

**A New Species of Freshwater Bopyrid, *Probopyrus iriomotensis* (Crustacea: Isopoda), Parasitizing *Macrobrachium* spp. (Crustacea: Decapoda), from Iriomote Island, Ryukyu Islands, Southwestern Japan**

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(Received 7 September 2009; Accepted 7 June 2010)

A new species of bopyrid isopod, *Probopyrus iriomotensis* sp. nov. parasitizing palaemonid freshwater shrimps of the genus *Macrobrachium*, is described based on material from Iriomote Island, Ryukyu Islands, southwestern Japan. The new species most commonly infects the branchial chambers of *Macrobrachium shokitai* Fujino and Baba, 1973, but rarely also *M. formosense* (Bate, 1868). The new species is similar to *Probopyrus ascendens* (Semper, 1880), *P. gangeticus* Chopra, 1923, and *P. giardi* Weber, 1892, but can be distinguished from them by a combination of characters of the pleomere and pleotelson, relative body width, and the degree of deflection of the body axis. This is the first species of Bopyridae to be recorded from a freshwater environment in Japan. In addition, the generic assignment of two marine species of *Probopyrus* is questioned, and the date of authorship of *P. marinus* Nierstrasz and Brender à Brandis, 1923 is clarified.

**Key Words:** Crustacea, Isopoda, Bopyridae, *Probopyrus*, *Macrobrachium*, Iriomote Island, Japan.

## **Introduction**

In Japan, 94 species of bopyrid isopod have been recorded (Shiino 1972; Saito *et al.* 2000; Shimomura *et al.* 2006). Although these species infect various groups of decapod crustaceans inhabiting marine or brackish-water environments, no true freshwater species has been known from Japan. Carcinologists of the University of the Ryukyus recently noticed, however, an unidentified bopyrid species of the genus *Probopyrus* Giard and Bonnier, 1888 infecting the branchial chambers of *Macrobrachium shokitai* Fujino and Baba, 1973, an endemic freshwater shrimp of Iriomote Island, the largest and least disturbed of the Yaeyama Islands in the southern Ryukyu Islands.