WEIGHT-WIDTH RELATIONSHIP AND CONDITION FACTOR OF THE SWIMMING CRAB *PORTUNUS SEGNIS* (BRACHYURA, PORTUNIDAE)

Ahmad Noori[1], Parvaneh Moghaddam[1], Ehsan Kamrani[2], Arash Akbarzadeh[1], Bita Kalvani Neitali[3] and Marcelo Antonio Amaro Pinheiro[4]

[1*]Faculty of Atmospheric and Marine Science and Technology, University of Hormozgan, Bandar Abbas, Iran. [2]Faculty of Basic Sciences, University of Hormozgan, Bandar Abbas, Iran. [3]Faculty of Fisheries and Environmental Sciences, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran. [4]UNESP – Univ Estadual Paulista, Campus Experimental do Litoral Paulista (CLP); Crustacean Biology Laboratory; Research Group in Crustacean Biology (CRUSTA) – Praça Infante D. Henrique, s/nº – Parque Bitaru – 11330-900; São Vicente (SP)

*** Corresponding author: Noori@hormozgan.ac.ir**

The present work aims to study the weight vs. size relationship and the condition factor of a commercially important crab (*Portunus segnis*) from an inshore area located at the Persian Gulf, Hormozgan province, Iran. After sampled, the specimens were measured on their carapace width (CW) and weighted on their wet weight (WW). A total of 302 individuals of *P. segnis* were analyzed, being 148 males (49%) and 154 females (51%). Males were significantly larger and heavier than females ($P<0.05$), the expected pattern to many crabs. The relationship WW vs. CW, described through the power function, was allometric positive for males (b=3.45) and isometric for females (b=3.03), a result also observed in some other swimming crabs. The mean condition factor of males ($0.09\ 10^{-2} \pm 0.001\ 10^{-2}$) was reduced when compared with mean value obtained to females ($0.61\ 10^{-2} \pm 0.005\ 10^{-2}$) ($P<0.05$), due to female's gonads are heavier than that of males. The condition factor of this species oscillated throughout the sampling year, with a more prominent fluctuation in females, and lower winter values regardless sex, due to reproductive cycle.

Keywords: carapace, condition factor, *Portunus segnis*, weight-width relationship.