Identifying Zooplankton Assemblages of Asalouyeh harbor and its Relation to Environmental Factors

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Received date: 2015.02.21
Reception date: 2015.06.24

Abstract
This study carried out aimed to identify and evaluate density of zooplankton population. Sampling was conducted at six stations during the spring and fall on April 2013 and October 2014. Zooplanktons sampling was performed by a mesh (30µ) and water sampling done with Routner water sampler. Environmental factors, such as temperature, salinity, turbidity, conductivity, dissolved oxygen; pH and TDS were measured at different time sampling. Mesh was pulled up from depth of 15 and its contents drained to plastic containers with 0.5 L capacity, and then fixed with formalin after transferring to laboratory. According to results, 7 families and 21 geniuses were identified during the investigations. The frequency of dominant groups identified was included Copepoda 76%, Zoobenthos 13%, Bivalve 5%, Cladocera 3%, Balanidae 2% and Ichthyoplankton 1%. Density of zooplankton at each station was calculated. The highest and lowest density in autumn was 146250000 nm^{-3} for *Halicyclops sp*. and 50000 nm^{-3} for *Foraminifera,* respectively. The highest and lowest density in spring was 12475000 nm^{-3} for *Halicyclops sp*. and 2500 nm^{-3} for *Cyprisbalanus sp.,* respectively. Dominated genus was *Halicyclops sp.* which has been seen in both seasons. The highest density and lowest density in both seasons were recorded 21909321.43 and 3070678.57 $nm^{-}3$, respectively. There was a significant difference between two seasons in zooplankton density ($P<0.05$). Also there was a strong significant correlation between temperature, dissolved oxygen (among environmental factors) and zooplankton density in waters near the Assalouyeh harbor ($P<0.01$).

Keywords: Density, Zooplankton, Persian Gulf, Physical and chemical factors.