



Biological Assessment of Water Quality in the National Park of Prespa Lake Using Macroinvertebrates as Bioindicators

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Abstract: Macroinvertebrates were examined for use as potential biodiversity indicators in continental aquatic ecosystems in a semiarid Mediterranean region, the Prespa Lake basin. Biological assessment is one of the monitoring methods, which gives data related with the water quality. This assessment effectively describes water quality physical and anthropogenic impact (R. W. Plotnikoff, 1994). In our study are used the main groups of invertebrates which are phylum *Arthropoda*, phylum *Annelidae*, phylum *Mollusca*. The present work reports the results of an intensive study on water quality and benthic macroinvertebrates fauna of Prespa Lake basin, in Albania. The research was carried out at two sampling sites (two villages, Liqenas and Zaroshka) of the lake between November 2008 and August 2009. A total of 21 macroinvertebrate taxa were recorded. The species richness patterns of *Coleoptera*, *Ephemeroptera*, *Plecoptera* and *Trichoptera* were significantly correlated with EPT and BI value. Low macroinvertebrate abundance was observed during winter in both stations, this would be the result of the climate factor. At the present, it is under threat of anthropogenic disturbances, this especially in Zaroshka village. In spite of this, Prespa Lake shows good water quality conditions.

Key words: *Sensitivity, EPT, EPT-BI, Tolerance value, water quality.*

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