

## First Report of an Interstitial *Semicytherura* (Crustacea: Ostracoda: Cytheruridae: Cytherurinae): a New Species from Central Japan

Shinnosuke Yamada<sup>1</sup> and Hayato Tanaka<sup>2</sup>

<sup>1</sup>GeoBio-Center, Ludwig Maximilians University of Munich, Richard Wagner Street 10, 80333 Munich, Germany

E-mail: shinno\_976@hotmail.com

<sup>2</sup>Graduate School of Science and Technology, Shizuoka University, Oya 836, Suruga-ku, Shizuoka, 422-8529 Japan

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A new species of ostracod, *Semicytherura sagittiformis* sp. nov., is described from a sandy beach in Shizuoka Prefecture, central Japan. It lives in pore-waters of marine sandy sediments and is ecologically associated with other interstitial ostracods (e.g., *Parapolycope* and *Microloxoconcha*). *Semicytherura sagittiformis* is one of the smallest species in the genus *Semicytherura*, and its carapace size is comparable with those of some large interstitial ostracods. This fact suggests that a small carapace is the most important character for adaptation of ostracods to an interstitial environment.

**Key Words:** Crustacea, Ostracoda, *Semicytherura*, new species, interstitial fauna, Japan, taxonomy, carapace size.

### Introduction

Podocopid ostracods are small crustaceans furnished with a calcified bivalved carapace. They live in various aquatic habitats and their carapaces are often found in sedimentary strata as microfossils. Many taxonomic papers concerning epibenthic ostracods have been published, and a few authors have described the small ostracods living in the pore-water of sandy sediments, the so-called “interstitial species” (Hiruta 1989; Watanabe *et al.* 2008; Higashi and Tsukagoshi 2008).

Interstitial ostracods often show specialised features, such as small carapace size, translucent colour, absence of an eye, valves with no ornamentation, and reduction in the number of setae on the appendages (Hartmann 1973; Maddocks 1976). The interstitial ostracod fauna consists mainly of a few specialised taxa (e.g., *Microloxoconcha* and *Cobanocythere*), but some ostracods belonging to families that are mainly composed of epibenthic species have been reported as interstitial species (Danielopol and Hartmann 1986). The body sizes of these latter interstitial species are usually smaller than those of confamilial epibenthic ones, but some of the other specialised characters listed above are not found in their carapace and appendages (Danielopol and Bonaduce 1990).

The genus *Semicytherura* Wagner, 1957 is defined by the calcified lamella and the tooth arrangement of the hingement. About 30 named species of this genus have been found in various marine habitats in Japan (rocky shore, inner bay, and