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Scientific Journals Home Page Histological Study of the Organogenesis of the Digestive System and Swim Bladder of the

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Chalcalburnus tarichi Pallas, 1811 (Cyprinidae)

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Abstract: The histological development of the digestive system and swim bladder of Chalcalburnus tarichi larvae and their histology in adults were studied under light microscopy. After hatching, the digestive tract is a simple undifferentiated tube. Exogenous feeding started on the 6th day. The yolk sac was absorbed completely on the 9th day. The goblet cells appeared first in the bucco-pharyngeal cavity and oesophagus on the 4th day, in the anterior on the 9th day and in the posterior intestine on the 5th day. The digestive tract was differentiated as the buccal cavity, pharynx, oesophagus post-eosophageal swelling and intestine on the 5th day. At the same time, taste buds and pharyngeal teeth also started to form. In the oesophagus, the circular muscle was observed on the 9th day and the longitudinal muscle in one-year-old fish. In the intestine, the circular muscle was observed on the 35th day and the longitudinal muscle in two-year-old individuals. The wall of the digestive tract is composed of epithelial, submucosa, muscle and serosa layers. The liver lobules formed on the 3rd day and the cells began to reserve glycogen on the 10th day. The pancreatic acina formed on the 5th day and the tubular in one-year-old fish. The liver and pancreas ducts opened into the anterior intestine before the exogenous feeding started. The swim bladder was observed as one lobuled on the 4.5th day and two lobuled on the 35th day.

Key Words: Chalcalburnus tarichi, digestive system, histology

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