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**A small and peculiar malacological sample from
Kálmán Csák, with note on the first record of the
bivalve *Pisidium supinum* A. Schmidt, 1851
(Mollusca, Pisiidae) in Romania**

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Abstract. We report herein a small, but peculiar mollusc sample provided by Kálmán Csák from the collecting sites situated near Tinca (Bihar county) in the Crișul Negru River basin. Surprisingly it contains the bivalve *Pisidium supinum* A. Schmidt, 1851 (Mollusca, Pisiidae), representing the first record of that taxon from Romania.

Introduction

In March 2012 we were greatly surprised, even if we were aware of the existing collection of molluscs in the Tinca Museum, after receiving from Sr. Kálmán Csák (for his biography see Domokos 2011, 2012) five matchboxes with molluscs

samples collected around Tinca/Tenke and Luncasprie/Lankás. The first collecting date is from 1976, while the last one took place in August 1981.

However, a question should arise: is it important for a scientist to elaborate a paper for a handful of samples? The reply is yes, especially when we have over-viewed the content of the boxes that produced a series of surprises. We shortly recognized that the samples contained a species that become extinct in the last 35-40 years, while another one represents its first faunal record from the area. The aim of the present paper is to complete a systematic review of the samples emphasizing their environmental and biogeographic significance.

Material and methods

The material consists of a small collection of shells of gastropods and bivalves stored in five matchboxes. All the samples are supplied with labels and provided with the name of the collecting place, the date of sampling, the collector's name and number of specimens. The five samples represent in total 13 different taxa: the first three samples consist of snails, whereas the fourth and fifth consist of bivalves. For the identification of mollusc taxa we used the works of Soós (1943) and Richnovszky & Pintér (1979).

Systematic part

1. Tinca (= Tenke), Large-bog and Small-bog (= Nagyláp és Kislap), July 20, 1980; leg.: Csák Kálmán, Jr.

Aplexa hypnorum Linnaeus, 1758

Material: five specimens

It should be a rare species because the only locality cited by Sîrbu (2006) from Romania is Oradea (Nagyvárad) and it is based on Riess' (1899) observation.

Lithoglyphus naticoides (C. Pfeiffer, 1828) (Fig. 1A, B)

Material: three specimens

Remarks: It is cited by Sîrbu (2006) from the Holod stream, which is a tributary from the right side of the Crişu-Negru (Fekete-Körös) river.

Theodoxus prevostianus C. Pfeiffer, 1828 (Fig. 1C, D)

Material: nine specimens

Description: It is a known fact that based on the shell morphology alone it is not always possible to differentiate *Theodoxus danubialis* from *T. prevostianus* C.

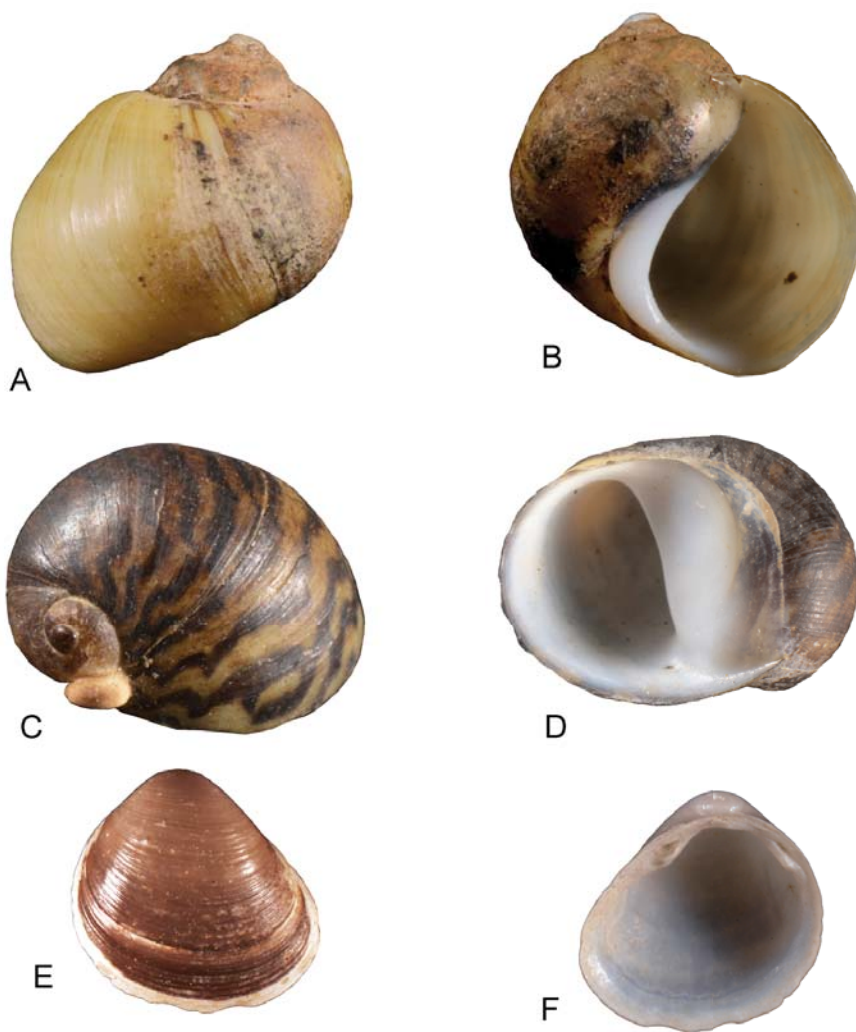


Figure 1. Molluscs from Pădurea Craiului Mountains. A, B: *Lithoglyphus naticoides* (size about 6 mm); C, D: *Theodoxus prevostianus* (size about 6 mm); E, F: *Pisidium supinum* (size about 4.5 mm).

Pfeiffer, 1828 (Fehér et al. 2007, Fehér pers. com.). The shells display various stages of development and are covered by a greyish translucent cover permitting on the last whorl the appearance on the blackish background colour of a yellowish zigzagged pattern with crisp margins. The size of the shells (length-width-height) ranges between: 10,1–7,4–5,4 mm in the largest, whereas 3,3–3,3–2,0 mm in the smallest. About half of the specimens bear one or two ovule remnants and the preservation state of the shells suggests that they may have belonged probably to recently perished animals. Therefore we may presume, as it is suggested also by the lack of opercula, that the shells were relocated from the area of Răbăgani (Grossu 1993; Sîrbu 2006).

Remarks: Based on the previous faunal assemblage of Large-bog and Small-bog near Tinca, we may presume that the water-source of the bogs was provided, at least partially, by the course of the Crișul Negru river. However, it is a known fact that both *Lithoglyphus naticoides* and *Theodoxus prevostianus* are rheophilic and are members of the limnobenthos adhering exclusively to a hard bottom. However, because the collecting site was a bog the above conditions cannot be fulfilled. Consequently, we cannot consider these records as in situ occurrences. Unfortunately, nowadays those bogs are dried out and transformed into illegal dumping-grounds, and therefore new sampling from that locality is not possible.

2. Pădurea Craiului (= Királyerdő) Mountains, Luncasprie (= Lankás), spring in Toplița Valley, August, 1976; leg.: Csák Kálmán

Ancylus fluviatilis (C. Pfeiffer, 1828)

Material: seven specimens

Remarks: The shells are eroded and with signs of erosion due to transportation. The River Limpet is a small sized snail with about 5-10 mm shell length, that is relatively frequent in the area of Pădurea Craiului (=Királyerdő) Mountains. It prefers karstic spring and streams usually sticking to rocks and stones (Domokos & Lennert 2010).

3. Pădurea Craiului Mountains (= Királyerdő), Luncasprie (= Lankás), upper sector of Vida stream, August, 1981; leg.: Csák Kálmán

Bulgarica vetusta (Rossmässler, 1836) (Fig. 2A, B, C)

Material: six specimens.

Remarks: It is a south-eastern European taxon that may be considered the most frequent clausilid from the Pădurea Craiului (= Királyerdő) Mountains (Domokos & Lennert 2010).

Isognomostoma isognomostoma (Gmelin, 1886) (Fig. 2D, E)

Material: one specimen

Remarks: This species is relatively rear in the Pădurea Craiului (=Királyerdő) Mountains (Domokos & Lennert 2010).

Laciniaria plicata Draparnaud, 1805

Material: one specimen

Lithoglyphus naticoides (C. Pfeiffer, 1828)

Material: two specimens

Remarks: The specimens collected from the Vida stream document the taxon's wider distribution, being reported earlier from the Crișul Negru River Basin in the Holod River, downstream of Răbăgani, in the Crișul Negru riverbed at Tinca and Zerind and from the Crișul Repede River at Cheresig by Sîrbu (2006).

4. Tinca (= Tenke) in Belfir (= Bélfenyér) stream, 1981, leg.: Csák Kálmán

Sphaerium corneum (Linnaeus, 1758)

Material: 10 specimens with single shell, four specimens with double shell.

5. Tinca (= Tenke), Crișul Negru (= Fekete-Körös), probably in early eighties, leg.: Csák Kálmán

Pisidium henslowanum Sheppard, 1823

Material: one specimen with double shell.

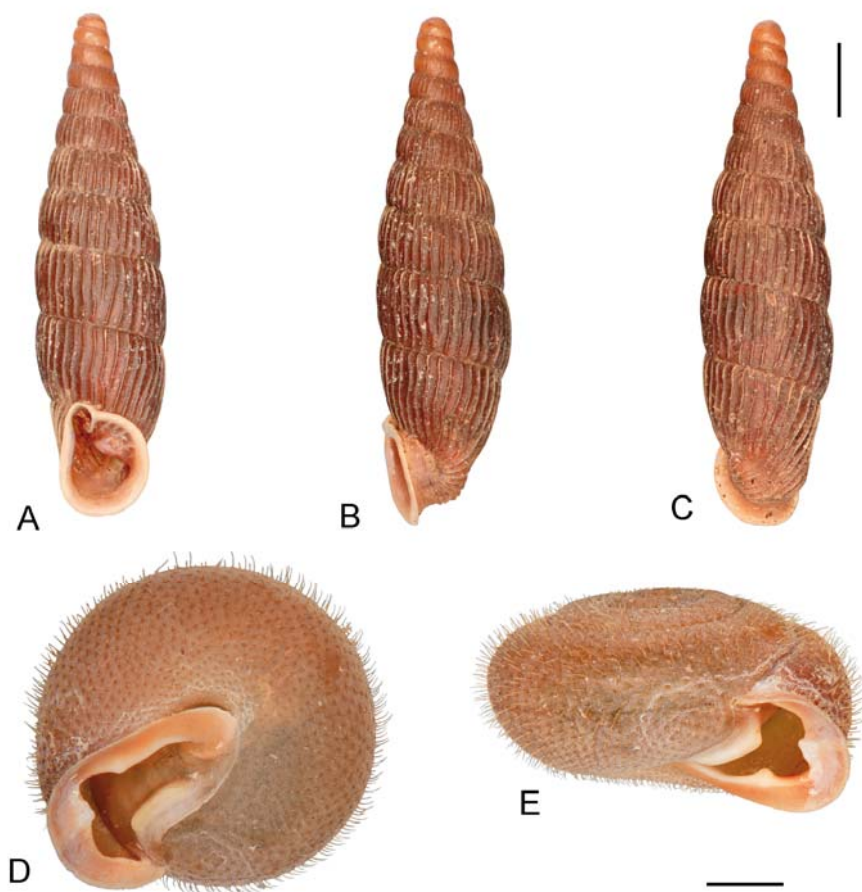


Figure 2. Molluscs from Pădurea Craiului Mountains. A-C: *Bulgarica vetusta*; D, E: *Isognomostoma isognomostoma*. Scale equals 2 mm.

Pisidium nitidum Jenyns, 1832

Material: one specimen with single shell

Pisidium supinum A. Schmidt, 1851 (Fig. 1E, F)

Material: one specimen with single shell

Remarks: The species is missing from the faunal list of Grossu (1993). Furthermore, taking into consideration the works of Glöer & Sîrbu (2005) and Sîrbu (2006) it is a new taxon for Romania and for the area of Țara Crișurilor. By adding this taxon to the faunal list of Romania, the number of *Pisidium* species increases up to 12.

Sphaerium riviculum (Lamarck, 1818)

Material: 30 specimens with single shell and four specimens with double shells.

Concluding remarks

In the last thirty years deep environmental changes occurred in the area of Crișul Negru Basin especially due to human intervention that affected especially the faunal assemblages closely linked to aquatic or semiaquatic habitats. As noted above some bogs (see above) were dried out and after that transformed into illegal dump deposits. Activities focused on freshwater fish culture and fish pond constructions in the area of Răbăgani resulted in the extinction of the last living population of *Theodoxus prevostianus* in Romania. Nevertheless, the samples of that species collected by Kálmán Csák in 1980 may have resulted from a more abundant and still alive population from Răbăgani.

Acknowledgements

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