

A New Species of the Stenopodidean Shrimp Genus *Spongicola* (Crustacea: Decapoda: Spongicolidae) from French Polynesia, South Pacific

Tomoyuki Komai

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

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A new species of the spongicolid shrimp genus *Spongicola*, *S. teres* sp. nov., is described and illustrated on the basis of a single male specimen collected from the Society Islands, French Polynesia, South Pacific Ocean, at a depth of 650–800 m. It appears closest to *S. depressus* Saito and Komai, 2008 and *S. levigatus* Hayashi and Ogawa, 1987 among the seven known congeneric species in having a reduced armature of the carapace and third pereopod, but the more developed rostral ridge, extending onto the gastric region of the carapace, distinguishes the new species from the latter two species. The armature of the telson and the development of the grooming apparatus of the first pereopod are also useful in differentiating these three species. An emended identification key to the species of *Spongicola* is provided.

Key Words: Key, *Spongicola teres*, taxonomy, French Polynesia, Society Islands.

Introduction

Spongicola de Haan, 1841 is a genus in the stenopodidean shrimp family Spongicolidae Schram, 1986. Of the seven genera in this family, *Microprosthemata* Stimpson, 1860 consists of free-living species on shallow coral reefs (Saito and Anker 2014) and the monotypic *Engystenopus* Alcock and Anderson, 1894 was erected for the free-living deep-water free-living *E. palmipes* Alcock and Anderson, 1894 (Goy 2010); the other five genera, *Globospongicola* Komai and Saito, 2006, *Paraspongicola* de Saint Laurent and Cleva, 1981, *Spongicola*, *Spongicoloides* Hansen, 1908, and *Spongiocaris* Bruce and Baba, 1973, contain species associated with deep-water sponges, chiefly hexactinellids, living in the atrium of the host as a heterosexual pair (Saito and Takeda 2003; Komai and Saito 2006; Saito *et al.* 2006; Saito and Komai 2008). Saito and Komai (2008) revised *Spongicola* and *Paraspongicola*, recognizing seven species of *Spongicola*, all known from the Indian and Pacific Oceans: *S. andamanicus* Alcock, 1901, *S. depressus* Saito and Komai, 2008, *S. goyi* Saito and Komai, 2008, *S. levigatus* Hayashi and Ogawa, 1987, *S. parvispinus* Zarenkov, 1990, *S. robustus* Saito and Komai, 2008, and *S. venustus* de Haan, 1844. Within the Spongicolidae, this genus is characterized by the rudimentary exopod of the third maxilliped and the massive palms of the third pereopods with their serrate dorsal and ventral margins (Saito and Komai 2008).

In this article, a new species of *Spongicola* is described and illustrated on the basis of a single male specimen collected during the French expedition “TARASOC” in 2009, which was devoted to documenting of the deep-water benthic fauna on seamounts in French Polynesia. The new spe-

cies appears closest to *S. depressus* and *S. levigatus*, but several morphological differences, including the armature of the rostrum, telson, and third pereopod, and the structure of the grooming apparatus of the first pereopod, justify the establishment of the new taxon.

Materials and Methods

The “TARASOC” cruise was organized by the Institut pour la Recherche et le Développement (IRD) and the Museum national d’Histoire naturelle, Paris (MNHN), France (chief scientist Dr. Philippe Bouchet, MNHN), and carried out by RV *Alis* between 20 September and 27 October 2009 (French National Oceanographic Data Center 2015). The surveyed areas included the Tarava Seamounts, the Tuamotu Archipelago, and the Society Islands. The holotype of the new species is deposited in MNHN. Postorbital carapace length (cl, in mm) was measured from the rostral base to the midpoint of the posterodorsal margin of the carapace. An abbreviation used in the text is DW for Warén dredge. The morphological terminology follows Saito and Komai (2008).

Family **Spongicolidae** Schram, 1986

Genus *Spongicola* de Haan, 1844

Spongicola teres sp. nov.

(Figs 1–4)

Material examined. Holotype: male (cl 5.2 mm), TARASOC, stn DW 3440, between Raiatea and Tahaa, Society Islands, French Polynesia, 16°40’S, 151°25’W, 650–800 m, 16 October 2009, MNHN-IU-2011–5119.