

**EVALUATION OF THE ECOLOGICAL WATER QUALITY IN STREAMS OF
THE LAKE N. PLASTIRA REGION (C. GREECE) IN APRIL AND JULY 2000.**

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ABSTRACT

Fifteen sites were sampled for macrobenthic organisms, and physicochemical parameters taken in streams discharging into Lake Plastira (Central Greece) at two different seasons. The recording of the physical structure of the sites had also taken place parallelly to the samplings in spring. Biotic indices, habitat quality scores, the multi-variate techniques of FUZZY and CANOCO, the ordination technique of PCA and correlation matrices were applied to the data. It was found that site 2J had a distinctly different macrobenthic community, with all biotic indices, the Hellenic as well, designating it as having a poorer water quality than all the other sites. The latter may be due to the increased sediment deposition into the stream as a result of anthropogenic influences or to its high fine sediment composition. The application of the Hellenic score for the first time proved to have as an advantage the fact that it takes into account habitat deficiencies. The assessment of the streams' habitat quality showed that site 1A was the poorest. Neither the number of taxa nor the Greek LQI proved to be correlated to the habitat quality scores. The application pointed out problems that have to be solved in the future studies.