## DISCOVERY OF POLYCHAETE SPECIES MANAYUNKIA CASPICA (ANNENKOVA, 1929) IN THE SERBIAN SECTOR OF THE DANUBE. Dunja Jakovčev-Todorović, Vesna Đikanović, Snežana Milošević, and P. Cakić. Siniša Stanković Institute for Biological Research, 11060 Belgrade, Serbia

Key words: Polychaeta, Manayunkia caspica, new record, Danube River, Serbia

Information on distribution of the polychaete *Manayunkia caspica* in the literature is scarce and out-of-date. The hitherto known distribution includes the Ponto-Caspian area and Bulgarian part of the Danube River (G e r l a c h, 1978; R u s s e v and M a r i n o v, 1964; R u s s e v *et al.*, 1998; U z u n o v *et al.*, 1998). *Manayunkia caspica* originates from the Ponto-Caspian basin (Caspian Environment Programme, 2001), and it has not been previously found in most European areas. This new record of *M. caspica* moves the limit of distribution of the given species 122 km upstream along the Danube watercourse.

## Manayunkia caspica (Annenkova, 1929)

Four undamaged specimens of *M. caspica* (Annenkova, 1929) from the Serbian part of the Danube were examined. All individuals were collected in September of 2005 near the townlet Tekija (44° 41′ 2" N, 22° 24′53" E; altitude of 477 m; km 956 of the watercourse; depth of 9 m). The observed specimens are stored in the collection of biological material of the Benthological Section of the Siniša Stanković Institute for Biological Research in Belgrade (ref. number 935/2005). All morphological and morphometric characters of the examined individuals correspond to the guides of A n n e n k o v a (1930), R u s s e v and M a r i n o v (1964), and T i m m (1999). Specimens were photographed using a Leica FFC280...DFC480 digital camera, a Leica DMRB microscope, and TWAIN software.

The species is characteristic of fresh (potamon) and brackish water (G e r l a c h, 1978). *Manayunkia caspica* was found in a habitat that mainly contained very fine sand and silt (grains not visually perceptible, <0.125 mm) and fine and coarse sand (grains visually perceptible, 0.125 - 0.5 mm and 0.5 - 2 mm, respectively).

Subsidiary taxa of benthoinvertebrates discovered at the same sampling location as *M. caspica* were as follows: nematodes; turbellarians [*Polycelis tenuis* (Ijima, 1884) and *Planaria torva* (Müller, 1773)]; polychaetes [*Hypania invalida* (Grube, 1860)]; oligochaetes [*Amphichaeta leydigi* (Tauber, 1879), *Lim-nodrilus claparedeanus* (Ratzel, 1868), *Tubifex tubifex* (Müller, 1774), *Enchytraeus albidus* (Henle, 1837), *Mesenchytraeus* spp., and *Lumbriculus variegatus* (Müller, 1774), Lumbriculidae]; gastropods [*Theodoxus danubialis* (C. Pfeiffer, 1828) and *Theodoxus fluviatilis* (Linnaeus, 1758)]; bivalves [*Corbicula fluminalis* (Müller, 1774), *Corbicula fluminea* (Müller, 1774),

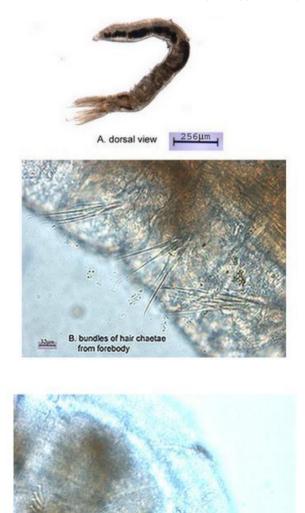




Fig. 1. Individuals of *Manayunkia caspica*. A – dorsal view; B – bundles of hair chaetae from forebody; C – bundles of crotchets from posterior segments.

UDC 595.142 (497.11)(282.243.7)

and *Dreissena polymorpha* (Pallas, 1771)]; isopods [*Jaera sar-si* (Valkanov, 1936)]; amphipods [*Corophium curvispinum* (Sars, 1895) and *Corophium robustum* (Sars, 1895), Gammaridae]; and chironomid larvae.

To judge from the literature data mentioned above, this finding is the northernmost record of *M. caspica* in the Danube and the most recent one. As already stated, the finding moves the limit of distribution of this Ponto-Caspian relict. The Danube River Basin is one of the main corridors for its expansion into Central Europe.

Acknowledgements - This work was supported by Grant 143023 from the Ministry of Science and Environment Protection of the Republic of Serbia.

*References* - Annenkova, N. P. (1930). The freshwater Polychaeta of the U.S.S.R. Key to Determination of Freshwater Organisms of the USSR.

2. Leningrad. - Caspian Environment Programme, (2001). Caspian flora and fauna species checklist, http://enrin.grida.no/caspian/additional\_info/species\_checklist.pdf. - Gerlach, S. A. (1978). Polychaeta (einschliesslich Archiannelida). In: J. Illies (ed), Limnofauna Europaea, 2nd edn. Gustav Fischer Verlag, Stuttgart, New York, 1-138. - Russev, B., Marinov. T. (1964). Über die Polychäten- und Hirudineenfauna im Bulgarischen Sektor der Donau. Bulletin de l'Institut et Musée de zoologie, XV: 191-197. - Russev, B., Petrova, A., Janeva, I. and Andreev, S. (1998). Diversity of zooplankton and zoobenthos in the Danube River, its tributaries, and adjacent water bodies. In: C. Meine (ed), Bulgaria's Biological Diversity: Conservation Status and Needs Assessment, Volumes I and II, Washington D.C., Biodiversity Support Program, 261-292. - Timm, T. (1999). A Guide to the Estonian Annelida. Estonian Academy Publishers, Tartu, Tallinn, 1-208. - Uzunov, Y., Kovachev, S., Kumanski, K. and Ludskanova-Nikolova, J. (1998). Aquatic Ecosystems of the Aegean and Black Sea Basins. In: C. Meine (ed), Bulgaria's Biological Diversity: Conservation Status and Needs Assessment, Volumes I and II, Washington, D.C., Biodiversity Support Program, 293-318.