



Histological development of eye in Caspian roach, *Rutilus lacustris* (Pallas, 1814) (Teleostei: Cyprinidae) during early ontogeny

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Abstract

Fish larvae are equipped with several sensory systems that are functional at or soon after hatching and their function are modified further throughout the larval and juvenile periods. The development of the functional eye generally is correlated with the onset of feeding. This study aimed to determine the development of the eye structure in Caspian roach, *Rutilus lacustris*, during its early ontogeny. For this purpose, the histological sections of *R. lacustris* eye from hatching up to 90 dph were prepared, examined and photographed. According to the results, the retina of the newly hatched larvae was almost completely differentiated. The most differentiations of the eye structures had been occurred until 6 dph concomitant with initiation of exogenous feeding. This fact illustrates the importance of visual sense as an eye-dependent species during its larval period.

Keywords: Eye, Retina, Ontogeny, Development.