Zootaxa 3368: 245–255 (2012)
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

Three new gastrotrich species of the genus *Tetranchyroderma* (Macrodasyida: Thaumastodermatidae) from Korea*

JIMIN LEE & CHEON YOUNG CHANG[1]
Marine Ecosystem Research Division, Korea Institute of Ocean Science & Technology, Ansan 426-744, Korea
[1] Corresponding author, E-mail: cychang@daegu.ac.kr

**In:* Karanovic, T. & Lee, W. (Eds) (2012) Biodiversity of Invertebrates in Korea. *Zootaxa*, 3368, 1–304.

Abstract

Three new gastrotrich species of the *genus Tetranchyroderma* are described sublittoral sandy bottoms of the Yellow Sea and Jeju Island in South Korea. *Tetranchyroderma aethesbregmum* **sp. nov.**, which has a dorsal cuticular armature with pentancres only, is characterized by the peculiar shape of the head with a median trapezoidal lobe flanking three pairs of papillae. *Tetranchyroderma megabitubulatum* **sp. nov.** is clearly differentiated from other pentancrous species by the character combination of three pairs of cephalic tentacles, a pair of long dorsolateral adhesive tubes, and paired 'foot' ventral adhesive tubes. *Tetranchyroderma insolitum* **sp. nov.** is the only species possessing cuticular armature with tetrancres and triancres mixed, and also characteristic in having an earlobeprotrusion at the posterolateral corners of head.

Key words: Description, Gastrotricha, marine, South Korea, taxonomy

Introduction

The serial faunal studies on macrodasyidan gastrotrichs have been carried out in Korea, since Chang et al. (1998a) first recorded two *Thaumastoderm* species, *T. copiophorum* and *T. appendiculatum*. A total of 16 species from six genera in two families, Planodasyidae Rao & Clausen, 1970 and Thaumastodermatidae Remane, 1926 have been recorded from the Korean coast so far (Chang et al. 1998a, b; Chang & Lee 2001; Lee & Chang 2002, 2003, 2006, 2007, 2012; Lee et al. 2009). Among them, five species belong to the genus *Tetranchyroderma* Remane, 1926, which is the most diversified and representative marine gastrotrich genus (Todaro 2002).

Since we have recently confirmed three new *Tetranchyroderma* species, which were collected from sublittoral bottoms in the Yellow Sea and Jeju Island, we add them to the gastrotrich fauna of Korea. Herein we describe the three new species with taxonomic remarks on their affinities based on morphological characters. We also provide detailed illustrations and SEM photomicrographs of each species.

Material and methods

Material was collected from sublittoral sandy bottoms at four localities (Fig. 1): Baegripo Beach (station 1), Gasa Beach (station 2), Myeongsasipri Beach (station 3) in the Yellow Sea and Hwasun (station 4) in Jeju Island, Korea.

Samplings were accomplished by scooping the top (~10 cm) sediments into polyethylene vinyl bags or 700 ml volume plastic bottles by skin diving or using a dredge. General methods, including scanning electron microscopy, were carried out by following our previous papers (Lee & Chang 2003; Lee et al. 2009).

Type specimens were deposited in the National Institute of Biological Resources (NIBR), Incheon, Korea, and in the Department of Biological Science (DB), Daegu University, Korea.

Accepted by T. Karanovic: 3 May 2012; published: 4 Jul. 2012