A study on Zooplankton biomass variations in summer and autumn in Chahbahar eastern coasts

Mehran Loghmani[1*]
Gillan Attaran Fariman[2]
Fatemeh Zabihi[3]

1, 2, 3. Marine Biology department, Marine Science Faculty, Chabahar Maritime University, Chabahar, Iran

***Corresponding author:**
Loghmani_mehran@yahoo.com

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Abstract

The purpose of this study was to compare the Biomass variations of zooplankton in the eastern coast of Chahbahar in the summer and autumn seasons. Sampling was done using a 100-micron zooplankton net to horizontally in two summer (Monsoon) and autumn (Post-Monsoon) in 2015 at 8 stations. According to the results, the mean of dry weight of zooplankton was 115.46±16.34 and 23.45±2.26 mg m^3 in autumn. Independent T test showed a significant difference between the seasons of summer and autumn in terms of biomass ($P<0.05$). There were significant difference of biomass in the sampling stations ($P<0.05$) at each seasons. The Maximum and minimum values of biomass recorded at Station 3 (Shipbuilding) and Station 8 (Out of the Beris Port) respectively. According to the results of one-way ANOVA, there was no significant difference of salinity and temperature between different stations in the summer and autumn seasons ($P>0.05$). Also, the transparency at station 3 was significantly higher than other stations in summer. According to the results of Pearson correlation, inverse linear relationship were observed between biomass and temperature ($r=-0.796$) and salinity ($r=-0.285$). Bay are affected by the monsoon and the western winds of the Indian Ocean. Zooplankton density is due to environmental, nutritional and reproductive conditions in different seasons should be.

Keywords: Biomass, Zooplankton, Chahbahar Bay, Makran Sea.