Taxonomy and species richness of supralittoral amphipods in the Persian Gulf

Project Manager**: Dr .Farzaneh Momtazi**

Contributors: **Dr. Abdolvahab Maghsoudlou, Vahid Sepahvand and Yeganeh Layeghi**

Abstract

Amphipods play an important role in the food web and can be used as an indicator of marine pollution. The main goals of the present study were increase the knowledge on taxonomy, species richness and biodiversity of amphipods in the supralittoral zone of the Persian Gulf. Quantitative sampling was done in one transect of 15 stations (including 7 stations in Qeshm Island and 8 stations along the Iranian coasts of the Persian Gulf) by randomly 0.5×0.5 m^2 quadrate. The replicate in mangrove coast was 7 and in sandy and muddy beach was 3 times. In the rocky substrate, replicate was 5 times for each of microhabitat. The investigation for finding talitrids was done qualitative in the highest part of intertidal zone. The material was preserved in 90% ethanol and dissections were made in glycerol and material mounted in glycerin gelatin. Selected material was drawn by Camera Lucida. Material is deposited on Iranian National Institute for Oceanography Collection (INIOC). Results show presence of 12 species and eight families of supralittoral amphipods, seven of the were new to science include: *Apohyale* sp., *Melita persia*, *Meximaera* sp., *Parhyale darvishi*, *Ptilohyale* sp., and *Talorchestia qeshm*. Based on the quantitative results *Melita persia* and *Parhyale darvishi* were the abundant species in studying area. The Bushehr station had both highest frequency and evenness of amphipods, while Cinama Darya station had the highest diversity. Our findings show the biodiversity of

amphipods in the Persian Gulf in contrast with previous studies are unique and most of recorded species was recoded from deeper stations along the worlds.

Key words: New species, New record, Amphipods, Supralittoral, Persian Gulf, *Melita persia*, *Parhyale darvishi*.