

MOLLUSCS FROM SOCENI IN THE COLLECTION OF THE MUSEUM OF OLTENIA CRAIOVA

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Abstract. At Soceni (Caraș-Severin County, southwestern Romania) on Turislav and Polițioana valleys, over 2500 Sarmatian and Pannonian species of gastropods and bivalves, but also algae, foraminifers, bryozoans, worms, ostracods and fish have been unerathed. The Soceni fauna has been studied primarily by JEKELIUS (1944). In this paper, several fossils from Soceni are described, part of paleontology collection of the Museum of Oltenia.

Keywords: Soceni, bivalves, gastropods, Sarmatian.

Rezumat. Moluște de la Soceni din colecția Muzeului Olteniei Craiova. Pe raza localității Soceni, jud. Caraș-Severin (SV României), pe văile Turislav și Polițioana, au fost descoperite peste 2500 de specii de gastropode și bivalve, dar și alge, foraminifere, brizoare, viermi, ostracode, pești de vârstă sarmațiană și pannoniană. Fauna de la Soceni a fost studiată în special de JEKELIUS (1944). În cuprinsul lucrării sunt descrise câteva fosile propuse a intra în colecția paleontologică a Muzeului Olteniei.

Cuvinte cheie: Soceni, bivalve, gastropode, Sarmațian.

INTRODUCTION

On Turislav and Polițioana valleys, the clay, shale, clay mica sands and biogenic Sarmatian and Pannonian limestone bears over 2500 gastropod and lamellibranchiate species, as well as algae, foraminifers, bryozoans, worms, ostracods, fish etc. (***) Rezervații Naturale). This fauna has been studied mainly by JEKELIUS (1944), who described from Soceni 140 Sarmatian species and 113 Pannonian ones.

The paleontological reserve of Soceni means a scientific, stratigraphic and paleontological area typical for the European Sarmatian and Pannonian (MORAC et al., 1998). The legal status of the fossil-bearing site is coined by H. CJ 8/1994 and by D. 499/1982.

MATERIAL AND METHOD

The shells of molluscs come from Soceni, (Caraș-Severin County), from Turislav and Polițioana valleys. After cleaning, we made a primary sorting of the shells, according to morphology. In order to assign the species, we used references of JEKELIUS (1944), SIMIONESCU & BARBU (1940), PAPP (1952), MACAROVICI & TURCULEȚ (1972), TUDOR (1955) etc. The species description (shell shapes, ornamentation and peculiar details) as well as their measurements have been compared with those of the types described in the quoted papers. As much as possible, we tried to compare the samples with the holotype of each species.

RESULTS AND DISCUSSIONS

BIVALVES

Tapes gregarius ponderosus (D'ORBIGNY) (Fig. 1)



Figure 1. *Tapes gregarius ponderosus* (photo: A. Popescu)

- 1940. *Tapes gregarius* var. *ponderosa*, SIMIONESCU & BARBU, 158, Taf. 7, Figs. 35, 36.
- 1944. *Irus (Paphirus) gregarius*, JEKELIUS, p. 95, Taf. 29, Figs. 5-12.
- 1954. *Irus (Paphirus) gregarius ponderosus*, PAPP, p. 85, Pl. 16, Figs. 21-23.
- 1967. *Tapes (Irus) gregarius ponderosus*, SAULEA, Pl. LVII, Fig. 1.
- 1972. *Tapes (Irus) gregarius*, MACAROVICI & TURCULEȚ, p. 201, Pl. LXIII, Fig. 3.
- 2004. *Tapes gregarius*, IONESI & ȚABĂRĂ, Pl. 3, Fig. 1.

Valves variable in size of 30-40 mm in length. Sub-trapezoidal outlines, slightly stuck out, rounded at the anterior side. The umbo locates deeply towards the anterior side. There are three cardinal teeth bifurcated and thin, without lateral teeth. The paleal sinus is relatively deep. The surface covered by thick growth lines. **Sarmatian.**

***Tapes gregarius dissitus* D'ORBIGNY (EICHWALD) (Fig. 2)**



Figure 2. *Tapes gregarius dissitus* (photo: A. Popescu).

1940. *Tapes (Irus) gregarius dissitus*, SIMIONESCU & BARBU, pl. VII, Figs. 47-48.

1954. *Irus (Paphirus) gregarius dissitus*, PAPP, p. 83, Pl. 16, Figs. 10, 11.

1972. *Tapes (Irus) gregarius dissitus*, MACAROVICI & TURCULEȚ, p. 201, Pl. LXIII, Fig. 4.

Thin valves, elongated and rounded towards the posterior side. Their surfaces expose growth lines which are unequal as regards thickness. The umbo placed deeply towards the anterior side. There are three cardinal teeth bifurcated and thin, without lateral teeth. Paleal sinus is relatively deep. The surface covered with thin concentric scores. **Sarmatian.**

GASTROPODS

***Melanopsis fossilis* MARTINI (Fig. 3)**



Figure 3. *Melanopsis fossilis* (photo: A. Popescu).

1944. *Melanopsis fossilis*, JEKELIUS, Pl. 52, Figs. 1, 2, 7, 8, 11.

1963. *Melanopsis fossilis fossilis*, LUPU, Pl. I, Fig. 1.

1971. *Melanopsis fossilis fossilis*, CLICHICI, Pl. XXIII, Fig. 4.

1972. *Melanopsis fossilis*, MACAROVICI & TURCULEȚ, p. 224, Pl. LXXIII, Figs. 10, 11.

1980. *Melanopsis fossilis*, LUEGER, Pl. 1 Fig. 26.

2002. *Melanopsis fossilis*, HARZHAUSER et al., p. 95, Pl. 6, Figs. 6, 8-10; Pl. 7, Figs. 11-12.

Elongated thick ovoid shell, with 7 convex whirl scalariform circles, the last one covering $\frac{3}{4}$ from the height of the shell. Ellipsoidal-elongated aperture. **Sarmatian.**

***Melanopsis vindobonensis* FUCHS (Fig. 4)**

1936. *Melanopsis vindobonensis*, PAUCĂ, Pl. XI, Figs. 1-4.

1963. *Melanopsis vindobonensis vindobonensis*, LUPU, Pl. I, Figs. 6a, b.

1972. *Melanopsis vindobonensis*, MACAROVICI & TURCULEȚ, p. 225, Pl. LXXIII, Figs. 12, 13

1980. *Melanopsis vindobonensis*, LUEGER, Pl. 1, Fig. 2815.

2002. *Melanopsis vindobonensis*, HARZHAUSER, KOWALKE, MANDIC, p. 96, Pl. 7, Figs. 1-3.

Figure 4. *Melanopsis vindobonensis* (photo: A. Popescu).

Globular shell, 35-40 mm in height. The last whirl circle covering almost entirely the preceding ones. The last whirl circle slightly convex at the superior side, where it presents a hull. The apical angle of 90°. Ellipsoidal-elongated aperture, prolonged with a short siphonal channel. **Sarmatian**.

Figure 5. *Melanopsis inermis* (photo: A. Popescu).***Melanopsis inermis* HANDMANN (Fig. 5)**

1944. *Melanopsis inermis*, JEKELIUS, p. 135, Pl. 54, Figs. 1-20.

2002. *Melanopsis inermis*, HARZHAUSER et al., p. 97-98, Pl. 6, Figs. 3, 4.

Shell of 15-20 mm in height. The last whirl circle is concave, covering almost entirely the other ones. Provided with a belt rounded in the upper side. The suture of the last spire is deep. It differs from *Melanopsis vindobonensis* by the upper side of the last spire which is rounded and without a hull. **Sarmatian**.

***Cerithium disjunctum* SOWERBY (Fig. 6)**Figure 6. *Cerithium disjunctum* (photo: A. Popescu).

1853. *Cerithium convexum*, EICHWALD, p. 157, Pl. VII, Fig. 17.

1856. *Cerithium disjunctum*, HOERNES, p. 406, Pl. LXII, Figs. 10, 11.

1903. *Cerithium disjunctum*, SIMIONESCU, Pl. I, Fig. 23.

1940. *Cerithium disjunctum*, SIMIONESCU & BARBU, p. 77, Pl. I, Figs. 9-12.

1944. *Pirenella disjuncta*, JEKELIUS, p. 79, Pl. 20, Figs. 10-18, 20.

1954. *Pirenella disjuncta disjuncta*, PAPP, p. 42-43, Pl. 7, Figs. 21-23.

1955. *Cerithium (Thericium) disjunctum*, TUDOR, p. 99-100, Pl. VIII, Figs. 64a, b.

Small, thick, turriculate shell. Convex spires, they do not cover each other. Narrow and deep suture. There are four volute ribs with tubercles. The whirl circles present 3 – 4 tubercles rows. It has a slightly elongated siphonal channel. The aperture is ellipsoidal-elongated. It differs from *Cerithium lignitarium* by the smaller size, but even more by the fact that with *C. lignitarium* the intervals between tubercles are as broad as the tubercles. **Sarmatian**.

***Cerithium rubiginosum* EICHWALD (Fig. 7)**Figure 7. *Cerithium rubiginosum* (photo: A. Popescu).

1903. *Cerithium rubiginosum*, SIMIONESCU, p. 25. Pl. II, Figs. 21, 22.

1940. *Cerithium rubiginosum*, SIMIONESCU & BARBU, p. 92, Pl. I, Figs. 54-56.

1944. *Pithocerithium rubiginosum*, JEKELIUS, p. 80, Pl. 21, Figs. 1-17.

1955. *Cerithium (Thericium) rubiginosum*, MOISESCU, p. 201, Pl. XIX, Figs. 17-23.

1955. *Cerithium (Thericium) rubiginosum*, TUDOR, p. 101-102, Pl. VIII, Fig. 65.

1972. *Cerithium rubiginosum*, MACAROVICI & TURCULEȚ, p. 201, Pl. LXIII, Fig. 7.

Small sized shell (13-15 mm), thin, ellipsoidal, with 7-8 whirl circles which are rather broad than tall, adorned with a row of tubercles at the medial side of the whirl. Shallow suture. An ovoid aperture, with a short siphonal channel. **Sarmatian.**

CONCLUSIONS

All are Sarmatian taxa. Most of them have been reported by Jekelius from Soceni: *Tapes gregarius ponderosus* D'ORBIGNY under the name of *Irus (Paphirus) gregarius*, *Melanopsis fossilis* MARTINI, *Melanopsis inermis* HANDMANN, whereas *Cerithium disjunctum* SOW. has been mentioned under the name of *Pirenella disjuncta*. There are also some taxa reported from the Dacian Basin, which have been found at Soceni: *Tapes gregarius dissitus* D'ORBIGNY, *Melanopsis vindobonensis* FUCHS.

We have not kept the names *Pirenella*, *Pithocerithium* and *Irus* used by JEKELIUS, while still keeping the names *Cerithium* and *Tapes*, according to the principle of priority, in conformity with the Zoological International Code.

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