpose, wintertime and summertime coral reef fish assemblages along with some environmental parameters were assessed at three different sites along a presumed anthropogenic disturbance gradient. Results indicated that the alterations in substrate rugosity and orthophosphate concentration could be responsible for spatial variations in family composition and fish assemblage structure in winter. On the other hand, live coral cover, total zooplankton density, and TDS were identified as the most important variables regulating spatial variability of fish assemblages in summer.

Keywords: *Environmental parameters, Season, Coral reef fish, Anthropogenic activities, Persian Gulf.*