A New Genus and Species of Kamakidae (Crustacea: Amphipoda) from Isahaya Bay, Western Japan

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A monotypic new genus, Heterokamaka (Crustacea: Amphipoda: Kamakidae), is erected for its type species H. isahayae sp. nov. from Isahaya Bay, western Japan. Heterokamaka closely resembles Kamaka Dershavin, 1923 in having a dilated coxa 1, coalesced urosomites 1 and 2, and a uniramous uropod 3; however, it can be distinguished readily by the acute-tipped, short ocular lobes. Because H. isahayae occurs only in Isahaya Bay, which has become eutrophic, this new species is probably facing a high risk of extinction.

Key Words: Crustacea, Amphipoda, Kamakidae, Heterokamaka, new genus, new species, Isahaya Bay, Japan, threatened species.

Introduction

Isahaya Bay is a branch of Ariake Sound, Kyushu, western Japan, that is famous for a huge reclamation project, which has resulted in large impacts on the natural environment (Azuma 2000). After isolation by the construction of a dike in April, 1997, a drastic change in the fauna of bivalves and gastropods has occurred inside the dike (Sato 2002, 2006). Also in amphipods, a decrease in the species richness and density has been observed there (Azuma 2000; Matsuo 2006). In the course of the latter studies, several specimens of a peculiar amphipod resembling species of Kamaka Dershavin, 1923 were collected, and closer examination has revealed that they belong to an undescribed species, which in turn calls for the erection of a new genus in the family Kamakidae. In this paper, the new monotypic genus Heterokamaka is proposed, with the new species, here named H. isahayae, as its type species.

Materials and Methods

Samples were collected from Isahaya Bay by Dr Mikio Azuma in 1997 and 1998. Six individuals were dissected and their appendages were examined and illustrated under a phase-contrast microscope. Body length was measured from the apex of the rostrum along the dorsal margin to the distal end of the telson. If setal groups on appendage articles are separated, the number of setae is described as \(a+b\) in order from proximal to distal. The type series is deposited in the Osaka Mu-