

The Effect of Monsoon on Energy Budget of *Azumapecten ruschenbergerii* (Tryon, 1869) Bivalvia in Chabahar Bay (Oman Sea)

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Abstract

In the present study, energy budget of dominant bivalve of the Oman Sea, *Azumapecten ruschenbergerii*, was evaluated at Chabahar Bay subjected to changes of temperature and food, before and after monsoon. Scope for growth (SFG) is used to indicate ecophysiological condition of animals. It is determined in studying energy budget. SFG values were calculated for seawater temperature, lower and higher temperatures, and also when pecten fed with different microalgae. Furthermore, enthalpy of its adductor muscle was calculated and subjected to statistical analysis. Averages of SFG values were negative before and positive after monsoon. SFG values were generally higher when fed with Microalgae *Dunaliella* sp. Moreover, despite of significant difference between SFG values before and after monsoon, enthalpies of adductor muscles (edible part) have not shown significant difference. So, this study suggests that 1) The above mentioned Microalgae has more feeding efficiency, 2) This mollusk had more excreting than absorbed energy and 3) It can be one of the best animals in aquaculture purposes and an effective factor to reduce blooming in aquatic areas.

Keywords: *Scope for growth, Energy budget, Temperature and Food, Physiology, Azumapecten ruschenbergerii, Chabahar Bay.*
