



## Article

### **A new species of the pontoniine shrimp genus *Onyccaris* Nobili, 1904 (Crustacea: Decapoda: Caridea: Palaemonidae) from Sagami Bay, central Japan**

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#### **Abstract**

The pontoniine shrimp genus *Onyccaris* Nobili, 1904 currently contains 18 species, all known from the Indo-West Pacific. In this study, a new species of the genus, *O. hayamaensis*, is described and illustrated on the basis of four ovigerous female and three male specimens collected from Sagami Bay, central Japan, at shallow subtidal depths of 5–6 m. The specimens lived in internal cavities of an unidentified species of a haliclionid sponge, *Haliclona* sp. This new species is referred to the *O. quadratophthalma* (Balss, 1921) species group, represented by four species, i.e., *O. balssi* Bruce, 2011, *O. fujinoi* Bruce, 2011, *O. quadratophthalma*, and *O. trullata* Bruce, 1978. Differentiating characters between the new species and the latter four species are discussed. The present new species exhibits strong sexual dimorphism in the second pereopods and heterochaely in the male second pereopods, though these traits are not fully documented in some of other congeneric species. Diagnostic characters derived from the second pereopods should be treated carefully.

**Key words:** Crustacea, Decapoda, Caridea, Palaemonidae, Pontoniinae, *Onyccaris*, new species, sponge, association, Japan

#### **Introduction**

The pontoniine shrimp genus *Onyccaris* Nobili, 1904 (Caridea: Palaemonidae) is currently represented by 18 species, all known from the Indo-West Pacific (De Grave & Fransen 2011). Most species are found in association with sponges in those cases in which the hosts are known (cf. Holthuis 1952; Fujino & Miyake 1969; Bruce 1971, 1980, 2011a; Bruce & Coombes 1995; Hayashi 2003; Marin 2005). From Japanese waters, six species have been reported (Hayashi 2003; Bruce 2011b): *O. amakusensis* Fujino & Miyake, 1969; *O. callyspongiae* Fujino & Miyake, 1969; *O. fujinoi* Bruce, 2011; *O. oligodentata* Fujino & Miyake, 1969; *O. seychellensis* Bruce, 1971; and *O. spinosa* Fujino & Miyake, 1969.

The present paper serves to describe a new species of *Onyccaris* from Sagami Bay, central Japan, on the basis of seven specimens that were found in association with an unidentified sponge of the genus *Haliclona* Grant, 1836 (Demospongiae: Chalinidae), encrusted on bottom surface of a small rock at depths of 5–6 m. The new species, *O. hayamaensis*, is morphologically similar to the four species referred to the *O. quadratophthalma* (Balss, 1921) species group (Bruce 2011), i.e., *O. balssi* Bruce, 2011, *O. fujinoi* Bruce, 2011, *O. quadratophthalma* and *O. trullata* Bruce, 1978. Differentiating characters between the new species and the latter four known species are discussed.

Specimens were collected by hand sorting during diving. The type material is deposited in the Natural History Museum and Institute, Chiba (CBM). Carapace length (cl) was measured from the tip of the rostrum to the posterior margin of the carapace.