

Description of a remarkable new species of *Opalia* (Gastropoda: Epitoniidae) from the Philippines

R.N. KILBURN

Natal Museum, Private Bag 9070, Pietermaritzburg 3200, South Africa

Opalia garciai n. sp., type locality near Balicasag Is., Philippines, is described; it shows little resemblance to any other known species.

Key words: Gastropoda, Prosobranchia, Epitoniidae, *Opalia*, taxonomy, Philippines.

INTRODUCTION

Over the past decade the commercial fishermen of the central and southern Philippines have continued to bring to light new and unusual molluscs. The large and distinctively patterned epitoniid, here described, was sent to me by Dr. Emilio F. Garcia of Lafayette, Louisiana, U.S.A.

Family Epitoniidae

Genus *Opalia* H. & A. Adams, 1853

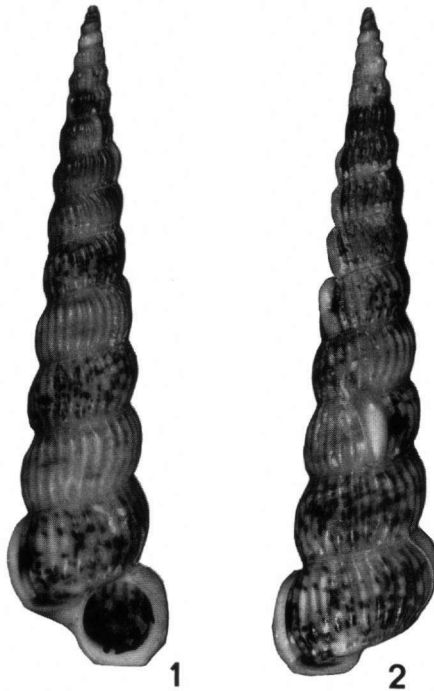
***Opalia garciai* sp. n.**

Figs. 1-2

Description. — Shell (figs. 1-2) subulate, b/1 0.24, of 15 teleoconch whorls (protoconch missing); whorls convex, with median periphery, suture moderately shallow, not crenulate; body whorl with a strong spiral cord at periphery of base, rendered slightly nodular by rib terminations, and showing (at least partially) immediately above suture on spire whorls. Aperture ovate, peristome continuous, moderately thick and with slightly free edge on inner lip, terminal varix thick, in side-view very shallowly concave and slightly opisthoclinal, base of peristome flattened, with a small, blunt lobe caused by termination of basal cord.

Varices developed from 2nd teleoconch whorl onward, more or less randomly arranged, usually one per whorl, on some of early whorls two, but none on penultimate whorl. Sculptured by narrow, arcuate, slightly prosoclinal axial ribs, not aligned from whorl to whorl, on each whorl terminating above at suture and below at basal cord; 29 ribs on penultimate whorl, 17 (including varices) on 3rd whorl (worn on initial whorls). Ribs and their intervals crossed by microscopic spiral striae and equally fine, wrinkled, more or less axial striae, but where unworn, the surface is seen to bear chalky areas of intritacalx which bear microscopic, spirally arranged pits. Basal disk without axial ribs, although strong growth interruptions are caused by previous varices; microscopically rugulose, caused by spiral striae and wavy axial threads.

Ground colour brownish-white, with random dots of orange-brown and a small blotch of dark orange-brown behind each varix; dots very faint in area succeeding each varix, darkening as the whorl grows; varices uniform pale yellowish-buff.



Figs. 1-2. *Opalia garciai* sp. n. Holotype, dimensions 46.2 × 11.0 mm.

Dimensions. — 46.2 × 10.7 mm, aperture (internal diameter) 5.7 mm.

Type material. — Holotype Natal Museum L1082/T1170, off Balicasag Island, Bohol Sea, southern Philippines, deep water.

Notes. — The generic-level classification of the Epitoniidae is fraught with dispute, and the relationships between the variously recognized genera and subgenera remain largely unresolved (see Bouchet & Warén, 1986: 469-479, for a discussion of characters). The present species is particularly problematic in that it combines the characteristics of several genera. The low, non-lamellate axial ribs, *Turritella*-like shape and distinct colour pattern are superficially suggestive of the genus *Acrilla* H. Adams, 1860. *Acrilloscala* Sacco, 1891, is perhaps even closer in appearance to *O. garciai*, on account of the presence of occasional varices and a finely reticulate microsculpture; however, in *Acrilloscala* the axial ribs continue uninterruptedly onto the basal disk, which is not the case in *Opalia garciai*. There is also some similarity to members of the bathyal to abyssal genera *Claviscala* De Boury, 1909, and *Cylindriscala* De Boury, 1909.

However, all the above genera lack an intritacalx layer, which is present in the genus *Opalia* H. & A. Adams, 1853 (s.l.), to which *O. garciai* is here referred. This character is here regarded as apomorphic (it does not occur elsewhere in the superfamily Jantinoidea, or in any related superfamily). *Opalia*, together with probable subgenera such

as *Punctiscala* De Boury, 1890, *Nodiscala* De Boury, 1889, and *Gregorioiscala* Cossmann, 1912, is characterised by the presence of an intritacalx, as well as non-lamellate axial ribs and a distinct basal cord and disk (see Kilburn, 1985: 266). Within the genus, the question of a subgenus remains open, as no known species of *Opalia* appears either to possess a colour pattern or to resemble *O. garciai* in its turritelliform shape. Of described subgenera, *Opalia* s.s. best conforms in general characters, notably in lacking a double peristome, but differs in shape and axial sculpture.

Etymology. — Named in honour of Dr. Emilio F. García, who first drew my attention to this species.

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