

## Reproductive and Recruitment Patterns of Fiddler Crab, *Uca sindensis* in the Intertidal Zone of Pohl Port (Bandar Abbas)

Lvajoo, Fatemeh<sup>1\*</sup>; Kamrani, Ehsan<sup>2</sup>; Sadjadi, Mir Masoud<sup>3</sup>

1- Marine Biology Department, Faculty of Science, University of Hormozgan, Hormozgan Province, Bandar Abbas, Email: f.lavajoo@gmail.com

2- Associated Professor in Marine Biology, Faculty of Science, University of Hormozgan, Hormozgan Province, Bandar Abbas, Email: ezas47@gmail.com

3- Associated Professor in Marine Biology, Faculty of Science, University of Hormozgan, Hormozgan Province, Bandar Abbas, Email: mmsajjadi@hotmail.com

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\*Correspond Author

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### Abstract

The purpose of this study was to investigate the reproductive and recruitment patterns of *Uca sindensis* crab in intertidal zone of Pohl port in Bandar Abbas. The coordinates of sampling area were in latitudes 26 degrees and 45 minutes to 27 degrees and 10 minutes north and longitude 55 degrees and 20 minutes to 56 degrees east with area of 26.4 km<sup>2</sup>. Samples were monthly taken from October 2009 to September 2010 in the intertidal zone of Pohl port when the tide was ebb. 10 quadrates with area of 5.0X5.0 m<sup>2</sup> were used for sampling, as every quadrates excavated to a depth of 30 cm. samples collected were transported to the laboratory. Samples were biometrically using caliper with precision of 0.05 mm and eggs counted using the method of Litulo, 2004. Analysis and recruitment curves and frequency distribution of crab population was done by FISAT II software. The results showed that the reproductive pattern in this species was seasonal, and starting from April to August. Ovigerous females in length class of 4.5 to 11.5 mm were more abundant than any other classes with average of Carapace width about 7.56±2.24. There was linear and direct relationship between carapace width and eggs, and positively relationship between them. Carapace width of Female crabs which carry about 2340 eggs was 4.5 however female crabs with 11,300 eggs was 11.5 mm. Carapace width showed a linear relationship with abdominal width. A peak was observed quite regularly in recruitment that was started in October and most of its value was between June and July months. Finally, this study showed that in the subtropical region of Pohl port, the amount of organic matter and soil temperature were two key factors that have the most effects on reproduction, growth and population of fiddler crabs.

Keywords: Fiddler crabs (*Uca sindensis*), Reproduction, Recruitment, Bandar Abbas and Pohl port

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