J. Int. Environmental Application & Science, Vol. 6 (5): 710-716 (2011)

Assessment of Water Quality of Mat and Shkumbin Rivers, According to the Dates of Benthic Macroinvertebrates in 2009-2010

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Received June 11, 2011; Accepted December 15, 2011

Abstract: According to the instructions from Water Framework Directive (WFD) for the water bodies' study, benthic macro invertebrates are an important element. The purpose of this study, realised in 2009-2010, is the identification of the relations between benthic macro invertebrates and the assessment of ecologic elements, which characters two rivers of Albania, Shkumbin and Mat. The results show that the total number of organisms, in four stations of Shkumbin, is 1052, 27 of which are related to 27 taxons. In Mat, are found 2641 organisms which are related to 39 taxons. EPT-Biotic Index shows different values in different stations: St 1= 2.26; St 2 =2.49; St 3 = 3.97; St 4 =3.96. Mat results with these values: St 1 =3.71; St 2 =3.67; St3 =3.85; St 4=3.7. According to these results, the water quality of two stations of Shkumbin and three stations of Mat, is excellent (0-3.75), while in two other Shkumbin's stations and in the other Mat's station is good (3.75-6.5). We also accounted for rivers, SWRC-Index Biotic and the two parameters accord to each other. Both rivers have a good water quality and a light impact.

Keywords: *Macro invertebrates, Biotic Index, Water Quality, EPT-Index, SWRC*-Index.

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[#]*This paper has been presented at Abalakes-2011 Elbasan, Albania*