



A distinctive new species of the alpheid genus *Salmoneus* Holthuis, 1955 (Crustacea: Decapoda: Caridea) from the northwestern Pacific

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Abstract

A new species of the alpheid shrimp genus *Salmoneus* Holthuis, 1955, *S. pinguis* **sp. nov.**, is described based on the holotype from Okinawa, Ryukyu Archipelago, Japan. An additional, much smaller and morphologically slightly different specimen from Panglao, Bohol Sea, the Philippines, is tentatively assigned to *S. pinguis* **sp. nov.** The new species is one of the most unusual members of *Salmoneus* presenting a combination of several unique characters, including the unusually stout, plump body; the carapace strongly domed dorsally, with a broadly rounded rostrum, and without orbital teeth; the second abdominal pleuron conspicuously enlarged; the fourth pleuron greatly overlapping the fifth pleuron; the antennular and antennal flagella furnished with long setae; and the major cheliped comparatively small, and with the distally blunt, slightly bulbous fingertips.

Key words: Decapoda, Caridea, Alpheidae, shrimp, *Salmoneus*, new species, Japan, Philippines

Introduction

The alpheid genus *Salmoneus* Holthuis, 1955 is characterised by the well-developed rostrum; the orbital hoods completely or partly covering the eyestalks in dorsal view; the unequal and asymmetrical first pereopods or chelipeds, with the major cheliped lacking a snapping mechanism; the sixth abdominal somite lacking a distinct articulated flap at posteroventral angle; and the second pleopod with an appendix masculina in all individuals, including ovigerous ones, suggesting some form of hermaphroditism (see Anker 2011a). Most species of *Salmoneus* have cryptic life habits, dwelling in crevices in coral rocks, spaces deep under rocks or coral rubble, or in burrows of other decapod crustaceans, including larger alpheid shrimps and callianassid ghost shrimps. Recent sampling efforts and taxonomic studies (e.g., Anker & Marin 2006; Anker 2007, 2010, 2011a, 2011b; Komai 2009) dramatically increased the number of species over the last decade, with hitherto 44 valid species worldwide (De Grave & Fransen 2011; Anker 2011b).

In 2009, the first author conducted fieldwork in the Ryukyu Islands, in collaboration with skillful local divers, specifically targeting decapod crustaceans. During one of the dives, one specimen of a very distinctive alpheid shrimp was collected at Manza, Okinawa Island, at a depth of 2 m. A second specimen of presumably the same species was found by the second author while sorting the alpheid material collected by the Panglao 2004 Marine Biodiversity Project in the Philippines. Examination of both specimens revealed that they belong to a species of *Salmoneus* new to science. In the present contribution, this species is described as new.

The type specimen from the Ryukyu Islands is deposited in the collections of the Natural History Museum and Institute, Chiba, Japan (CBM). The additional specimen from the Philippines is deposited in the collections of the Muséum national d'Histoire naturelle, Paris, France (MNHN). Carapace length (cl, in mm) was measured from the tip of the rostrum to the posterior margin of the carapace. The term “spiniform seta” is used for a structure also known as “movable spine”.