

A new species of *Lyria* (Gastropoda: Volutidae) from New Caledonian waters

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ABSTRACT. A new species of Volutidae, *Lyria guionneti*, is described from New Caledonia.

INTRODUCTION

Recent explorations of the waters around New Caledonia, already well known through previous expeditions by MNHN and IRD (formerly Orstom), Paris, revealed the existence of a new species of deep-water volute.

Lyria (Lyria) guionneti n. sp.
Figs 1-9

Type Material

Holotype Muséum national d'Histoire naturelle, Paris. Four paratypes coll. V. Crayssac.

Type Locality

On submarine mountain southeast of New Caledonia, dredged between 400 and 500 m.

Range

Only known from the type locality.

Dimensions

Holotype 33.4 mm x 17.1 mm; paratype 1: 36.2 mm x 16.6 mm; paratype 2: 47.6 mm x 20.6 mm; paratype 3: 33.3 mm x 15.5 mm; paratype 4: 33.7 mm x 16.5 mm (the protoconch in paratype 4 is missing).

Shell characteristics

The shell has an ovate fusiform shape and can be either moderately thick and solid, or relatively thin and fragile. The spire is not very high, and measures approximately one third of the shell length. The protoconch is small, glossy, and has two elevated white whorls. The teleoconch has 5 convex whorls of

which the first two or three show weak axial undulations that gradually disappear towards the body whorl. All except one specimen show very faint spiral ridges on the lower part of the body whorl. In the holotype they number 8. The outer lip is thickened in the holotype, less so in the paratypes, and it is even flaring in paratype 2. In specimens known, the columella bears always 3 solid primary columellar plaits, followed by 3 to 6 secondary plaits in adults. The suture is very deep. In the best preserved specimen, paratype 2, the outer surface has a silky gloss and the interior of the aperture is glossy. The columellar callus is slightly thickened in some shells, hardly visible in others. The coloration consists of three spiral bands made up of irregular brown to olive coloured blotches that tend to be arrow shaped. In paratype 2 these blotches merge into almost solid bands. Base colour is porcellaneous white in paratypes 2, 3 and 4, pinkish orange in holotype and paratype 1. The protoconches are always white.

Animal and radula unknown.

Comparison

This species is undoubtedly a *Lyria*, of which genus it has the following characteristics: in *Lyria*, shells are elongate-fusiform, often with a small regularly coiled protoconch and the teleoconch with axial ribs or undulations. The genus, as understood at present, is very large and species show a wide diversity in size, shape and coloration. The new species is not a Volutomitridae, because shells of that family have only three columellar plaits, never followed by secondary columellar plaits. Its closest relatives, all placed in the subgenus *Lyria* s.s., are the Indo-Pacific species with a small protoconch such as *L. cassidula*, *L. deliciosa*, *L. habeï* and *L. pallidula*. *L. guionneti* differs from all these by its very particular colour pattern, combined with characteristics such as its very deep suture and white protoconch.

Possibly its closest relative in the genus is the not very well known *L. pallidula* from Japan, but this species has axial ribs on the body whorl, absent in all our specimens of *L. guionneti*. Other deep water volutes from the New Caledonian region are *L. kunene*, *L. planicostata* and *L. exorata*. All these have a different, solid light brown and thick shell structure, not seen in *L. guionneti*.

Remarks

All specimens found up to now have been collected dead. The shells, however, display clearly all characteristics of the species. Even with this limited sample, we can state that *L. guionneti* is very variable in several aspects: size of the adult shell, globosity of the whorls, base colour and pattern. This is unusual in *Lyria* from one collecting spot.

Etymology.

Lyria guionneti has been named to honor the late Mr. Pierre Guionnet, the well known French collector and shell dealer who passed away recently.

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SELECTED BIBLIOGRAPHY

- Bail, P. 1993a. Le genre *Lyria* Gray, 1847. Part I. *Xenophora* 61:6-23.
- Bail, P. 1993b. Le genre *Lyria* Gray, 1847. Part II. *Xenophora* 64:4-19.
- Bouchet Ph. & Poppe G.T. 1988. Deep water Volutes from the New Caledonian Regio, with a discussion on Biogeography. *Venus*. 47(1): 15-32.
- Bouchet Ph. & Poppe G.T. 1995. A review of the deep-water volute genus *Calliotectum* (Gastropoda: Volutidae). In: P. Bouchet (ed.), *Résultats des Campagnes Musorstom*, Vol. 4. *Mém. Natn. Hist. Nat.*, 167: 499-252. Paris.
- Poppe G.T. & Goto Y. 1992. *Volutes*. Ancona. 348 pp.
- Weaver C.S. & duPont J.E. 1970. *The Living Volutes, a Monograph of the Recent Volutidae of the World*. Delaware. 375 pp.



Figures 1-3. *Lyria (Lyria) guionneti* n.sp.

1. Holotype, detail of the spire; 2. Paratype 2, detail of the spire; 3. Paratype 2, columellar plait.

Figures 4-9. *Lyria (Lyria) guionneti* n.sp.

4-5. Holotype 33.4 x 17.1 mm, MNHN; 6-7. Paratype 1, 36.2 x 16.6 mm, coll. V. Crayssac; 8-9. Paratype 2, 47.6 x 20.6 mm, coll. V. Crayssac.

