

# On the Identity of *Morula martensi* Dall, 1923 and Description of a New Species of *Ergalatax* from the Red Sea (Gastropoda: Muricidae: Ergalataxinae)

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## ABSTRACT

*Morula martensi* Dall, 1923 differs from the similar species *Ergalatax margariticola* (Broderip, 1833) by having a smaller, narrower and white shell. The species erroneously identified as *Ergalatax* or *Cronia martensi* (Dall, 1923) in recent literature is named here as *Ergalatax obscura* n.sp.

**Key Words:** Gastropoda, Muricidae, *Morula martensi*, new species.

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## INTRODUCTION

Martens (1874:95, pl. 5, fig. 49) identified and illustrated a shell from the Hausknecht collection as *Purpura (Ricinula) siderea* Reeve, 1846. Examination of the type material of *Ricinula siderea* (3 syntypes BMNH 1968478, type locality: Philippines, ex coll. H. Cuming), revealed that it is a buccinid, and not the species illustrated by Martens, which Dall (1923:304) subsequently named *Morula martensi*. The seven specimens examined by Martens, all from the Persian Gulf, are stored in the Museum für Naturkunde, Berlin. Martens' original figure is here reproduced (fig. 2), and the actual specimen figured (figs. 12, 13).

Martens' description, figure, and comparisons with *Purpura undata* (Chemnitz, 1795:pl. 192, fig. 1852) [= *Ergalatax margariticola* (Broderip, 1833)], my re-examination of the specimens of the Hausknecht collection and comparison with specimens from Qatar (coll. R. Houart), reveal that this species is similar to *E. margariticola*. The shells from Oman and the Persian Gulf are white with black blotches on the spiral cords (figs. 12-15), and differ from *E. margariticola*, which has a broader, more darkly pigmented shell. Specimens from Oman were illustrated by Bosch and Bosch (1982:95, 1989:60) as *Cronia konkanensis* (Melvill, 1893), which, however, is probably a distinct species, more closely related to *Thais muricina* (Blainville, 1832) and *T. marginatra*

(Blainville, 1832), both classified in Rapaninae. If the populations from the Persian Gulf prove to be only an ecological form of *E. margariticola*, then *E. martensi* (Dall, 1923) will become a junior synonym of that species. *Ergalatax martensi* was reported to be a synonym of *E. contracta* (Reeve, 1846) by Houart (1995:251). It is here considered a distinct species.

Three distinct species with similar gross morphology have been confused in the recent literature. *Ergalatax martensi* (Dall, 1923), from Oman and the Persian Gulf, is closely related to but probably distinct from *E. margariticola* (Broderip, 1833); *Ergalatax obscura*, new species, from the Gulf of Aden, the Red Sea, the Gulf of Aqaba and the Mediterranean coast of Turkey, is a distinct species identified incorrectly as *Cronia* (or *Ergalatax*) *martensi* (Dall) in recent literature; and *Thais konkanensis* (Melvill, 1893), from the Indo-West Pacific, which is closely related to *T. muricina* (Blainville, 1832) and *T. marginata* (Blainville, 1832).

My researchs were incomplete when I received photographs and material for identification from Turkey, from G. Buzurro and W. Engl. At the time, I provisionally identified the new Mediterranean immigrant as *Ergalatax martensi*, and it was reported as such by Buzurro, Engl and Tümtürk (1995) and by Engl (1995). It is now evident that *E. martensi* is confined to Oman and the Persian Gulf, and that the Turkish species is *E. obscura* n.sp.

## SYSTEMATICS

Order Neogastropoda Thiele, 1929  
Superfamily Muricoidea Rafinesque, 1815  
Family Muricidae Rafinesque, 1815  
Subfamily Ergalataxinae Kuroda & Habe, 1971  
Genus *Ergalatax* Iredale, 1931

*Ergalatax* Iredale, 1931:231. Type species (by original

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designation): *Ergalatax recurrens* Iredale, 1931; off Sydney Harbour, New South Wales, Australia.

*Ergalatax martensi* (Dall, 1923)  
(figs. 2, 12–15)

*Morula martensi* Dall, 1923:304, new name for *Morula siderea* von Martens, 1874, not Reeve, 1846.

*Cronia konkanensis*—BOSCH & BOSCH, 1982:95, text fig.; SMYTHE, 1982:60, pl. 1, fig. i; BOSCH & BOSCH, 1989:60, text fig. (not *Ricinula konkanensis* Melvill, 1893).

NOT *Cronia martensi*—SHARABATI, 1984:pl. 19, fig. 9; SINGER & MIENIS, 1991b:58, fig. 19 (in part); COULOMBEL, 1994:73, text figs (= *Ergalatax obscura* n.sp.).

NOT *Ergalatax martensi* BUZURRO, ENGL & TüMTÜRK, 1995: 17, text fig.; ENGL, 1995: 46, fig. 10 (= *Ergalatax obscura* n.sp.).

**Description:** Shell up to 26.5 mm in length at maturity, slender, squamous. Spire high with 6 weakly convex, shouldered teleoconch whorls. Suture adpressed. Protoconch eroded in all specimens examined. Axial sculpture of teleoconch whorls consisting of high, strong, nodose ribs, producing blunt knobs at intersection with spiral cords. 9 or 10 ribs on first and second whorls, 8–10 on third, 9–12 on fourth and fifth, 7–10 on last whorl. Ribs more strongly developed at shoulder. Other axial sculpture of numerous growth lamellae. Spiral sculpture of low, squamous cords of various strength. Usually 13 or 14 cords on last whorl, and 6 additional, smaller cords on shoulder. Aperture narrow, ovate. Columellar lip smooth, occasionally with 1 or 3 weak folds abapically. Lip adherent. Anal notch narrow, deep. Outer lip crenulate, with 6–8 weak, elongate denticles within. Siphonal canal short, broad, open. White, with primary spiral cords, or knobs only, topped with dark brown or black. Aperture glossy white. Operculum dark brown with subterminal nucleus. Radula unknown.

**Type material:** Lectotype (here selected), the specimen figured by Martens (1874) as *Purpura (Ricinula) siderea*, not Reeve, 1846, and 6 paralectotypes ZMB 21596.

**Type locality:** Persian Gulf, here designated.

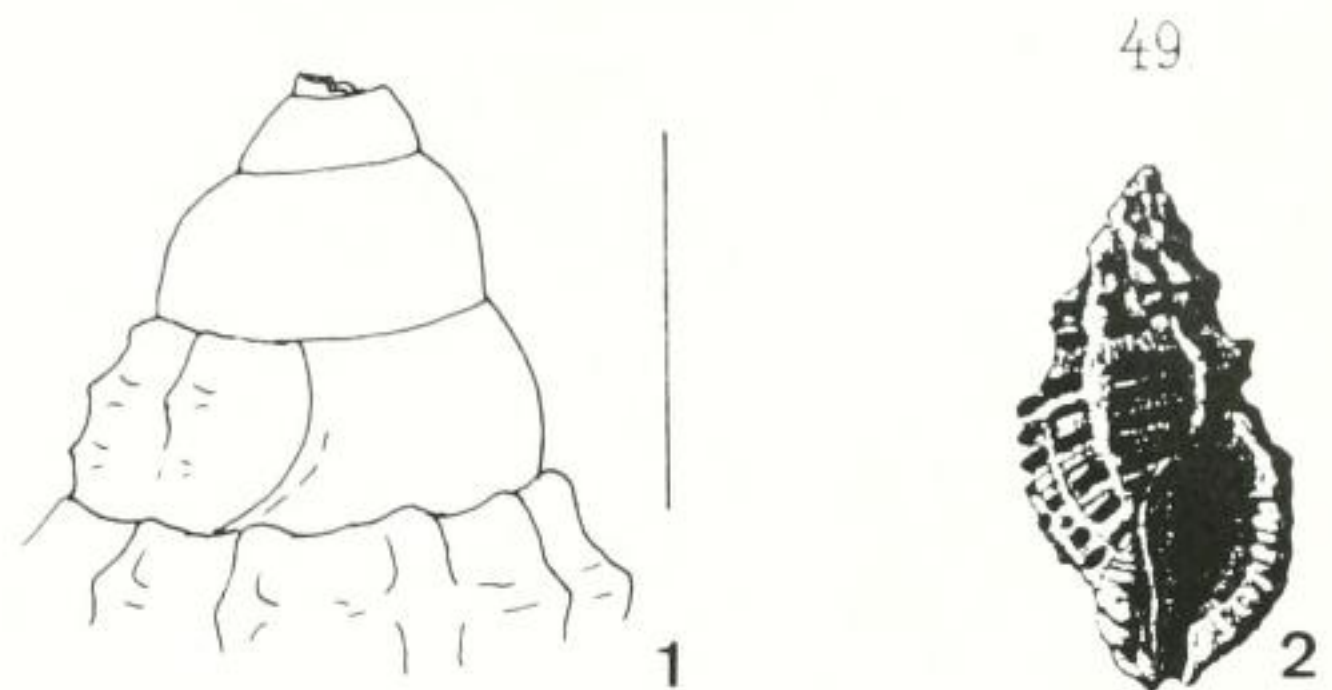
**Other material examined:** QATAR: Doha, landing stage, coll. R. Houart (10).

**Distribution:** Oman and the Persian Gulf.

**Remarks:** As stated above, the shell is close to *Ergalatax margariticola* (Broderip, 1833), but differs in being usually smaller relative to the number of teleoconch whorls, narrower, and in having a white ground color and a white, glossy aperture, instead of cream or light brown in *E. margariticola*.

*Ergalatax obscura* n.sp.  
(Figs 1, 3–8)

*Cronia martensi*—SHARABATI, 1984: pl. 19, fig. 9, 9a, 9b;



**Figures 1, 2.** 1. Protoconch of *Ergalatax obscura* n.sp. (scale bar: 0.5 mm). 2. Fig. 49 of Martens (1874), as *Purpura siderea* (Reeve).

SINGER & MIENIS, 1991b: 58, fig. 19; COULOMBEL, 1994: 73, text figs) (not *Morula martensi* Dall, 1923).

*Drupella rugosa* SINGER & MIENIS, 1991a: 18, fig. 6 (not *Murex rugosus* Born, 1778).

*Cronia cf. konkanensis*—GIUNCHI & TISSELLI, 1995: 8, text figs.

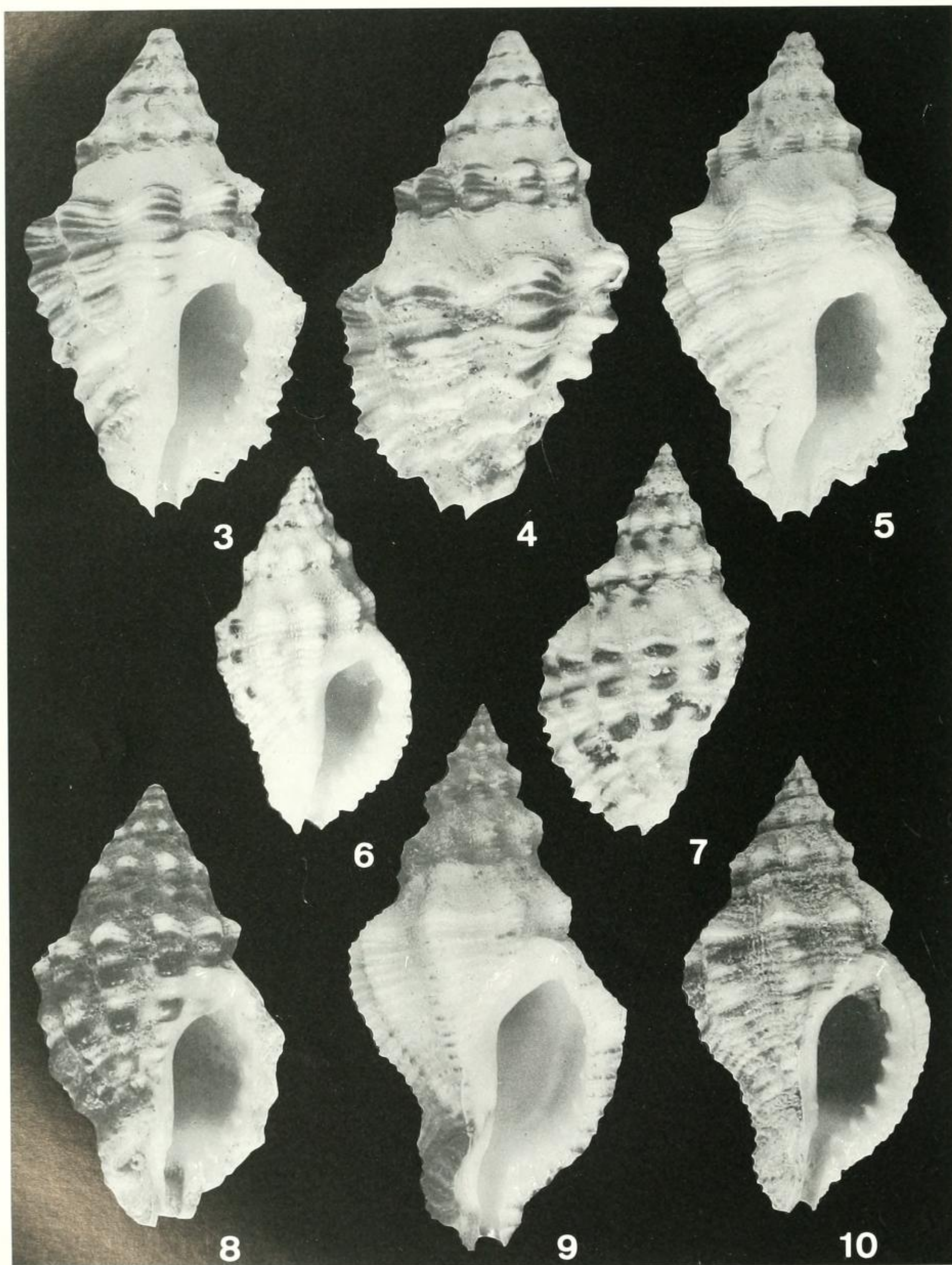
*Ergalatax martensi*—BUZURRO, ENGL & TüMTÜRK, 1995: (no pag.), text fig; ENGL, 1995: 46, fig. 10 (not *Morula martensi* Dall, 1923).

**Description:** Shell medium sized for the genus, up to 25.5 mm in length at maturity, heavy, stout. Spire high with 3+ protoconch whorls (partially broken), and up to 7 broad, strongly shouldered teleoconch whorls. Suture adpressed. Protoconch conical, acute, whorls smooth. Axial sculpture of teleoconch whorls consisting of high, rounded, nodose ribs: 10 or 11 from first to penultimate whorl, 6 to 8 on last whorl. Spiral sculpture of high, strong, primary, secondary, and tertiary cords. Sculpture forming high, nodose knobs at intersection of spiral cords and axial ribs. Aperture relatively small, ovate. Columellar lip with 2 or 3 weak knobs abapically, rim adherent. Anal notch broad, moderately deep. Outer lip weakly crenulate, with 7 strong, elongate denticles within. Siphonal canal short, broad, broadly open. Milky-white, creamy-white, or tan, usually with some light to dark brown coloured spiral cords on shoulder and on more prominent nodes. Aperture cream or pale yellow within. Operculum ergalataxine, with subterminal nucleus. Radula unknown.

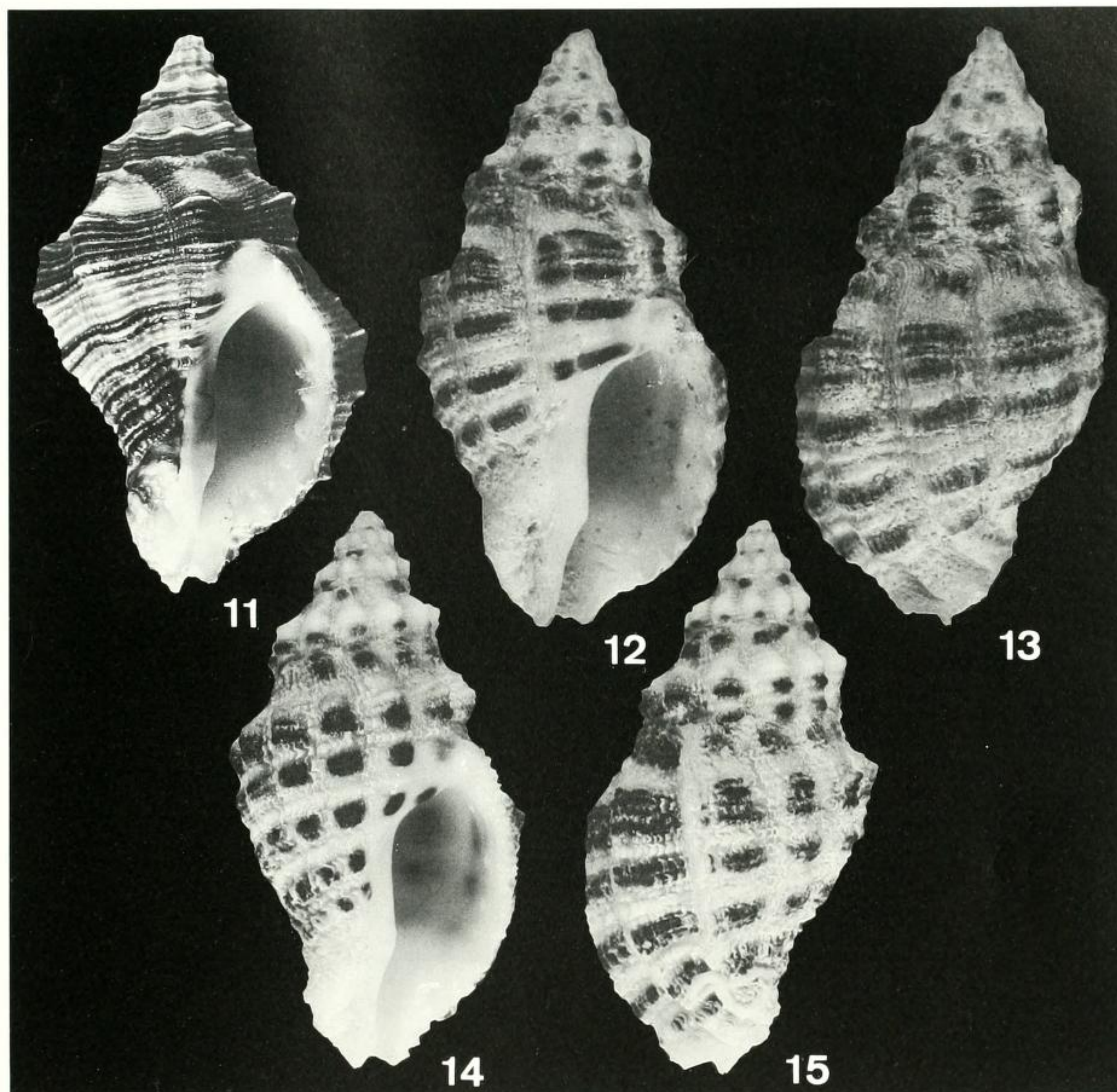
**Type material:** RED SEA: Djibouti, Perim, Strait of Bab el Mandeb. Holotype MNHN; paratypes: MNHN (4), coll. R. Houart (1); GULF OF ADEN: Djibouti, Obock. Paratypes: MNHN (9); Yemen, Aden. Paratypes: MNHN (4), AMS C. 309658 (1), NMNZ M.270540 (1), NML1647/T1336 (1), coll. R. Houart (1).

**Type locality:** Red Sea, Djibouti, Perim, Strait of Bab el Mandeb.

**Other material examined:** GULF OF ADEN (no other data): coll. R. Houart (3); RED SEA: Massawa, MNHN (2); no other data, coll. R. Houart (1); GULF OF AQABA: Egypt, Sharm El Sheik, coll. R. Houart (2); Israël, Eilat, coll. R. Houart (3).



Figures 3-8. *Ergalatax obscura* n.sp. 3-4. Holotype MNHN, Djibouti, Perim, Strait of Bab el Mandab, 24.2mm. 5. Paratype MNHN, Aden, Yemen, 24.2 mm. 6. Sharm El Sheik, 20 mm, coll. R. Houart. 7. Paratype MNHN, Aden, Yemen, 19.2 mm. 8. Paratype MNHN, Gulf of Aden, Djibouti, Obock, 23 mm. Figures 9, 10. *Ergalatax contracta* (Reeve, 1846). 9. New Caledonia, 31.9 mm, coll. R. Houart. 10. Sri Lanka, 22.8 mm, coll. R. Houart.



**Figure 11.** *Ergalatax heptagonalis* (Reeve, 1846), 31 mm, syntype BMNH 1968476. **Figures 12–15.** *Ergalatax martensi* (Dall, 1923). **12–13.** Persian Gulf, Hausknecht coll., illustrated by Martens (1874), 21.4 mm, Museum für Naturkunde, Berlin n° 21596. **14–15.** Persian Gulf, Qatar, 23.2 mm, coll. R. Houart.

**Distribution:** Gulf of Aden, Red Sea, and Gulf of Aqaba. Mediterranean: Turkey, from Iskenderun to Tasucu (Buzurro, Engl & Tümtürk, 1995; Engl, 1995; Giunchi & Tisselli, 1995).

**Etymology:** obscurus—(Latin) enigmatic. [indistinct is a more literal translation].

**Remarks:** *Ergalatax obscura* n.sp. differs from *E. martensi* in having a smaller, more strongly shouldered shell with broader, less numerous axial ribs, and more adpressed suture. It is milky white, cream or tan with light or dark brown blotches, with a cream or pale yellow aperture, while *E. martensi* is white with dark brown or black blotches, with a glossy white aperture. *Ergalatax obscura* n.sp. differs consistently from the similar *E. con-*

*tracta* (Figs 9–10) in its stouter shell with stronger, more pronounced, and more nodose axial ribs, broader spiral cords, shorter and relatively broader siphonal canal, and more adpressed suture.

I am not aware of intermediate forms between *E. obscura* and *E. contracta*, and no specimen of *E. obscura* has been found elsewhere in the extensive material of *E. contracta* examined from localities throughout the Indo-West Pacific. However, there are two typical specimens of *E. contracta* in the lot containing the holotype of *E. obscura*.

From *E. heptagonalis* (Reeve, 1846) (Fig. 11), *E. obscura* differs in its higher, more pronounced, and more nodose axial ribs, and in its broader spiral cords.

Although the shell of *E. obscura* seems to be close to

some forms of *Drupella rugosa* (Born, 1778), a Rapaninae, it differs in being stouter, in having a lower spire, fewer, broader spiral threads, and a more adpressed suture. The operculum of *E. obscura* is typically ergalataxine with a subterminal nucleus, compared to the typically rapanine "D" shaped operculum of *D. rugosa*, with lateral nucleus.

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