

## Addition to the Egerian (late Oligocene – early Miocene) gastropod fauna of Esztergom (Hungary)

VICIÁN, Zoltán<sup>1</sup>, KOVÁCS, Zoltán<sup>2</sup>, STEIN, Gerhard<sup>3</sup>

<sup>1</sup>Hungary, Budapest, Neptun utca 86. 10/42, E-mail: kauri72@gmail.com

<sup>2</sup>Hungary, Budapest, Kerékgyártó utca 27/A, E-mail: kzkovacszoltan@gmail.com

<sup>3</sup>Germany, Lüneburg, Georg-Böhm-Straße 15, gerhard-stein.lg@t-online.de

### Új adatok az esztergomi egri korú (késő-oligocén–kora-miocén) gastropoda faunához

#### Összefoglalás

Jelen munka az Esztergom-Szentgyörgymező mellett feltárt egri korú (késő-oligocén–kora-miocén) rétegsor mollusca faunájának részletesebb ismeretéhez járul hozzá 27 faj bemutatásával. Ezek közül 14 a lelőhelyről eddig még nem dokumentált ismert gastropoda taxon. Néhány ritka faj újonnan begyűjtött jó megtartású példányát is ábrázoljuk. A lelőhely gazdag faunája a tudományra nézve öt új species leírását tette lehetővé: *Calyptraea baldii* n. sp., *Cypraeorbis nadaii* n. sp., *Paziella (Paziella) modesta* n. sp., *Contortia zitae* n. sp. és *Clavatula danuvii* n. sp. Új kombinációk: *Tritia edentata* (BÁLDI, 1966) nov. comb., *Cordieria collectiva* (NOSZKY, 1936) nov. comb., *Stenodrillia oligocenica* (NOSZKY, 1936) nov. comb. Több, korábban bevezetett egri korú mollusca faj típuspéldánya 1956-ban megsemmisült, ezek közül öt, az esztergomi anyagban is előforduló taxon számára neotípust jelölünk ki: *Euthriofusus szontaghi* NOSZKY, 1936; *Eoconus egerensis* (NOSZKY, 1936); *Cordieria collectiva* (NOSZKY, 1936); *Stenodrillia oligocenica* (NOSZKY, 1936); *Turricula telegdirothi* (NOSZKY, 1936).

*Tárgyszavak:* Gastropoda, Paratethys, Esztergomi-medence, egri emelet, késő-oligocén, kora-miocén

#### Abstract

Additions are made to the Egerian (late Oligocene – early Miocene) gastropod fauna of Esztergom-Szentgyörgymező (Hungary) by description of 27 species. 14 taxa are new records at the locality. A few rare species are presented by newly collected well-preserved specimens, and five new species are designated: *Calyptraea baldii* n. sp., *Cypraeorbis nadaii* n. sp., *Paziella (Paziella) modesta* n. sp., *Contortia zitae* n. sp., and *Clavatula danuvii* n. sp. New combinations include: *Tritia edentata* (BÁLDI, 1966) nov. comb., *Cordieria collectiva* (NOSZKY, 1936), nov. comb., *Stenodrillia oligocenica* (NOSZKY, 1936) nov. comb. As holotypes of several Egerian species were destroyed in 1956, neotypes are designated for five taxa: *Euthriofusus szontaghi* NOSZKY, 1936; *Eoconus egerensis* (NOSZKY, 1936); *Cordieria collectiva* (NOSZKY, 1936); *Stenodrillia oligocenica* (NOSZKY, 1936); *Turricula telegdirothi* (NOSZKY, 1936).

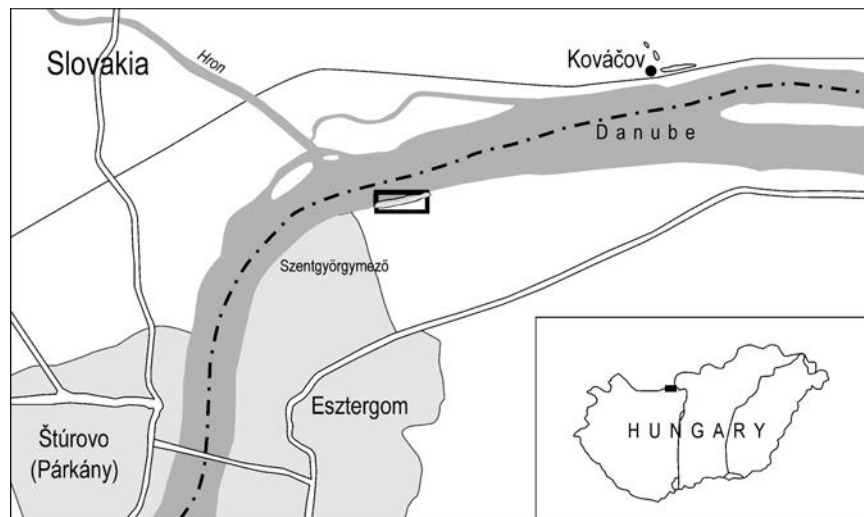
*Keywords:* Gastropoda, Paratethys, Esztergom Basin, Egerian Stage, late Oligocene, early Miocene

### Introduction

In 2016 a newly discovered Egerian (late Oligocene – early Miocene) locality in the vicinity of Esztergom was described with a rich mollusc fauna (KOVÁCS & VICIÁN 2016). In this paper the gastropod fauna is completed with new occurrences of 14 well-known Oligocene species, and five new species are designated. The material came from the well-bedded, grey, clayey siltstone layers of a 5 m long, and 2.5 m wide artificial trench of Unit C (see the sequence of the outcrop: KOVÁCS & VICIÁN l.c., fig. 2).

The Esztergom Basin is a part of the Dorog Basin and

belongs to the Hungarian Palaeogene Basin System in the late Oligocene – early Miocene Egerian Stage. The Oligocene deposits of the region represent the Törökbálint Sand Formation. This formation can be traced on the surface, in the bed of the Danube River, and with data from boreholes. The latter show that it underlies the Quaternary deposits of the Dorog Basin with an average thickness of 400 m. The upper member of the Törökbálint Fm is characterised by littoral to lagoonal deposits; the lower member, the „mollusc-bearing clay”, consists of mainly deep sublittoral to shallow bathyal clayey siltstone. The invertebrate fauna is characterised by a subtidal marine ecosystem.



**Figure 1.** Location of the Egerian locality, east of Esztergom-Szentgyörgymező with outcrops of the Törökbálint Sand Formation in the vicinity

**I. ábra.** A vizsgált feltárás Esztergom-Szentgyörgymezőtől keletre a Duna-parton és a Törökbálinti Homok Formáció felszíni előfordulásai a környéken

The locality studied is located east of Esztergom-Szentgyörgymező, on the bank and in the bed of the River Danube (47° 48' 50" N, 18° 45' 4" E) (Figure 1). The outcrop reveals different types of Egerian rocks of about 350 m length and 25 m width; the stratigraphically lower part of the sequence (128 m) consists of bathyal mollusc-bearing clayey siltstone (facies unit No. 4 in SZTANÓ et al. 1998). (For research history and a detailed description of the locality see KOVÁCS & VICIÁN 2016).

### Material and methods

The specimens investigated herein are deposited in the collection of the Hungarian Natural History Museum (HNHM), Budapest, and also in the private collections of the first and third authors. The gastropod taxonomy and morphological terminology follow e.g. HARZHAUSER (2004), HARZHAUSER & MANDIC (2001), MERLE et al. (2011), and KOVÁCS & VICIÁN (2016). Comprehensive works of LOZOUET (2015) and SCHNETLER & PALM (2008) were also used for taxonomical revision. As most species recorded herein are thoroughly discussed in the literature, short synonymies are cited (types and relevant papers), and only taxa of special interest are described in detail.

Abbreviations – shell length: SL, shell height: SH, shell width: SW (all measurements are given in mm), labral teeth: LT, columellar teeth: CT.

### Systematic palaeontology

Class Gastropoda CUVIER, 1797  
 Family Potamididae H. ADAMS & A. ADAMS, 1854  
 Genus *Potamides* BRONGNIART, 1810  
 Subgenus *Potamides* (*Ptychopotamides*) SACCO, 1895  
 Type species: *Murex tricinctus* BROCCHI, 1814

### *Potamides* (*Ptychopotamides*) *conjunctoturris* (SACCO, 1895) (Plate 1, figure 1)

- 1895 *Tympanotomus conjunctoturris* — SACCO, p. 50, pl. 3, fig. 25.  
 1975 *Potamides lamarcki* BRONGNIART n. spp. — BÁLDI & STEININGER, pl. 10, fig. 4.  
 1984a *Potamides* (*Potamides*) *lamarcki* BRONGNIART — JANSSEN, p. 125.  
 1984 *Tympanotomus conjunctoturris* SACCO — FERRERO MORTARA et al., p. 199, pl. 36, fig. 2.  
 2008 *Tympanotonos conjunctoturris* SACCO — ISLAMOGLU, fig. 6/L

*Material*: 10 specimens.

*Remarks*: The species is a new record at Esztergom-Szentgyörgymező. *P. (P.) conjunctoturris* — which is typical of the Italian Oligocene — is characterised by high, conical, tower-shaped shell, flat teleoconch whorls with defined suture, uniplicate columella, and sculpture of three granulated spiral keels. Based on morphology, the species is assigned to subgenus *Potamides* (*Ptychopotamides*) in this paper. It was illustrated as *P. lamarcki* n. spp. by BÁLDI & STEININGER (1975) from the sand pit of Máriahalom, but the formal designation of the new subspecies has never been published. The morphology of this specimen is distinguishable from that of *P. lamarcki* (BRONGNIART, 1810) (JANSSEN 1984a), but corresponds to *P. (P.) conjunctoturris*, therefore the specimen is regarded as a representative of the latter taxon. The species is very close in size and overall morphology to the late Chattian – early Miocene *P. (P.) papaveraceus* (BASTEROT, 1825) but *conjunctoturris* differs in sculpture: of the three spiral keels the adapical one is the strongest. Here they are considered as different taxa with an evolutionary relationship (*conjunctoturris* is the ancestor of *papaveraceus*). However, it must be mentioned that subsequent comparison of the types might demonstrate the two species to be conspecific.

Family Calyptraeidae LAMARCK, 1809  
Genus *Calyptraea* LAMARCK, 1799  
Type species: *Patella chinensis*, LINNAEUS, 1758

*Calyptraea baldii* n. sp.  
(Figure 2)

1973 *Calyptraea chinensis* (Linné) — BÁLDI, p. 264, pl. 31, figs 1–2 [non *Calyptraea chinensis* (LINNAEUS, 1758)]  
<http://zoobank.org/urn:lsid:zoobank.org:act:79486CC9-5003-44F8-BD63-13C47C3F0584>

**Holotype:** M.63.9470, HNHM, Department of Palaeontology and Geology, (BÁLDI 1973, pl. 31, figs 1–2).

**Paratype 1:** F4/4370, (private collection of G. STEIN) (Figure 2), **paratype 2:** O.2019.20, (private collection of Z. VICIÁN)

Measurements	SH	SW	Locality
holotype M.63.9470.	8	23	Diósjenő
paratype 1. F4/4370	6.5	13	Esztergom
paratype 2. O.2019.20	7	13	Esztergom

**Type strata and locality:** Egerian (Upper Oligocene – Lower Miocene) sand, Diósjenő, Hungary (BÁLDI 1973: 55).

**Derivation of name:** In honor of Tamás BÁLDI (1935–2014), late Hungarian geologist and palaeontologist.

**Material:** 3 specimens in the Esztergom-Szentgyörgymező assemblage.

**Diagnosis:** A *Calyptraea* with patelliform, conical shell with three teleoconch whorls, subcircular base, excentric apex, sigmoid and reflexed septum, spiral growth wrinkles.

**Description:** Low, conical shell (SW max. 23), eroded protoconch, three slightly convex teleoconch whorls. Base subcircular, apex excentric, suture indistinct, umbilicus visible. Septum sigmoid reflexed on the umbilical area, and sigmoid to the margin. Sculpture of moderately strong, irregular spiral growth wrinkles.

**Remarks:** The *Calyptraea* material of Esztergom-Szentgyörgymező agrees with the holotype of *C. baldii* n. sp. The

new species differs in morphology from the Oligocene–Recent *C. chinensis* by excentric apex and large, reflexed septum. *C. pseudodeformis* BÁLDI, 1966 from the Egerian Pannonian Basin is characterised by higher shell. The Oligocene *C. striatella* NYST, 1845 is distinguishable by its almost straight septum and stronger spiral sculpture, *C. labellata* Deshayes, 1866 possesses a slightly reflexed septum.

**Distribution:** Diósjenő, Esztergom-Szentgyörgymező.

Family Cypraeidae RAFINESQUE, 1815

Genus *Cypraeorbis* CONRAD, 1865

Type species: *Cypraea sphaeroides* CONRAD, 1848

*Cypraeorbis splendens exsplendens*  
(SACCO, 1894)  
(Plate 1, figures 2–3)

1894 *Zonaria subexcisa* var. *exsplendens* — SACCO, p. 14, pl. 1, fig. 22.

1984 *Zonaria subexcisa* var. *exsplendens* SACCO — FERRERO MORTARA et al., p. 146, pl. 23, fig. 4.

2000 *Cypraeorbis splendens exsplendens* (SACCO) — FEHSE, p. 19.

**Material:** 2 specimens.

**Remarks:** The species is a new record in the Egerian Pannonian Basin. The morphology of the species is briefly discussed below. *C. splendens exsplendens* is typical of the Rupelian– Chattian in Italy.

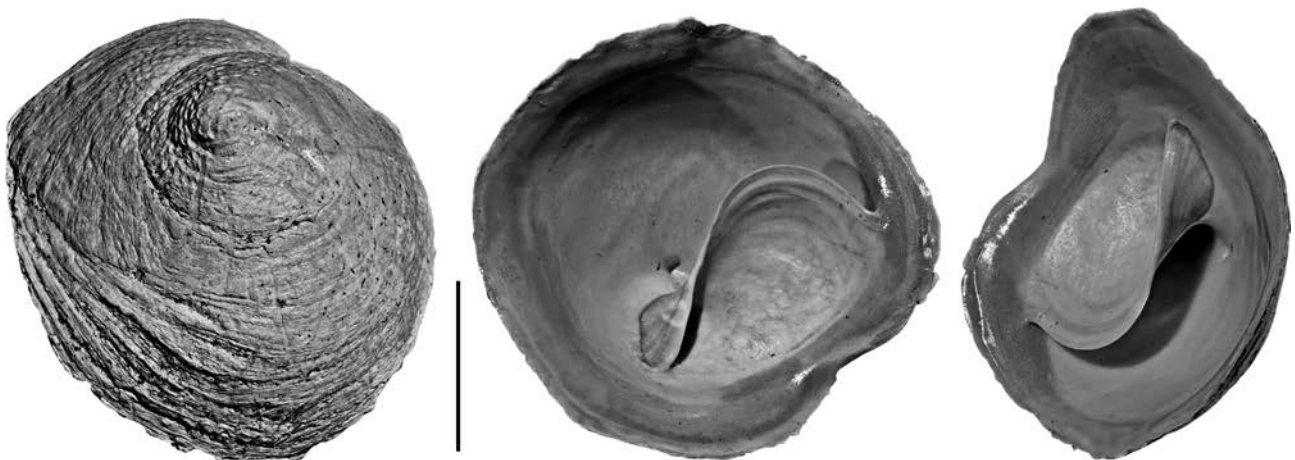
*Cypraeorbis nadaii* n. sp.  
(Plate 1, figures 4–13)

1958 *Erronea (Zonarina) subglobosa* (GRATELOUP) — SENEŠ, pl. 21, figs 282–283.

1992 *Zonaria* cf. *globosa* (DUJARDIN) — LEÉL-ŐSSY, pl. 5, figs 4–5.  
<http://zoobank.org/urn:lsid:zoobank.org:act:CD2EB874-9EAC-4483-8417-CB89AF78EC65>

**Holotype:** PAL 2019.1.1., HNHM, Department of Palaeontology and Geology (Plate 1, figures 4–7).

**Paratype 1:** ZVH nr. 9455; **paratype 2:** ZVH nr. 9449; **paratype 3:** ZVH nr. 1255 (for locality Diósjenő, D–24 see BÁLDI 1973) (private collection of Z. VICIÁN)



**Figure 2.** *Calyptraea baldii* n. sp., paratype 1, SH 6.5, (4.5×). Scale bar: 5 mm  
2. **ábra.** *Calyptraea baldii* n. sp., paratípus 1, SH 6.5, (4.5×). Méretvonal: 5 mm

Measurements	SL	SW	SH	LT:CT	Locality
holotype PAL 2019.1.1.	23.1	17	11.2	15:12	Esztergom
paratype 1. ZVH nr. 9455	20.1	14.6	11	16:12	Esztergom
paratype 2. ZVH nr. 9449	22.9	16	12.6	16:11	Esztergom
paratype 3. ZVH nr. 1255	20.8	15	12.2	17:12	Diósjenő, D-24

*Type strata and locality:* Egerian (Upper Oligocene – Lower Miocene) siltstone, Esztergom-Szentgyörgymező, Hungary.

*Derivation of name:* In honor of László NÁDAI (Budapest), Hungarian private fossil collector.

*Material:* 10 specimens in Hungary.

*Diagnosis:* Small *Cypraeorbis* with coarse teeth, shell with strong dorsal callus, spire blotch and wavy dorsal line in well preserved specimens.

*Description:* The shell is small for the genus, inflated oval with convex dorsum, highest point in posterior third. Terminals are slightly separated from dorsal elevation. Posterior extremity is blunt, anterior slightly protruded. The spire situated on right side, slightly projected. Margins are rounded but with roundly sharp accumulation of callous. Aperture narrow, slightly curved posteriorly, almost the same width over entire length. Ventrums is weakly convex, columellar side is twice in width as the labrum. Terminal ridge short, well-separated from columellar teeth. Inner margin has 11–12 short and coarse teeth which are stronger to anterior part. Teeth are equally spaced and not extending on base or inside of the columella. Fossula smooth, steeply concave with notch in anterior end. Labrum has 15–17 short denticles which extend only in anterior portion. Anterior end of labrum is only slightly declivous. The shells have small variations in size and number of teeth. The only variable feature is the development of the dorsal callous.

Colouration is preserved with respect to two specimens: beige base and sides with irregular darker zone around the dorsal area. Dorsum darker than the base, yellowish in colour with reddish irregular spire blotch — this feature is evident even on poorly preserved specimens. Dorsal line wavy and forms deeper sulcus on the best-preserved specimen.

*Remarks:* At Esztergom-Szentgyörgymező all three Paratethyan Oligocene *Cypraeorbis* occur together and this allowed them to be compared side by side, and to introduce a new species. *Cypraeorbis* is a well-known genus in the NE Atlantic Oligocene. In the Paratethys two species have been described in the literature: *C. hungarica* SCHILDER, 1932 and *C. turgidiuscula* (DE GREGORIO, 1894), both occur in the same layer of the studied succession as *C. nadaii* n. sp. The *C. hungarica* described from the Egerian of the Wind Quarry (Eger, Hungary) is a larger form — the smallest specimen has SL 27 — with more pronounced extremities. Columellar teeth are similar in number but are coarser and longer, and run inside the shell. Fossula has no notch on anterior end. Colouration is different, high callous on sides over half way to dorsum, and irregularly freckled pattern of brown circular dots. No even sign of dorsal line or spire blotch (KOVÁCS & VICIÁN 2016). *C. turgidiuscula* (Rupelian, Italy) is characterised by aperture strongly curved posteriorly, less developed fossula and more

numerous teeth (18:14). This species also occurs in the Egerian deposits of Esztergom-Szentgyörgymező, and the best-preserved specimen shows different colouration: beige dorsum with few larger irregular brownish blotches, the darker frame above the side callous is narrow and wavy with darker patches. *C. splendens* (GRATELOUP, 1827) (Rupelian of Gaas, France) differs by more elongated shell with pronounced extremities, and finer, more numerous teeth (23:21). Teeth on labral side extend onto the ventral area. *C. truncata* (BRONN, 1831) (Rupelian of Gaas) possesses a similar globose shell but it is a much larger form (SL 28 on average) with more numerous teeth (24:16 on average). *C. splendens exsplendens* (SACCO) (Oligocene, Italy) is a larger form with more numerous teeth (20:16 on average) and pronounced extremities. Anterior end of labrum is concave (Plate 1, figs 2–3).

*Distribution:* Esztergom-Szentgyörgymező, Diósjenő, Dömös (Hungary), Kováčov (Slovakia).

Family Tonnidae SUTER, 1913

Genus *Sassia* BELLARDI, 1873

Type species: *Triton apenninicum* SASSI, 1827

*Sassia foveolata* (SANDBERGER, 1860)

(Plate 1, figure 14)

1860 *Tritonium foveolatum* — SANDBERGER, pl. 18, fig. 2.

1983 *Charonia (Sassia) foveolata* (SANDBERGER) — GÜRS, p. 69, pl. 4, fig. 108.

1995 *Sassia foveolata* (SANDBERGER) — GÜRS, p. 91, pl. 15, figs 4–5, pl. 58, fig. 4 (cum syn.)

*Material:* 1 specimen.

*Remarks:* The species was recorded in the mollusc assemblages of Eger as *Tritonium tarbellianum* GRATELOUP var. by TELEGDÍ ROTH (1914) and NOSZKY (1936), and as *Charonia tarbelliana transiens* n. subsp. by BÁLDI (1973) in the mollusc assemblages of Eger. *Sassia foveolata* differs from the late Oligocene – middle Miocene *S. turrita* (EICHWALD, 1830) by strong sculpture, especially two rows of tubercles at the periphery on the last whorl. *S. foveolata* is typical of the Oligocene in the North Sea Basin and the Paris Basin.

Family Epitoniidae BERRY 1910

Genus *Cerithiscalca* DE BOURY 1887

Type species: *Cerithiscalca primula* DESHAYES 1861

*Cerithiscalca* sp.

(Plate 1, figures 15–16)

*Material:* 2 specimens.

*Remarks:* The genus is a new record in the Egerian of Hungary. The most closely allied form to the specimen figured here is a specimen from the Rupelian of the Mainz Basin described and illustrated by GÜRS (1995, p. 143, pl. 26, fig. 6) in his unpublished thesis as “*Cerithiopsis traceyi* n. sp.” (the name is not available). The two specimens are closely allied in size and morphology, but the lack of protoconch does not allow them to be identified at species level.

Family Muricidae RAFINESQUE, 1815  
 Subfamily Muricinae RAFINESQUE, 1815  
 Genus *Paziella* JOUSSEAUME, 1880  
 Subgenus *Paziella* (*Paziella*) JOUSSEAUME, 1880  
 Type species: *Murex pazi* CROSSE, 1869

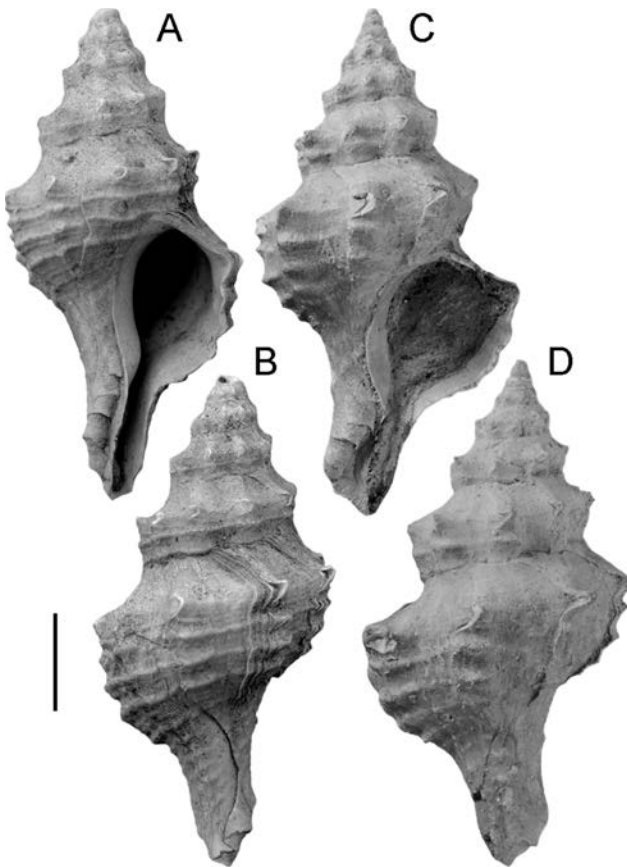
*Paziella* (*Paziella*) *modesta* n. sp.  
 (Figure 3/A–D)

2016 *Paziella* sp. — KOVÁCS & VICIÁN, p. 236, pl. 2, figs 14–15, 17.  
<http://zoobank.org/urn:lsid:zoobank.org:act:F53B3790-6843-4689-87C2-4DDF885B9273>

**Holotype:** INV 2016.12, HNHM, Department of Palaeontology and Geology, (KOVÁCS & VICIÁN, 2016, pl. 2, figs 14–15, refigured here, Figure 3/A–B).

**Paratype 1:** INV 2016.13, (KOVÁCS & VICIÁN, 2016, pl. 2, fig. 17), **paratype 2:** O.2019.24, (private collection of Z. VICIÁN) (Figure 3/C–D).

Measurements	SL	SW
holotype INV 2016.12	25	12.2
paratype 1. INV 2016.13	21	9.6
paratype 2. O.2019.24	26	13.6



**Figure 3.** *Paziella* (*Paziella*) *modesta* n. sp.  
 A–B. Holotype, SL 25 (2.5×)  
 C–D. Paratype 2, SL 26 (2.5×). Scale bar: 5 mm  
**3. ábra.** *Paziella* (*Paziella*) *modesta* n. sp.  
 A–B. Holotípus, SL 25 (2.5×).  
 C–D. Paratípus 2, SL 26 (2.5×). Méretvonal: 5 mm

**Type strata and locality:** Egerian (Upper Oligocene – Lower Miocene) siltstone, Esztergom-Szentgyörgymező, Hungary.

**Derivation of name:** The name refers to the weakly developed sculpture.

**Material:** 48 specimens.

**Diagnosis:** A *Paziella* (*Paziella*) with medium sized shell, paucispiral protoconch, five shouldered teleoconch whorls, ovate aperture, smooth columellar lip, sculpture of marked primary cords and varices with small P1 spines.

**Description:** Shell of medium size (SL max. 25). Protoconch of about two smooth, rounded whorls. Teleoconch of five shouldered whorls with sloping sutural ramp. Ovate aperture, smooth columellar lip. Outer lip usually broken, denticles cannot be traced. Slightly curved open siphonal canal. Spiral sculpture of primary cords P1, P2, and secondary cord s1 on the spire whorls, and P1–P6, s1–s3 on the last whorl. Axial sculpture of varices from the first teleoconch whorl: nine spiny varices on the penultimate, while seven to eight varices on the last whorl. Small, narrowly open P1 spines from the second teleoconch whorl, very weakly developed P2–P3 spinelets on the last whorl.

**Remarks:** Based on morphological features, the new species is assigned to subgenus *Paziella* (*Paziella*). Only one late Oligocene *Paziella* species has been known in Europe: *P. (P.) aturensis* (COSSMANN & PEYROT, 1924) from the Chattian of France (MERLE et al. 2011). It is a closely allied form in size and overall morphology, however, specimens of *P. modesta* n. sp. differ in having a less inflated body whorl, a somewhat shorter and slightly reflected siphonal canal, and its sculpture bears weakly developed P1 spines.

Family Buccinidae RAFINESQUE, 1815  
 Subfamily Buccininae RAFINESQUE, 1815  
 Genus *Euthriofusus* COSSMANN, 1901  
 Type species: *Fusus burdigalensis* BASTEROT, 1825

*Euthriofusus szontaghi* NOSZKY, 1936  
 (Plate 2, figures 1–2)

1936 *Euthriofusus Szontaghi* — NOSZKY, p. 105, pl. 5, fig. 2.  
 1973 *Euthriofusus szontaghi* NOSZKY — BÁLDI, p. 299, pl. 42, fig. 3.  
 2016 *Euthriofusus szontaghi* NOSZKY — KOVÁCS & VICIÁN, pl. 3, fig. 8.

**Material:** 2 specimens.

**Remarks:** A fragmentary specimen was figured by KOVÁCS & VICIÁN (2016); in the present paper a newly collected well-preserved specimen is illustrated. The type specimen was destroyed (PÁLFY et al. 2008); a neotype is designated herein from Eger, the type locality: HNHM, Department of Palaeontology and Geology; inventory number: M.63.3099. (Representation: BÁLDI 1973, pl. 42, fig. 3). The species has been documented in the Egerian mollusc assemblage of Eger.

Family Nassariidae IREDALE, 1916  
 Subfamily Nassariinae IREDALE, 1916  
 Genus *Tritia* RISSO, 1826  
 Type species: *Buccinum reticulatum* LINNAEUS, 1758

*Tritia edentata* (BÁLDI, 1966) nov. comb.

1966 *Hinia fortcostata edentata* n. subsp. — BÁLDI, p. 90, pl. 2, fig. 14.  
 1973 *Hinia fortcostata edentata* BÁLDI — BÁLDI, p. 297, pl. 41, fig. 9.  
 2016 *Nassarius* sp. B — KOVÁCS & VICIÁN, pl. 4, figs 3–4.

*Material*: 6 specimens.

*Remarks*: The taxon was designated as a subspecies (*Hinia fortcostata edentata*) by BÁLDI (1966). Due to the courtesy of Elmar LINHARDT (Bayerisches Landesamt für Umwelt) photos of the holotype of *Tritia fortcostata* (HÖLZL, 1958) could be studied. *T. edentata* differs from *T. fortcostata* by less elongated, broader shell, less rounded teleoconch whorls, wider aperture and more widely spaced axial ribs. Based on the morphological differences and the Egerian stratigraphical range, *T. edentata* is considered herein as a separate species. *T. edentata* has been documented in the Egerian mollusc assemblages of Eger, Máriahalom, Zsám-bék, Mány and Gyermely.

*Tritia pygmaea* aff. *bispiralis*  
 (KOCH & WIECHMANN, 1872)  
 (Plate 2, figures 3–4)

1872 *Nassa pygmaea* SCHLOTHEIM var. *bispiralis* — KOCH & WIECHMANN, p. 30, pl. 1, fig. 5.  
 1997 *Hinia (Tritonella) pygmaea* (SCHLOTHEIM) — MOTHS et al., pl. 5, fig. 5.  
 2016 *Nassarius fortcostatus* (HÖLZL) — KOVÁCS & VICIÁN, pl. 4, figs 7–8.

*Material*: 8 specimens.

*Remarks*: The specimen referred to as *N. fortcostatus* (HÖLZL, 1958) by KOVÁCS & VICIÁN (2016) is actually more closely allied to *T. pygmaea bispiralis* (KOCH & WIECHMANN), but somewhat differs in subsutural part of the whorls and in sculpture. Here a newly collected well-preserved specimen is illustrated. Based on morphology, the *Nassa pygmaea* specimen figured by ONDREJIČKOVÁ & SENEŠ (1965, pl. 5, figs 56–57) from the Egerian of southern Slovakia is also considered to be a possible representative of *T. pygmaea bispiralis*. The subspecies is typical of the Chattian of the North Sea Basin.

Family Marginellidae FLEMING, 1828  
 Subfamily Marginellinae FLEMING, 1828  
 Genus *Dentimargo* COSSMANN, 1899  
 Type species: *Marginella dentifera* LAMARCK, 1803

*Dentimargo fuchsi* COSSMANN, 1899  
 (Plate 2, figures 5–6)

1870 *Marginella gracilis* — FUCHS, p. 147, pl. 4, figs 6–8.  
 1899 *Dentimargo Fuchsi* — COSSMANN, p. 91.  
 1973 *Marginella gracilis* FUCHS — BÁLDI, p. 310, pl. 45, fig. 1.

*Material*: 3 specimens.

*Remarks*: The species is a new record at Esztergom-Szentgyörgymező. *D. fuchsi* is distinguishable from the Pannonian Basin endemic *D. vadaszi* (BÁLDI, 1961) by higher spire. In the Hungarian literature COSSMANN's revision of *Marginella gracilis* FUCHS was overlooked. The species has been documented in the Egerian mollusc assemblage of Eger.

Family Olividae LATREILLE, 1825  
 Subfamily Ancillariinae SWAINSON, 1840  
 Genus *Ancillarina* BELLARDI, 1882  
 Type species: *Ancilla canalifera* LAMARCK, 1803

*Ancillarina subcanalifera*  
 (D'ORBIGNY, 1852)  
 (Plate 2, figures 7–8)

1852 *Ancillaria subcanalifera* — D'ORBIGNY, p. 52.  
 1973 *Tortoliva subcanalifera* — BÁLDI, p. 302, pl. 44, figs 5–6 only (cum syn.)  
 1997 *Ancillarina subcanalifera* (D'ORBIGNY) — BALUK, p. 27, pl. 7, figs 5–6 (cum syn.)

*Material*: 2 specimens.

*Remarks*: The species is a new record at Esztergom-Szentgyörgymező. In the Egerian of Hungary it has been documented in the mollusc assemblages of Eger and Budafok.

Family Cancellariidae FORBES & HANLEY, 1851  
 Subfamily Cancellariinae FORBES & HANLEY, 1851  
 Genus *Admetula* COSSMANN, 1889  
 Type species: *Cancellaria evulsa* SOLANDER in BRANDER, 1766

*Admetula* cf. *evulsa*  
 (SOLANDER in BRANDER, 1766)  
 (Plate 2, figs 9–10)

1766 *Buccinum evulsum* — SOLANDER in BRANDER, pl. 1, fig. 14.  
 non 1973 *Bonellitia evulsa* SOLANDER in BRANDER — BÁLDI, p. 309, pl. 41, figs 7–8 [= *Admetula postera* (BEYRICH, 1856)].  
 1997 *Cancellaria (Merica) evulsa* (SOLANDER) — GRÜNDEL, p. 17, text-fig. 10, pl. 4, fig. 6 (cum syn.)  
 2008 *Cancellaria (Merica) evulsa* (SOLANDER in BRANDER) — SCHNETLER & PALM, p. 60, pl. 6, fig. 11 (cum syn.)

*Material*: 4 specimens.

*Remarks*: The species is a new record at Esztergom-Szentgyörgymező. *A. evulsa* is a highly variable form. It differs in morphology from *A. postera* (BEYRICH) which is widespread in the Egerian Pannonian Basin by elongate shell with higher spire. The specimen figured herein with eroded protoconch of 2 1/4 whorls is very similar in size and morphology — especially in spiral sculpture — to the one illustrated by GRÜNDEL (1997, pl. 4, fig. 6). *A. evulsa* is typical of the Eocene to Oligocene in the NE Atlantic and the North Sea Basin.

*Admetula postera* (BEYRICH, 1856)  
(Plate 2, figs 11–12)

1856 *Cancellaria evulsa* SOLANDER sp. var. *postera* — BEYRICH, 557, pl. 26, figs 3–5.

1973 *Bonellitia evulsa* SOLANDER in BRANDER — BÁLDI, p. 309, pl. 41, figs 7–8.

1984b *Cancellaria (Merica) evulsa postera* BEYRICH — JANSSEN, p. 13, pl. 2, fig. 8 (cum syn.)

**Material:** 14 specimens.

**Remarks:** The species was recorded at Esztergom-Szentgyörgymező without illustration by KOVÁCS & VICIÁN (2016). *A. postera* differs from *A. evulsa* in morphology by broader shell and different sculpture. The species is common in the Chattian North Sea Basin and Mainz Basin, and in the Egerian Pannonian Basin. In Hungary it has been documented in the mollusc assemblages of Eger, Solymár, Törökbálint, Leányfalu and Dejtár.

Genus *Contortia* SACCO, 1894

Type species: *Cancellaria contorta* BASTEROT, 1825

*Contortia zitae* n. sp.  
(Figure 4)

<http://zoobank.org/urn:lsid:zoobank.org:act:91D1903E-C7C8-4EEC-B749-8E8F98EF28DE>

**Holotype:** PAL 2019.149.1., HNHM, Department of Palaeontology and Geology, SL 24, SW 13.

**Type strata and locality:** Egerian (Upper Oligocene – Lower Miocene) siltstone, Esztergom-Szentgyörgymező, Hungary.

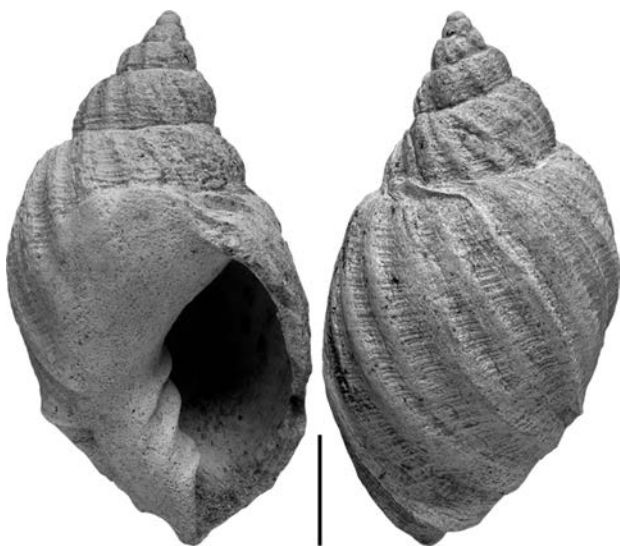
**Derivation of name:** Named after Zita VICIÁN, the daughter of the first author.

**Material:** 1 specimen.

**Diagnosis:** A *Contortia* with elongated shape, relatively less incised sutures, fold-like axial ribs, dentate outer lip, extended callus and high aperture.

**Description:** Medium sized shell. The protoconch is apically abraded and superficially slightly corroded; two moderately rounded, smooth whorls are preserved with a base width of 1.5 mm. Due to the poor preservation the transition area to the teleoconch as well as the spiral sculpture of the first whorl of the teleoconch are not recognizable. The beginning of the teleoconch is interpreted with the appearance of the first axial rib. The teleoconch consists of four whorls which are slightly more rounded on the upper part than on the lower part, but do not form a pronounced shoulder or sutural ramp. The suture is not very deep. The height of the last whorl is 2/3 of the total height of the shell. The outer lip is not thickened. Inside the outer lip there are 9 very weak, short, strip-shaped denticles. The two columellar folds and the columellar termination are approximately parallel to each other. The inner lip has no denticles. The callus is widely spread, not very thick, and extends higher than the upper margin of the aperture. An umbilical bulge is formed, the umbilicus is covered by the callus. Axial sculpture of uniformly arranged, fold-like prosocline ribs with the same distances as the width of the ribs. The number of ribs increases from 11 on the first whorl to 18 on the last whorl. The ribs are somewhat different in thickness, a few of them are slightly bulging. Spiral sculpture of inconspicuous spiral cords with increasing number from whorl to whorl. Due to the surface corrosion, spiral sculpture is not recognizable on the first teleoconch whorl. On the second whorl 8 cords of different width are visible, every second one is a bit narrower. The interspaces are not wide, but clearly visible.

**Remarks:** The new species shows a high degree of similarity with the Miocene NE Atlantic *Contortia contorta* (BASTEROT, 1825) from which it differs by the morphological features mentioned in the diagnosis. Furthermore, *C. contorta* appears not earlier than the Burdigalian (CAHUZAC et al. 2004) — in the Paratethys the species is known in the Burdigalian of Upper Bavaria (HÖLZL 1958). Some forms of the highly variable *C. contorta* are very similar to *C. zitae*, such as the Burdigalian *C. contorta levis* (PEYROT, 1928), the Langhian *C. deshayesiana tauropercostata* (SACCO, 1894) (see FERRERO MORTARA et al. 1984, pl. 32, fig. 10), and *C. deshayesiana longonassoides* (SACCO, 1894). *Cancellaria buccinoides* KOENEN, 1889 (*non* G. B. SOWERBY, 1832; *non* COUTHOUY, 1838) from the Lower Oligocene of the North Sea Basin is also similar in morphology but is distinguishable from *C. zitae* n. sp. by absence of umbilical bulge (KOENEN 1889, pl. 10, fig. 9). The Badenian *Contortia fenestrata* (EICHWALD, 1830) somehow resembles *C. zitae* n. sp. in the outline and the profile of the whorls, but differs by the proportion of the apertural height, the coarser spiral sculpture and the development of the callus. The small specimen that was recorded as *C. contorta* by R. JANSSEN (1979: 305, pl. 16, fig. 38) from the Chattian of the North Sea Basin shares no similarities with *C. zitae* n. sp.



**Figure 4.** *Contortia zitae* n. sp., holotype SL 24 (2.9×). Scale bar: 5 mm

4. ábra. *Contortia zitae* n. sp., holotípus SL 24 (2.9×). Méretvonal: 5 mm

Family Conidae FLEMING, 1822  
Genus *Eoconus* TUCKER & TENORIO, 2009  
Type species: *Conus sauridens* CONRAD, 1833

*Eoconus egerensis* (NOSZKY, 1936)  
(Plate 2, figure 13)

1936 *Leptoconus Dujardini* DESHAYES var. *egerensis* — NOSZKY, p. 110.  
1973 *Conus (Conolithus) dujardini egerensis* NOSZKY — BÁLDI, p. 328, pl. 45, figs 7–8.

*Material*: 2 specimens.

The species was recorded at Esztergom-Szentgyörgy-mező without illustration by KOVÁCS & VICIÁN (2016). The type specimen was destroyed (PÁLFY et al. 2008); a neotype is designated herein from Eger, the type locality: HNHM, Department of Palaeontology and Geology; inventory number: M.63.7123. (Representation: BÁLDI 1973, pl. 45, fig. 7). *E. egerensis* has been documented in the Egerian mollusc assemblages of Eger, Novaj and Diósjenő.

Family Borsoniidae BELLARDI, 1875  
Genus *Cordieria* ROUAULT, 1848  
Type species: *Cordieria iberica* Rouault, 1848

*Cordieria collectiva*  
(NOSZKY, 1936) nov. comb.  
(Plate 2, figures 14–15)

1936 *Drillia collectiva* n. sp. — NOSZKY, p. 106, pl. 5, fig. 22.  
2016 *Cordieria* sp. — KOVÁCS & VICIÁN, p. 242, pl. 5, figs 3–4.

*Material*: 63 specimens.

*Remarks*: The shell size and morphology of the specimens in the studied assemblage agree well with the type of *Drillia collectiva* NOSZKY (1936, pl. 5, fig. 22) from the Egerian mollusc assemblage of Eger. The holotype was destroyed (PÁLFY et al. 2008); a neotype is designated herein: HNHM, Department of Palaeontology and Geology; inventory number: INV 2016.44. (Representation: KOVÁCS & VICIÁN 2016, pl. 5, figs 3–4).

Genus *Asthenotoma* HARRIS & BURROWS, 1891  
Type species: *Pleurotoma meneghinii* MAYER, 1868

*Asthenotoma obliquinodosa*  
(SANDBERGER, 1860)  
(Plate 2, figures 16–17)

1860 *Pleurotoma obliquinodosa* — SANDBERGER, p. 240, pl. 16, fig. 6.  
1973 *Asthenotoma obliquinodosa* (SANDBERGER) — BÁLDI, p. 324, pl. 48, fig. 10.  
1998 *Asthenotoma obliquinodosa* (SANDBERGER) — WELLE, p. 87, pl. 16, figs 4–5.

*Material*: 2 specimens.

*Remarks*: The species was recorded at the locality by KOVÁCS & VICIÁN (2016); in the present paper a newly collected well-preserved specimen is illustrated. In the Egerian of Hungary *A. obliquinodosa* has been documented in the mollusc assemblages of Eger.

Family Drilliidae OLSSON, 1964  
Genus *Stenodrillia* KOROBKOV, 1955  
Type species: *Pleurotoma allionii* BELLARDI, 1875

*Stenodrillia oligocenica*  
(NOSZKY, 1936) nov. comb.  
(Plate 2, figure 18)

1936 *Drillia crispata* JAN. nov. var. *oligocenica* — NOSZKY, p. 107, pl. 6, fig. 12.  
1973 *Clavus (Crassispira) oligocenicus* (NOSZKY) — BÁLDI, p. 322, pl. 48, fig. 9.  
2016 *Raphitoma valdicarenata* BÁLDI — KOVÁCS & VICIÁN, pl. 5, figs 10–11.

*Material*: 10 specimens.

*Remarks*: The species was misidentified by KOVÁCS & VICIÁN (2016). The holotype was destroyed (PÁLFY et al. 2008); a neotype is designated herein from Eger, the type locality: HNHM, Department of Palaeontology and Geology; inventory number: M.69.221. (Representation: BÁLDI 1973, pl. 48, fig. 9).

Family Clavatulidae GRAY, 1853  
Genus *Clavatula* LAMARCK, 1801  
Type species: *Clavatula coronata* LAMARCK, 1801

*Clavatula danuvii* n. sp.  
(Figure 5, Plate 2, figures 19–20)

<http://zoobank.org/urn:lsid:zoobank.org:act:97D846A9-D61F-4B4D-818C-1C492617F07C>

*Holotype*: PAL 2019.150.1., HNHM, Department of Palaeontology and Geology, SL 15,8, SW 5,4.

*Type strata and locality*: Egerian (Upper Oligocene – Lower Miocene) siltstone, Esztergom-Szentgyörgy-mező, Hungary.

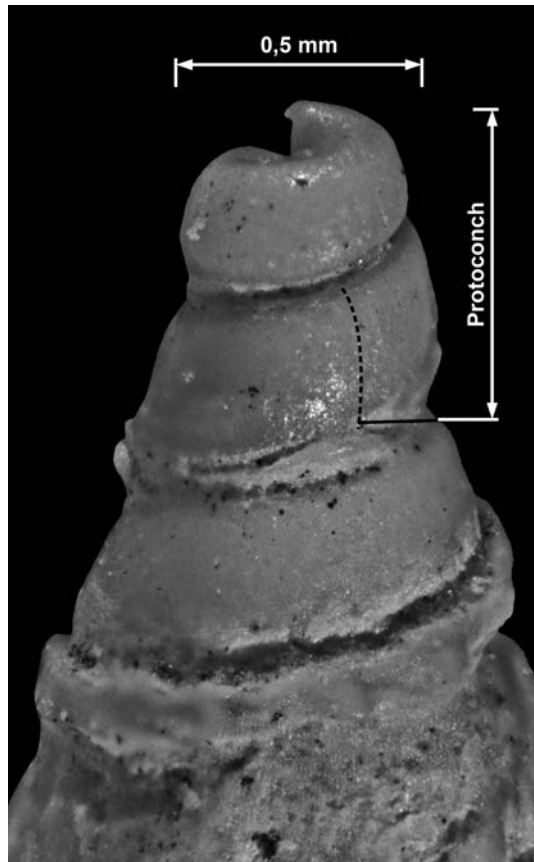
*Derivation of name*: The name refers to the origin of the holotype from the bank of the Danube river (Latin: Danuvius).

*Material*: 1 specimen.

*Diagnosis*: Medium sized *Clavatula* with rows of rounded nodes on both sides of the suture, concave teleoconch whorls, relatively long and slightly twisted siphonal canal.

*Description*: Medium sized adult specimen, the initial three whorls are abraded and appear smooth with remnants of the original outer shell layer visible only in the sutural area. As the protoconch is incomplete the ornamentation of protoconch, the transition, and the initial teleoconch are not recognisable, so the transition to the teleoconch is interpreted with the change of the whorl profile (Figure 5). The teleoconch consists of 8 whorls. Axial sculpture of two rows of rounded nodes immediately below and immediately above the suture, 12 nodes on the last whorl. The node-bearing areas are bulge, the abapical bulge is much stronger. The whorls are concave between the rows of nodes. The maximal depth of the specific sinus is situated in the concave area of the whorls. Spiral sculpture





**Figure 5.** *Clavatula danuvii* n. sp.  
Early whorls of the holotype  
5. ábra. *Clavatula danuvii* n. sp.  
A holotípus korai kanyarulatái

of about 20 flat spiral bands separated by narrow furrows. The spiral sculpture persists on the base and the siphonal canal as well with two spirals that are stronger at the transition to the shell base, and the spiral interspaces become increasingly wider. The siphonal canal is extended and slightly twisted.

**Remarks:** The most similar species is *Clavatula boreoromana* KAUTSKY, 1925 from the Hemmoorian (= Burdigalian) of the North Sea Basin (KAUTSKY 1925: 154, pl. 10, figs 28–29; see also GLIBERT 1954, pl. 3, fig. 7). *Clavatula danuvii* n. sp. differs from *C. boreoromana* especially in the shape of the siphonal canal which is relatively long and almost straight. About the North Sea Basin species KAUTSKY wrote: „Der Kanal ist ziemlich kurz und etwas nach rechts gedreht; sein Rücken trägt bei einigen Exemplaren einen sehr schwachen Wulst.“ [The siphonal canal is quite short and twisted slightly to the right; the back has a very weak bulge in some specimens.]. *Clavatula romana* (DEFRANCE, 1826) from the Miocene of the Loire Basin and the Paratethys, and the Mediterranean Pliocene has much stronger ornamentation with a different style (SCARPONI & DELLA BELLA 2004, pl. 25, figs 29–30).

Genus *Turricula* SCHUMACHER, 1817  
Type species: *Murex javanus* LINNAEUS, 1767

*Turricula telegdirothi* (NOSZKY, 1936)  
(Plate 2, figure 21)

1936 *Surcula Telegdi Rothi* n. sp. — NOSZKY, p. 108, pl. 5, fig. 10.  
1973 *Turricula telegdirothi* (NOSZKY) — BÁLDI, p. 320, pl. 47, fig. 11.

**Material:** 2 specimens.

**Remarks:** The species was recorded at Esztergom-Szentgyörgymező without illustration by KOVÁCS & VICIÁN (2016). The type specimen was destroyed (PÁLFY et al. 2008); a neotype is designated herein from Novaj, the type area: HNHM, Department of Palaeontology and Geology; inventory number: M.60.10759. (Representation: BÁLDI 1973, pl. 47, fig. 11). *T. telegdirothi* has been documented in the Egerian mollusc assemblages of Eger and Novaj (BÁLDI 1973).

Family Turridae H. ADAMS & A. ADAMS, 1853  
Genus *Gemmula* WEINKAUFF, 1875  
Type species: *Pleurotoma gemmata* REEVE, 1843

*Gemmula geinitzi* (KOENEN, 1890)  
(Plate 2, figures 22–23)

1890 *Pleurotoma geinitzi* — KOENEN, p. 382.  
1998 *Gemmula (Gemmula) geinitzi* (KOENEN) — WELLE, p. 76, pl. 13, figs 12–14 (cum syn.)  
2008 *Gemmula (Gemmula) geinitzi* (KOENEN) — SCHNETLER & PALM, p. 56, pl. 7, fig. 8 (cum syn.)

**Material:** 4 specimens.

**Remarks:** The species is a new record in the Egerian of Hungary. It differs in morphology from the closely allied *G. laticlavia* (BEYRICH, 1848) — which is widespread in the Egerian Pannonian Basin — by slightly narrower shell, and by sculpture of well-defined granulated spiral keel in the middle of the whorls. *G. geinitzi* is typical of the Oligocene of the North Sea Basin.

Family Fusiturridae ABDELKRIM et al. 2018  
Genus *Fusiturris* THIELE, 1929  
Type species: *Pleurotoma undatiruga* BIVONA Ant. in BIVONA And., 1838

*Fusiturris* cf. *selysii* (KONINCK, 1837)  
(Plate 2, figure 24)

1837 *Pleurotoma Selysii* — KONINCK, p. 25, pl. 1, fig. 4.  
1859 *Pleurotoma Selysii* KONINCK — SANDBERGER, p. 236, pl. 15, fig. 12, pl. 16, fig. 4.  
1973 *Turris (Fusiturris) selysi* (KONINCK) — BÁLDI, p. 312, pl. 47, figs 9–10 (cum syn.)  
2008 *Fusiturris selysii* (DE KONINCK) — SCHNETLER & PALM, p. 57, pl. 7, fig. 12 (cum syn.)

**Material:** 1 specimen.

**Remarks:** The species is a new record at Esztergom-Szentgyörgymező. The specimen figured here is close to the type in size and sculpture but differs by slightly broader shell. Similar shells were illustrated by SANDBERGER (1859, pl. 15, fig. 12) and BÁLDI (1973). In the Egerian of Hungary *F. selysii* has been documented in the mollusc assemblages of Eger and Törökbálint.

Family Acteonidae D'ORBIGNY, 1842  
 Subfamily Acteoninae D'ORBIGNY, 1842  
 Genus *Tornatellaea* CONRAD, 1860  
 Type species: *Tornatellaea bella* CONRAD, 1860

*Tornatellaea simulata*  
 (SOLANDER in BRANDER, 1766)  
 (Plate 2, figures 25–26)

1766 *Bulla simulata* — SOLANDER in BRANDER, p. 29, pl. 4, fig. 61.  
 1995 *Tornatellaea simulata* (SOLANDER) — GÜRS, p. 176, pl. 32,  
 fig. 1 (cum syn.)  
 2011 *Tornatellaea simulata* (SOLANDER in BRANDER) — SCHNETLER  
 & HEILMANN-CLAUSEN, p. 75, pl. 7, figs 3–5 (cum syn.)

*Material*: 1 specimen.

*Remarks*: The species is a new record in the Egerian Pannonian Basin. It differs in morphology from *Acteon punctatosulcatus* (PHILIPPI, 1843) — which was documented at Eger by BÁLDI (1973) — in morphology by globose shell. *T. simulata* occurs in the Eocene (England, France, Denmark, Austria) to the Oligocene (France, the Netherlands, Germany).

Family Ellobiidae L. PFEIFFER, 1854  
 Genus *Ellobium* RÖDING, 1798  
 Type species: *Ellobium midae* RÖDING, 1798

*Ellobium* cf. *subjudae* (D'ORBIGNY, 1852)

1852 *Auricula subjudae* — D'ORBIGNY, p. 2.  
 1984a *Ellobium* (*Ellobium*) cf. *subjudae* (D'ORBIGNY) — JANSSEN,  
 p. 134, pl. 4, figs 16–17.

*Material*: 1 fragmentary specimen.

*Remarks*: The species is a new record at Esztergom-Szentgyörgymező. Unfortunately, the specimen was destroyed shortly after being found, but it was identical with the one that was recorded by JANSSEN (1984a). In the Egerian of Hungary this rare species has been documented in the mollusc assemblage of Máriahalom. From a palaeoecological point of view the appearance of the genus in the Egerian Pannonian Basin is significant because it indicates a tropical mangrove ecosystem. The co-occurrence of *Ellobium* along with *Melanopsis*, *Potamides* (*Ptychopotamides*), *Mesohalina*, *Terebralia*, *Granulolabium* and *Pugilina* specimens represents a proper indicator for coastal or lagoonal environments (HARZHAUSER & KOWALKE 2001, HARZHAUSER et al. 2016). However, this group is characterised by making only a sporadic appearance as derived material in Unit C of the locality; within the whole gastropod assemblage (about 6000 specimens in the studied unit) they form approx. 1.6%.

Both the siltstone deposits and the gastropod fauna of Unit C indicate a bathyal setting.

## Conclusion

Up until now 61 species have been documented in the Egerian gastropod assemblage of Esztergom-Szentgyörgymező (KOVÁCS & VICIÁN 2016, VICIÁN et al. 2017). In the present paper 14 gastropod species are described as new at the locality. Some of these [e.g. *Potamides* (*Ptychopotamides*) *conjunctoturris* (SACCO), *Ancillarina subcanalifera* (D'ORBIGNY), *Eoconus egerensis* (NOSZKY) or *Fusiturris* cf. *selysii* (KONINCK)] are well-known late Oligocene taxa that are widespread in the Pannonian Basin; while five taxa are new in Hungary: *Cerithiscala* sp., *Sassia foveolata* (SANDBERGER), *Admetula evulsa* (SOLANDER in BRANDER), *Gemmula geinitzi* (KOENEN) and *Tornatellaea simulata* (SOLANDER in BRANDER); these are present in the Chattian of the Mainz Basin or the North Sea Basin. The richness of the gastropod assemblage can also be demonstrated by the introduction of five new species: *Calyptrea baldii* n. sp., *Cypraeorbis nadaii* n. sp., *Paziella* (*Paziella*) *modesta* n. sp., *Contortia zitae* n. sp. and *Clavatula danuvii* n. sp. The high diversity of genus *Cypraeorbis* (four species) and the family Cancellariidae (six species) in this Oligocene fauna is also noteworthy.

In Hungary the Egerian mollusc assemblages of the Wind Quarry (Eger) show the highest gastropod alpha diversity with more than 100 species (BÁLDI 1973), while the fauna of Máriahalom contains about 76 species (JANSSEN 1984a). With the new records presented herein, Esztergom-Szentgyörgymező seems to be the second richest Egerian locality in the country, and future fieldwork collection promise further results.

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### Plate I — I. tábla

- Figure 1. *Potamides (Ptychopotamides) conjunctoturrus* (SACCO, 1895), SL 17 (2.5×)
- Figures 2–3. *Cypraeorbis exsplendens* (SACCO, 1894), SL 30 (2.5×)
- Figures 4–7. *Cypraeorbis nadaii* n. sp., holotype, SL 23.1 (2.5×)
- Figures 8–11. *Cypraeorbis nadaii* n. sp., paratype 1, SL 20.1 (2.5×)
- Figures 12–13. *Cypraeorbis nadaii* n. sp., paratype 2, SL 22.9 (2.5×)
- Fig. 14. *Sassia foveolata* (SANDBERGER, 1860), SL 22 (2.5×)
- Figures 15–16. *Cerithiscala* sp., SL 9 (3×)
- Scale bars: 5 mm. Méretvonalak: 5 mm

### Plate II — II. tábla

- Figures 1–2. *Euthriofusus szontaghi* NOSZKY, 1936, SL 22 (2.5×)
- Figures 3–4. *Tritia pygmaea* aff. *bispiralis* (KOCH & WIECHMANN, 1872), SL 9 (5×)
- Figures 5–6. *Dentimargo fuchsi* COSSMANN, 1899, SL 14 (3×)
- Figures 7–8. *Ancillarina subcanalifera* (D'ORBIGNY, 1852), SL 21 (2.5×)
- Figures 9–10. *Admetula* cf. *evulsa* (SOLANDER in BANDER, 1766), SL 13 (4×)
- Figures 11–12. *Admetula postera* (BEYRICH, 1856), SL 20 (3×)
- Figure 13. *Eoconus egerensis* (NOSZKY, 1936), SL 23 (2.5×)
- Figures 14–15. *Cordieria collectiva* (NOSZKY, 1936), SL 10.5 (4×)
- Figures 16–17. *Asthenotoma obliquinodosa* (SANDBERGER, 1860), SL 23 (2.5×)
- Figure 18. *Stenodrillia oligocenica* (NOSZKY, 1936), SL 14 (3×)
- Figures 19–20. *Clavatula danuvii* n. sp., holotype, SL 16 (4×)
- Figure 21. *Turricula telegdirothi* (NOSZKY, 1936), SL 20 (2.5×)
- Figures 22–23. *Gemmula geinitzi* (KOENEN, 1890), SL 16.5 (3×)
- Figure 24. *Fusiturris* cf. *selysii* (KONINCK, 1837), SL 30 (2.5×)
- Figures 25–26. *Tornatellaea simulata* (SOLANDER in BRANDER, 1766), SL 4.5 (10×)
- Scale bars: 5 mm (Figures 1–24), 1 mm (Figures 25–26). Méretvonalak: 5 mm (Figures 1–24), 1 mm (Figures 25–26)

Plate I — I. tábla

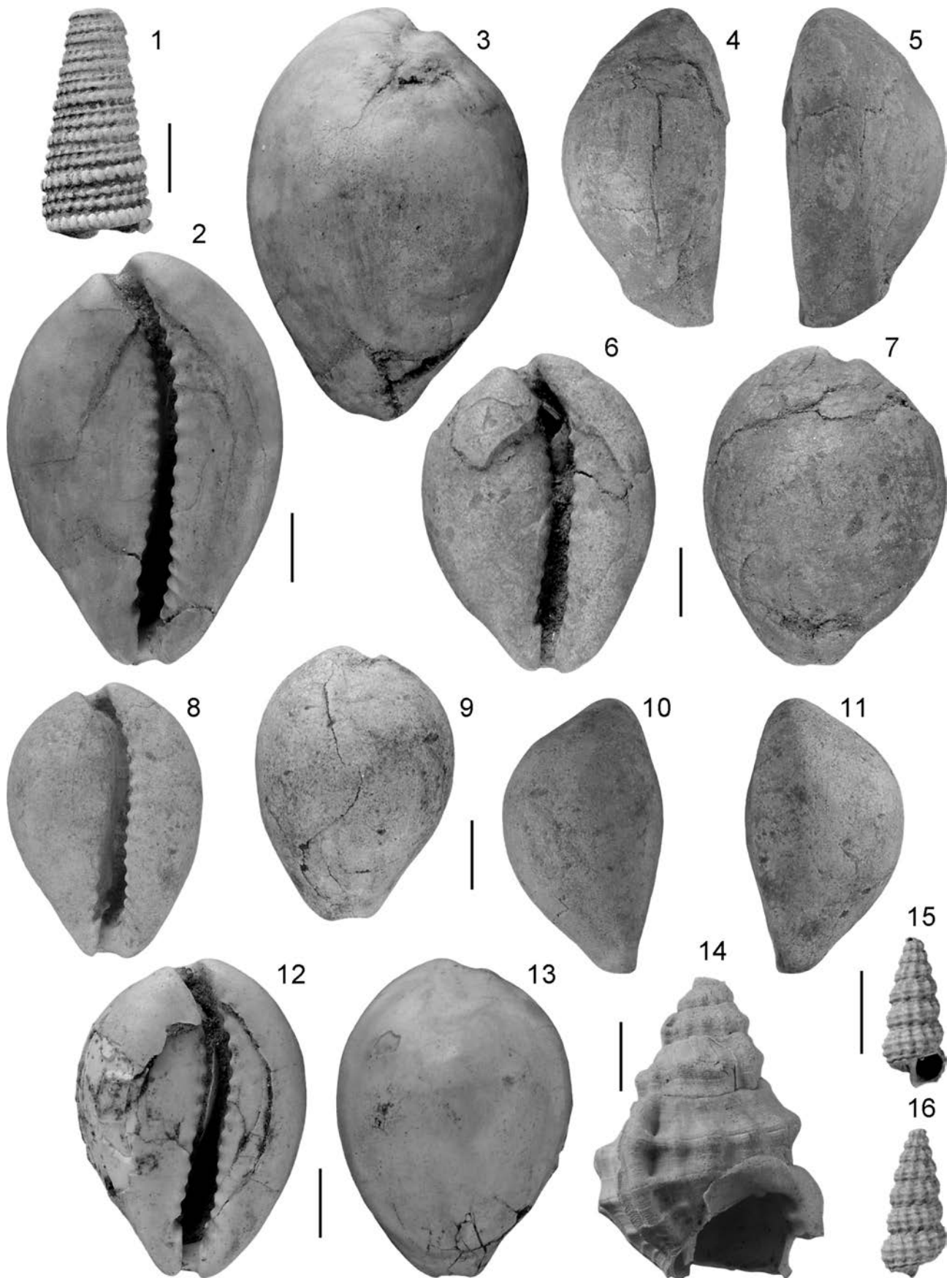


Plate II — II. tábla

