Gorgan University of Agricultural Sciences and Natural Resources

J. of Utilization and Cultivation of Aquatics, Vol. 9(2), 2020
http://japu.gau.ac.ir
DOI: 10.22069/japu.2020.16625.1501

Study on abundance and biodiversity of zooplankton communities in Warm Fishes pools of Mazandaran province

***F.S. Tahami[1], M. Roshan Tabari[1], A. Roohi Kolagar[1], M. Naderi Jelodar[1] and M.A. Afraei Bandpei[1]**

[1]Caspian Sea Ecology Research Institute, Iranian Fisheries Science Research Institute, Agricultural Research Education and Extention Organization (AREEO), Farahabad, Sari, Iran

Received: 05.10.2019; Accepted: 09.22.2019

Abstract

Knowing the zooplankton of any aquatic ecosystem is very effective in managing this ecosystem and since zooplankton plays an important role in the transfer of the photosynthetic material transmitted by phytoplankton to other organisms at higher levels. The recognition of each aquatic ecosystem is very effective in better management of the ecosystem and since it has a significant role in the transmission of photosynthetic raw materials by phytoplankton to other organisms at higher levels. In this study, Zooplankton of four water pools located in Mazandaran province, with the geographical position of 36° 68' 12" north and 53° 41' 76" in the east were studied. Each of the pools was in the area of 3 hectares and rectangular, each of which was filled from well water and under the same management. Sampling was performed by a sampler with mesh size of 55-micron, in July, August and September, every 15 days and then data was collected at the laboratory for identification and counting data. In the present study, six groups of zooplankton including 1 genus of Copepoda, 9 genera of Rotifera and 5 genera of Protozoa, 1 Cladocera, 1 Mollusca and 2 Cirripedia genuses were identified. The highest percentage of zooplankton groups in hydrothermal pools was related to Protozoa (44%), which belonged to two genera of Ciliata with a mean density of 8544.7 ± 7 (number per cubic meter) and Vorticella with a mean density of 5128.05 ± 05 Number in m^3) and since this group of zooplankton was not suitable for feeding, they were not fed to offspring, resulting in better conditions for growth, and the rotifers had the most masses, of which Brachionus sp dominated that 65% of this genus is devoted to the relatively good conditions for feeding fish in these pools.

Keywords: Biodiversity, Biomass, Density, Warm Fishes, Zooplankton

*Corresponding author: farnaztahamy@gmail.com