

Description of *Pterynotus laurae* n.sp. from the Philippine Islands (Gastropoda, Muricidae, Muricinae)

Roland HOUART

Research associate, Institut Royal des Sciences Naturelles de Belgique
Département des Invertébrés Récents
Rue Vautier, 29, B-1000 Bruxelles, Belgium

KEYWORDS. Gastropoda, Muricidae, Muricinae, Philippine Is., *Pterynotus*, n.sp.

ABSTRACT. *Pterynotus laurae* n.sp. is described. The species is currently restricted to the Sulu Sea in the Philippine Islands. It is compared with *P. albobrunneus* Bertsch & D'Attilio, 1980 from the Indian Ocean. Two other species, *P. pinnatus* (Swainson, 1822) and *P. pellucidus* (Reeve, 1845) are illustrated for further comparison.

RESUME. Une nouvelle espèce, *Pterynotus laurae* n.sp. est décrite de la Mer de Sulu, dans les Iles Philippines. Elle est comparée à *P. albobrunneus* Bertsch & D'Attilio, 1980 de l'Océan Indien et à *P. pinnatus* (Swainson, 1822) et *P. pellucidus* (Reeve, 1845) de l'Indo-Pacifique. Toutes les espèces sont illustrées.

Abbreviations

MNHN: Muséum National d'Histoire Naturelle, Paris, France.

NM: Natal Museum, Pietermaritzburg, South Africa.

WPU: Wilhelm-Pieck-Universität, Rostock, Germany.

SYSTEMATIC ACCOUNT

FAMILY : MURICIDAE Rafinesque, 1815

SUBFAMILY : MURICINAE Rafinesque, 1815

GENUS : *Pterynotus* Swainson, 1833

Type species by original designation: *Pterynotus pinnatus* (Swainson, 1822); Recent, Indo-West Pacific.

Pterynotus laurae n.sp.

Figs 1-4

Material examined.

Philippine Islands, Sulu Sea: holotype MNHN; 1 paratype coll. R. Houart.

Description.

Shell medium sized for the genus, up to 46.4 mm in length (holotype) (Figs 2-3), heavy, squamous. Spire high with 1.5 protoconch whorls, and up to 7 broad, weakly shouldered teleoconch whorls. Suture

adpressed. Protoconch large, broad, irregularly shaped, smooth (Fig. 1). Terminal varix unknown (eroded). Axial sculpture of teleoconch whorls consisting of high, broad, webbed varices. Other axial sculpture of numerous growth lamellae. First and second whorls with 7 lamellate nodes, third to last with 3 varices and one high intervarical node near preceding varix. Spiral sculpture of high, strong, squamous, primary and secondary cords, and additional narrow threads. First and second whorl with 3 cords and 1 on shoulder, third with 4 cords and 1 on shoulder, fourth with 4 and 2-4 on shoulder, fifth and sixth with 4 and 3 or 4 on shoulder, last whorl with 9 or 10 cords and 4 or 5 on shoulder. Narrow, squamous threads occasionally between cords.

Aperture ovate. Columellar lip flaring, smooth; rim partially erect, adherent at adapical extremity, briefly expanded adapically. Anal notch broad, delineated by small node. Outer lip erect, denticulate, with 7 or 8 strong, elongate denticles within.

Siphonal canal moderately long, broad, weakly abaxially recurved, open, adaperturally bent at extremity; ornamented with 4 primary spiral cords and 2-5 narrow threads between cords.

Light and dark brown; protoconch, first and second teleoconch whorls milky white, third whorl light brown, fourth to last whorl darker coloured, decreasing in darkness from fourth to last whorl. Spiral cords weakly lighter coloured. Aperture white. Operculum and radula unknown.

Discussion.

Pterynotus laurae n.sp. resembles *P. albobrunneus* Bertsch & D'Attilio, 1980, known from South Africa to Oman and south-west India (Fig. 9) (VOKES, 1978; BERTSCH & D'ATTILIO, 1980; MILLARD, 1990; BOSCH et al, 1995; coll. MNHN, NM, WPU, R. Houart). However, the shell of *P. laurae* is broader, especially the last teleoconch whorl. The spiral cords are broader and less numerous than in *P. albobrunneus*. *P. laurae* bears 4 or 5 cords on the shoulder of the last whorl, 9 or 10 on body, and 4 primary cords on the siphonal canal, while *P. albobrunneus* has 12-15 cords and threads on shoulder, 10 or 11 on body, and 5 or 6 cords on the siphonal canal. It is also interesting to note the decreasing of darkness in colour from fourth to last whorl in *P. laurae* and the lighter coloured spiral cords, while the last whorl is darker coloured in *P. albobrunneus*, with a dark brow line on the top of the spiral cords on almost the whole shell.

I have not been able to study *P. albobrunneus* with preserved protoconch, but it is quite interesting to note the irregularly shaped protoconch of *P. laurae*, and its variability in thickness; the protoconch of the holotype is almost twice the size of these of the paratype. The irregular shape and the difference of thickness of the protoconch could be the results of an intracapsular development, leading probably to a restricted geographical distribution of the species.

Pterynotus pinnatus (Swainson, 1822) (Fig. 7) and *P. pellucidus* (Reeve, 1845) (Fig. 8) are two other members of this group of similar looking shells.

However, they differ in having a conical, multispiral protoconch. They are here illustrated for information and further comparison.

Etymology.

At the request of J.-P. Barbier, I am pleased to name this new species for his daughter, Laure.

ACKNOWLEDGEMENTS. I am very indebted to Mr. Jean-Pierre Barbier (Paris) who gave me the opportunity to study these specimens and for the gift of the material. Thanks also to Dr. R.N. Kilburn (Natal Museum, Pietermaritzburg) and to Dr. P. Bouchet and Mrs V. Héros (Muséum National d'Histoire Naturelle, Paris) for the loan of additional specimens of *Pterynotus albobrunneus*.

REFERENCES

- BERTSCH, H., & A. D'ATTILIO. 1980. New species of Muricidae (Gastropoda) from the Indian Ocean, the Philippines and Brasil. *Venus* 39 (3): 131-138.
- BOSCH, D.T, S.P. DANCE, R.G. MOOLENBEEK, P.G. OLIVER. 1995. *Seashells of Eastern Arabia*. S.P. Dance, Motivate Publishing: 296 pp.
- MILLARD, V. 1990. Some Muricidae from South Africa. *The Strandloper* 227: 2-11.
- VOKES, E.H. 1978. Muricidae (Mollusca: Gastropoda) from the eastern coast of Africa. *Ann. Natal Mus.* 23 (2): 375-418.

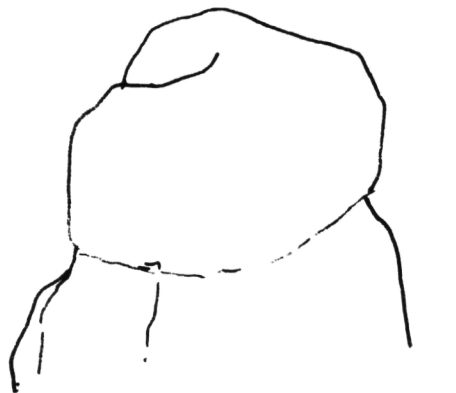
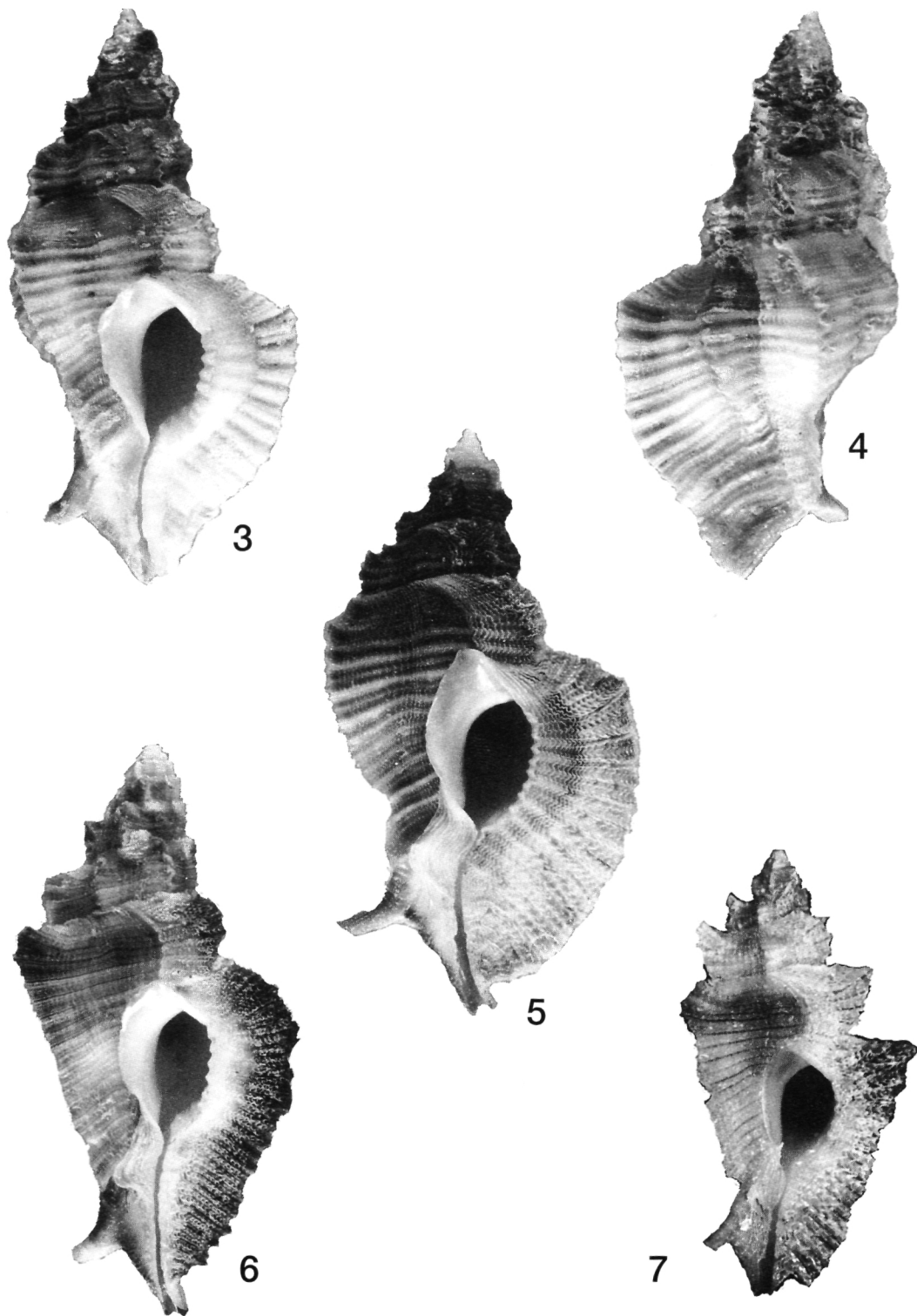


Fig. 1. Protoconch of *Pterynotus laurae* n.sp. (holotype MNHN); scale bar: 0.5 mm.



Figs. 2-4. *Pterynotus laurae* n.sp., Philippine Islands, Sulu Sea. **2-3.** Holotype MNHN, 46.4 mm. **4.** Paratype coll. R. Houart, 45.5 mm.

Figs. 5-6. *Pterynotus albobrunneus* Bertsch & D'Attilio, 1980. **5.** India, Trivandurum, coll. R. Houart, 44.6 mm. **6.** Seychelles, MNHN, 23.1 mm.

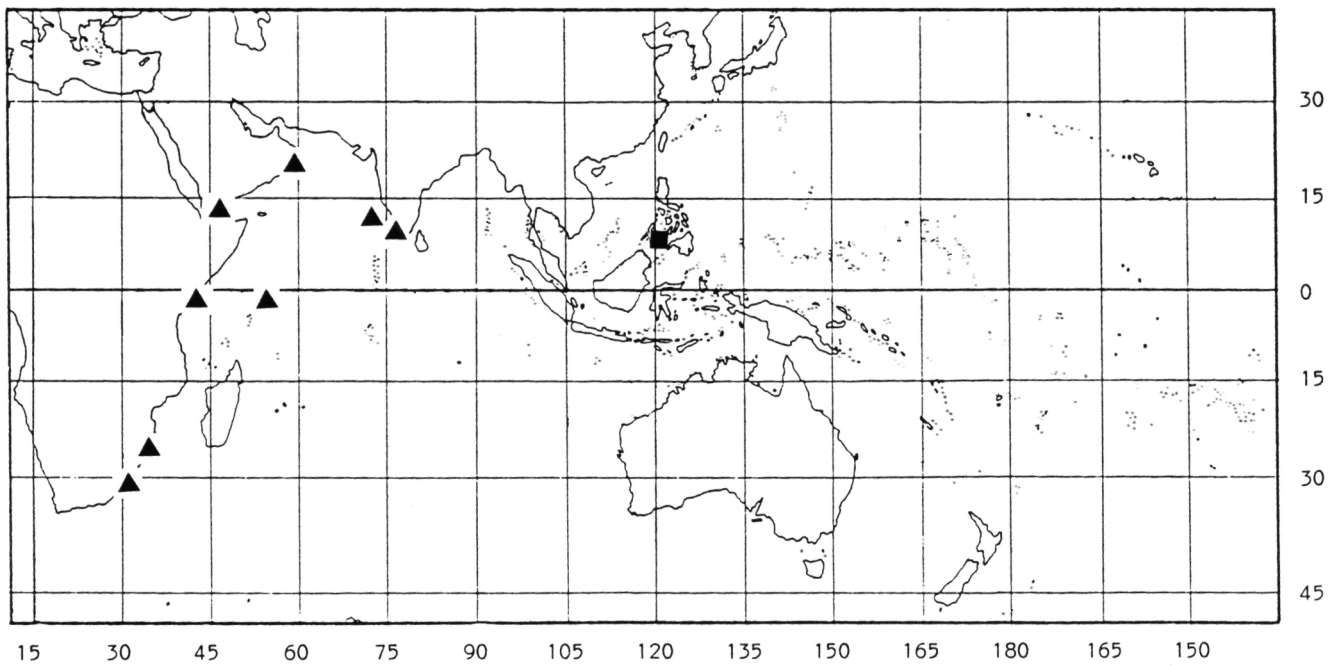
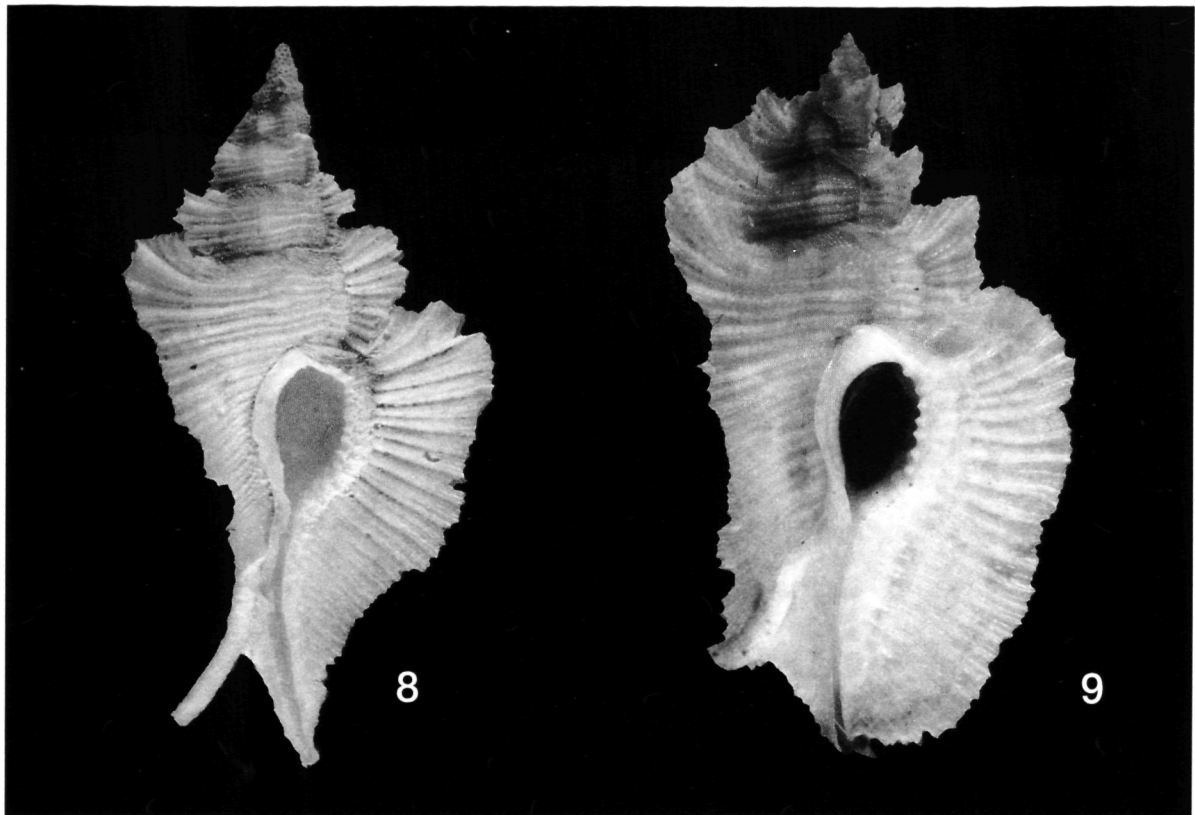


Fig. 7. *Pterynotus pinnatus* (Swainson, 1822), Japan, coll. R. Houart, 57.2 mm.

Fig. 8. *Pterynotus pellucidus* (Reeve, 1845), Japan, coll. R. Houart, 54.3 mm.

Fig. 9. Geographical distribution of *Pterynotus albobrunneus* and of *Pterynotus laurae* n.sp.

▲ *P. albobrunneus* Bertsch & D'Attilio, 1980. ■ *P. laurae* n.sp.