

## ***Diptychophlia hubrechtii*, a new species (Caenogastropoda, Turridae) from off northeastern Brazil.**

Carlo Magenta Cunha  
Museu de Zoologia da USP  
Cx. Postal 2494  
04299-970 São Paulo, SP, Brazil  
carlomagenta@gmail.com

### **Abstract**

*Diptychophlia hubrechtii*, a new species is described base on shell, being the first record of this genus to Atlantic Ocean. It occurs in Fortaleza, Ceará, N.E. Brazil, in 260 m depth. The main diagnostic characters of the new species are: shell with acuminate, color cream to light-pink, siphonal canal moderately short, protoconch mammilated and strongly channeled suture.

Key words: *Diptychophlia*, Turridae, *Diptychophlia hubrechtii* new species, Brazil

### **Resumo**

*Diptychophlia hubrechtii*, uma nova espécie é descrita baseada na concha, sendo a primeira ocorrência do gênero para o Oceano Atlântico. Ocorre em Fortaleza, Ceará, Nordeste do Brasil, em 260 m de profundidade. As principais características da nova espécie são: concha turritiforme alongada, cor creme a levemente rosada, canal sifonal curto e escultura fortemente sulcada.

Palavras-chave: *Diptychophlia*, Turridae, *Diptychophlia hubrechtii* nova espécie, Brasil

### **Introduction**

The genus *Diptychophlia* Berry, 1964 [type species *Clavatula occata* Hinds, 1844, by monotypy] is characterized by spire acuminate, many whorls, channeled suture, aperture narrow and anal notch shallow, open to suture.

During the past decade many new genus and species of marine mollusks have been described (Simone & Cunha 2003; Pimenta & Absalão 2004; Simone & Birman 2006; Santos & Absalão 2006).

Recently, J. Coltro and Dr. Paulo M. Costa, in a expedition dredging in deep waters off Fortaleza, Ceará State bringing from 280-300 meters, collected many specimens of the several families that possibly they will contribute for the increase of new species and new occurrences for the Brazilian coast. The turrid describe herein is a part of this sample material collected in the gravel bottoms with corals dead.

Institution abbreviations: **ANSP**, Academy of Natural Sciences of Philadelphia, USA; **MNRJ**, Museu Nacional da Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil; **MZSP**, Museu de Zoologia da Universidade de São Paulo, São Paulo, SP, Brazil; **ZSM**, Zoologische Staatssammlung München, Germany.

### **Systematics**

Family Turridae Swainson, 1840

Genus *Diptychophlia* Berry, 1964:150.

**Type species:** *Diptychophlia occata* (Hinds, 1844), type species by monotype – *Clavatula occata* Hinds, 1844:19, pl6, f.10.

***Diptychophlia hubrechtii***, new species  
(Figs. 1-6)

**Types material:** Holotype MZSP 58651 (figs. 1-5). Paratypes: MZSP 57093, 2 shells (metalized) (Fig. 6); MZSP 78931, 5 specimens; ANSP 413314, 2 shells; MNRJ 10530, 4 shells; ZSM 20060171, 2 shells; all from type locality.

**Type-locality:** BRAZIL. **Ceará:** Canopus Bank, off Fortaleza, 02 14' 25"S 38 22' 50"W; 260 m depth (Draged, viii/2005. J. Coltro and P.M. Costa col.).

**Diagnosis:** N.E. Brazilian deepwater species. Shell strongly channeled suture. Color cream to ligh-pink. Aperture with about half of total shell length.

### Description

Shell (Figs. 1-6). Size about 8 mm, fusiform, color cream to ligh-pink. Protoconch smooth, mamillated, glossy, with about 2 whorls. Limit protoconch – teleoconch well marked. Aperture with about half of total shell length (Fig. 2). Teleoconch with about 4-5 convex whorls. Suture very channeled, furrow equivalent to cord width. Shell tall, uniformly sized axial ribs projected outside. Each node with tip rounded, smooth, disposed axially, between each node forming a shallow space, with about 8 node axial ribs in last whorl. Last whorl almost double size of spire length.

**Measurements of shells** (respectively height and width in mm): MZSP 58651 (Holotype): Paratypes: MZSP 57093 #1: 6.1 by 3.0; #2: 6.2 by 2.8; MZSP 78931 #1: 8.7 by 2.8, #2: 8.8 by 2.9, #3: 6.9 by 2.2, #4: 6.5 by 2.1, #5: 7.4 by 2.6; ANSP 413314 #1: 7.3 by 2.4, #2: 7.9 by 2.5; ZSM 20060171 #1: 7.7 by 2.7, #2: 7.6 by 2.5; MNRJ 10530 #1: 8.0 by 2.9, #2: 6.8 by 2.3, #3: 7.1 by 2.5, #4: 6.7 by 2.1.

**Distribution:** Canopus Bank, Ceará, Brazil.

**Habitat:** Gravel bottoms with dead corals, 260 m depth.

**Material examined:** Types.

**Etymology:** Named in honor of Gilbert S.P. (Steve) Hubrecht, enthusiastic and an expert of the turrids.

**Discussion:** *Diptychophlia hubrechtii* is herein described from empty shells. *D. hubrechtii* differ from type species *D. occata* (Hinds 1844), in outline and having a strongly channeled suture, being the second specie described for this genus. The depth of occurrence and type locality appears to be also different, as *D. occata* occurs in the W. Side off Panama at 72 m and *D. hubrechtii* in the N.E Brazil about 280 m. The protoconch of *D. hubrechtii* (Figs. 3, 4, 6) resembles that of the genus *Cerithiopsis*.

How this description is based only by shell characters, the generic placement of the species is relatively arbitrary, without knowledge of the radular morphology. Therefore, the precise generic allocation of the new species described herein must remain provisional.

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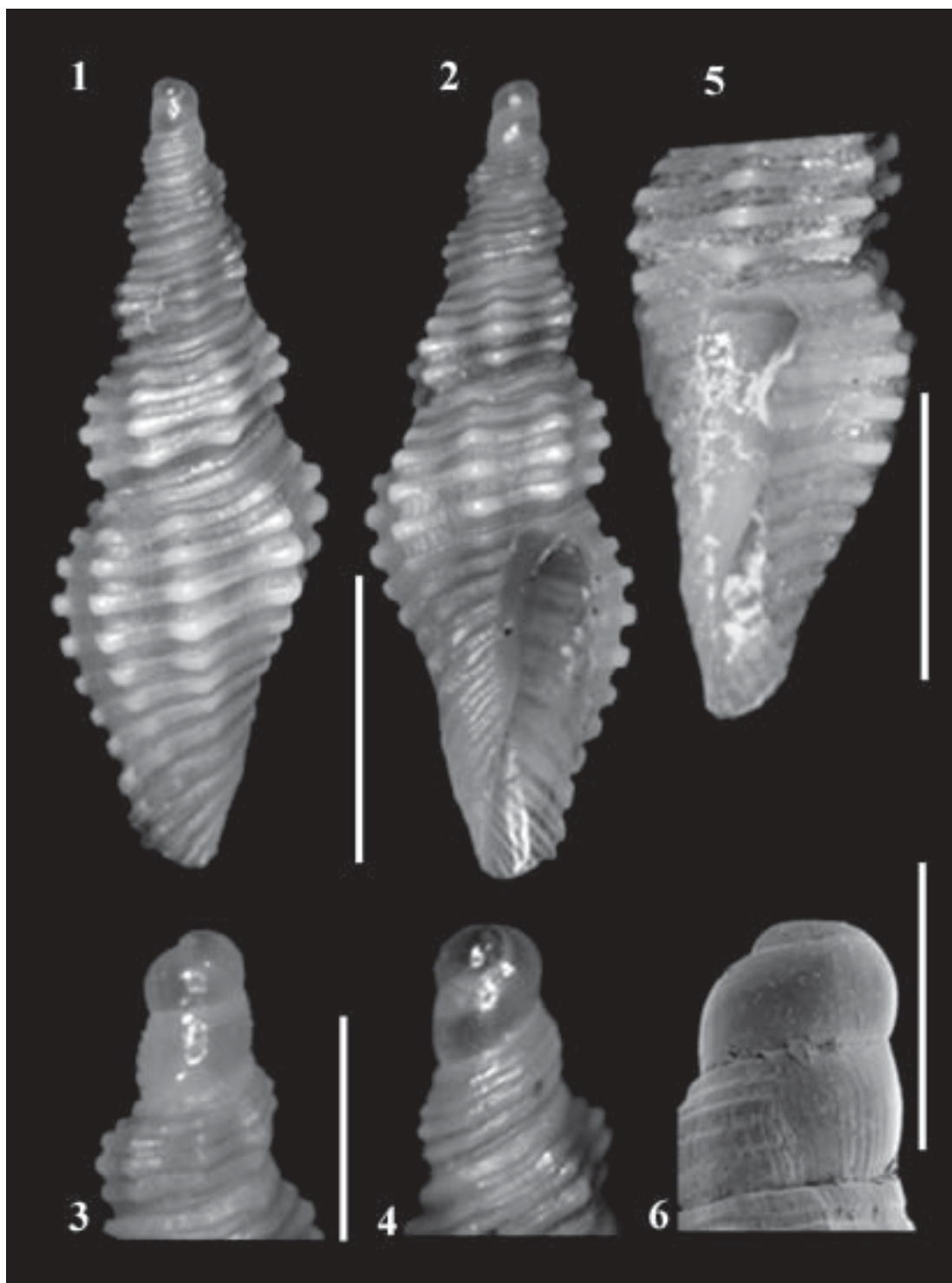


Fig. 1-6. *Diptychophlia hubrechtii* new species. 1-5 Holotype MZSP 58651 shell: 1-2, frontal and dorsal views (scale = 2mm); 3-4, details of protoconch and first teleoconch whorls, two views (scale = 1 mm); 5, detail of outer lip, outer view (scale = 1.5mm). 6 Paratype MZSP 57093, protoconch, SEM, detail - frontal view (scale = 0.5mm).

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