

***Eclectofusus*, a new genus for
Pararetifusus dedonderi Fraussen & Hadorn, 2006
(Gastropoda: Buccinidae)**

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Abstract. *Eclectofusus* gen. nov. (Buccinidae) is described to accommodate *Pararetifusus dedonderi* Fraussen & Hadorn, 2001. The new genus is compared with *Pararetifusus* Kosuge, 1967 and *Americominella* Klappenbach & Ureta, 1972.

INTRODUCTION

The description of *Pararetifusus dedonderi* Fraussen & Hadorn, 2001 was not accompanied by the description of a new genus to prevent the establishment of a monotypic genus. That principle worked well until a revision of *Pararetifusus* was published by Kosyan (2006). In the meantime we searched through material of many expeditions and museums to find more species which may belong to this group but without result. In the present paper we describe the new genus *Eclectofusus* to accommodate "*Pararetifusus*" *dedonderi* properly. Previously only known from the Philippines, the range of *E. dedonderi* is hereby extended to Vanuatu and the Solomon Islands. Bathymetric distributions, previously only based on information obtained from fishermen and shell dealers, are here based on detailed information from the scientific expeditions.

Material and methods

The material reported in the present study originates from various expeditions conducted since 1980 by MNHN and IRD (formerly ORSTOM):

- (a) SALOMON 1 (Solomon Islands).
- (b) MUSORSTOM 3 (northern Philippines).
- (c) PANGLAO 2005 (Bohol and Sulu Seas; Philippines).
- (d) MUSORSTOM 8 (Vanuatu).

Material from these expeditions is, unless otherwise stated, deposited in MNHN.

We provided the bathymetric range which is reported as the broadest possible depth range and the so called confirmed depth range which is the narrowest possible range for *E. dedonderi* (e.g. if a specimen was

reported from a depth of 100-200 m and a second specimen of the same species from 500-600 m, the bathymetric range would be 100-600 m, while the confirmed bathymetric range would be 200-500 m). The bathymetric range takes into account records of dead and live taken specimens while the confirmed depth range is only provided for live taken specimens. The depth ranges of every station were assigned to '200 m' categories (e.g. 0-200 m, 200-400m, ...). If a depth range was not unequivocally assignable, the category comprising the corresponding mid point of the depth range was used (e.g. a depth range of 320-440 m with the mid point at 380 m would become assigned to the '200-400 m' category). See Fig. 1.

Abbreviations

- CP: Chalut à perche (beam trawl).
- DW: Drague Warén (Warén dredge).
- IRD: Institut de Recherche pour le Développement (Formerly ORSTOM).
- KBIN: Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels, Belgium.
- KF: collection Koen Fraussen, Aarschot, Belgium.
- MNHN: Muséum national d'Histoire naturelle, Paris, France.
- ORSTOM: Office de la Recherche Scientifique et Technique d'Outre Mer (now IRD).
- dd: empty shell, dead collected.
- lv: collected alive.
- jv: juvenile or subadult specimen/shell.

SYSTEMATICS

Family **BUCCINIDAE** Rafinesque, 1815

Eclectofusus gen. nov.

Type species. *Pararetifusus dedonderi* Fraussen & Hadorn, 2001 (type locality: Balicasag Island, near Panglao, Bohol, central Philippine Islands, in 120-250 m).

Range. The single species, *Electofusus dedonderi* comb. nov., is known from the Philippines, the Solomon Islands and Vanuatu.

Diagnosis. Shell small, up to 19.4 mm in length, usually between 12 and 17 mm, thin, rather fragile, semi-transparent. Shape broadly fusiform, spire high. Siphonal canal short, narrow, open.

Protoconch paucispiral, glossy, smooth.

Sculpture reticulate, consisting of fine, sharp spiral cords crossing narrow but prominent axial ribs, forming a sharp knob at intersections.

Aperture oval, outer lip usually thin (subadult), occasionally thick, with 2-7 big denticles within (adult specimens), columella smooth without columellar knob, glossy, slightly curved. Operculum slightly smaller than aperture, corneous, pale brown; shape rather triangular, pointed, nucleus terminal.

Periostracum thick, rather corneous, dark brown; forming flamboyant sharp axial lamellae with spiny hairs on intersections of spiral cords with axial ribs, these spiny hairs occasionally bicuspid on shoulder.

Radula with tricuspid outer teeth.

Comparison. *Electofusus* gen. nov. is characterized by having a reticulate sculpture in combination with big and rounded internal denticles inside the outer lip, a hirsute periostracum and a small adult size.

Pararetifusus Kosuge, 1967 (type species: *Phymorhynchus tenuis* Okutani, 1966: 26, Japan) differs in having two or three pronounced spiral cords and by the absence of axial sculpture.

Americominella Klappenbach & Ureta, 1972 [type species: *Americominella duartei* Klappenbach & Ureta, 1972: 2, Argentina (= *A. longisetosus* De Castellanos & Fernandez, 1972, Argentina)] (= *Echinosipho* Kaiser, 1977 with type species: *Echinosipho aculeatum* Kaiser, 1977: 27, Argentina, a synonym of *A. duartei*) is similar in sculpture and periostracum. The radula is quite identical with the exception of the central tooth which has a concave base in *A. duartei* (instead of being rectangular) and the broader base of the lateral teeth (Bouchet & Warén, 1986: pl. 2, fig. 10). Furthermore, *A. duartei* differs at once in having a broad, depressed protoconch consisting of 1.5 whorls, a larger size (up to 90 mm) and a different distribution (subantarctic, off Argentina).

Etymology. *Electofusus* gen. nov. is named after *eclecticism*, one of the artistic trends during the romanticism (1820-1870) which is based on compiling distinct styles, referring to the characteristics of this shell which one may regard as a compilation from a varied number of families: the

shape of *Fusinus* (Fascioliidae), the usual colour and also the sculpture of *Trophon* (Muricidae), the reticulate sculpture of *Raphitoma* (Raphitomidae), the periostracum of *Cymatium* (Ranellidae) but the radula of Buccinidae.

Electofusus dedonderi (Fraussen & Hadorn, 2001)
comb. nov.

Fig. 2

Pararetifusus dedonderi Fraussen & Hadorn, 2001: 93.

Type locality. Balicasag Island, near Panglao, Bohol, central Philippines, in 120-250 m.

Type material. Holotype in KBIN 490.I.G.nr.29.260 and 18 paratypes.

Other material examined. A total of 15 lots (23 specimens). **Philippines:** MUSORSTOM 3: Stn CP139, 11°53'N, 122°14'E, 240-267 m, 1 lv, PANGLAO 2005 (Bohol Sea), stn CP2343 (Pamilacan Island), 9°27'N, 123°49'E, 273-356 m, 1 dd, stn DW2364 (Dipolog), 9°01'N, 123°25'E, 427 m, 2 dd (1 jv), stn CP2380 (Dipolog), 8°41'N, 123°18'E, 150-163 m, 4 lv (1 jv), stn CP2383 (Aliguay Island), 8°45'N, 123°18'E, 338-351 m, 1 lv, 1 dd (1 jv), stn CP2384 (Aliguay Island), 8°46'N, 123°16'E, 624-647 m, 1 lv, 1 dd, stn CP2392 (Balicasag Island), 9°29'N, 123°41'E, 242-400 m, 1 lv, 1 dd, stn CP2393 (Balicasag Island), 9°30'N, 123°42'E, 356-396 m, 1 lv, stn CP2404 (Maribojoc Bay), 9°39'N, 123°43'E, 481-505 m, 1 lv, stn CP2409 (Maribojoc Bay), 9°45'N, 123°45'E, 220-257 m, 1 lv.

Solomon Islands: SALOMON 1, stn CP1804, 9°32'S, 160°37'E, 309-328 m, 1 lv (jv), stn CP1831, 10°12'S, 161°19'E, 135-325 m, 2 lv (1 jv), stn CP1837, 10°13'S, 161°29'E, 381-383 m, 1 dd, stn CP1860, 9°22'S, 160°31'E, 620 m, wood, 1 lv.

Vanuatu: MUSORSTOM 8, stn DW978, 19°23'S, 169°27'E, 408-413 m, 1 dd.

Range and habitat. Western Pacific, before only reported from the central Philippines, the range is extended towards the south-east to the Solomon Islands and Vanuatu. The confirmed bathymetric range is 163 to 624 m for live collected specimens, records of empty shells range from 135 to 647 m.

Live specimens were sampled on sandy-muddy bottoms with volcanic mud and/or coral rubble.

The species is syntopic with *Manaria* species at the Philippines (PANGLAO 2005, stns CP2343, CP2384, CP2393) and at the Solomon Islands (SALOMON 1, stns CP1804, CP1837, CP1860) and with *Preangeria dentata* at the Philippines (PANGLAO 2005, stns CP2380, CP2383, CP2392).

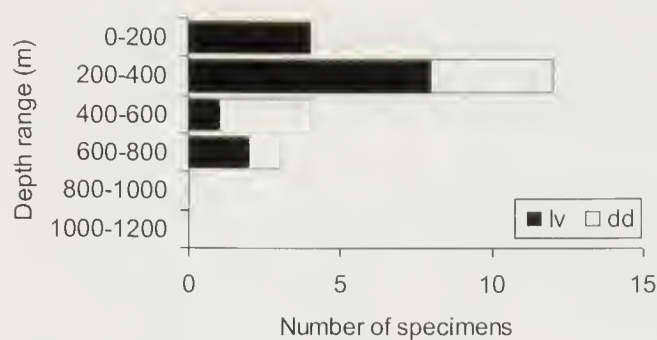


Figure 1 Bathymetric distribution of MNHN material of *Eclctofusus dedonderi*.

Remarks. *Eclctofusus dedonderi* comb. nov. is characterized by a strong, reticulate sculpture in combination with a small, smooth, paucispiral protoconch and a reticulate and hirsute periostracum.

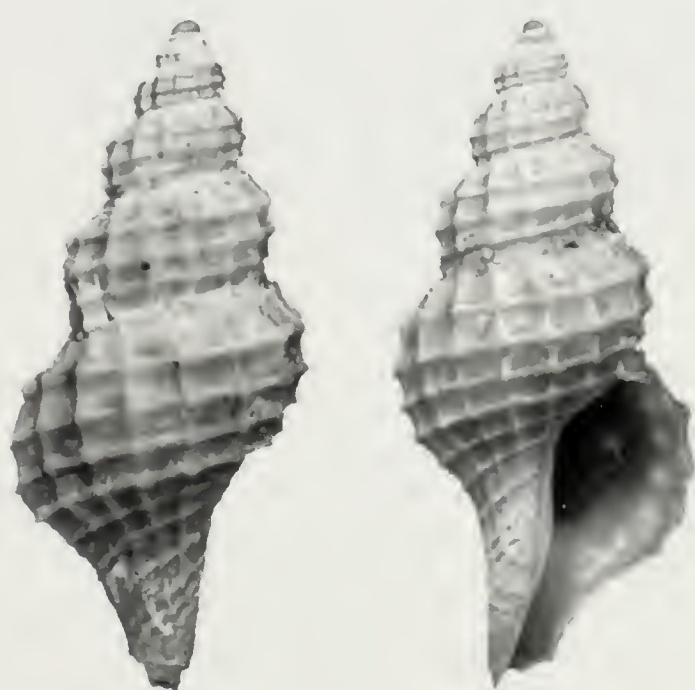


Figure 2. *Eclctofusus dedonderi* comb. nov., 11.6 mm, paratype 12, Philippines, Balicasag Island, in tangle nets, 120-150 m deep, KF-3206.

Genus *Pararetifusus* Kosuge, 1967

Pararetifusus Kosuge, 1967: 59-64.

Type species: *Phymorhynchus tenuis* Okutani, 1966: 26, pl. II-21 (type locality: Japan, Sagami Bay, 34°57'N, 139°21'E, 1470-1500 m).

Remarks. *Pararetifusus* species are mainly known from the Boreal and Arctic region. Three species are known. For a discussion of included species we refer to Kosyan, 2006 (5-15).

Eclctofusus sp. nov. differs in having sharp axial ribs, forming a reticulate sculpture together with the spiral sculpture.

Included species

Pararetifusus kantori Kosyan, 2006 (type locality: Russia, Bering Sea, 52°40.8'N, 159°13'E, 800-1000 m).

Pararetifusus kosugei Kosyan, 2006 (type locality: Russia, Bering Island, 55°08'N, 165°58.3'E, 130-250 m).

Pararetifusus tenuis (Okutani, 1966) (type locality: Japan, Sagami Bay, 34°57'N, 139°21'E., 1470-1500 m).

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