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FIVE NEW EPITONIID GASTROPODS FROM THE
WEST COAST OF THE AMERICAS

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FIVE NEW EPITONIID GASTROPODS FROM THE WEST COAST OF THE AMERICAS

By HELEN DUSHANE¹

ABSTRACT: Five epitoniids (Mollusca: Gastropoda) are described as new, including (*Asperiscala longinosanum* from the west coast of Baja California, Mexico; *Epitonium (Asperiscala) macleani* from Ventana Bay, Baja California, Mexico; *Epitonium (Acirsa) cerralvoensis* from Cerralvo Island, Baja California, Mexico; *Epitonium (Acirsa) murrha* from Panama; and *Amaea contexta* from Guerrero, Mexico.

The epitoniid collections of the Los Angeles County Museum of Natural History (LACM), including those now on loan from the Allan Hancock Foundation, contain five new species described here. Two of the new species were dredged by the R/V *Velero III* in the 1930's and are from the Hancock Foundation Collection. Two are from a 1966 Museum expedition to the Cape San Lucas area of Baja California, sponsored by Mr. Richard Dwyer of Corona del Mar, on the R/V *Sea Quest*. One other new species was collected by Fred E. Lewis and remained unidentified until now.

ACKNOWLEDGMENTS

I am grateful to the Los Angeles County Museum of Natural History for the opportunity to study their collections and for the help rendered by Dr. James H. McLean and Mr. Gale Sphon of the Invertebrate Zoology section. I also thank the photography department of the Museum for the illustrations.

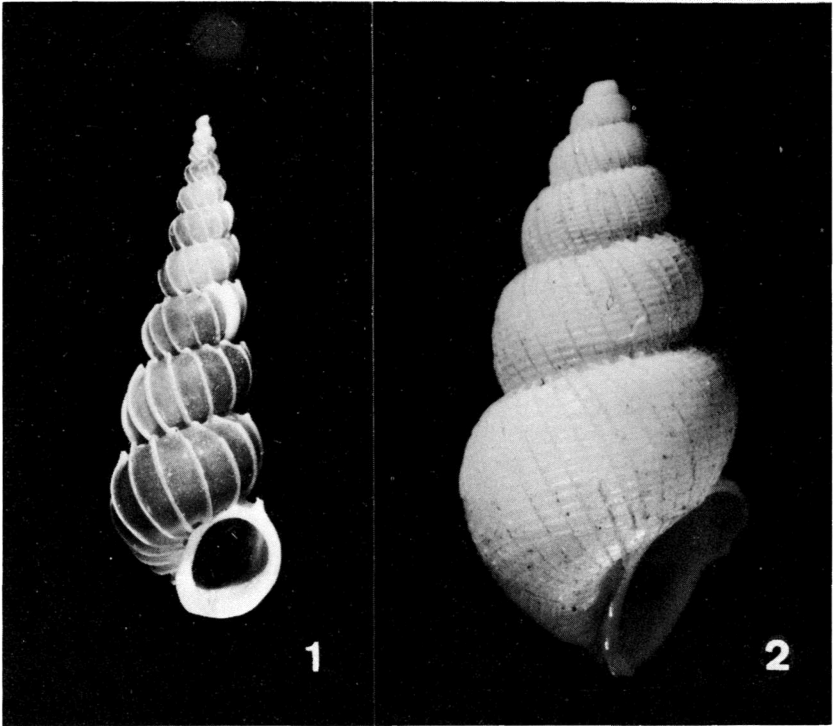
Epitonium (Asperiscala) longinosanum, sp. nov.

Fig. 1

Diagnosis: An elongate species with 11 low varices differing from all other epitoniids from the Panamic molluscan province in having a brown shell with white ribs and unevenly spaced minute spiral striae.

Description: Shell large, tall and slender, thin but strong, medium brown in color, shining, with 11 gradually enlarging, rounded whorls, nuclear whorls missing; suture distinct, varices white, 11, low and slightly reflected with a small, sharp spine on shoulder of whorl, varices continuous from whorl to whorl, an occasional costa thicker than others; spiral striations uneven, visible only under 10 X magnification; columellar lip curved, peritreme continuous, reflected over the ends of the varices, outer lip thickened by last varix; um-

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Figures 1-2. 1, *Epitonium (Asperiscala) longinosanum* sp. nov., holotype, LACM 1196. X 3; 2, *Epitonium (Asperiscala) macleani* sp. nov., holotype, LACM 1197. X 9.

bilicus lacking, operculum missing in holotype. Dimensions (in mm): length 16.5, width 5.5.

Type Locality: Rancho Inocentes, Baja California del Sur, Mexico, 23° 45' N, 110° 40' W. Collected by Captain Fred E. Lewis prior to 1945, one specimen.

Type Material: Holotype, LACM 1196.

Discussion: The coloring and 11 varices with sharp, shoulder spines distinguish *E. longinosanum* from all other west American epitoniiids. It differs from *E. appressicostatum* Dall, 1917 (p. 482), which it most resembles, in having fewer costae, a less glassy surface, and fine spiral striations between the costae.

Epitonium longinosanum is named for José Longinos Martínez who established a museum of natural history in Mexico City in 1791 and the following year collected shells from La Paz to San Francisco (Longinos Martínez, 1938).

Epitonium (Asperiscala) macleani, sp. nov.

Fig. 2

Diagnosis: A small species differing from all others in having rounded whorls, numerous low axial costae of differing strengths and numerous fine spiral ribs.

Description: Shell small, white, fragile, with approximately 32 fine costae of varying size, nuclear whorls two, smooth, rounded, light brown, first postnuclear whorl with axial striations; remaining whorls six; suture distinct, deeply impressed; umbilicus small and nearly covered by peritreme; surface between whorls with raised spiral threads, approximately 28 on the body whorl; whorls rapidly expanding, rounded, basal disk or cord lacking; aperture oval (lip broken in holotype); operculum unknown. Dimensions (in mm): length 7.0; width 3.5 (holotype).

Type Locality: Off Punta Ventana, Baja California del Sur, Mexico (opposite Cerralvo Island), 24° 4' N, 109° 49' W, 15-25 fms, sand bottom, LACM Invertebrate Zoology locality 66-23, James H. McLean, Peter M. Oringer, and Louis Marinovich, R/V *Sea Quest*, 8 April 1966, ten specimens.

Type Material: Holotype, LACM 1197; 8 paratypes, LACM 1198; 1 paratype, DuShane Collection.

Discussion: This species differs from all others known from the Panamic province. Less globose than the brownish *Epitonium (Asperiscala) huffmani* DuShane and McLean, 1968 (fig. 1), it is white and has somewhat similar sculpture.

Epitonium (Asperiscala) macleani is named for Dr. James H. McLean, Curator of Invertebrate Zoology, Los Angeles County Museum of Natural History.

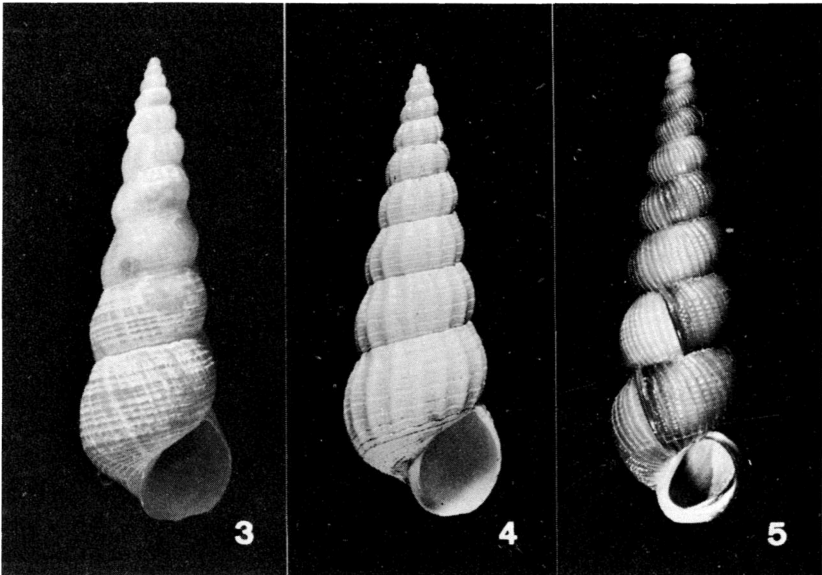
Epitonium (Acirsa) cerralvoensis, sp. nov.

Fig. 3

Diagnosis: A slender, pale brown species differing from other epitoniids from the Panamic molluscan province in having reduced axial costae and unevenly spaced spiral striae.

Description: Shell of medium size, tall and slender, thin but strong, light brown in color, with 10-12 gradually enlarging, rounded whorls, two opaque nuclear whorls; suture moderately impressed; axial ridges pale brown, 16 on the fourth whorl, gradually becoming obsolete on succeeding whorls, spiral ridges wider than the interspaces, 19 on last whorl; peritreme incomplete, lip thin, columella arched; no basal ridge; operculum horn colored, paucispiral. Dimensions (in mm): length 11.8, width 3.7 (holotype).

Type Locality: West side, Cerralvo Island, Baja California del Sur, Mexico, 24° 11' N, 109° 55' W, 7 fms, sand bottom, LACM Invertebrate Zoology locality 66-24, James H. McLean, Peter M. Oringer, and Louis Marinovich, R/V *Sea Quest*, 9 April 1966, two specimens.



Figures 3-5. 3, *Epitonium (Acirsa) cerralvoensis* sp. nov., holotype, LACM 1200. X 5; 4, *Epitonium (Acirsa) murrha* sp. nov., holotype, LACM 1232. X 3; 5, *Amaea (s.l.) contexta* sp. nov., holotype, LACM 1199. X 4.

Type Material: Holotype, LACM 1200; 1 paratype, LACM 1201. Although larger (15.3 mm in length), the paratype is worn and has several holes in the shell.

Referred Material: LACM 66-17, 10-20 fms off Cape San Lucas, Baja California, 1 specimen; LACM 66-17, 10-20 fms off Rancho Palmilla, Baja California, 1 specimen; LACM 66-20, 4 fms, Pulmo Bay, Baja California, 1 specimen; AHF 1051-40, 21 fms off Puerto Refugio, Angel de la Guardia Island, Baja California, 1 specimen.

Discussion: No other epitoniid from the west coasts of the Americas has sculpture like this species.

Epitonium (Acirsa) cerralvoensis is named for Cerralvo Island, its type locality.

Epitonium (Acirsa) murrha, sp. nov.

Fig. 4

Diagnosis: A large species with 19 low axial ribs over which the spiral sculpture crosses; differing from other *Acirsa* from the west coasts of the Americas in having more pronounced axial sculpture on the body whorl.

Description: Shell of medium size, white, texture of opaque china;

nuclear whorls two, opaque (first nuclear whorl missing in holotype), first postnuclear whorl with faint indication of axial sculpture; second postnuclear whorl with incised spiral lines; remaining convex whorls 10, gradually enlarging; 19 retractive axial ridges on body whorl giving a sinuous appearance; penultimate whorl with 15 spiral cords, uneven in width, separated by narrow, incised lines riding over the axial ridges; suture moderately impressed; basal ridge with 10-11 flat cords separated by incised lines; aperture oval, peritreme incomplete, umbilicus lacking, operculum unknown. Dimensions (in mm): length 19.1, width 6.9 (holotype).

Type Locality: Ten miles southwest of Secas Islands, Panama, 7° 51' 10" N, 82° 12' 05" W, 30 fms, gray sand, R/V *Velero* III station 944-39, 27 March 1939, one specimen.

Type Material: Holotype, LACM-AHF 1232.

Discussion: No other epitoniid from the west American coast has the color or sculpture of this species. The north Atlantic species, *Acirsa costulata* Mighels and Adams, 1842, figured by Clench and Turner (1950, p. 230) is similar in proportions but has weaker axial and spiral sculpture.

The name *murrha*, a Latin noun, meaning porcelain clay, refers to the chinalike surface of the shell. It is intended as a noun in apposition.

Amaea (s.l.) contexta, sp. nov.

Fig. 5

Diagnosis: An epitoniid differing from all other species in having many whorls, a dark brown color, numerous low axial ribs, and coarse spiral ribs.

Description: Shell of medium size, slender, dark brown, with four smooth, white, glassy nuclear whorls (missing in holotype), first postnuclear whorl axially ribbed; the following 10 whorls dark brown, convex; suture deeply impressed; axial sculpture of thin, strong ribs, about 24 on the body whorl, with occasionally a very heavy rib; these ribs continue to the columellar wall; spiral sculpture of about 18 ridges per whorl, beaded on the anterior face of the ribs; basal ridge present; outer lip formed by the extension of the last varix, aperture oval, umbilicus lacking; operculum lacking in holotype. Dimensions (in mm): length 15.4, width 4.5 (holotype).

Type Locality: Petatlan Bay, Guerrero, Mexico, 17° 31' 45" N, 101° 27' 34" W, 5-10 fms, hard sand and shell bottom, R/V *Velero* III station 265-34, 3 February 1934, one specimen.

Type Material: Holotype, LACM 1199.

Referred Material: Two smaller, damaged specimens with intact nuclear whorls were dredged by Laura and Carl Shy off Manzanillo, Colima, Mexico, in 5-10 fms, November 1967. These two specimens are uniformly dark brown, suggesting that the color of the holotype has faded.

Discussion: No other epitoniid from the west American coast is related

to this species. Sculpture is unique, making the generic allocation uncertain. Since the general features suggest *Amaea* H. and A. Adams, 1853, it is placed here provisionally.

The Latin name is derived from *contextus*, meaning interwoven, and refers to the woven texture of the axial and spiral sculpture.

RESUMEN

Cinco epitónidos (Mollusca: Gastropoda) se describen como nuevas especies, incluyendo (*Asperiscula*) *longinosanum* de la costa oeste de la Baja California, México; *Epitonium* (*Asperiscula*) *macleani* de la Bahía de Ventana, Baja California; México; *Epitonium* (*Acirsa*) *cerralvoensis* de la Isla Cerralvo, Baja California, México; *Epitonium* (*Acirsa*) *murrha* procedente de Panamá; y *Amaea contexta* de Guerrero, México.

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