Identifying the Zooplanktons Transported and Discharged by Ballast Tanks of Ships during Entering Bandar-e Imam Khomeini Terminals

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Abstract

The present study aims to examine and identify zooplanktons species carried by ballast tanks of the ship and discharged into Bandar Imam Khomeini waters. The samples were taken during summer 2014 from 12 ships loaded with ironstone, condensate and ironware traveled from both South America and the Southeast Asia within two seasons. For this purpose, 50 liter-three specimens was filtered by a 100 micron plankton catching net and stabilized by formalin. The specimens were detected by microscope and by using the valid identification keys. Considering to the obtained results within two seasons of summer and winter, it is found that there were totally 9 families and 18 genera transported through South America route where the greatest frequency was related to Paracalanidae with 35%, whereas in the Southeast Asia route there were 18 families and 30 genera of zooplanktons in which the greatest frequency was found in Cyclonidae and Sididae families with 9 and 8%, respectively. By comparing both local and foreign reports related to this zone it was revealed that no species can be regarded as invasive species.

Keywords: Ballast tank, Zooplankton, Invasive species, Bandar-e Imam Khomeini.