

Claudia Nagy

Ms. Claudia Nagy (37 yrs) is a biologist at the Romanian Water Authority, Somes-Tisa Directorate.



What did you study, when, where and most importantly: why?

I studied ecology and environmental protection at the Babes-Bolyai University of Cluj Napoca (Romania) in the 1990ies. I specialised on studying the benthic macroinvertebrates and their relationship with abiotic factors. I am dealing with all macroinvertebrates, especially with aquatic oligochaetes [*a certain group of segmented worms*].

My PhD studies were focused on the role of aquatic oligochaetes in the structure and function of different ecosystems (pristine or very modified). The study was a contribution to the knowledge of aquatic Oligochaeta (Annelida) fauna of Romania. Aquatic ecosystems are very important part of the environment and they should know better in order to protect them effectively.

What will your role be on board of the JDS3 ships?

I will be responsible for sampling benthic macroinvertebrate from different habitats in the littoral zone. For this, we will use kick and sweep methods. We are interested not only in the abundance of species, but also in their preference for the substratum, and flow velocity.

Why is this important? What can we learn?

Macroinvertebrates are particularly well suited for assessing ecosystems, since a comparatively large amount of data exists, the identification is relatively simple for some taxonomical groups, and they occur in large numbers in all stream types. The faunal composition of stream macroinvertebrates is controlled by environmental variables acting at different spatial scales.

The first assessment methods indicate the impact caused by human activities through organic pollution on the in-stream benthic community. Recently, hydromorphological degradation has been identified to be an important stressor affecting the in-stream biota in many countries stream types.

For this reason, our samples are very important for development of a new assessment method (especially for large river) taking into account all the environmental factors.

What is an important gain from JDS3 specifically for your country of origin?

Romania is the last country that the Danube passes on its way to the Black Sea. It has a lot of beautiful places that we can see along the river, a lot of places that we should keep clean and safe for the aquatic



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flora and fauna. A good management of this natural resource is the key for environmental protection. I hope this JDS3 will lead to good results in order to provide effective methods of assessment of water quality and good ideas of what nature means.

What are you looking forward to regarding the JDS3?

This expedition on the Danube River is a great opportunity for me. Why? Because I can see a lot of places that I never saw, a lot of aquatic ecosystems of different type; each of them could bring into the light something new regarding the diversity of species, the invasive species and something new about their behaviour in correlation with the stressor factors. I hope I would find some interesting species of oligochaetes, ideally a new species for me.

I like my work very much, I like to work with other people, to be inside a team. I hope that our work can help people understand the importance of nature for us and for our children.