Living Neretva-Towards EU standars in the Neretva river basin (BiH)

26-27 May 2008

Environmental Flow Working Group (WFD-WG1):

PHYTOBENTHOS IN THE RIVER TIHALJINA - MLADE

Natasa Smolar-Žvanut, *Ph.D.*
Aleksandra Krivograd Klemenčič, *Ph.D.*

THE OBJECTIVES:

- → **Species composition**
- → **Water quality**
- → **Similarity among sampling sites**

MATERIAL AND METHODS

- 5 samples T1-T5, 28th of April 2008
- Species were determined by light microscope Nikon Eclipse E400 (magnification 1000×)
- Scale for estimation of algae taxa abundance: 1, 3, 5
- Pantle-Buck index
- Bray-Curtis coefficient of similarity

RESULTS

In total, 69 taxa and 5 algal classes were identified in all five sampling sites

- Diatoms prevailed with 58 taxa, followed by
- Cyanophyceae with 5,
- Chlorophyceae with 3,
- Florideophyceae with 2 and
- Zygnematophyceae with 1 takson.

Number of phytobenthos species:

T1	T2	T3	T4	T5
20	38	20	40	25

- Many present species are common species on travertine

RESULTS – cont.

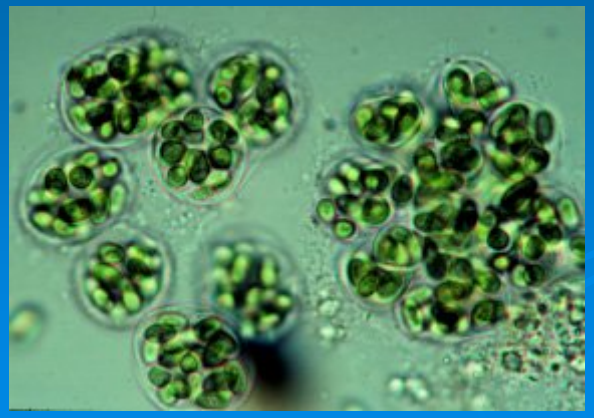
Saprobic index:

T1: 1. quality class

T2-T4: 1-2. quality class

Table 2: Number of indicator taxa for single saprobic level

	T1	T2	T3	T4	T5
oligosaprobic	10	15	6	9	9
oligo-betamezo saprobic	3	9	3	9	4
beta mezosaprobic	4	7	4	9	7
betamezo-alfamezo saprobic	/	1	/	3	/
oligo-alfamezo saprobic	1	1	/	1	/



RESULTS – cont.

Bray-Curtis coefficient of similarity: