Study of Histological Structure of Spleen and Head Kidney in *Otolithes ruber* and *Liza abu* from Musa Creek

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Abstract

The present study aimed to study the tissue structure of hematopoietic organs (head kidney and spleen) in two native fish species (*Otolithes ruber* and *Liza abu*) from the Persian Gulf. In this regards, 100 *Otolithes ruber* and *Lisa abu* were collected from 5 different stations including: Petrochemical, Ghanam, Zangi, Douragh and Patil stations, all situated in Mosa creek. Fish were dissected and tissue samples were taken from spleen and head kidney and fixated in formalin 15%. Tissue sections were prepared according to the routine histological methods and then were stained with hematoxylin and eosin (H&E). Increased number of melanomacrophage aggregations, degeneration of renal tubules and leukocyte infiltration were observed in both fish species collected from Petrochemical station. On the other hand, the hematopoietic organs in fish caught at Patil station had relatively normal structure. As it seems, there is a close relation between the tissue structure of studied organs and the contamination of each station. The pattern was as follow: Petrochemical station> Ghanam> Zangi> Doragh> Patil.

Keywords: Musa creek, Head-kidney, Spleen, Otolithes rube, Liza abu, Tissue structure, Hematopoietic organs.