

Invading the Danube River: range extension of Ponto-Caspian polychaete *Manayunkia caspica* Annenkova, 1929

Ana Atanacković¹, Katarina Zorić¹, Jelena Tomović¹, Marija Ilić¹, Bojana Tubić¹, Bela Csányi², Momir Paunović¹

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

Freshwater polychaetes are most diverse in the Palaearctic Region and beside Lake Baikal, the second notable area of diversity is the Ponto-Caspian region, comprising low saline waters (0.5–5%) of the Black and Caspian Seas. There are several characteristic polychaete species that are spreading from this area and among them are *Hypania invalida*, widespread in European freshwaters, and *Manayunkia caspica*, which distribution range has been probably prevented for a long time due to the Iron Gate dam. The latter Ponto-Caspian relict was found in the Danube River for the first time in 1943 and has been well known along almost the entire Romanian stretch of the river. It reached the Serbian Danube part in November 2005. After that the species has been repeatedly found at 934 rkm (the town of Kladovo), in the reservoir Iron Gate II. During the Joint Danube Survey 3 (JDS 3) in September 2013, *M. caspica* was recorded at five localities in total: Romania/Bulgaria: Pristol/Novo Selo; Hungary: upstream Budapest and Szob; Slovakia/Hungary: Iza/Szony and Klizska Nema as the most upstream locality. These findings moved the limit of the species distribution upstream of the Iron Gate and confirmed that this Ponto-Caspian relict, extend its known distribution from the Ponto-Caspian region to the Central and Western Europe. It is obvious that *M. caspica* has become a regular element of the macroinvertebrate fauna along the entire stretch of the Danube River, establishing its populations. Additional research is needed in order to understand better how the presence of this species will affect the existing communities.

Key words: Polychaeta, alien species, range extension, the Danube River.

Acknowledgements: The material was collected during the Joint Danube Survey 3, and the investigation was coordinated by the Secretariat of the International Commission for the Protection of the Danube River. The preparation of the manuscript was supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia, Project No. III43002.