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The first record of *Catenula confusa* Nuttycombe, 1956 (Platyhelminthes: Catenulida: Catenulidae) from Korea

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Microturbellarians, small free-living Platyhelminthes are rich in freshwater environments. They are useful as indicator of water quality. There has never been a record of microturbellarians in Korea. Here I report a microturbellarian species, *Catenula confusa* Nuttycombe, 1956. Although specimens in this study show some differences with those of the original description of *C. confusa* in length and width of zooid, they conform to the specific diagnosis of this species.

Keywords: freshwater, Heuksando Island, microturbellaria

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Introduction

Free-living freshwater Platyhelminthes are usually divided into two groups, macroturbellarians known as planarians (order Tricladida) and microturbellarians. The latter are less than a few millimeters in length, and inhabit on the surface of sediments, stones and aquatic plants in aquatic environments (Kolasa, 1991). Owing to their richness in freshwater ecosystem and sensitivity to environmental changes, microturbellarinas have potentials as indicator species of water quality (Young, 2001).

Approximately 400 species of freshwater microturbellarians have been reported and about 350 species and 150 species were described from Europe and North America, respectively (Kolasa, 1991). And in the East Asia, thirty-nine species were recorded from Japan (Kawakatsu *et al*., 1970-2000). In Korea, however, microturbellarian species has never been reported though three planarian species were described (KSSZ, 1997).

Here, I report *Catenula confusa* Nuttycombe, 1956, which is the first record of microturbellarian species from Korea.

Materials and Methods

Specimens were collected by scooping out sediments from ditches enriched with organic matter in Heuksan-do Island. In the laboratory, organic matters and coarse sediments were removed and then specimens were sorted under a stereomicroscope. Specimens were mounted on hole slide glasses with distilled water to observe them alive. Observation and taking pictures of mounted specimens were performed with a research microscope, BX53 (Olympus, Tokyo, Japan) equipped with a camera system. After observation, specimens were fixed with formaldehyde or 70% ethanol solution. Specimens (KOSPIV 0000241741) were deposited in the National Institute of Biological Resources (NIBR), the Republic of Korea.

Results and Discussion

Phylum Platyhelmithes (Gegenbauer, 1859) 편형동물문
Class Catenulida Meixner, 1924 사슬납작벌레강 (신칭)
Family Catenulidae Graff, 1905 사슬납작벌레과 (신칭)
Genus *Catenula* Duges, 1832 사슬납작벌레속 (신칭)

***Catenula confusa* Nuttycombe, 1956**
사슬납작벌레 (신칭) (Fig. 1)
Catenula lemnae Marcus, 1945a: 11; Marcus, 1945b: 1; Luther, 1960: 23.
Catenula confusa Jones, 1959: 335; van der Land, 1965: 235.

Material examined. Twenty individuals: Korea, Jeollanam-do, Sinan-gun, Heuksan-myeon, Ye-ri, 36°68′97.52″ N, 125°45′45.31″E, 21 September 2015, collected by Hanna Kim.
Diagnosis. Single zooid, 0.25-0.45 mm in length; 0.015-



Fig. 1. *Catenula confusa* Nuttycombe, 1956. Two anterior zooids. Scale bar = 50 μm.

0.050 mm in width. Body, thread-like when elongated; 1-5 zooids; not forming balustrade. Head, anterior end rounded; cephalic auricles at posterior end of cephalic region; length of cephalic region, about 1/3 of total length of zooid in single zooid specimen. Statocysts located dorsal to cephalic ganglion.

Habitats. Ponds and ditches rich in organic matter.

World distribution. Cosmopolitan.

Remarks. Although specimens in this study show some differences with those of the original description of *C. confusa* in length and width of zooid, they conform to the specific diagnosis of this species suggested by Nuttycombe (1956).

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