Rotifers, Composition and Dynamics in Bovilla Reservoir - A Case Study

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Abstract Bovilla reservoir is the main drinking water storage for at least 800 000' inhabitants in the capital city of Albania. Being rather younger, ten years old, and with such important status, it was the time for studying different changes, which might have starting, in the physical and biological processes. In May 2006 was implemented an interdisciplinary study for the reservoir and nearby region, having as main aim the evaluation of water quality depending on different parameters (physical, chemical, phytoplanktonical, zooplanktonical, and mikrobiological). The data presented here are part of that big project presented in different papers since then, but in a particular way here is been analyzing only one zooplanktonic' group (rotifers, cladocera and copepoda) dealing with. Based on the sensitivity to some physical and chemical conditions allow using rotifers and other zooplankton species as bioindicators of aquatic ecosystem saprobity. Sampling data were taken every two months in two years, in the deepest station and also two other stations for the first year. From the results we got a list of 26 species from the group of Rotifera, where almost all are cosmopolitan species, but still few of them have been spread through all the year. These most dominant species were: *Keratella cochlearis*, *Keratella quandrangula*, *Kellicotia longispina,* and *Polyarthra tryg*la; even in a low densities compare to the other groups of zooplankton that were studied. They are quite tolerant species from changes of temperatures, pH, but the distribution of them follows the distribution of oxygen, or other food sources mostly in the upper layers (3 to 5 meters). Saprobiological analysis showed that the investigated area during these periods had values from 1.2 to 2.5, which correspond to I, and I- II water category.

Key words: *Bovilla reservoir, rotifera, composition, dynamics, bioindicator.*

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