# Two New Records of Trochidae (Gastropoda, Orthogastropoda) in Korea

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### **ABSTRACT**

Two trochid shells of the genus *Ginebis*, *G. crumpii* (Pilsbry, 1893) and the genus *Enida*, *E. japonica* A. Adams, 1860, collected from the coast of Jeju Island in Korea are reported. *Ginebis crumpii* and *Enida japonica* are closely related to *Calliostoma* Swainson, but can be differentiated by the features of the aperture and umbilicus. These species are a new records to the Korean Molluscan fauna. At present, *G. crumpii* and *E. japonica* are the only species of the represented in Korean water. Including the new records in this study, the family Trichidae contains 30 genera and 57 species in Korean water.

Key words: Trochidae, Ginebis, Enida, new record, Korea

#### INTRODUCTION

Trochids occur in most marine habitats and microhabitats of the intertidal to shallow subtidal zone, on stones and rocks. There are highly variable in size, shape, ornamentation and pigmentation. Korean trochids have been reported by previous investigators (Siba, 1934; Lee, 1956; Kang, 1971; Je, 1989; Kwon et al., 1993; Kwon et al., 2001). The list of aminals in Korea (Choe and Park, 1997) contained 41 species in 16 genera of trochids in Korea. Recently, 55 species in 28 genera have been additionally reported by Lee and Min (2002).

By adding two new species reporting in this study, Korean trochids become 30 genera and 57 species in family Trochidae.

## **SYSTEMATICS**

Family Trochidae Rafinesque, 1815 Genus Ginebis Is. Taki and Otsuka, 1943 Ginebis crumpii (Pilsbry, 1893) 가시줄바위고등 (신칭) (Fig. 1)

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Bathybembix crumpii: Kira, 1977. P. 12, Pl. 6, Fig. 3; Abbott and Dance, 1999. P. 35.

Bathybembix (Ginebis) crumpii: Okada (ed.), 1967. P. 27; Habe and Okutani, 1975. P. 46, 165; Ito, 1989. p. 43, pl. 1, fig. 1.

Ginebis crumpii: Higo et al., 1999, P. 54; Okutani et al., 2000. Pl. 30, Fig. 30, P. 61.

Type locality: Japan

Material examined: 1 ind. Seongsan, June, 2004, D. K. Min

**Measurement**: 40 mm in shell height; 30 mm in shell width.

Description: Shell small sized (up to 40 mm long), light, conical in shape and longer than wide, outside of shell with glossy white brown. Spire relatively long, with pointed apex, strongly impressed sutures. Whorls sculptured with tubercles 3 spiral ribs on upper side of whorl different in thickness, tip of tubercles acutely pointed. Periphery of last whorl rounded. Base of shell relatively round, with roughly granulated on spiral ribs. Umbilicus absent. Aperture rounded. Columella curved and smooth, with nacreous callus and slightly thickened.

Habitat: in 50-400 m deep, fine sand bottom.

**Distribution :** Korea (Jeju Is.), Japan (Honshu-Oga peninsula), East China Sea.

Genus Enida A. Adams, 1860

Enida japonica A. Adams, 1860 납작배꼽고등 (신청) (Fig. 2)

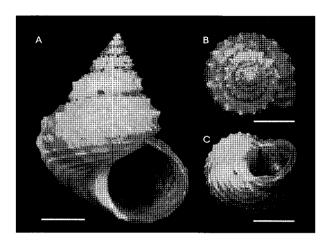


Fig. 1. Ginebis crumpii. A, Ventral view; B, Apical view; C, Basal view. Scale bar=10 mm.

Enida speciosa A. Adams, 1860 (cited from Higo et al., 1999)

Trochus (Gibbula) japonicus E. A. Smith, 1875 (cited from Higo et al., 1999)

 $Chlorostoma\ miyatense\ Yokoyama,\ 1920\ (cited\ from\ Higo\ et\ al.,\ 1999)$ 

Enida japonica: Okada (ed.), 1967. P. 28; Habe, 1975.
P. 42, 247; Habe, 1976. P. 10, Pl. 5, Fig. 15; Ito, 1989.
p. 43, pl. 1, fig. 12; Ito, 1990. p. 95; Higo et al., 1999,
P. 58; Okutani et al., 2000. Pl. 32, Fig. 55, P. 66.

Type locality: off Mishima, western Japan.

Material examined: 1 ind. Seongsan, June, 2004, D. K. Min

**Measurement**: 6 mm in shell height; 10 mm in shell width.

Description: Shell small sized (up to 10 mm long), light, spire depressed conical in shape, about as long as wide, suture deep in groove, whorls side straighted, periphery sharply angulated. Outside of shell having brown markings on white background. Whorls with fine granular spiral ribs, peripheral rib especially sharp and basal ribs weakened. Base of shell flat, with many low spiral grooves. Umbilicus funnel in shape and deeply open. Aperture roughly quadrate, lacking denticle. Columella extreme curved and smooth, with nacreous callus and slightly thickened.

**Habitat**: in 50-200 m deep, fine sand bottom.

**Distribution :** Korea (Jeju Is), Japan (Honshu-Sado island), Indonesia.

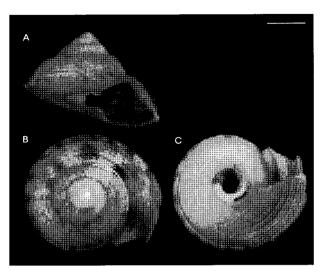


Fig. 2. Enida japonica. **A**, Ventral view; **B**, Apical view; **C**, Basal view. Scale bar=3 mm

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