



<http://dx.doi.org/10.11646/zootaxa.4028.3.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:45E8CEBA-FC8A-4359-9E65-574F1490D990>

A new cave-dwelling species of the alpheid shrimp genus *Salmoneus* Holthuis, 1955 (Crustacea: Decapoda: Caridea) from the Ryukyu Islands, southern Japan

TOMOYUKI KOMAI¹, YUSUKE YAMADA² & KYO YUNOKAWA³

¹Natural History Museum and Institute, Chiba, 955-2 Aoba-cho, Chuo-ku, Chiba, 260-8682 Japan. E-mail: komai@chiba-muse.or.jp

²21-38-14 Ishikawa, Uruma, Okinawa, 904-1106 Japan. E-mail: y-yusuke@hotmail.co.jp

³Iejima Diving Service, Ie, Kunigami, Okinawa, 905-0502 Japan. E-mail: diving@iejima.com

Abstract

A new species of the alpheid shrimp genus *Salmoneus* Holthuis, 1955, *S. antricola* n. sp., is described and illustrated on the basis of a single ovigerous specimen from an aphotic marine cave at a depth of 12 m, off Ie Island, Okinawa Islands, the Ryukyu Archipelago. It is morphologically similar to five species presently referred to the *S. jarli* (Holthuis, 1951) species group: *S. erasimorum* Dworschak, Anker & Abed-Navandi, 2000, *S. komaii* Anker, 2011, *S. paulayi* Anker, 2011, *S. poupini* Anker, 2011, and *S. sketi* Fransen, 1991. However, the minor cheliped with an elongate carpus being subequal to the chela, the lack of teeth on the cutting edges of the minor cheliped fingers, and the very slender third to fifth pereopods are obvious characters that distinguish *S. antricola* n. sp. from all of its presumed close relatives. Among the 50 species of *Salmoneus*, only *S. sketi* and the present new species are known from marine caves.

Key words: Ie Island, Indo-West Pacific, marine cave, *Salmoneus antricola*

Introduction

Taxonomic studies in the last decade have dramatically increased the number of species in the alpheid shrimp genus *Salmoneus* Holthuis, 1955, currently with 49 species (De Grave & Fransen 2011; updated by Anker 2011b; Komai & Anker 2012; Anker *et al.* 2014; Anker & Lazarus 2015). The genus is widely distributed, mainly in the tropical and subtropical parts of the world oceans. Although all the known species are found in shallow waters, their habitats are cryptic: most species dwell deep under rocks and coral rubble, in crevices of coral rocks, or in burrows of other crustaceans. *Salmoneus sketi* Fransen, 1991 was, until now, the sole representative of the genus confined to marine cave habitats in the Adriatic Sea (Fransen 1991).

In this study, a new species of *Salmoneus* is described and illustrated on the basis of a single ovigerous specimen collected in a marine cave off Ie Island (at a depth of 12 m), Okinawa Islands, southern Japan. Two other species of decapod crustaceans have been recently described from this cave, viz. *Bresilia rufiocolus* Komai & Yamada, 2011 (Caridea: Bresiliidae) and *Catoptrus iejima* Fujita & Naruse, 2011 (Brachyura: Portunidae) (Komai & Yamada 2011; Fujita & Naruse 2011).

The holotype of the new species is deposited in the collection of the Natural History Museum and Institute, Chiba, Japan (CBM). Carapace length (cl, in mm) was measured from the tip of the rostrum to the posterior margin of the carapace.

Taxonomic account

Family Alpheidae

Genus *Salmoneus* Holthuis, 1955