

## The most westward European occurrence point for *Dreissena bugensis* (Andrusov 1897)

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The occurrence of *Dreissena bugensis* (Andrusov 1897) from the Romanian Danube is reported.  
This represents the most westward occurrence point of quagga mussel in Europe.

*Dreissena bugensis* (quagga mussel, Fig. 2, 3) was found by Andrusov in 1890 in a narrow region of the Bug river. The species remained in its natural range until 1940, when it began to spread in the Ponto-Azov basin (ZHULIDOV et al. 2004). Later (1940–1990) *D. bugensis* started to spread to the north of the Black Sea, Dnjepr river and Volga basin. (ZHULIDOV et al. 2005, ORLOVA et al. 2004). Apparently the species is absent from Western Europe, but it was found in the Great Lakes in North America, in 1989 (MAY & MARSDEN 1992).

The presence of the species in the river tributaries to the Black Sea was considered to be possible, but no evidence was found to prove it. In Romania, the species was found for the first time at Cernavoda (44°21'N, 28°02'E) in the Danube river in 2004, at depths ranging from 0 to 5 m below the water surface, on concrete aquatic structures (MICU & TELEMBICI 2004).

Locality and material examined: SW Romania, Drobeta Turnu Severin (44°37'13.68"N, 22°40'49.40"E), in an abandoned fishing net on the bottom of the Danube river, August 23, 2005, 20 living adult specimens, L. Popa leg., O. Popa det. This is the second finding of the species in Romania and it represents the most westward occurrence point for the species *D. bugensis* in Europe. This

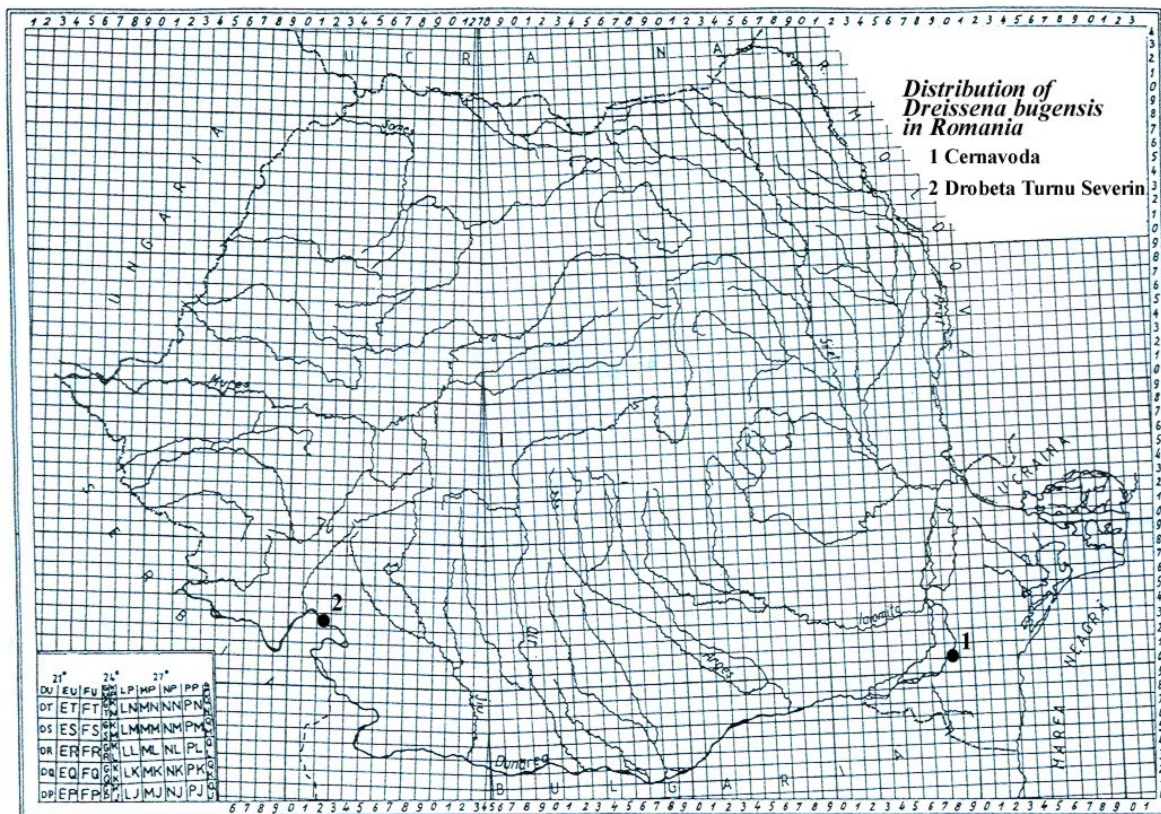
finding documents the range expansion of the quagga mussel, and it's worth mentioning that the Rhine-Main-Danube Canal offers no physical barrier to the spreading of this invasive species to Western Europe. (MÜLLER et al. 2002).

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**Fig. 1** The distribution of *Dreissena bugensis* in the Romanian sector of the Danube river. 1 – the first record in Romania; 2 – the most westward collection point of *D. bugensis*.



**Fig. 2.** Specimens of *Dreissena bugensis* from Romanian Danube (Photo O. Popa)



**Fig. 3.** *Dreissena bugensis* from Great Lakes, Nort America (Photo ©USGS-NASbase)