Summary

The Polish fauna of gudgeons and Romanogobio fish comprises three species: Gobio gobio L., Romanogobio kessleri Dybowski, 1862 and R. albipinnatus Lukasch, 1933. The knowledge of their parasites is fragmentary and inconsistent. The list of parasites of G. gobio recorded from Poland contains 34 taxa, of which 31 are identified to species level. Two species of Digenea have been reported for R. kessleri, whereas the parasites of R. albipinnatus have not been hitherto studied. The world list of parasites of three aforementioned fish species is much more extended, however the discrepancy in the state of knowledge of parasites between particular host species is still significant. The list comprises representatives of 90 taxa (incl. 81 identified to species level) recorded for G. gobio, 24 taxa (incl. 21 identified to species level) - for R. albipinnatus and 10 taxa (incl. nine identified to species level) - for R. kessleri.

The present studies aimed at faunistic survey of parasites associated with G. gobio, R. kessleri and R. albipinnatus, sympatrically occurring in the San River, south-eastern Poland. The basic indices of parasitic infections, depending on the phenological period, were evaluated. An attempt was made at estimating the host specificity of parasitic taxa in relation to the examined fish hosts.

The material comprising 390 specimens of fish was collected at four localities distributed along the San River, being the only river in Poland with sympatric occurrence of the examined host species. The material was subject to parasitological analysis.

Altogether 9 954 parasites representing 33 taxa (incl. 29 identified to species level) were obtained. Representatives of 26 taxa (incl. 23 identified to species level) were found in G. gobio, 15 taxa (incl. 11 identified to species level) - in R. albipinnatus and 25 taxa (incl. 22 identified to species level) - in R. kessleri. The overall prevalence for all three fish hosts attained 99.48%. The highest prevalence rate and mean intensity of infestation in all three hosts were recorded for metacercariae of Diplostomum pseudospathaceum. Of the 33 taxa of parasites recorded during the studies, as many as 12 (incl. 10 identified to species level) were common to all three host species, which equaled 36.36% of all recorded taxa. Three species – Dactylogyrus cryptomeres, D. finitimus and D. gobioninum – were recorded as new to the Polish fauna. A higher species richness was observed in the spring-summer period. The qualitative and quantitative differences in the parasitic fauna of gudgeons and Romanogobio fish occurring in Poland, may be mainly due to the differences in microhabitats occupied by the host species. Despite the closer relationships between the two representatives of Romanogobio, no significant similarity in their parasitic fauna was observed.

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