

## A new Triphoridae from Canopus Bank, N.E. Brazil (Caenogastropoda)

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### Abstract

A new Triphoridae (Caenogastropoda) is described for deep waters (from 260 m depth) in Canopus Bank, off Ceará, N.E. Brazilian coast. *Inella unicornium*, new species, is very much long, of large size (about 50 mm), with a pair of spiral dotted cords in each whorl, and a projected, wide outer lip in aperture.

Keywords: *Inella unicornium* n. sp., Brazil, deepwater, Triphoridae.

### Resumo

Um novo Triphoridae (Caenogastropoda) é descrito para águas profundas (260 m) no Banco de Canopus, ao largo do Ceará, Costa nordeste do Brasil. *Inella unicornium*, espécie nova, é extremamente longa, de tamanho grande (por volta de 50 mm), com um par de cordas espirais pontuadas em cada volta e uma abertura com lábio externo expandido e amplo.

Palavras-chave: *Inella unicornium* n. sp., Brasil, águas profundas, Triphoridae.

### Introduction

Dredges in Canopus Bank, located off Ceará, Brazil, have revealed a series of new and interesting species. This paper describes one of them, a new Triphoridae, which are characterized by species with elongated, turritiform shell invariably sinistrally coiled.

The genus *Inella* Bayle, 1879 (type species *Triphora gigas* Hinds, 1843, from New Guinea) is characterized by relatively large sized animals, very much elongated, a relatively straight profile of the spire, and a projected aperture.

The material of the species described herein is relatively scarce, and is deposited in the Museu de Zoologia da Universidade de São Paulo (MZSP) malacological collection.

Family Triphoridae

***Inella unicornium***, new species  
(Figs. 1-7)

**Type:** Holotype MZSP 78886. Paratypes: 4 broken shells, MZSP 78890, from type locality.

**Type locality:** BRAZIL. Ceará; Canopus Bank, off Fortaleza, 02 14' 25"S 38 22' 50"W; 260 m depth (xi/2005, Coltro col.).

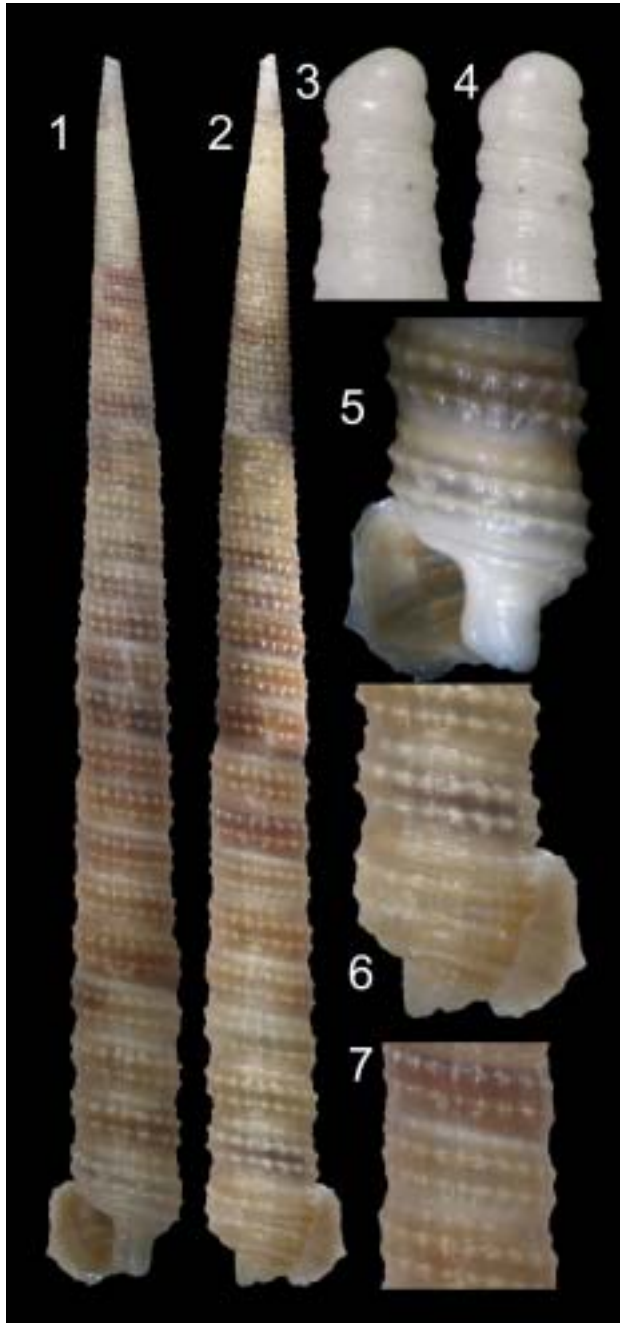
**Diagnosis:** Western Atlantic species with very elongated, large shell (about 50 mm). Profile almost straight. Sculpture a pair of spiral dotted cords located equidistant from suture and from each other. Aperture expanded.

### Description

Shell (Figs. 1-7). Of large size (about 50 mm) highly elongated and coiled. Sinistral. Color mostly beige, with some areas white (close to apex) and some sparse brown whorls. Protoconch on one whorl, somewhat mammillated, smooth, glossy (Figs. 3, 4); separation with teleoconch clear, orthocone (Fig. 4). Teleoconch of about 40 whorls; each whorl gradually increasing; profile almost straight; suture shallow. Sculpture a pair of dotted spiral cord, located somewhat equidistant between sutures (Fig. 7); about 20 uniform dots in penultimate whorl. Pair of cords as wider portion of each whorl, shell surface concave superiorly and inferiorly to them, suture as deeper region, smooth, having only growth lines; between both cords plane, smooth area having growth lines, this area equivalent to that between cords and suture. Cord lacking dots in region preceding aperture (Figs. 2, 6); a third smooth cord appearing in inferior region of last whorl also equidistant from other cords. Aperture rounded, somewhat dislocated from longitudinal shell axis; outer lip expanded (Figs. 1, 5) (about 20% wider than preceding whorl), with small projections corresponded to sculptural spiral cords. Canal short, thick, weakly opened, extending little beyond outer lip; located approximately in center of shell longitudinal axis. Inner lip white, glossy, smooth, deeply concave; callus narrow, at short distance from inner lip.

**Measurements** (respectively length, width, height in mm): Holotype (MZSP 78886): 49.7 by 5.6.

**Distribution:** Canopus Bank, Ceará.



Figs 1-7, *Inella unicornium* n. sp. shell: 1, holotype, apertural view; 2, same, dorsal view; 3-4, detail of shell apex in two positions, Paratype MZSP 78890, protoconch diameter about 0.5 mm; 5, holotype, detail of aperture; 6, same, last whorls, dorsal view; 7, same, detail of sculpture of a middle region of spire. Total length = 49.7 mm.

**Habitat:** Gravel bottoms, 260 m depth.

**Material examined:** Types.

**Etymology:** The specific epithet refers to the shape of the shell, looking like a unicorn horn, a mystic entity.

**Discussion:** There is no species in the western Atlantic that can be confused with *Inella unicornium* (see, e.g., Abbott, 1974; Rios, 1994; Merlano & Hegenus, 1994). The large size (about 50 mm), so uncommon feature for a triphorid, easily distinguishes it from the remaining co-familial species. The species barely resembles *Triphora longissima* (Dall, 1881), from North Carolina to Florida, and *T. inflata* (Watson, 1880), from Florida, by the high elongation and by straight spire profile; however, *I. unicornium* differs from both species in having a larger size, by the pair of spiral sculpture (instead of three), by smaller sized dots in the spiral cords, and by projected outer lip. It also weakly resembles *T. colon* (Dall, 1881), from Florida; however, *I. unicornium* differs from *T. colon* by larger size, by proportionally longer whorls, by taller spiral cords, and by projected outer lip. It is interesting to note, however, that all those species mentioned here lack protoconch, and possibly all them belong to the genus *Inella*.

As a consequence of the relatively feeble definition of the triphorid genera, the attribution of *Inella* to *I. unicornium* is not totally secure. From the known genera, *Inella* appears to be the more adequate, taking into consideration the relatively large size of the shell, the extreme elongation, the straight spire profile and the projected outer lip. *I. unicornium* also could be considered as *Epitrium* Harris & Burrows, 1891 and *Hypotriphora* Cotton & Godfrey, 1931; however, both genera possess species with still straighter profile (almost no sign of suture) and lack outer lip projected (see Wenz, 1938; Marshall, 1983).

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