



<http://dx.doi.org/10.11646/zootaxa.3784.2.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:CC68C27D-D614-41AF-A8A6-27BDE6D5CECF>

A new species of the pontoniine shrimp genus *Eupontonia* (Crustacea: Decapoda: Caridea: Palaemonidae) from the Ryukyu Islands, Japan

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Abstract

A third species of the pontoniine shrimp genus *Eupontonia* Bruce, 1971, *E. gracilipes* n. sp., is described and illustrated on the basis of a single female specimen collected from shallow water of Ishigaki Island, southern Ryukyu Islands, Japan. The new species is readily distinguished from the two congeneric species, *E. noctalbata* Bruce, 1971 and *E. oahu* Bruce, 2010, by a number of morphological characters, including the presence of a distinct postrostral median ridge and of the postrostral median tooth on the carapace. It is considered to be a free-living species. The generic diagnosis of *Eupontonia* is slightly emended to accommodate the present new species. A key in aid of identification of species of *Eupontonia* is provided.

Key words: *Eupontonia gracilipes*, *noctalbata*, *oahu*, Ishigaki Island

Introduction

The pontoniine shrimp genus *Eupontonia* Bruce, 1971 (Palaemonidae) is currently represented by two species, *E. noctalbata* Bruce, 1971 (type species), known from the Seychelles in the Indian Ocean (Bruce 1971) and Xisha Islands in the South China Sea, northwestern Pacific (Li 1997), and *E. oahu* Bruce, 2010, so far known only from Oahu, Hawai'i, Central Pacific (Bruce 2010). *Eupontonia noctalbata* has been rarely collected, represented only by the female holotype (Bruce 1971) and an ovigerous female subsequently reported by Li (1997). No evidence of symbiotic association of *E. noctalbata* has been observed. On the other hand, *E. oahu* was described based on 46 specimens found to be associated with *Pocillopora meandrina* Dana, 1846 (Scleractinia: Pocilloporidae) (Bruce 2010). *Eupontonia* is one of the three primitive genera within Pontoniinae characterized by the possession of a mandibular palp (the other two are *Palaemonella* Dana, 1852 and *Vir* Holthuis, 1952). In the lack of a hepatic tooth on the carapace, *Eupontonia* appears closer to *Vir*. Bruce (1971; 2010) discussed differentiating characters between *Eupontonia* and *Vir*.

A faunal survey for shallow water shrimp fauna in the Ryukyu Islands, made by the second author, a third hitherto unknown species of *Eupontonia*, represented only by a single, apparently free-living female specimen, was discovered from Ishigaki Island, Yaeyama Islands in southern Ryukyu Islands. The species is herein described and illustrated as new to science, with its taxonomic position discussed, based on morphological characters. The discovery of the new species, *E. gracilipes*, requires a minor emendation to the generic diagnosis discussed by Bruce (2010).

The holotype is deposited in the Natural History Museum and Institute, Chiba (CBM). Postorbital carapace length (cl), measured from the rostral base from the midpoint of the posterodorsal margin of the carapace, indicates specimen size.

type specimen of *E. noctalbata* reported by Li (1997) and specimens of the congeneric *E. oahu* have two pairs of dorsolateral spines on the telson (Bruce 2010).

Etymology. From the combination of the Latin, *gracilis* (= slender) and *pes* (= leg), in reference to the slender ambulatory legs (third to fifth pereopods). Used as a noun in apposition.

Key to species of *Eupontonia*

1. Carapace with supraorbital tooth *E. noctalbata*
- Carapace without supraorbital tooth 2
2. Posteriormost tooth of dorsal rostral series distinctly postrostral; second pereopod with carpus distinctly longer than palm, unarmed. *E. gracilipes* n. sp.
- Posteriormost tooth of dorsal rostral series not postrostral; second pereopod with carpus distinctly shorter than carpus, armed with small distomesial tooth..... *E. oahu*

Acknowledgements

We thank two anonymous reviewers for offering comments and suggestions for improvements.

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