

# Composition and Abundance of Macroinvertebrate Communities in the Arda River (South Bulgaria) in Relation to Some Ecological Factors

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**Abstract:** Studies of the composition and abundance of benthic macroinvertebrate communities at six sampling sites in the Arda River (South Bulgaria) were carried out in 2002 and 2003. Seventeen benthic groups on different taxonomic levels were established. The Chironomidae family (Diptera) and the Ephemeroptera and Trichoptera orders were most frequent and/or dominated in the communities, while the remaining benthic groups were more seldom identified or their populations were less numerous. Changes in the distribution of macrozoobenthic coenoses along the river were observed, related to temperature fluctuations and substrate character as part of the effect of the reservoirs. Great variations in the abundance and species composition of macrozoobenthic communities at the studied sites were reported, mostly related to the specific abiotic conditions.

**Key words:** macroinvertebrates, environmental factors, reservoirs, Arda River, South Bulgaria