Gyraulus elenae sp. n.—a new Planorbid snail from Eastern Turkey (Mollusca: Gastropoda: Planorbidae)

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The most recent complete list of the basommatophoran snails of Turkey (Yildirim et al., 2006) includes eight species of the genus Gyraulus Charpentier, 1837 (sensu Meier-Brook, 1983). Four of them have wide Palearctic or even Holarctic distribution, whereas the rest are of the Mediterranean – Near Eastern type of distribution. However, this species list is clearly far from completeness as recently several new species of Gyraulus have been recorded for Turkey, including four species (Gyraulus pamphylicus Glöer et Rähle, 2009, G. nedyalkovi Glöer et Georgiev, 2012, G. egridirensis Glöer et Girod, 2013, and G. taseviensis Glöer et Girod, 2013) described as new for science. In this note, we describe one more Gyraulus species from waterbodies of Eastern Turkey and provide a determination key for all species of the genus recorded hitherto from Turkey.

Museum abbreviations: Zoological Museum Hamburg, Germany (ZMH), Zoological Institute of the Russian Academy of Sciences, Sankt-Petersburg, Russia (ZIN), Museum of Siberian Aquatic Molluscs, Omsk State Pedagogical University, Omsk, Russia (MSAM).

Gyraulus elenae sp. n. (Fig. 1, 2; Table 1)

Type locality: Eastern Turkey, Rize Province, Findikli District, a spring in the valley of the Chaglayan (Çağlayan) River. 41°11’13.80” N, 41°19’3.59” E. The spring is situated nearly 19–20 km above the mouth of the Chaglayan River.

Material studied. Type series (holotype and 2 paratypes) is kept in ZMH (holotype: ZMH 79657; paratypes: ZMH 79658). Another paratypes are in the collections of ZIN (5 ex), MSAM 14-1278 (2 ex) and collection of P. Glöer (1 ex).

Shell description. Shell small (1.75–2.6 mm width), periostracum color is yellowish brown or dark brown, consists of 2.5–3.5 (2.77 in average) rounded whorls. Keel or peripheric angle are absent. The first whorls are flat (not immersed), the basal side is wide, deep umbilicated, the first whorl is clearly visible through the umbilicus. The surface if finely striated and glossy. The aperture is broad and slightly deflected, its height is nearly 0.75 of its width (limits 0.65–0.83, average 0.74). The body whorl is relatively high (0.25–0.30 of the shell diameter) and wide, its width may reach 0.8–1.0 mm.

Soft body. Head, foot and mantle of the animal are dark gray without any characteristic pattern of coloration.

Anatomical traits. The preputium and the penis sheath are of nearly same length (see Fig. 1). The former is visibly wider and somewhat inflated in the proximal end. The penis sheath is narrow and oblong. The bursa copulatrix is club elongated with a short bursa duct. The prostate gland bears eight long finger-shaped diverticles.

Differential diagnosis. It is the smallest species of Gyraulus of the Near East region and Caucasus. Besides, it is the only species in which the initial whorls are not immersed and the umbilicus is so wide that the first whorl is visible through it. More information on diagnostic traits of G. elenae sp.n. and related species is given below in the identification key.

Distribution. The species is known from the type locality and two other spring situated in closer proximity to the latter with coordinates 41°11’17.13” N, 41°18’41.49” E (see Fig. 2). Most probably, it will be found in adjacent districts of Georgia and other part of Turkey.