Ecological assessment of Mel e Gonzeh mangrove forest by AZTI's Marine Biotic Index

Ali Shobeiri Dozeini[1]
Ali Fakhri[2]
Ahmad Faghih Ahmadani[3]
Amir Vazirizadeh[4*]

1. Department of Biology, Ganbad Kavous University, Ganbad Kavous, Iran
2. Department of Marine Ecology, Persian Gulf University, Bushehr, Iran
3. Department of Marine Biotechnology, Persian Gulf University, Bushehr, Iran
4. Department of Biology, Persian Gulf University, Bushehr, Ìran

***Correspondence author:**
vaziriamir@yahoo.com

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Abstract

AMBI is an ecological marine ecosystem indicator, which provides a more intelligent assessment of ecosystems of sensitivity and resilience, and ecological role, compared to famous diversity and dominance. This study assesses ecosystem health status from the AMBI's perspective by examining the distribution and biodiversity of macrobenthoses from mangrove of Mel-e-Gonzeh in the Bushehr province. A randomized quadrat sampling of 0.25 squares meters at low tidal time of three stations and three tidal levels and three replication during four seasons from autumn 2015 to summer of 2016. The number of 144 species identified such as Crustacea, Polychaeta and Mollusca etc. with this ecosystem, 17.64% were classified as sensitive (group I), 57.4% were indifferent (group II), 21.78% resistant (group III), and 18.3% were opportunistic (group IV), which calculated the index and plotted the figure of one to 4.67. Finally, after checking AMBI charts, the level of good ecosystem health assessed slightly pollution.

Keywords: Macrobenthos, Mangrove, Ecosystem Health Index, Persian Gulf.