



First record of the thermosbaenacean genus *Halosbaena* from Asia: *H. daitoensis* sp. nov. (Peracarida: Thermosbaenacea: Halosbaenidae) from an anchialine cave of Minamidaito-jima Is., in Okinawa, southern Japan

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Abstract

A new species of *Halosbaena* is described from Japan as the first record of the genus from Asia. *Halosbaena daitoensis* sp. nov. differs from its congeners in the following combination of characters: rounded mediodistal angle of ocular scales; 12–14 segmented main flagellum of antenna 1; segment 2 of exopodite of pereopods 2–5 with 8 plumose macrosetae; segment 2 of uropodal exopodite with 9 plumose macrosetae; telson about 0.6 times as width as length; distally tapering male penial lobe, with a short projection on its base. A key to species of the genus is provided.

Key words: new species, *Halosbaena*, Minamidaito-jima Is., Halosbaenidae, Thermosbaenacea

Introduction

The Thermosbaenacea is a rare order in the subclass Peracarida known from hot springs, underground waters, hyper saline, marine or fresh waters (Poore & Humphreys 1992). More recently, Wagner (1994) reviewed the thermosbaenacean crustaceans, recognizing 33 species in seven genera from four families, i.e. Thermosbaenidae, Monodellidae, Tulumellidae, Halosbaenidae, discussed with full reference to former publications, distribution, and habitat all of the species in the world. The genus *Halosbaena* Stock is a largest genus in the family Halosbaenidae including three species, all from saline or fresh waters in cave habitats, *H. acanthura* Stock from Caribbean Sea, *H. fortunata* Bowman & Iliffe from Canary Islands, and *H. tulki* Poore & Humphreys from Australia. The main diagnostic characters are 9 to 16-segmented main flagellum of antenna 1, 4 to 7-segmented accessory flagellum of antenna 1, propodus of gnathopod with 4 teazel macrosetae ventrally, 2-segmented exopodite of pereopod 2, pleonites 3–6 with simple macrosetae ventrally, medial margin of uropodal endopodite with stout serrate macrosetae, and telson with four pairs of cuspidate macrosetae and three to five serrate macrosetae along posterolateral margin (Wagner 1994).

In Japanese water, Thermosbaenacea has long been left open for taxonomy. A recent investigation yielded an undescribed species of the genus from an anchialine cave of Minamidaito-jima Is. in Okinawa, southern Japan, as the first record of the genus from Asia. Based on this material, the present paper herein describes *Halosbaena daitoensis* sp. nov.