



A new cave-dwelling talitrid genus and species from Japan (Crustacea: Amphipoda: Talitridae)

KRISTINE N. WHITE¹, JAMES K. LOWRY² & HIROSHI MORINO³

¹University of Maryland University College, Asia Division, Camp Foster Education Center, Unit 35042, FPO AP 96373-5042.
E-mail: kristine.white@faculty.umuc.edu

²Crustacea Section, Australian Museum, 6 College Street, Sydney, NSW 2010, Australia. E-mail: jim.lowry@austmus.gov.au

³4433-71 Kawawada-cho, Mito, 311-4153 Japan. E-mail: morino631@gmail.com

Abstract

An independently derived, blind, cave-dwelling amphipod, *Minamitalitrus zoltani* **gen. nov.**, **sp. nov.** is described from the Hoshino-do cave on the island on Minami-Daitō jima, Okinawa, Japan. This genus belongs to the *Talitrus* group of 15 genera and is the first record of the group from Japan. Several characters support the new genus, particularly the reduced biramous pleopods.

Key words: *Minamitalitrus*, *zoltani*, Japan, blind, troglobite

Introduction

There are currently five genera and about 12 species of talitrid amphipods reported from Japan (Iwasa 1939, Stephensen 1944, Morino 1972, 1975, 1999, Jo 1988, Miyamoto & Morino 2004), all in the *Orchestia* group of Lowry & Coleman (2012) based on well developed subchelate male second gnathopods. They are all coastal beach and sand hoppers except *Platorchestia humicola* (Martens, 1868), *P. japonica* (Tattersall, 1922), '*Orchestia*' *kokuboi* Uéno, 1929 and '*Orchestia*' *solifuga* Iwasa, 1939, which are terrestrial species.

The Daitō Islands, or Ufuagan, are uplifted atolls and consist of three islands that are approximately 360 km east of Okinawa-jima Island in Japan. The three islands are Kita-Daitō jima, Minami-Daitō jima, and Oki-Daitō jima. Eight specimens of a cave dwelling talitrid were collected from the Hoshino-do cave on Minami-Daitō jima Island. When alive, these large amphipods were white (Fig 1) and appeared to be completely blind. They are the first records of Japanese talitrids in the *Talitrus* group (Lowry & Coleman 2012). Based on several morphologically distinct characters, that support separate generic recognition, we describe the terrestrial cave hopper, *Minamitalitrus zoltani* **gen. nov.**, **sp. nov.**

Methods

Amphipods were collected from a cave using forceps and preserved in 70% EtOH.

Specimens used for morphological analyses were transferred to glycerin, dissected, mounted on slides, and illustrated using a Nikon® Y-IDT drawing tube attached to a Nikon® Eclipse 50I compound microscope. Pencil drawings were scanned and digitally inked in Adobe® Illustrator using a Wacom® Tablet, following the methods of Coleman (2003).

Type material is deposited in The National Museum of Nature and Science in Tokyo, with the prefix NSMT for museum numbers; in The University of the Ryukyus Museum (Fujukan), with the prefix RUMF for the museum number; in the Australian Museum, with the prefix AMP for the museum number; and in the Hungarian Natural History Museum, Budapest, Department of Zoology, Collection of Crustacea (no museum number).