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**5th CONGRESS OF ECOLOGISTS
OF THE REPUBLIC OF MACEDONIA
WITH INTERNATIONAL PARTICIPATION**

ABSTRACT BOOK

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I. Конгрес на еколозите на Македонија со меѓународно учество (5 ; 2016 ; Охрид) види Congress of ecologists of the Republic of Macedonia with international participation (5 ; 2016 ; Ohrid)

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ecological and esthetic problem, because many of them produce metabolites that modify the rock surfaces and cause damage to these natural heritage sites.

Keywords: aerophytic cyanobacteria and algae, extreme habitats, conservation, Gloeocapsa, Chlorella

Diatoms diversity and ecological status of the Đetinja River (Serbia)

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The Đetinja River is located in western Serbia and it was dammed for creating the artificial Vrutci Lake. Samples were collected during 11 sampling events (September, October and December 2014, March, April, May, June, July, August, September and October 2015). Epilithic diatoms were scraped from the stones by brush. Permanent slides were observed by Zeiss AxioImagerM.1 microscope with DIC optics at magnification x1600 and AxioVision4.8 software. The relative abundance of diatoms was estimated by counting 400 valves of each taxa. The biological assessment of water quality was performed using diatom indices calculating by OMNIDIA 5.3 software.

Total of 113 diatom taxa have been recorded in the studied samples. *Achnanthydum minutissimum* was abundantly developed in mass and predominated over the other diatoms in almost all sampling periods. In some periods it was followed by *Amphora inariensis*, *A. pediculus*, *Cocconeis placentula* var. *lineata*, *Gomphonema olivaceum*, *Nitzschia amphibia* and *N. fonticola* as dominant or subdominant taxa in the community. The diatom indices analysis showed good to very good ecological status of the Đetinja River in the investigated period. They indicated absence of organic pollution. In almost all sampling events anthropogenic eutrophication was low, except in March when it was moderate. In March *Gomphonema olivaceum* was dominant taxon in the epilithic diatom community as β -mesosaprobous, eutraphentic taxon.

The Đetinja River was characterized by high species diversity and good to very good ecological status which matches with the literature data about rivers and streams with low level of pollution which are characterized by high species richness.

Keywords: *Achnanthydum minutissimum*, *Gomphonema olivaceum*, diatom indices, OMNIDIA.