





Phylogeny of the genus Cobitis (Linnaeus, 1758) in the southern Caspian Sea basin using osteological characters

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The taxonomic statue of the members of the genus Cobitis is poorly recognized. Hence, the present study was conducted to study the phylogenetic relationships of two species of spined loaches from the southern Caspian Sea basin, including C. faridpaki and C. keyvani and two unknown populations of this genus from the Doogh River at the western and Gisum River at the eastern part of this basin as in-group and Oxyneomacheilus bergianus as out-group by employing a cladistic method based on osteological data. Based on the results, the member of the genus Cobitis in the southern Caspian Sea basin form a monophyletic taxon (significantly supported with 100% bootstrap values). The results showed that the genus cobitis of the southern Caspian Sea basin could be divided into two subclades, including Cobitis sp. 2 (Doogh) and C. faridpaki (Siahrud) + Cobitis sp. 1 (Gisum) + C. keivany (Babulrud). The results also do not confirm the distinction of two species i.e. C. faridpaki and C. keyvani in the southern Caspian Sea basin using osteological characters.

Keywords: Phylogeny, Cobitis, Caspian Sea basin, Osteology, Loach.

























