



A new species and new record of the Amphilochidae (Crustacea: Amphipoda) from Korea

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Abstract

Two species of the family Amphilochidae were collected from shallow Korean waters. One of the species is new and is described as *Hourstonius geojeensis*. The morphology of the eyes, lateral cephalic lobe, mandibular palp and molar, antenna 1, gnathopod 2, pereopodal dactyls, epimeron, uropods and telson are the major characteristics which differentiate the new species from its congeners. The other species found, *Paramphilochus parachelatus* Ishimaru & Ikehara, 1986 is a new record for Korean waters, previously known from Japanese waters. Both species are fully illustrated and compared with related species. A key to north Pacific *Hourstonius* species is provided.

Key words: *Hourstonius*, *geojeensis*, *Paramphilochus*, *parachelatus*, taxonomy, amphilochid, amphipod, Korea

Introduction

Amphilochid amphipods are very common but inconspicuous inhabitants of the bottom fauna and are commonly considered to be nestlers with wide ecological niches. They are also known to be associates of various invertebrates, such as ascidians, hydroids, sponges, scleractinian and gorgonian corals and bivalves (Barnard 1971; McKinney 1978; Barnard & Thomas 1983; Bousfield & Hoover 2001; Azman 2009). Members of the family Amphilochidae are very small bodied amphipods (0.75 to 5 mm), characterized by the conspicuous rostrum, small coxa 1 often hidden by coxa 2, large broadened coxa 4, elongated biramous uropod 3 and reduced uropod 2 (Barnard & Karaman 1991). Amphilochids are considered to be an unspecialized family, with character states such as homopodous pereopods 5–7, a biramous uropod 3 and generally unspecialized mouthparts (Krapp-Schickel & Koenemann 2006). Worldwide, 15 genera have been reported in the family Amphilochidae (Barnard & Karaman 1991; Hoover & Bousfield 2001). Of these, the genus *Hourstonius* Hoover & Bousfield, 2001 is separated from *Gitanopsis* Sars, 1895 by the presence of a distinct accessory flagellum, the marginal spines on the mandibular molar, the smooth posteroventral margins of coxae 2–4 and the more rounded apex of the telson. To date, this genus is comprised of 14 described species (Kim & Kim 1992; Hirayama & Takeuchi 1993; Hoover & Bousfield 2001) centered mostly in the north-Pacific, with a small number of species in the Atlantic.

The monotypic genus *Paramphilochus* Ishimaru & Ikehara, 1986 is characterized by the short carpal lobe of gnathopod 2 and the obtusely angled palm of gnathopod 2 forming a parachelate condition and consists of the species, *Paramphilochus parachelatus* Ishimaru & Ikehara, 1986 from the Japan Sea. Previously only one amphilochid species, *H. koreana* (Kim & Kim, 1992) was reported from Korean waters. These additional records now bring the total recorded number of amphilochid species to three from Korea, but many more are to be expected considering the very small body size, cryptic nature and inquilinous habit of many species.

In this paper the new species, *Hourstonius geojeensis* and newly recorded species, *Paramphilochus parachelatus* are described and illustrated. A key to the north-Pacific *Hourstonius* species is also given.