*Zootaxa* 2500: 39–57 (2010)
www.mapress.com/zootaxa/


**Article**

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

# Two new interstitial species of the genus *Parapolycope* (Crustacea: Ostracoda) from central Japan

HAYATO TANAKA & AKIRA TSUKAGOSHI
*Department of Environment and Energy System, Shizuoka University, Oya 836, Suruga-ku, Shizuoka, 422-8529 Japan*

## Abstract

Two new interstitial cladocopid ostracods are described from central Japan: *Parapolycope oligohalina* sp. nov, and *Parapolycope spiralis* **sp. nov.** These two species are the third and forth records of the genus *Parapolycope* Klie, 1936, respectively. Since *P. oligohalina* **sp. nov.** inhabits river mouth environments with low salinity at low tides, the wide tolerance to salinity in the species is shown. Myodocopan Ostracoda have so far been considered as a pure marine taxa. The occurrence of *P. oligohalina* **sp. nov.** indicates that a few myodocopan ostracods can live in oligohaline environments. The carapace surface covered with puncta of varying size is a unique character of *P. oligohalina* **sp. nov.** *P. spiralis* **sp. nov.** exhibits a spiral structure in both male copulatory duct and female spermatheca as specific characters. A key to the genera of the Polycopinae is presented.

**Key words:** Myodocopa, Halocyprida, Cladocopina, River mouth, copulatory duct

## Introduction

The genus *Parapolycope* Klie, 1936 (type species: *Parapolycope germanica* Klie, 1936) was described from the interstitial habitat in Helgoland (Germany), with the following diagnosis: carapace oval, narrow, thin and translucent; female with circular upper lip; antennula with four podomeres; exopodite of antenna nine podomeres, endopodite three podomeres; coxal endites of mandibula with few sharp teeth, palpus with indistinct three podomeres, button-shaped last podomere carries two setae, exopodite present as a single seta; endopodite and exopodite of maxillula strongly shortened; exopodite of fifth limb reduced to a wide bristle; furca with decreased number of claws; in male, upper lip with strong chitinous hook; one ventral seta of the last podomere in antennula extending as sheet-shaped; both lamellae of furca with a flagellum, right one converted copulatory organ. Except for the type species, only one other species has been recorded to date, i.e., *Parapolycope kunashiri* Chavtur, 1977 from the southern Kuril islands.

In this paper, two new *Parapolycope* species are described as interstitial ostracods from the sandy beaches in Japan.

## Material and methods

Sand materials were collected from the mouth of Kanogawa River bank, Numazu City, Shizuoka Prefecture (35°04'52"N, 138°51'33"E) and the Miho Spit, Shizuoka City, Shizuoka Prefecture (35°01'13"N, 138°31'20"E) from the sediments (Fig. 1) at various depths (about 30–50 cm). At the Kanogawa River bank, salinity was measured from the interstitial pore water (water in the hole) and surface water near the shore line by the salinity refractometer. The materials were washed five times in a bucket with fresh water in the laboratory, and the top layer water was strained through nets of #25 in mesh size. The specimens were picked up from the remaining deposits under a stereo-binocular microscope (SHZ-10, OLYMPUS). Appendages were dissected and mounted in a gum-chloral medium named 'Neo-Shigaral' or glycerine on glass slides. A

*Accepted by R. Matzke-Karasz: 22 Apr. 2010; published: 9 Jun. 2010*