



Description of a new blind species of *Heterokamaka* (Crustacea: Amphipoda: Kamakidae) from Dianshan Lake, China

ZHONGE HOU¹, YITAO PAN² & SHUQIANG LI^{3,4}

¹Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China. E-mail: houze@ioz.ac.cn;

²College of Environment and Resources, Jilin University, Changchun 130012, China. E-mail: panyitao_hayao@hotmail.com

³Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China. E-mail: lisq@ioz.ac.cn

⁴Corresponding author

Abstract

In family Kamakidae, genera *Kamaka* and *Heterokamaka* possess fused urosomites 1 and 2. *Kamaka* is widely distributed in West Pacific, including nine species. *Heterokamaka* is very similar to *Kamaka*, except lamellate article 3 of the mandibular palp and long antenna 2. In this paper, a new species of *Heterokamaka* is described and illustrated in detail and the distributions of *Kamaka* and *Heterokamaka* are provided.

Key words: Taxonomy, diagnosis, tube-dwelling, *Kamaka*, freshwater

Introduction

The family Kamakidae Myers and Lowry, 2003 includes genera with fused urosomites as well as genera with free urosomites. The genera *Kamaka* Derzhavin, 1923 and *Heterokamaka* Ariyama, 2008 possess coalesced urosomites 1 and 2, while other kamakid genera have separated urosomites. The genus *Kamaka* widely inhabit freshwater and brackish waters along West Pacific, from Kamchatka to Australia (Ueno 1935; Krapp-Schickel & Myers 2006). Up to now, there are nine *Kamaka* species have been recorded, including *Kamaka kuthae* Derzhavin, 1923, *K. biwae* Ueno, 1943, *K. derzhavini* Gurjanova, 1951, *K. palmata* Dang, 1968, *K. taditadi* Thomas & Barnard, 1991, *K. littoralis* Ren, 2006, *K. morinoi* Ariyama, 2007, *K. excavata* Ariyama, 2007 and *K. silvana* Myers, 2009. In China, two species have been recorded from brackish water, including *K. biwae* and *K. littoralis*. *K. littoralis* was collected from mangrove litter in Hainan Island, while *K. biwae* (Yan *et al.* 1998) collected from brackish estuary in Liaoning Province required further examination, since *K. biwae* was only found in freshwater (Ariyama 2007). The genus *Heterokamaka* Ariyama, 2008 was founded based on specimens from Isahaya Bay, Western Japan, which is closely related to the genus *Kamaka* and can be distinguished from *Kamaka* by lamellate article 3 of the mandibular palp and long antenna 2. The relationship between *Heterokamaka* and *Kamaka* needs further research on morphological or molecular data.

Dianshan Lake is a natural freshwater lake, located in the west of Shanghai, upstream of the Huangpu River. However, this lake became eutrophicated because of aquiculture, which would affect animal biodiversity. During our survey of benthic animal in Dianshan Lake, four amphipod species were found, including *Grandidierella taihuensis* Morino & Dai, 1990, *Monoculodes limnophilus* Tattersall, 1922, *Corophium denticulatum* Ren, 1995 and one *Heterokamaka* species new to science. In this paper, this new species, *Heterokamaka lutensis* **sp. nov.**, is described and illustrated. Moreover, the distributions of *Kamaka* and *Heterokamaka* species are presented in Figure 1, where type localities are used for most species, except for *Kamaka kuthae* and *K. derzhavini*, since no detailed information of type localities was recorded along east and west sides of Kamchatka peninsula.