

## ***Melanoides tuberculata* (Müller, 1774), a new species for the territory of Serbia (Gastropoda: Thiaridae)**

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### **Abstract:**

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This article relates to the first record of *Melanoides tuberculata* (Müller, 1774) for the territory of Serbia. Its distribution in the region of "Niška banja", eastern Serbia is a consequence of its release by aquarists at thermal water stream called "Topla voda". Short habitat description and the areal are given.

**Key words:** *Melanoides tuberculata*, first record, Niška banja, Serbia, Thiaridae

The freshwater benthic snail *M. tuberculata* belongs to the family Thiaridae and many of its native varieties were distributed all over the East Africa, Tropical Asia and Southeast Asia (Malek & Cheng, 1974). Today, they are extensively dispersed in the tropical and subtropical regions of the world (Bede, 1992; Pointier, 1993). Regions that this snail invaded include North America (Murray, 1964) and South America (de Marco, 1999). Also, the most widely used taxonomy in Europe, "Fauna Europaea" reveals presence of mentioned thiarid snail in Austria, France, Germany, Hungary, Italy, Malta, Netherlands, Poland, Slovakia and Spain (Fauna Europaea, 2011). According to available literature data, *M. tuberculata* was never recorded in Serbia. Usually named "Malayan snail", commonly reaches a length of 30-36 mm (Thompson, 1984). He is ovoviviparous (Ben-Ami & Hodgson, 2005) and parthenogenetic species (Pointier and Guyard, 1992; Pointier *et al.*, 1993), with diet that mostly consists of fine detritus and epiphytic algae (Madsen, 1992).

The authors visited "Topla voda" (Fig. 1) stream on 27. November 2011, near "Niška Banja" settlement (Latitude: 43, 17' 46"; Longitude reference: North latitude, Longitude: 22, 0' 0" Longitude reference: East longitude).

On this occasion, authors observed a single specimen of gastropods and realized that it represents *M. tuberculata*, thiarid snail who is well known to aquarists.

This allochtone species was noted in a small, fast flowing, thermal stream called "Topla voda" which is composed of two thermal water sources: "Suvo vrelo" and "Školska česma". This habitat is under the influence of temperate climate at the altitude of 210 m (Dragić *et al.*, 1997).



**Figure 1.** "Topla voda" stream, located near settlement "Niška banja" Photo: Vladimir Gligorijević

The riverbed was covered in sludge and sand with some smaller rocks in the middle. The specimens were photographed on a stream bottom (Fig. 2) during that survey and then fixed in alcohol for later identification according to [http://el.ercd.usace.army.mil/ansrp/ANSIS/html/melanooides\\_tuberculata\\_red\\_rimmed\\_melania.htm#Mtu tuberculata\\_Identification](http://el.ercd.usace.army.mil/ansrp/ANSIS/html/melanooides_tuberculata_red_rimmed_melania.htm#Mtu tuberculata_Identification) and [http://www.gastropods.com/9/Shell\\_11379.shtml](http://www.gastropods.com/9/Shell_11379.shtml). Ten specimens, 25.3mm to 34.1mm in length were measured with vernier calliper and then collected and used for mentioned identification.

The actual distribution of *M. tuberculata* in "Niška banja" thermal stream called "Topla voda" is certainly the consequence of its inadequate manipulation by local acquirists. The finding of *M. tuberculata* increases the number of known species of Gastropoda for the territory of Serbia.

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**Figure 2.** *M. tuberculata* in nature habitat at "Topla voda" stream., Photo: Miodrag Milenković

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