

Diatoms of the Dojkinec River (Nature Park
"Stara planina", Serbia)

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DIATOMS OF THE DOJKINCI RIVER (NATURE PARK "STARA PLANINA", SERBIA)

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The Dojkinci River belongs to the Nature Park „Stara planina“, Eastern Serbia. The river has never been investigated by algologists. Diatom samples were collected during July 2010 on 15 localities from different types of substrate including stone surfaces, sand, mud, filamentous algae and submerged mosses. In the laboratory, samples were cleaned by standard cold acid method, and permanent slides were observed by light microscope.

During the investigated period, a total of 124 taxa were determined within 43 genera. Among numerous common diatoms we recorded three taxa for the first time in Serbia: *Brachysira intermedia* (Øst.) Lange-Bertalot, *Chamaepinnularia mediocris* (Krass.) Lange-Bertalot and *Navicula tridentula* Krass.. Also, we observed 21 taxa which are rarely recorded taxa for Serbia. The most interesting was *Diatomella balfouriana* Grevill. In Serbia, it was known only from the River Tisa near Titel (Szabados 1966). In the studied material, it was identified only in samples collected from the surface of rocks at the third locality. We observed it in mass, together with *Tetracyclus rupestris* (Braun) Grun. Their morphology, distribution and ecology is presented in this paper.

The objective of this investigation is to show that our knowledge of the diatom flora of Serbia is very poor despite the growing efforts in the immediate past. Evaluation of the floristic richness of diatoms in the river is a necessary, further step. These new information increases our knowledge of the river system, which is important for further prediction of diatoms as bioindicators, and monitoring programs.