

# Taxonomic Composition and Dominant Structure of Macrozoobenthos in the Blagoevgradska Bistritsa River

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**Abstract:** The Blagoevgradska Bistritsa River is one of the main tributaries of the Struma River and the basic water source of the city of Blagoevgrad. A contemporary assessment of its ecological condition was made based on complex morphometric, hydrometric, physical-chemical, and hydrobiological studies carried out in 2002 and 2003. The taxonomic composition was determined and the dominant structure of the macrozoobenthic communities is commented in this paper. Totally for the river during the whole period of investigation 236 benthic animals taxa are reported. Eighty seven of them (57 species, 24 genera and 6 families) were found for the first time for the river fauna. A hundred and two taxa were not detected in comparison with previous periods. Species typical of the upper river courses (high flow velocity, low temperature and high dissolved oxygen content) *Baetis alpinus*, *B. muticus*, *Ecdyonurus epeorides*, *E. sylvicola*, *Nemoura* sp. or eurybiontic species as *B. rhodani* and *Chironomus* gr. *riparius* had the highest frequency and degree of dominance in 2002 and 2003.

**Key words:** Blagoevgradska Bistritsa River, macroinvertebrate benthic fauna, dominant species.