## **Biodiversity of Brachyura Larval in the Coastal** Waters of Hengam Island (Persian Gulf)

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## Abstract

This study was carried out aiming to identify and evaluate the diversity and abundance of rounded crab larvae in Hengam Island coastal waters from winter to autumn 2011. Planktonic larvae of brachyuran crabs were sampled using 300  $\mu$ m mesh net. Environmental factors such as temperature, salinity and dissolved oxygen were also measured. Seven species of brachyuran larvae were detected and the dominant species were *Leptodius exaratus* with 23% relative abundances. The most larval frequency of Brachyura was recorded in the summer (174/58±145/27 (Mean±SE) person per cubic meter) and the lowest in winter (8/75±9/97 (Mean±SE) person per cubic meter) respectively. The most larval frequency of Brachyura was recorded in the summer and the lowest in winter respectively. Abundance of the larvae and temperature showed a positive correlation (P<0.01) significantly using the spearman test. Shannon diversity index ranged between 0.17-1.08 that maximum was measured in the summer. In the present study larval stages of the *Charybdis feriata, Pilumnus kempi, Menaethius monoceros, Menaethiops nodulosus* and *Xantho* sp. were reported for the first time. Also, the species *P. kempi* and *Xantho* genus, that have not been reported from the Persian Gulf, was reported for the first time in this study.

Keywords: Zooplankton, Brachyura larvae, Zoea, Hengam Island, Persian Gulf.