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A new species of Epitoniidae (Mollusca: Gastropoda) from the northeast Pacific

LEONARD G. BROWN
5 Vumbaco Drive, Wallingford, CT 06492, USA. E-mail: Epmanshell@AOL.com

Abstract

Epitonium ferminense n. sp., from off the Palos Verdes Peninsula, Los Angeles County, California, is described and compared with its most similar congeners.

Keywords: *Epitonium*, new taxa, wentletrap

Introduction

This is a continuation of the research that was begun previously by Dr. James H. McLean and is based on material he examined in connection with the epitoniid section of his monograph covering the northeast Pacific gastropods. In the course of his research, he concluded some specimens were sufficiently distinctive to warrant being described as species new to science. Brown (2018) included a description of a number of these species. An additional new species is described herein.

Material and Methods

Specimens were made available on loan for examination using a stereoscopic microscope. Because examined these specimens were all dead shells, the examination was limited to the protoconch and teleoconch sculpture.

Abbreviations:

LACM	Natural History Museum of Los Angeles County, Malacology Department, Los Angeles, California, USA.
SD	Subsequent designation.
USNM	United States National Museum, Smithsonian Institution, Washington (DC), USA.

Systematics

Family Epitoniidae Berry, 1910

Epitonium Röding, 1798

Type species. *Turbo scalaris* Linnaeus, 1758, SD by Suter (1913).

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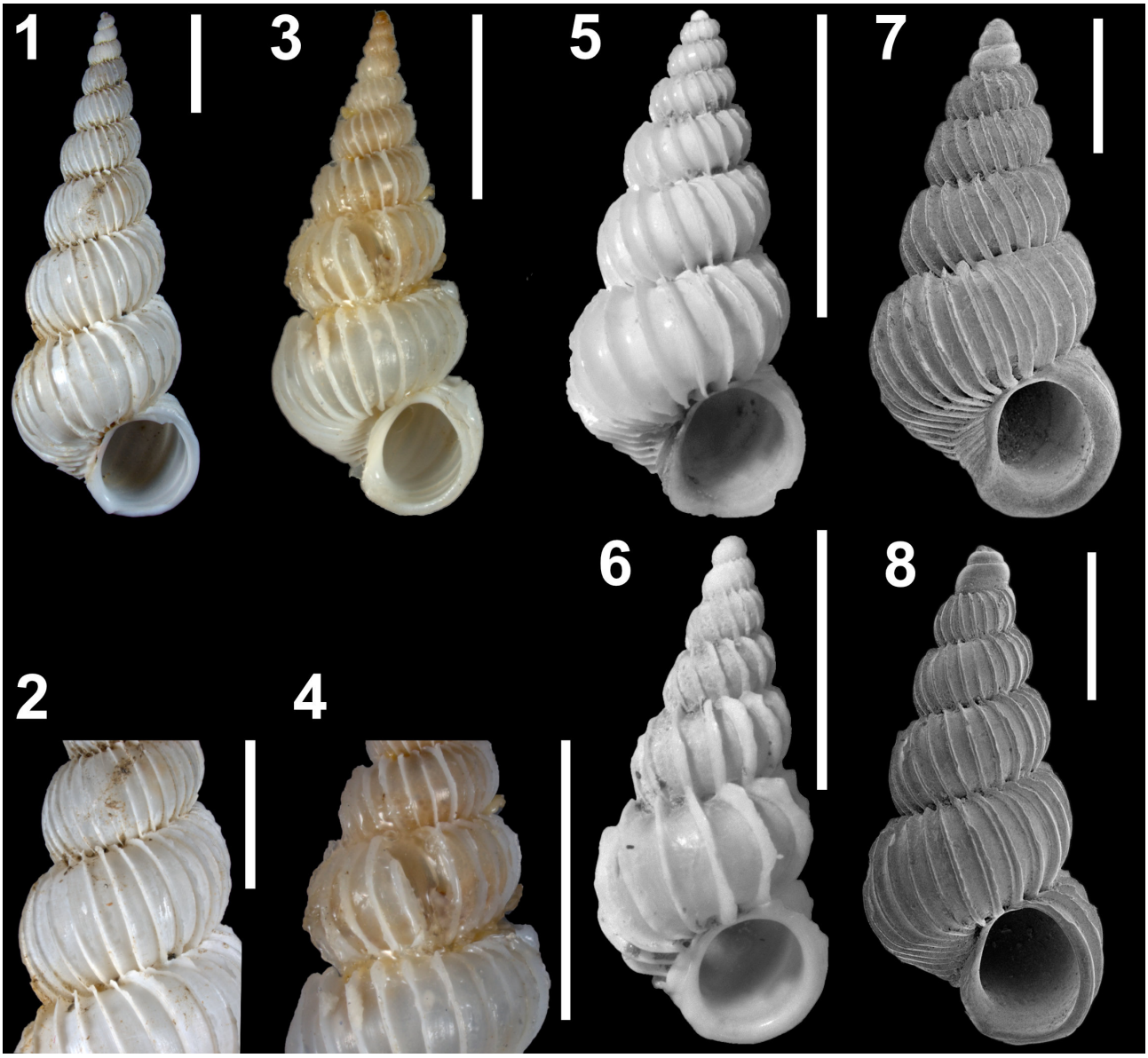
Epitonium ferminense n. sp.
(Figures 1, 2)

Type locality. LACM 1965-2, 2.7 mi. off Point Fermin, Los Angeles County, California, USA (33º 40' N, 118º 15' W), on sand and shale bottom, 29 m, leg. J.H. McLean, R/V *Velero IV* Station 10253-65.

Type material. Holotype LACM 3461 and 2 paratypes from the type locality LACM 3647; 9 paratypes LACM 3462 from off San Pedro, Los Angeles County, California, (33º 40’ 39” N, 119º 14’ 38” W), 27 m, leg. J.H. McLean, R/V *Velero IV* Station 10744-65.



FIGURES 1–8. 1–2. *Epitonium ferminense,* holotype, LACM 3461, 29 m, off Point Fermin, Los Angeles County, California, USA (33º 40' N, 118º 15' W). 23.1 mm. 3–4. *Epitonium hancocki* DuShane, 1970, holotype, LACM 1235, 37–73 m, North of Hood Island (Isla Española), Galapagos Islands, Ecuador (1º 21' S, 90º 40' W). 13 mm. 5. *Epitonium catalinense* Dall, 1917, LACM 71-176.20, 108–130 m, off Punta San Pablo, Baja California, Mexico. 8.3 mm. 6. *Epitonium tinctum* (Carpenter, 1864), LACM 67-67.13, intertidal, east anchorage, Asuncion Island, Baja California, Mexico. 9.5 mm. 7. *Epitonium berryi* (Dall, 1907), holotype, USNM 107724, 200 fathoms [= 366 m], San Pedro Bay, Los Angeles County, California, USA. 3.7 mm. 8. *Epitonium rectilaminatum* (Dall, 1907), holotype, USNM 110430, 12 fathoms [= 25 m] Monterey Bay, Monterey County, California, USA. 3.2 mm. Scale bars = 5 mm for Figs 1–6; 1 mm for Figs 7-8.

Description. Holotype acuminate, length 23.1 mm, width 8.48 mm, one paratype with single smooth protoconch whorl remaining, up to 10 convex teleoconch whorls, impressed sutures angled, making whorls appear slanted. Costae thin, slightly reflected, 18–33 per whorl; costae slightly expanded, more strongly reflected at suture. Intervals between costae smooth or with faint spiral growth lines. Slit-like umbilical opening crossed by terminations of costae. Outer lip thin, expanded, aperture oval, columella moderately expanded. White.

Distribution. Off Palos Verdes Peninsula, Los Angeles County, California, USA, 27–29 m.

Etymology. Dr. James H. McLean selected this name, which is a reference to the type locality.

Remarks. *Epitonium hancocki* DuShane, 1970, (Figs 3, 4) also has thin erect costae, but can be separated from the new species by disjunct teleooconch whorls, strongly peaked costae on the later whorls and an open umbilicus. *Epitonium tinctum* (Carpenter, 1864) (Fig. 6) is smaller, relatively broader, and has 11–15 costae per whorl (18–33 in *E. ferminense*). *Epitonium indianorum* (Carpenter, 1865) has fewer, stronger costae. *Epitonium californicum* Dall, 1917, and *E. sawinae* (Dall, 1903) have peaked and more strongly reflected costae (barely reflected and not peaked in *E. ferminense*). *Epitonium catalinense* Dall, 1917, (Fig. 5) also has thin erect costae, but is smaller, much less elongate, with more regular costae and has an open umbilicus (slit-like in *E. ferminense*).

Epitonium berryi (Dall, 1907) (Fig. 7) and *E. rectilaminatum* (Dall, 1907) (Fig. 8) have erroneously been considered synonyms of *E. catalinense* by McLean (1996: 64) and not *E. sawinae* (see also DuShane 1979: 117). The shared characters of *E. sawinae* and its synonyms *E. berryi* and *E. rectilaminatum* include a closed umbilicus, strongly reflected costae on the body whorl that are angulate on the base of the shell as well as a strong fasciole. *Epitonium sawinae* can be distinguished from *E. catalinense* by thin, erect costae (reflexed in *E. sawinae*) and an open umbilicus (closed in *E. sawinae*).

Discussion

DuShane (1979) published a review of the Epitoniidae occurring in the littoral and sublittoral zone of the northeast Pacific from Point Barrow, Alaska, including the Aleutian Islands, south to Cedros Island, Baja California, Mexico, that included a discussion of 21 recent species. Brown (2018) documented the occurrence of four additional nystiellid as well as four additional epitoniid species from this region.

This paper supplements these works by documenting an additional epitoniid species from the northeast Pacific.

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