



Conference Abstract

Through the lens of the taxonomist: combined morphological and molecular analysis in defining species of the genus *Gyrodactylus*

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Abstract

Very little is known about the species richness and distribution of the genus *Gyrodactylus* von Nordmann, 1932 parasitising on spined loaches (Cobitidae) in Bulgaria and elsewhere. The only Bulgarian records to date are barely supported by morphological data and include the Bulgarian endemic *G. matovi* Ergens, Kakacheva-Avramova, 1966 and *G. latus* Bychowsky, 1933, both reported from *Cobitis taenia* Linnaeus, 1758. The controversy of these findings is amplified by the fact that recent ichthyological studies reveal that the reported host species is not present in Bulgaria but two other species of *Cobitis* inhabit Bulgarian rivers. The genus *Sabanejewia* Vladykov, 1929 has also been examined but has not been found to harbour any monogeneans. In an attempt to unravel their ectoparasitic fauna, spined loaches of the genera *Cobitis* and *Sabanejewia* were sampled from 11 rivers across the country, belonging to the Danube watershed and the Aegean Sea basins. The analysis of the collected monogeneans included a morphological examination of the haptor hard parts and a molecular analysis of the ITS1-5.8S-ITS2 fragment of the ribosomal DNA. The results revealed one previously undescribed species for the genus *Sabanejewia*, one undescribed species parasitic on both *Cobitis* and *Sabanejewia*, one undescribed species from the genus *Cobitis* and the presence of *G. latus*, whose sequence is yet unpublished. All described parasites were collected from fish from different localities.

Keywords

Gyrodactylus, Monogenea, *Cobitis*, *Sabanejewia*, spine loaches, Danube watershed basin, Aegan Sea basin, Bulgaria

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Conflicts of interest

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