

Morphological Description of *Marionia olivacea* Baba, 1937, (Gastropoda: Nudibranchia: Tritoniidae) from Korean Waters

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ABSTRACT

A tritoniid species, *Marionia olivacea* Baba, 1937 belonging to the family Tritoniidae was collected by SCUBA survey in Korean fauna. Since only the scientific name of this species was listed on the National List of Marine Species 2023, we provide more information about *M. olivacea*, including an additional name in Korean and its morphological description in this study.

Keywords: Tritoniidae, *Marionia olivacea*, SCUBA survey, Korea

INTRODUCTION

Nudibranchs belonging to the family Tritoniidae Lamarck, 1809 are commonly found in warm and temperate subtidal habitats with a worldwide distribution, but also in cold and deep seas. They come in various sizes and colors, feeding mainly on cnidarians, including alcyonarian soft corals, sea pens, gorgonians and zoanthids, and often mimic their hunting species in coloration and shape (McDonald and Nybakken 1996, 1999; Avila *et al.* 1999; Smith and Gosliner 2003, 2005, 2007; Wyeth *et al.* 2006; Debelius and Kuitert 2007; Bertsch *et al.*, 2009).

To date, this family is divided into two subfamilies and 12 genera, among them 23 valid species belonging to the genus *Marionia* Vayssière, 1877, are presently recorded in the world (MolluscaBase, 2023). We found a tritoniid species, *Marionia olivacea* Baba, 1937 in

Korean fauna through a research survey last year and only listed by scientific name on the National List of Marine Species 2023. Thus, it is necessary to provide more information such as an additional name in Korean and its morphological descriptions. Here we provide the morphological characteristics, picture and species name in Korean.

MATERIALS AND METHODS

In this study, a specimen was collected by SCUBA diving from the subtidal zone of Ulleung Island in the East Sea on July 3, 2022. The morphological feature of this specimen was examined under a stereomicroscope (Leica MZ12.5, Germany) and identified as *M. olivacea* Baba, 1937, from Korean waters. The voucher specimen preserved in 95% ethanol solution was deposited at the National Marine Biodiversity Institute of Korea (MABIK), Seocheon, Republic of Korea (MABIK MO00184191).

SYSTEMATIC ACCOUNTS

Class Gastropoda Cuvier, 1797 복족강
Order Nudibranchia Cuvier, 1817 나새목
Superfamily Tritonioidea Lamarck, 1809 예쁜이갯민숭이상과

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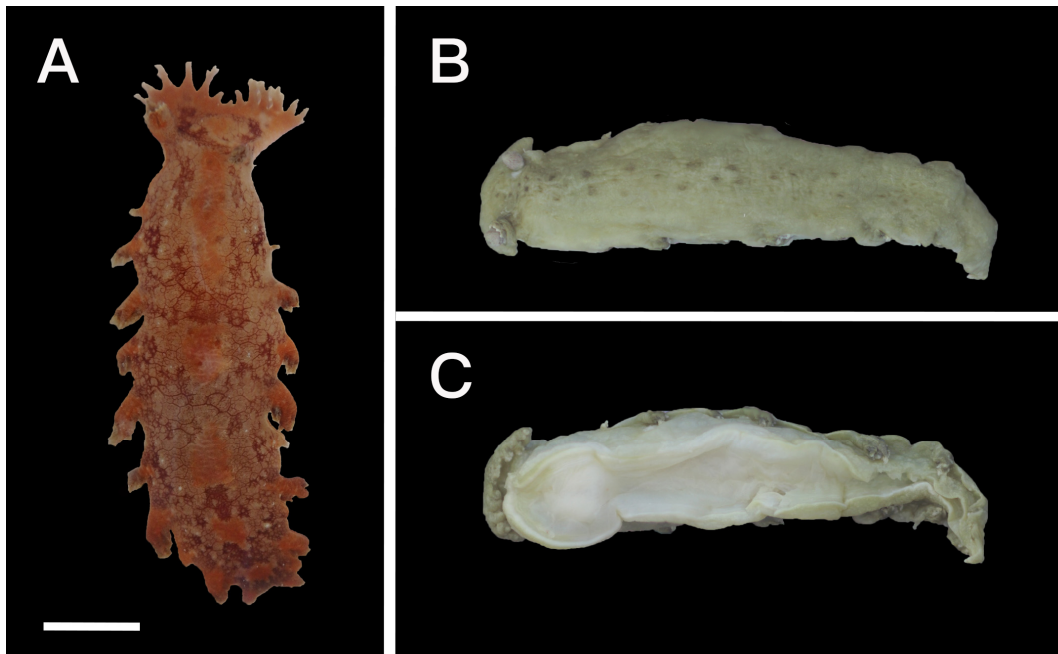


Fig. 1. *Marionia olivacea* Baba, 1937. **A**, Dorsal view (before fixed); **B-C**, Preserved specimen in dorsal view (B) and ventral view (C). Scale bar: 10 mm.

Family Tritoniidae Lamarck, 1809 예쁜이갯민숭이과
Genus *Marionia* Vayssière, 1877 소나무갯민숭이속(신칭)
***Marionia olivacea* Baba, 1937 (Fig. 1) 소나무갯민숭이(신칭)**
Marionia olivacea Baba, 1937: 117, textfigs. 1-3; Baba, 1949: pl.34, fig. 126; Bhave & Apte, 2011: 178, fig. 11; Kil et. al., 2020: 138, figs. A-D.

Type locality: Sagami Bay (Amadaiba and Off Nagai), Japan (Baba, 1937).

Distribution: India, Indonesia, Kenya, Japan and Korea (South and East Sea).

Material examined: 1 individual (MABIK MO00184191), Buk-myeon, Ulleung-gun, Gyeongsangbuk-do, Korea, 37°33'24.1"N, 130°56'24.6"E, collected by SCUBA diving at depth of max 57.2 m, 3 Jul 2022.

Description: Body elongated, body length 60mm; preserved specimen, approximately rectangular in cross section; back and side flat, translucent cream with a pattern of dark brown and orange brown (Fig. 1A). Anterior end round, hinder end narrow. Head semicircular veil without a median notch; 6-8 papillae on each side of the middle line, grooved spoon-shaped tentacle at its postero-lateral edge. Rhinophore arranged stout cylindrical sheath with a crenulate

edge; clavus crown of pinnate appendages. Shape of branchiae dendritic tufts, along the dorso-lateral ridges. Gills eight to fifteen pairs in number. Anal papilla on the right body side between branchial tufts 4-5. Foot almost same length and width as the body.

Remarks: There are many similarities between *M. pambanensis* and *M. olivacea* in morphological features. According to Nanda *et al.*, 2023 and Smith and Gosliner, 2007, the difference between them is based on the number of brachial plumes and velar papillae.

The body color of *M. olivacea* changes to a different pattern, from red-brown before fixing to olive color (Fig. 1A-C). According to the original description of Baba (1937), *M. olivacea* is generally olive in color, which is why the body color after fixing is more similar to the original color.

Kil *et al.*, 2020, introduced the pictures, morphological description and habitat information of this species as a new species in Korean waters in a book in Korean. However, the Korean species name of *M. olivacea* did not reflect on the national list of marine species until 2023. In this study, we follow the Korean names for the genus *Marionia* and *M. olivacea*, which were

suggested by them as ‘소나무갯민숭이속’ and ‘소나무갯민숭이’, and applied them accordingly.

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