Diet of three Sea star (Echinodermata: Asteroidea) from Chabahar coastal area

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Received date: 2015/08/12
Reception date: 2015/10/14

Abstract
In this study, diet of three most common Sea star, *Asteropecten indicus*, *Asteropecten polyacanthus phragmorus* and *Asterina burtani* from Chabahar coastal area were examined. Sampling of Sea star were carried out during 6 months from sandy-silt substratum of intertidal zone of Tis coast (Eastern part of Chabahar port) and also from of subtidal zone 10m depth of Ramin area (western part of Chabahar port) from October to March 2014-15. Stomach contents from 15-25 individuals of *A. indicus*, *A. polyacanthus phragmorus* and 53 individuals of *A. burtani* species were examined. In Sea stars *A. indicus* 90 specimen preys and in *A. polyacanthus phragmorus* 44 specimen preys were observed. The preys in *A. indicus* comprise 16 species and in *A. polyacanthus phragmorus* comprise 10 species. The dominant prey in the stomach of *A. indicus* (96.7%) and in *A. polyacanthus phragmorus* 97.7% were Mollusca, while crustacean accounted for 3.3% and less than 3% in the stomach of the two species, respectively. During the field observations of 53 examined individual of *A. burtani* species, 50 individual (approximately 94.3%), bring out their cardiac stomach and were being fed. 92% of Sea star consumed microscopic organisms that live on rocky surfaces, including 42% of the sponges and the rest percentage belonging to the Asidian and Nudibranches with similar percentage. According to result of this study *A. indicus* and *A. polyacanthus phragmorus* species are as key species in population control for several species of gastropod and bivalve. This control would have a beneficial effect on the populations of small mollusks. It can also be expected that *A. burtani* by feeding on prey with high abundance play important role in the stability of the food web.

Keywords: Diet, *Astropecten polyacanthus phragmorus, Asteropecten indicus*, *Asterina burtani*, Chabahar Coastal.