

# Three unrecorded marine gastropods from Korea

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## ABSTRACT

Three marine gastropod species were collected in 1988 to 2019 years from the Jeju island waters of Korea. They were identified as *Capulus japonicas* A. Adams, 1861, *Guraleus himerodes* (Melvill & Standen, 1896), and *Turridrupa bijubata* (Reeve, 1843) that come out into the unrecorded species in Korea. As a result, Korean Capuruidae was nine species of seven genera, the Mangeliidae was 21 species of 13 genera, and the Turridae was six species of three genera.

**Keywords:** Gastropod, Unrecorded species, *Capulus japonicas*, *Guraleus himerodes*, *Turridrupa bijubata*.

## INTRODUCTION

In this study, during the 1988-2019 period collected Korean marine gastropods by SCUBA diving in subtidal zone or hand in intertidal zone in the Korean water. As a result, three Korean unrecorded species were found and these species were identified as *Capulus japonicas*, *Guraleus himerodes*, and *Turridrupa bijubata*. The *C. japonicas* A. Adams, 1861 belongs to order Littorimorpha, and currently has eight species of seven genera in Capuruidae. The *G. himerodes* (Melvill & Standen, 1896) belongs to order Neogastropoda and currently has 20 species of 13 genera in Mangeliidae. The *T. bijubata* (Reeve, 1843) belongs to order Neogastropoda and currently has 5 species of 3 genera in Turridae (NIBR, 2019). Morphological features of specimen were observed by stereomicroscope and performed with reference to the illustrated guide to mollusk of Wilson (1994), Okutani *et al.* (2000), and Poppe (2008) for identification. The

newly record of the species and the classification system follows National species list of Korea (NIBR, 2019) and WoRMS (2020).

## SYSTEMATIC ACCOUNTS

Class Gastropoda Cuvier, 1795 복족강  
Subclass Caenogastropoda Cox, 1960 신생복족아강  
Order Littorimorpha Golikov & Starobogatov, 1975  
총알고둥목  
Superfamily Capuloidea J. Fleming, 1822 매부리고둥상과  
Family Capulidae J. Fleming, 1822 매부리고둥과  
Genus *Capulus* Montfort, 1810 매부리고둥속

### 1. *Capulus japonicas* A. Adams, 1861 홍줄매부리고둥 (신칭) (Fig. 1, A)

*Capulus japonicas* A. Adams, 1861, p. 138; Okutani & Habe, 1975, pp. 71, 220; Higo *et al.*, 1999, p. 116; Okutani *et al.*, 2000, p. 197, pl. 98, fig. 1; Poppe, 2008, p. 308, pl. 99, fig. 4; Huang & Huang, 2012, pp. 55-60.

**Type locality:** Japan.

**Habitat:** Intertidal to 5-20 m., attached on *Pecten* shells.

**Distribution:** Korea, Japan.

**Material examined:** 1 specimen (Seongsan, Seogwipo-si, Jeju-do: 6.v.2019).

**Measurement:** Width 23 mm, length 30 mm.

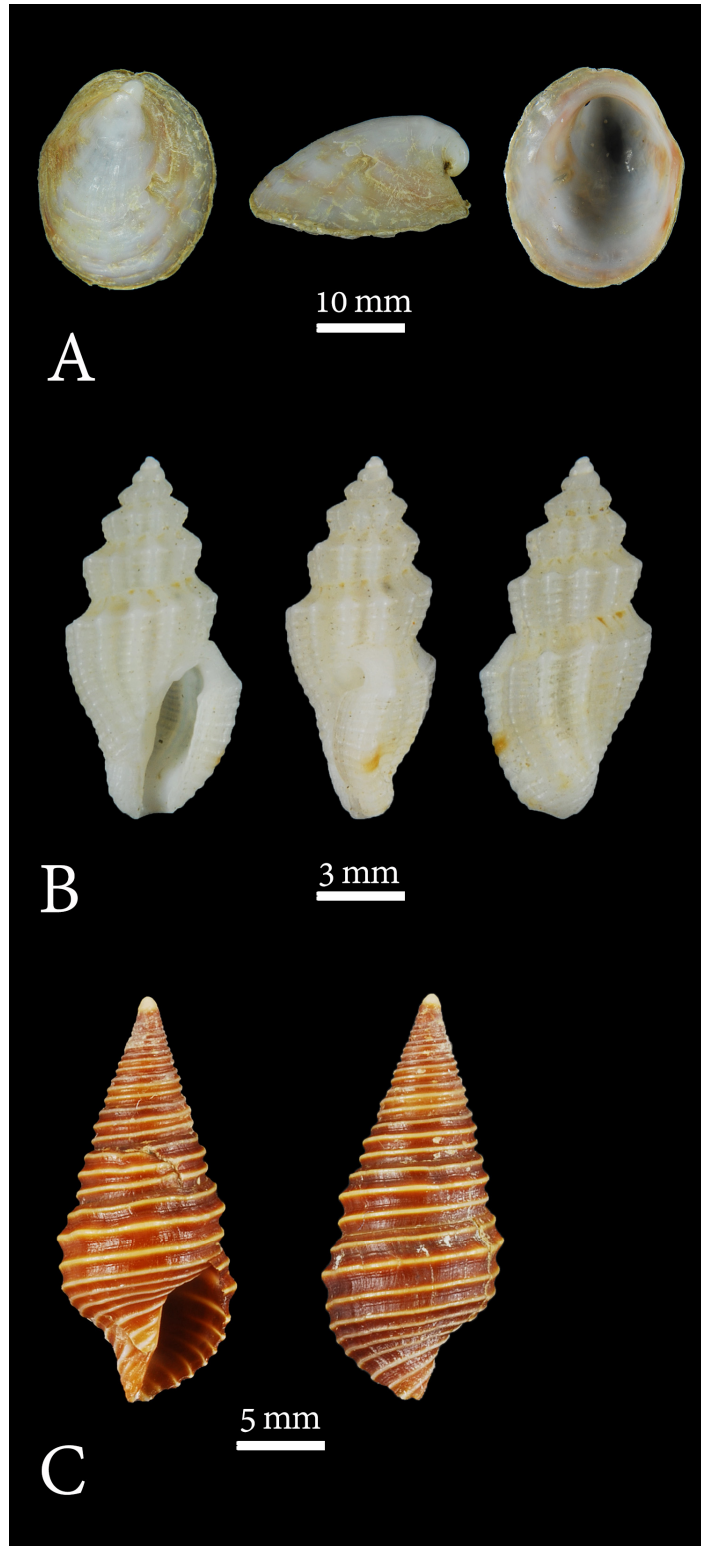
**Description:** Shell circular cap-shaped, not coiled,

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**Fig. 1.** New record Korean marine mollusks. **A**, *Capulus japonicas* A. Adams, 1861; **B**, *Guraleus himerodes* (Melvill & Standen, 1896); **C**, *Turridrupa bijubata* (Reeve, 1843).

mostly white in color, often with several reddish brown color bands. Shell thin but solid, surface sculptured form irregular curves, with weakly irregular concentric ribs. Apex situated posteriorly and abruptly recurved. Aperture rounded, without internal border. Interior of shell glossed, without a calcareous septum. No operculum.

Order Neogastropoda Wenz, 1938 신복족목  
Superfamily Conoidea J. Fleming, 1822 청자고둥상과  
Family Mangeliidae P. Fischer, 1883 골깊은언칭이고둥과  
Genus *Guraleus* Hedley, 1018 근대고둥속

## 2. *Guraleus himerodes* (Melvill & Standen, 1896)

모난꼬마언칭이고둥 (신칭) (Fig. 1, B)

*Mangilia himerodes* Melvill & Standen, 1896, p. 281, pl. 9, fig. 16.

*Guraleus himerodes*: Higo *et al.*, 1999, p. 321; Okutani *et al.*, 2000, p. 651, pl. 324, fig. 161.

**Type locality:** Loyalty islands, New Caledonia.

**Habitat:** Intertidal to 5-20 m., on sandy gravel bottom.

**Distribution:** Korea, Japan, Indo-West Pacific.

**Material examined:** 5 specimens (Seongsan, Seogwipo-si, Jeju-do: 17.iii.1998; 15.x.1998), 2 specimens (Seopjikoji Seogwipo-si, Jeju-do: 21.iv.1998), 6 specimens (Hwasun, Seogwipo-si, Jeju-do: 24.v.2001; 18.ix.2001).

**Measurement:** Height 5.6 mm, length 2.5 mm.

**Description:** Shell small sized but thick and solid, high-conical shape. Surface usually light brown and surrounded by brown dots below body whorl. Sculpture of about 13 axial cords intersecting, 10-12 spiral cords forming lattice structure on body whorl; penultimate whorl with about 11-13 axial and 6 spiral cords form lattice. Spire with about 7-8 whorls, each whorl weakly inflated. Suture deep, each whorl distinct and form a staircase. Body whorl rather inflated, periphery obliquely angulated, base of shell with brown spots arranged. Aperture narrow and elongate-ovate; outer lip thickened and have a dark brown spot. Deep posterior notch on shoulder of outer lip. Columella straight and relatively long, covered with thin white callus. Siphonal canal relatively long and straight, slightly curved dorsally and moderately narrow. Umbilicus absent.

Order Neogastropoda Wenz, 1938 신복족목  
Superfamily Conoidea J. Fleming, 1822 청자고둥상과  
Family Turridae H. Adams & A. Adams, 1853 (1838)  
단풍고둥과  
Genus *Turridrupa* Hedley, 1922 고리단풍고둥속 (신칭)

## 3. *Turridrupa bijubata* (Reeve, 1843) 검은고리언칭이고둥 (신칭) (Fig. 1, C)

*Pleurotoma bijubata* Reeve, 1843, p. 182.

*Turridrupa bijubata*; Wilson, 1994, p.195, pl. 40, fig. 18; Higo *et al.*, 1999, p. 321; Okutani *et al.*, 2000, p. 633, pl. 315, fig. 68; Poppe, 2008, p. 778, pl. 684, fig. 1, 2.

**Type locality:** Burias island, Philippines.

**Habitat:** Intertidal to 25-30 m., under stones and coral.

**Distribution:** Korea, Japan, Philippines, Hawaii, Australia.

**Material examined:** 1 specimen (Munseom, Seogwipo-si, Jeju-do: 9.viii.2003).

**Measurement:** Height 20 mm, length 8 mm.

**Description:** Shell small to medium-sized; moderately thick and solid, high-conical. Surface glossy, usually black-brown and has a yellow bands. Sculpture of body whorl with strong spiral cords, without axial cords or threads. Penultimate whorl with strong spiral cords; remainder of spire whorls with strong spiral cord. Suture shallow, whorls not easily distinguished. Body whorl relatively small and periphery not angulated; base with several spiral cords. Aperture narrow ovate form; outer lip moderately thin; periphery crenulated by spiral cords. Columella straight and long, covered with thin yellowish-brown callus. Siphonal canal short and moderately wide. Interior of aperture glossy, yellowish-white. Umbilicus absent.

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