Comparison of morphometric characteristics of otolith in some fish species of the Persian Gulf and Oman Sea

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Receive date: 2013.07.06
Acceptant date: 2013.10.12

Abstract
This study aimed to comparison of morphometric characteristics of otolith in *Rachycentron canadum*, *Arius dussumieri*, *Arius thalassinus*, *Drepane longimana and Drepane punctata* of the Persian Gulf and Oman Sea. Sampling lasted from September 2011 to December 2012. During this period 216 specimens was cut and studied. Trawling time was 2-2½ hours and trawling depth was considered as 10-100 m daily. Catching and sampling operations was done within 24 hours. Sampling and catching was done in Khuzestan to Sistan and Baluchistan waters. All the fish were identified and their otolith was extracted to verify them. Investigation of otolith morphometric characteristics (length, breadth, weight, perimeter and area) was conducted. Data indicated correlation between most of the parameters in most of species. This shows significantly different between otolith width and otolith weight in all species ($p<0.05$). Otolith perimeter, otolith length and otolith high had significantly different ($p<0.05$) in *A. thalassinus* and *A. dussumieri but not in D. punctata, D. longimana and R. canadum* ($p>0.05$). Otolith area showed significant difference in *R. canadum, A. thalassinus* and *A. dussumieri* ($p<0.05$) but not in *D. punctata, D. longimana* ($p>0.05$). This study indicated that the particular characteristics of Sagitta are useful in identification of these species.

Keywords: Otolith, *Rachycentron canadum*, *Arius dussumieri*, *Arius thalassinus Drepane longiman*, *Drepane punctata*, Persian Gulf, Oman Sea.