

***Cerithiella genei* (Bellardi & Michelotti, 1840), new for the Miocene of Belgium (Gastropoda Prosobranchia: Cerithiopsidae)**

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The species *Cerithiella genei* (Bellardi & Michelotti, 1840), which so far was recorded from the Middle Miocene of Italy, Germany, The Netherlands, and Denmark, is here recorded for the first time from the Middle Miocene Antwerp Member and Zonderschot Member of Belgium. The species is described in detail and figured.

Key words: Gastropoda, Prosobranchia, Cerithiopsidae, Miocene, Belgium, Antwerp.

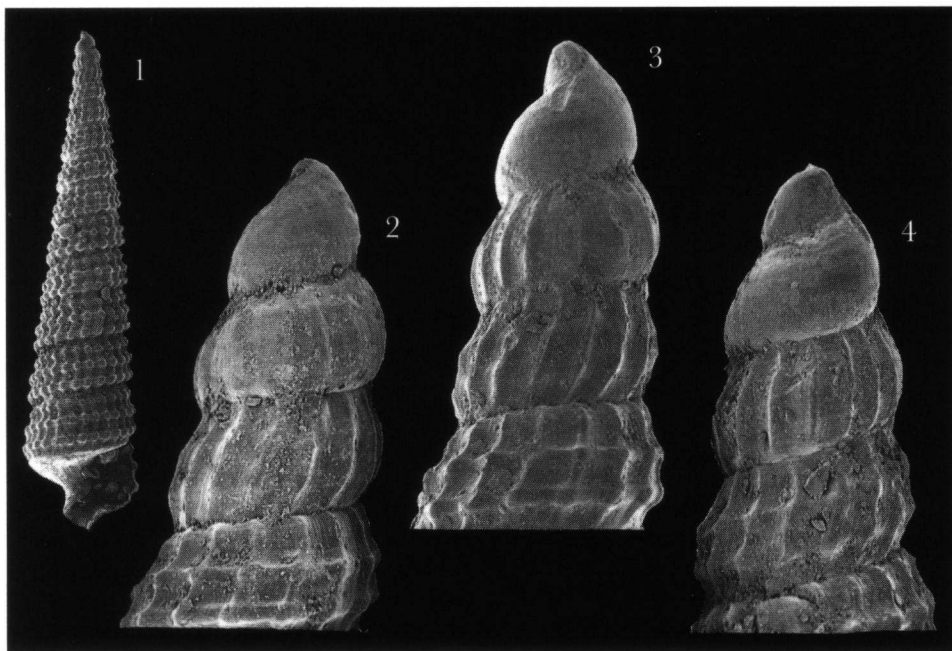
Glibert (1952) mentioned only one species of the Cerithiopsidae from the Miocene of Belgium, a *Seila* sp. from which insufficient material was present in the IRSNB collection to warrant description. Later, abundant new material of this family was collected on the E3 Kleine Ring Motorway, in the construction pits for the Kennedy-tunnel and the metro Antwerp, in Edegem and in Zonderschot (Heist-Op-Den-Berg). Two members of the genus *Ataxiocerithium* will be discussed by Marquet (1997). A further species is described herein.

Abbreviations used. - RGM: collections Nationaal Natuurhistorisch Museum, Leiden, The Netherlands, formerly Rijksmuseum van Geologie en Mineralogie; IRSNB: collections Institut royal des Sciences naturelles de Belgique, Brussels, Belgium; RM: collection R. Marquet, Antwerp, Belgium.

*Cerithiella genei* (Bellardi & Michelotti, 1840)

- 1840 *Cerithium Genei* Bellardi & Michelotti: 137, pl. 4 figs. 5-6.  
1847 *Cerithium Genei* - Michelotti: 194, pl. 7 fig. 14.  
1882 *Cerithium Genei* - Von Koenen: 273.  
1895 *Cerithiella Genei* - Sacco: 69, pl. 3 fig. 80.  
1895 *C. Genei* var. *latefenestrata*, Sacco: 69, pl. 3 fig. 79.  
1895 *C. Genei* var. *graciliturrita*, Sacco: 69, pl. 3 fig. 81.  
1895 *C. Genei* var. *spiculina*, Sacco: 69, pl. 3 fig. 82.  
1895 *C. Genei* var. *pliotransiens*, Sacco: 69, pl. 3 fig. 83.  
1907 *Cerithium Genei* - Ravn: 301, pl. 3 fig. 23.  
1944 *Cerithiella (Cerithiella) genei* - Van Voorthuysen: 29, pl. 12 figs. 2-3  
1960 *Cerithiella (Cerithiella) genei* - Anderson: 64, pl. 12 figs. 2-3.  
1964 *Cerithiella genei* - Anderson: 211.  
1967 *Cerithiella (Cerithiella) genei* - Janssen: 138, pl. 10 fig. 3.  
1984 *Cerithiella genei* - Ferrero Mortara et al.: 205, pl. 37 fig. 8  
1992 *Cerithiella genei* - Cavallo & Repetto: 78 fig. 151.

Material. - RM: Antwerp, Ploegstraat; Antwerpen Sand Member, Berchem Formation, late Early Miocene: 1 fr.; Antwerp Metro Schijnpoort; Bed 5 (see Marquet, 1991): 50 sp.; Bed 6: 4 sp.; Bed 8: 5 sp.; Dingden, Westfalen, Germany (Köningsbach, see Janssen, 1967); Dingdener Feinsand, Dingdener Schichten, Reinbekian, Middle Mi-



Figs. 1-4. *Cerithiella genei* (Bellardi & Michelotti, 1840), RGM 396.184, Metro Schijnpoort, Antwerp, Belgium, Bed 5, Antwerp Member, Berchem Formation, late Early Miocene; 1, apertural view of complete shell X 9; 2, Protoconch X 70; 3, Protoconch, 90° to the left of fig. 2, X 70; 4, Protoconch, 90° to the left of fig. 3. All SEM photographs.

ocene: 111 sp.; Kavelaer-Wetten, Westfalen, Germany; Bislicher Schichten, Reinbekian: 3 sp.; Heist-op-den-Berg, prov. Antwerp, Belgium (BVP-pit in Bergebeekstraat, Zonderschot); Zonderschot Member, Berchem Formation, late Early Miocene: 7 fr. ?; RGM: Antwerp Metro Schijnpoort; Bed 5: 1 sp. 396.194 (figured specimen); Kleine Ring Motorway, Borgerhout, Antwerp; Antwerp Member, Berchem Fm., late Early Miocene: 7 fr.

Type locality. - Sant' Agata, Italy.

Stratum typicum. - Marne de Sant'Agata, Tortonian, Late Miocene.

Description. - Rather small, nearly recticonical, very slender shell with paucispiral protoconch and up to fifteen teleoconch whorls. Protoconch 0.8 mm high, pointed, eccentric in relation to teleoconch, consisting of two whorls. Nucleus extremely small. Second whorl smooth, very tumid, acute. Two next whorls with ten to twenty clearly delimited, opisthocline axial ribs, which are slightly sinuous; the turning point is adapical, at 1/3 below the suture. Intercostal spaces twice as wide as ribs. Two spiral ribs appear gradually, which start immediately to form slight carinae and tubercles on the points of intersection with the axial ribs. A third spiral rib appears adapically on the fifth teleoconch whorl. This spiral always remains weaker than both others, which causes the existence of a shallow subsutural depression. Sculpture on body whorl consisting of about twenty narrow axial ribs, which are very slightly opisthocline to nearly or-

thocline. These axial ribs are crossed by four spiral ribs; adapical one weak, lying very close to the suture, second spiral at 1/3 of whorl height below suture, third (abapical) spiral strongest and at 2/3 below adapical suture, fourth spiral weak and lying on the angular whorl base. Axials weaker than third spiral. Axials and spirals forming a reticulate sculpture with weak square tubercles on the points of intersection. Aperture rounded oval, with relatively long siphonal canal. Shell base smooth, except for inconspicuous growth lines.

Dimensions of figured specimen. - Height 7.4 mm, diameter 1.8 mm.

Discussion. - This species is new for the Miocene of Belgium. It is absent in the Early Miocene Edegem Sand Member, but it is rather common in the Antwerpen Sand Member, especially in Bed 5. This is a seemingly undisturbed bed of scattered shells in rather coarse sand, with infaunal species like *Panopea angusta inflata* Goldfuss, 1841, in life position. The Zonderschot specimens are devoid of protoconch, so their identification is uncertain. The species was so far found in the Italian Miocene and Pliocene and in the Dutch, Danish and German Middle Miocene. Gründel (1980) placed the species in the genus *Stilus* Jeffreys, 1885, on account of its peculiar, pointed protoconch. Bouchet & Warén (1993), however, considered *Stilus* to be a junior synonym of *Cerithiella* because of the resemblance of the radula of the type species of *Stilus* to that of *Cerithiella*.

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#### REFERENCES

- ANDERSON, H.-J., 1960. Die Gastropoden des jüngeren Tertiärs in Nordwestdeutschland. Teil 2. Prosobranchia Mesogastropoda. 1. Littorinacea, Rissoacea, Cerithiacea. — *Meyniana* 9: 13-79.
- , 1964. Die Miocene Reinbek-Stufe in Nord- und Westdeutschland und ihre Molluskenfauna. — *Fortschr. Geol. Rheinl. Westf.* 14: 31-368.
- BELLARDI, L., & G. MICHELOTTI, 1840. Saggio orritografico sulla classe dei gastropodi fossili dei terreni terziarii del Piemonte. — *Mem. r. Accad. Sc. Torino* (2) 3: 93-174.
- BOUCHET, P., & A. WARÉN, 1993. Revision of the northeast Atlantic bathyal and abyssal Mesogastropoda. — *Boll. Malac. suppl.* 3: 580-840.
- CAVALLO, O., & G. REPETTO, 1992. Conchiglie fossile del Roero. Atlante iconografico. — *Assoz. Natur. Piemont., Memorie* 2: 1 — 251.
- FERRERO MORTARA, E., L. MONTEFAMEGLIO, M. NOVELLI, G. OPESSO, G. PAVIA & R. TAMPIERI, 1984. Catalogo dei tipi e degli esemplari figurati della Collezione Bellardi e Sacco Parte II. — *Mus. Reg. Sc. natur. Cataloghi* 7: 1-484.
- GLIBERT, M., 1952. Faune malacologique du Miocène de la Belgique. II. Gastropodes. — *Mém. Mus. r. Sci. nat. Belg.* 121: 1-197.
- GRÜNDEL, J., 1980. Bemerkungen zur Überfamilie Cerithiopsacea H.A. Adams, 1854 (Gastropoda) sowie zur Fassung einiger ihrer Gattungen. — *Zool. Anz.* 204: 209-264.
- JANSSEN, A.W., 1967. Beiträge zur Kenntnis des Miozäns von Dingden und seiner Mollusken-Fauna, 2. — *Geol. Palaeont.* 3: 153-193.
- KOENEN, A. VON, 1882. Die Gastropoda holostomata und tectibranchiata, Cephalopoda und Pteropoda des norddeutschen Miocän. 2. Teil von "as norddeutsche Miocän und seine Molluskenfauna" — *N. Jahrb. Geol. Paläont.* 2: 223-263.
- MARQUET, R., 1991. Recent temporary exposures of the Antwerpen Sands in the Antwerp city area: stratigraphy and fauna. — *Contr. Tert. Quatern. Geol.* 28: 9-12.

- — , 1997. Two *Ataxiocerithium* species from the Miocene of Belgium (Gastropoda Prosobranchia: Cerithiopsidae). — *Basteria* 61: 27-31.
- MICHELOTTI, G., 1847. Description des fossiles des terrains Miocènes de l'Italie septentrionale. — *Natuurk. Verh. Holl. Maatsch. Wet. Haarlem* 2: 1-408.
- RAVN, J.P.J., 1907. Molluskenfaunen i Jyllands Tertiaeraflejringer. — *Kong. Danske Vidensk. Selsk. Skrift.* 7: 217 — 384.
- SACCO, F., 1895. I molluschi dei terreni terziarii del Piemonte e della Liguria. parte XVII. (Cerithiidae, Triforidae, Cerithiopsidae e Diastomidae): 1-83. Torino.
- VOORTHUYSEN, J.H. VAN, 1944. Miozäne Gastropoden aus dem Peelgebiet (Niederlande) (Rissoidae-Muricidae, nach Zittel's Einteilung 1924). — *Meded. Geol. Sticht. (C-IV-1)* 5: 1-116.