



Gorgan University of Agricultural
Sciences and Natural Resources

J. of Utilization and Cultivation of Aquatics, Vol. 7(3), 2018

<http://japu.gau.ac.ir>

DOI: 10.22069/japu.2019.13418.1380

Investigating the rate of Filtration of *pinctada radiata* pearl cladding different salinity

***A. Abdollah Nezhad Banaderi**

Faculty of Science, Dept., of Biology, University of Payam Noor International Qeshm

Received: 11/29/2016; Accepted: 03/28/2016

Abstract

Pearl oyster *Pinctada radiata* is belongs to the family Pteriidae and is one of the pearl oyster Persian gulf. This study was designed to determine the optimum amount of salt and its effects on the filtration Pearl maker incidents using phytoplankton *Isochrysis:saff galbana* 5 treatments salinity (20, 25, 30, 35 and 40 parts per thousand), and 3 were repeated. Shells with an average length (dorsal - ventral) 49.67 ± 6.98 mm it was gathered from the Hendorabi island. The initial density of phytoplankton to town with 100,000 cells / ml were considered and at the time of one-hour and two-hour congestion they were counted again. Most filtration rate of 35 parts per thousand salinity that it is the first time 2459.77 ± 89.46 and 14.66% increase in the second hour with 2820.39 ± 57.00 ml / hour / shellfish with Other treatments were significantly different ($P<0.05$). The filtration rate was about 20 ppt salinity levels in the first hour 140.51 ± 37.02 and in the second hour with 32.12% decrease, 40.55 ± 22.11 ml / h / shellfish with Other treatments were significantly different ($P<0.05$). The overall results showed that this species best salt for biological activity such as eating, breathing and growing incidents of Pearl is 35 ppt salinity also increases the filtration at second on 30, 35 and 40 parts per thousand reflects its ability to adapt to face in salinity.

Keywords: Pearl oyster, Hendorabi island, *Pinctada radiata*, Phytoplankton *Isochrysis aff galbana*