Topic 3/ Poster

New records of the tropical aquatic worm *Branchiodrilus* (Clitellata, Naididae) in the Danube River

Ana Atanacković[1], Katarina Zorić[1], Božica Vasiljević[1], Marija Ilić[1], Bela Csanyi[2], Momir Paunović[1]

[1] Department for Hydroecology and Water Protection, Institute for Biological Research 'Siniša Stanković', University of Belgrade, Bulevar Despota Stefana 142, 11060 Belgrade, Serbia; E-mail: adjordjevic@ibiss.bg.ac.rs
[2] Centre for Ecological Research/Danube Research Institute, Hungarian Academy of Sciences, 29 Karolina Street, 1113 Budapest, Hungary

The naidid genus *Branchiodrilus* is very common in Asia, and according to some authors, the first discovery of this aquatic oligochaeta in Europe was in the Botanical Garden in London together with the tubificid species *Branchiura sowerbyi*. This specimen was described in 1890 as *Branchiodrilus semperi*. Since then, it has been recorded in the Netherlands, Belgium, France, and Slovakia as the species *B. hortensis*. A recent molecular phylogeny suggested that species complexes may occur within the genus *Branchiodrilus*, potentially represented by 10 different species. However, morphological examination has grouped all specimens from the Palearctic Region and suggested that all of them belong to the same species, probably *B. hortensis*, one of the three nominal species of the genus. Furthermore, the latest molecular analysis has conformed that the Oriental region might be the centre of origin, from which *Branchiodrilus* species have dispersed and radiated. In our latest investigation of the Danube River (September 2018 and April 2019), along a river section of 588 rkm in Serbia, we recorded *Branchiodrilus* specimens at four localities: Ram (8 ind.), Veliko Gradište (14 ind.), Donji Milanovac (2 ind.), and Kladovo (56 ind.). The scattered findings and native distribution of this worm suggests that its introduction in the Danube River has probably been human mediated. These new records are valuable contribution to the knowledge of the species distribution. In this phase, we are not able to predict the possible effects of *Branchiodrilus* on the aquatic ecosystems, and therefore, further monitoring on its distribution and population dynamics is necessary.

Key words: New records, invasive species, Serbia, the Danube River.

Acknowledgements: The preparation of the manuscript was supported by the Ministry of education, Science and Technological Development of the Republic of Serbia, Project No. TR37009.