

Morphology of gastrointestinal tract of bearded stone loaches (Cypriniformes: Balitoridae) in water bodies of the Republic of Kazakhstan

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Loaches of the family Balitoridae (order Cypriniformes) are one of the most various taxons of the fishes in water bodies of Asia. The loaches are not important commercial fishes but they often are numerous in water bodies of the Republic of Kazakhstan (Central Asia). They can play a significant role in supporting of normal function of environment therefore. Investigations of morphology of digestive system are important for understanding evolution and ecosystem services of the loaches. Morphology of gastrointestinal tract of indigenious species like spotted thicklip loach *Triplophysa trauchii* (Kessler, 1874), Tibetan stone loach *T.stoliczkai* (Steindachner, 1866), gray loach *T.dorsalis* (Kessler, 1872), Severtsov's loach *T.sewerzowii* (G.Nikolsky, 1938), and Kuschakewitsch loach *Iskandaria kuschakewitschii* (Herzenstein, 1890) were investigated. Fishes for the investigation were totally fixed in 10% formaldehyde, and then studied in our laboratory with conventional method. All investigated species have well developed and functionally active stomachs. Intestinal tract of Severtsov's loach has no any loop, but has one well-marked bend in the middle part of intestine. Usually, the intestinal tracts of spotted thicklip loach and Kuschakewitsch's loach have 2 loops, Tibetan stone loach has 3 loops and more, gray stone loach forms one 8-like vortex and loops. Disposition of loops of intestinal tract of Kuschakewitsch loach is similar to spotted thicklip loach, but forms O-shaped space in the body. Results of that investigation revealed that morphology of gastrointestinal tract depends on species and populations and has different length and disposition of loops.

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