

A New Species of *Corinnaeturris* (Gastropoda: Clathurellidae) from the Southeastern Gulf of Mexico

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ABSTRACT A new species of *Corinnaeturris* from the southeastern Gulf of Mexico is described and compared with *C. leucomata* (Dall, 1881) and *C. angularis* Figueira & Absalão, 2010, the only two species of that genus heretofore described (Worms, 2023).

KEY WORDS Clathurellidae, *Corinnaeturris*, *Corinnaeturris humilis*, Dry Tortugas

INTRODUCTION

In June, 2004 the Biology Department at the University of Louisiana at Lafayette, executed a dredging campaign in the southeastern Gulf of Mexico (GOM) using the R/V *Pelican*, a vessel operated by the Louisiana Universities Marine Consortium (LUMCON); its objective: sampling for algae, crustaceans and mollusks. The one-week campaign produced 543 lots of mollusks dredged at depths from 54 m to 509 m. Dredging at the deepest station, where the new *Corinnaeturris* species was collected, was performed using the Benthic Skimmer, a specialized dredge built specifically for deep-water, soft sediment conditions (see García, 2007). This particular station yielded two species of Scaphopoda belonging to two families, two species of Pelecypoda belonging to two families, and 19 species of Gastropoda, belonging to 12 families.

The genus *Corinnaeturris* was raised by Bouchet and Warén to accommodate a single species, Dall's *Pleurotoma leucomata*. The authors of the new genus considered Dall's species "to differ from everything we know" (1980:77), in particular, the multispiral, smooth apex with a single spiral keel, its granular

surface, and its labial sinus, "very deep and evenly curved at the subsutural zone (Ibid.)."

It took more than a century to discover a second species that would be assigned to that genus, the Brazilian species *Corinnaeturris angularis* Figueira & Absalão, 2010; so it was with surprise when, upon close examination of the *Pelican* material dredged in 2004, an undescribed species of *Corinnaeturris* was found.

ABBREVIATIONS

BMSM: Bailey-Matthews National Shell Museum, Sanibel Island, Florida
EFG: E.F. Garcia Collection
IBUFRJ: Instituto de Biologia, Universidade Federal do Rio de Janeiro.
MCZ: Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts.

SYSTEMATICS

Class Gastropoda	Cuvier, 1795
Subclass Prosobranchia	Milne-Edwards, 1848

Order Neogastropoda Wenz, 1938
 Superfamily Conoidea Fleming, 1822
 Family Clathurellidae H. Adams and A.
 Adams, 1858
 Genus *Corinnaeturris* Bouchet and
 Warén, 1980

Type species: *Pleurotoma leucomata* Dall, 1881,
 by original designation.

Corinnaeturris humilis new species
 (Plate 1, Figures 1-2)

Description. Shell elongate-fusiforme (width/length of holotype 1.65), 4.4 mm in length. Protoconch (Figure 1) of four whorls, light-tan in coloration; first and second whorls smooth; first whorl small, dome-shaped; second whorl twice as large; third and fourth whorls developing a carina below the middle and an inconspicuous, smooth suprasutural cord; transition to teleocoach marked by a change in coloration; edge of color change showing shape of a deep, evenly curved sinus (Figure 1). Teleocoach white, comprised of four, wide-shouldered angular whorls. Axial sculpture of ten to thirteen retractive ribs, becoming nodulose when crossed by spiral elements; ribs wider than interspaces on first whorl; interspaces becoming wider on later whorls; axial ribs evanescent towards anterior end of shell. Spiral cords appearing after first whorl: on second and third whorls one or two weak cords on shoulder; three stronger cords at periphery, at suture, and midway between the two; cords undulating, forming spirally elongated nodes as they cross axial elements. Last whorl with two weak spiral cords at shoulder, four stronger cords at mid-body, and ten weaker cords anteriorly; intersection of axial and spiral sculpture strongly nodulose, creating spirally elongated reticulations. Suture conspicuous, bordered posteriorly by spiral cord from previous whorl. Aperture narrow, slightly

longer than one third of shell length; siphonal canal wide; outer lip thin, broken, presumably with a posterior sinus similar in shape to that described at edge of protoconch.

Diagnosis. Shell small for the genus, with a protoconch of four whorls; the first two smooth; the last two carinated. Teleocoach of four whorls, sculptured with conspicuous, spirally elongated reticulations created by axial and spiral elements; reticulations strongly nodulose at intersections.

Type Material. Holotype BMSM 134988, 4.4 mm in length. Paratype BMSM 124989 3.6 mm in length. Both dredged at type locality.

Type Locality. 24°35.29'N, 83°41.86'W, in 496-509 m. Southwest Florida, off Dry Tortugas.

Distribution. Known only from the type locality.

Etymology. From the Latin for “humble”, referring to the modest looks of the species.

DISCUSSION

There has been only one species of *Corinnaeturris* described from the GOM (Rosenberg *et al*, 2010): *C. leucomata* Dall. The author described it as having a protoconch of four whorls (1989:120); Figueira & Absalão describe it as having three whorls (2010:737); our specimens concur with the latter (Plate 1 Figure 5). Besides the difference in protoconch, *C. leucomata* (Plate 1 Figures 5-7) grows four times larger than the new species, has more concave shoulders, heavier nodes at periphery of whorls, and less conspicuous spiral elements.

The Brazilian species *Corinnaeturris angularis* (Plate 1 Figures, 3-4) differs from the new species by having a protoconch of three whorls instead of four, with a spiral keel “sculptured with tiny slanted riblets”; more angular whorls; more numerous axial riblets (16 versus 10-13); less numerous, less conspicuous spiral elements (compare Plate 1 Figures 1, 2 with 3, 4); and

more numerous whorls. A 5.74 mm shell of *C. angularis* has seven teleoconch whorls while a 4.4 mm specimen of the new species has only four.

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LITERATURE CITED

- Bouchet, P. & A. Warén. 1980.** Revision of the northeastern Atlantic bathyal and abyssal Turridae (Mollusca, Gastropoda). *Journal of Molluscan Studies*, Supplement 8:1-119.
- Dall, W.H. 1889.** Report on the results of dredgings, under the supervision of Alexander Agassiz, in the Gulf of Mexico (1877-78) and in the Caribbean Sea (1879-1880), by the U. S. Coast Survey Steamer "Blake". *Bulletin of the Museum of Comparative Zoology* 18 1-492, pls. 10-40.
- Figueira, R.M.A. and R.S. Absalão. 2010.** Deep-water Mangeliinae, Taraninae and Clathurellinae (Mollusca: Gastropoda: Conoide: Turridae) from the Campos Basin, southeast Brazil. *Scientia Marina* 74(4):731-743.
- García, E.F. 2007.** Results of deep-water dredging in the Gulf of Mexico using the "Benthic Skimmer", and report on several geographic extensions, including two species not previously reported in the western Atlantic. *The Festivus* 39(2):13-18.
- Rosenberg, G., F. Moretzsohn & E. García. 2009.** Gastropoda (Mollusca) of the Gulf of Mexico. *In: Gulf of Mexico: Its Origins, Waters, and Biota. II. Biodiversity*. D. L. Felder & D. K. Camp, eds, Texas A & M University Press, pp. 579-699.
- Worms Editorial Board. 2023.** World Register of Marine Species. Available from <https://www.marinespecies.org/aphia.php?p=taxdetails&id=137814> on 8-10-2023.

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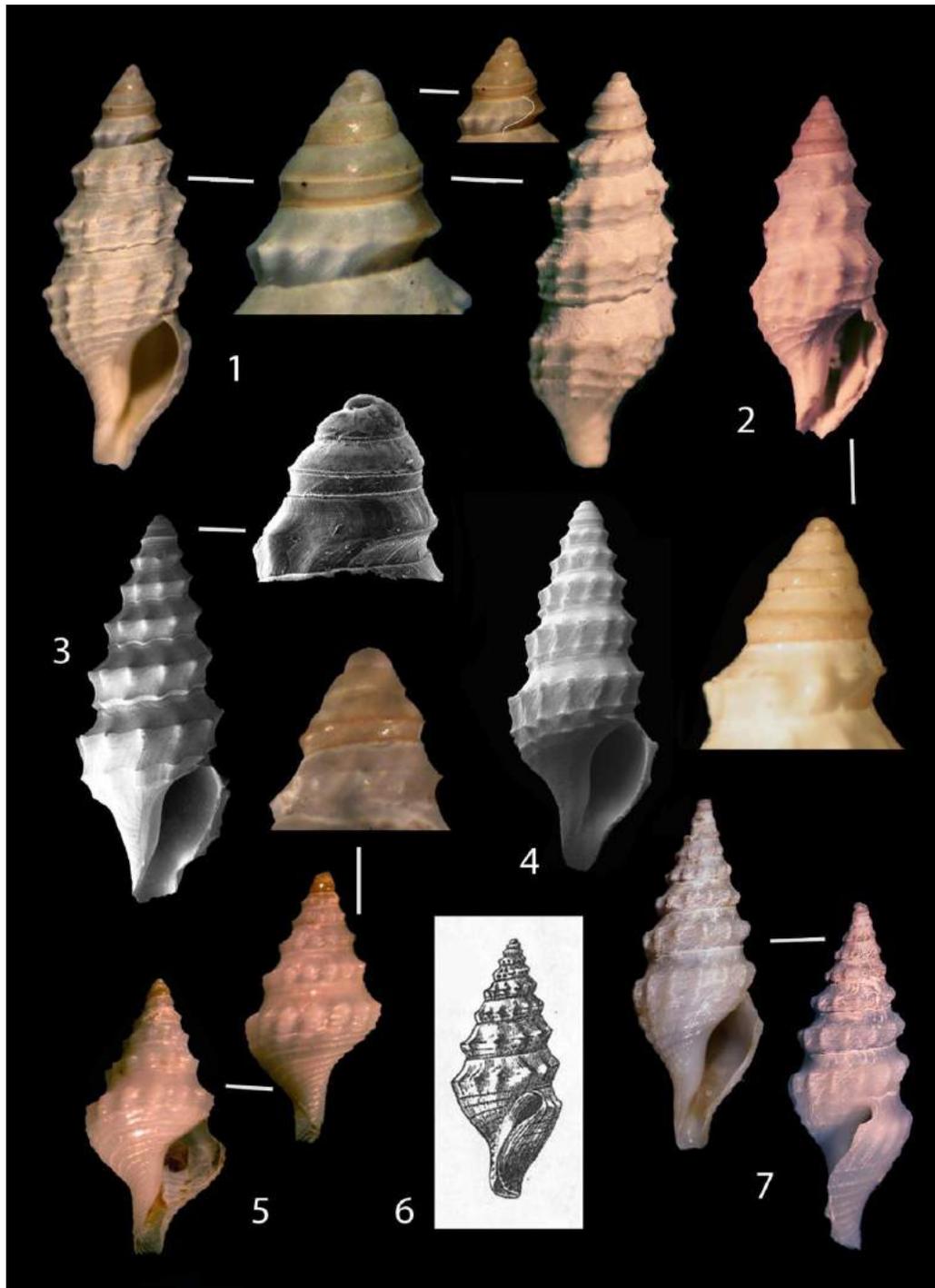


Plate 1. Comparison of *Corinnaeturris* species. Figures 1= *Corinnaeturris humilis* new species, holotype, BMSM 134988, 24°35.29'N, 83°41.86'W, 496-509 m, 4.4 mm. 2= *Corinnaeturris humilis* new species, paratype, BMSM 134989, same data as above, 3.6 mm. 3= *Corinnaeturris angularis* Figueira & Absalão, 2010, holotype, IBUFRJ 17053, 5.74 mm. 4= *Corinnaeturris angularis* Figueira & Absalão, 2010, paratype, MCZ 362500, 6 mm. 5= *Corinnaeturris leucomata* (Dall, 1881), 28°40'N, 88°29'W, in 1457.3 m; wreck of German U-Boat U166, approximately 45 mi. off the Mississippi River Delta, juvenile, 7.8 mm (EFG 25085). 6= *Corinnaeturris leucomata* (Dall, 1881), Type figure (Dall, 1889, pl. 11, fig. 13), Blake sta. 48; off mouth of the Mississippi river, 13.5 mm. 7= *Corinnaeturris leucomata* (Dall, 1881), 28°48.057'N; 88°05.040'W, 1758-1726 m, 17.6 mm (EFG 30507).