

Terebra (Hastula) rufopunctata, sp. nov.

Testa subulata, nitens, pallide olivacea, infra suturam zona angusta alba, et infra illam zona secunda livida cincta, et supra zonam albam punctis pluribus, parvis, rufis, notata; anfractus 12, primi duo laeves, vitrei, convexi, ceteri plani, costis vel plicis tenuibus numerosis, acutis, versus basim anfractuum evanidis, ornati, sutura obliqua sejuncti; anfr. ultimus circa peripheriam albo zonatus, et infra illam zona livido-fusca cinctus; apertura parva; canalis brevissimus, latus, levissime recurvus; columella medio leviter arcuata, ad basim carina unica succincta.

Long. 22 mill., diam. 5.

Hab. — ?

This species must not be confounded with *strigillata*, L., to which it has considerable likeness as regards the coloration. It may be at once distinguished by its acute plications, which do not extend to the bottom of the whorls, whilst those in the old species are quite flat and reach from suture to suture; and the body-whorl of the former is shorter than that of the latter.

EA SMITH 1877 229

173. *rufopunctata*, *Terebra (Hastula)* — E. A. SMITH, 1877, A. M. N. H., 19: 229. Hab. ? Coll. J. E. Gray. Size: 22×5 mm. Holotype no. 74.10.12.3: 21.6 mm (spot of red wax on whorl above aperture); syntypes: 19.9 mm, 19.6 mm, and 17.4 mm. = *Hastula traillii* (DESHAYES, 1859). c69

210. *Hastula rufopunctata* (E. A. Smith, 1877)

(Pl. 54, figs. 210a-e)
(Color pl. D, figs. 8-12)

- 1877 *Terebra (Hastula) rufopunctata* E. A. Smith, Ann. & Mag. Nat. Hist. ser. 4, 19:229; 1892 Sowerby, Man. Shells S. Africa p. 12.
- 1901 *Terebra (Abretia) diversa* E. A. Smith, Journ. Conch. 10:115, pl. 1, fig. 6; 1973 Kensley, Seashells S. Africa p. 214, fig. 868.
- 1961 *Hastula diversa* (Smith), Oyama & Takemura, Moll. Shells, Resources Exploitation Inst. 5: *Hastula* fig. 3.
- 1971 *Hastula rufopunctata* (E. A. Smith), Wilson & Gillett, Australian Sea Shells: 158, pl. 106, figs. 11, 11a,b.
- 1984 *Terebra rufopunctata* E. A. Smith, Aubry, Terebridae pl. 3.
- 1984 *Terebra diversa* (E. A. Smith), Aubry, Terebridae pl. 12.

Description: Shell to 36 mm; color variable, from white or beige to gray or dark brown with a white subsutural and peripheral stripe and often with reddish brown punctations on subsutural stripe; outline of whorls straight; protoconch of 1½ whorls; first whorls of teleoconch faintly translucent with a very narrow darker stripe showing through; subsutural groove absent; axial plications narrow, usually confined to subsutural area; spiral sculpture absent; aperture moderately elongate; columella recurved.

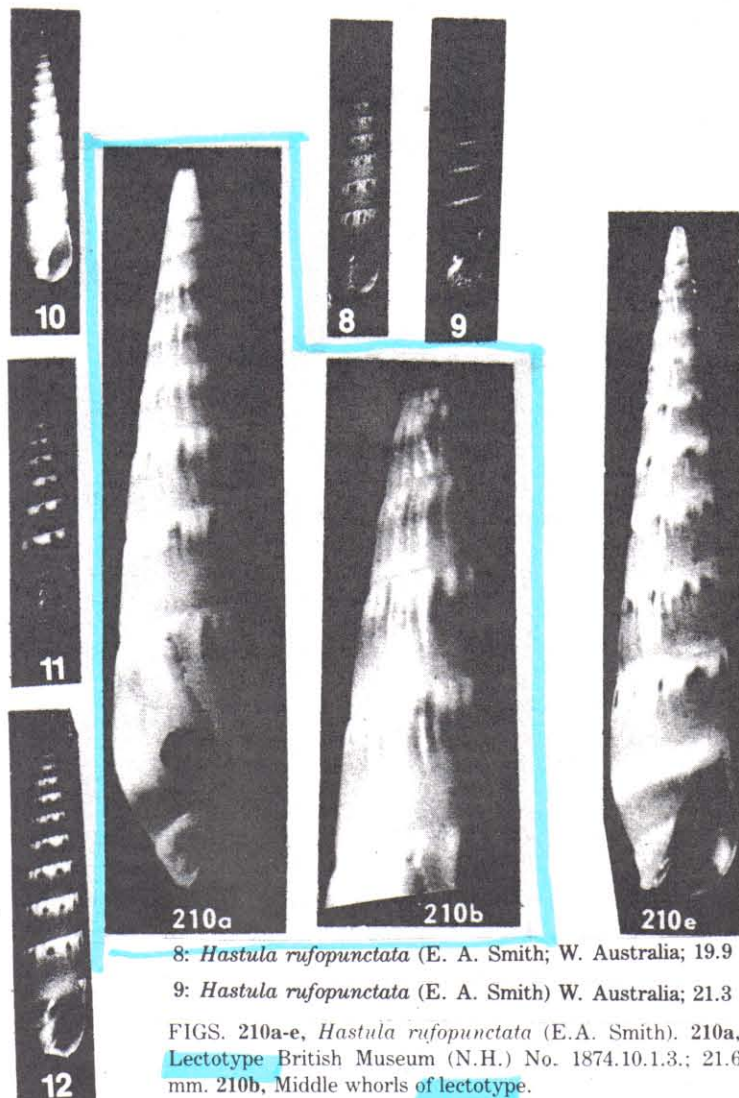
Type locality: *T. rufopunctata*, none. Natal, S. Africa is here designated as the type locality; *T. diversa*, "Umzinto, Natal, S. Africa."

Distribution: From South Africa to Japan and Western Australia; intertidal to 10 m.

Type: *H. rufopunctata* lectotype BM(NH) no. 1874.10.1.3, 21.6 mm; *T. diversa* lectotype BM(NH) no. 1899.4.14.118, 22.5 mm.

Discussion: E. A. Smith (1901) mentions spiral striations in *H. rufopunctata*, which are not at all evident in the types. Neither the type of *H. rufopunctata* nor *H. diversa* are striate, and spiral striae are unknown in the *Hastula* group. *H. parva* (209) may be separated from this species by its more turreted outline and by the lack of the somewhat translucent early whorls of this species.

Olive Schoenberg reported finding at least 25 live *H. rufopunctata* at extreme low tides on the beaches of Broome, Western Australia, encased in lumps of dried sand (Hawaiian Shell News 32(4):11). She speculated that they may not be able to dig deeply enough to protect themselves from desiccation or predation and have devised this way to escape desiccation during low tides.



8: *Hastula rufopunctata* (E. A. Smith); W. Australia; 19.9

9: *Hastula rufopunctata* (E. A. Smith) W. Australia; 21.3

FIGS. 210a-e, *Hastula rufopunctata* (E.A. Smith). 210a, Lectotype British Museum (N.H.) No. 1874.10.1.3.; 21.6 mm. 210b, Middle whorls of lectotype.

210e, Transkei coast; 26.0 mm.

10: *Hastula rufopunctata* (E. A. Smith); W. Australia; 21.3

11: *Hastula rufopunctata* (E. A. Smith); W. Australia; 21.2

12: *Hastula rufopunctata* (E. A. Smith); W. Australia; 27.7

12 *Hastula rufopunctata* (E.A. Smith, 1877) — Assez lisse. 35 mm. Océan Indien, Pacifique occ. (sud-ouest de l'Australie). — *H. strigilata* (Linné, 1758). Mêmes dessins. côtes plus fortes. Océan Indien, Pacifique occidental.

RUFOPUNCTATA (2)
E.A. SMITH 1877

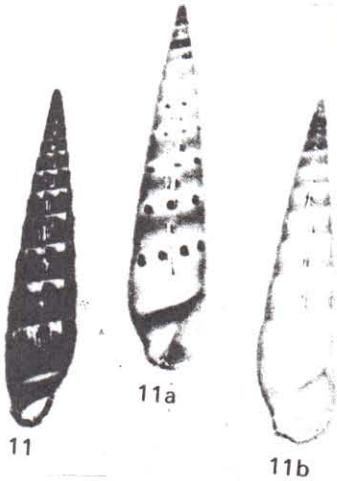
(V) (210)

L p 202

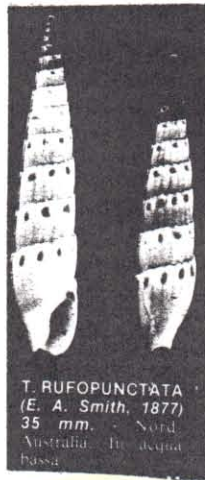
11, 11a, 11b. *Hastula rufopunctata* E. A. SMITH, 1877

Resembles *H. strigilata*, but with axial ribs absent, or obsolete and confined to the posterior 1/2 of the body whorl. Colour most often like *H. strigilata*, but commonly fawn or cream.

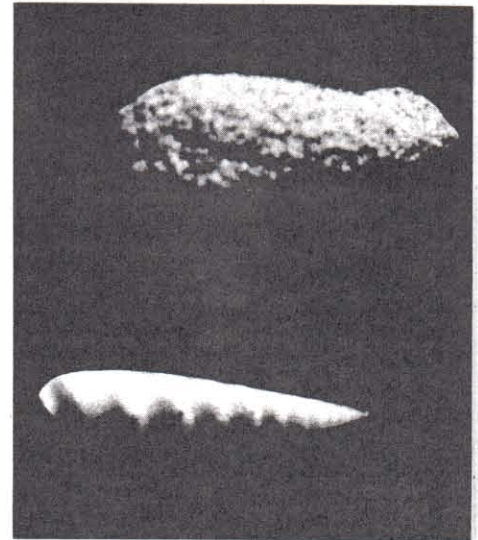
3 cm. Abundant in restricted localities. Shark Bay to Broome, W.A.



A. pl 106



AUGRY PL 3



H. rufopunctata Photo: Schoenberg

By OLIVE SCHOENBERG

Terebra live under the sand and come to the surface, usually at night to feed. Their trails in the sand give them away to predators, including man, who has learned to dig at either end of a trail for a shell.

At the extreme low tides we experienced last September in Broome, Western Australia, sand dwellers' habitats sometimes lie out of water. And if the low is of long enough duration, the sand gets dry, not only on the surface but down several inches. Very few fresh tracks are to be seen under these drying conditions. Only an occasional hermit crab in a shell draws a sand line or a bird etches its footprints here and there on the beach.

Nevertheless, at one beach I saw some lumps of sand lying about an inch from partially collapsed little holes. I dug into some of the holes but they were empty. Then, being curious, I fingered a lump. The dry, crusty sand fell off a hard thing inside. Rubbing the thing against my clothes, I found a shiny little terebrid (*Hastula rufopunctata* E. A. Smith) alive!

I picked up several more blobs of sand. They were the same. At least 25 such lumps were lying near holes in an area about the size of a two-car garage.

Why did these *rufopunctata* crawl out of their holes and cover themselves with sand? Other shells seen in similar habitats emerge from the sand glistening and clean, not covered with sand as though they had been rolling.

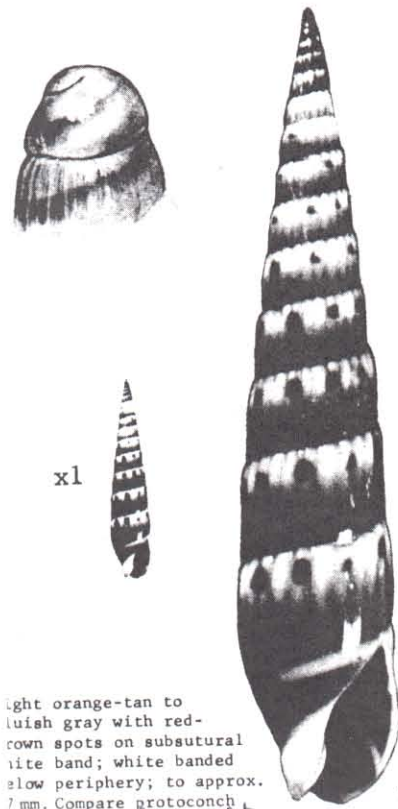
Maybe some shells are unable to dig deep enough to protect themselves from desiccation or predation and have devised this different way to wait out the low tides.

No, it couldn't have been an accident. All in the colony did the same thing. If I hadn't been curious, their little secret might never have been known — to me at least

HSN AUG 78

Terebra sp. No. 2 is similar to *T. strigilata*, but is smoother and lighter in color, with smaller black spots near the suture. Very smooth examples of this species have been called *Hastula diversa* (E. A. Smith, 1901). However, *H. diversa* is a South African terebra, being found commonly in beach drift in Natal. Of the Indo-Pacific species, the Hawaiian shell is closest to *H. rufopunctata* E. A. Smith, 1877.

H. rufopunctata *Terebra* sp. No. 2 Smith, 1877.



light orange-tan to bluish gray with red-brown spots on subsutural suture band; white banded below periphery; to approx. 7 mm. Compare protoconch with that of *H. strigilata*

x4 *Hastula rufopunctata* (E.A. Smith)
NORTHWESTERN AUSTRALIA