



Additional records of the laomediid mud-shrimp genus *Naushonia* Kingsley, 1897 (Crustacea: Decapoda: Gebiidea), with a revised identification key

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Abstract

Six species of the peculiar mud-shrimp genus *Naushonia* Kingsley, 1897 (Laomediidae) from various localities in the world are treated in this study: *N. carinata* Dworschak, Marin & Anker, 2006 (newly recorded from Japan); *N. japonica* Komai, 2004 (second record since the original description); *N. lactoalbida* Berggren, 1992 (newly recorded from Papua New Guinea); *N. portoricensis* (Rathbun, 1901) (newly recorded from the French Antilles); *N. serratipalma* Komai & Anker, 2010 (newly recorded from Saudi Arabia); and *N. draconis* Anker, 2014 (newly recorded from Cuba). A detailed description and new illustrations are provided for *N. portoricensis*, a species for which a modern description was hitherto unavailable. Gill formula was re-examined in all six species. Colour photographs of living or fresh specimens are provided for most species. A revised key to all known species of *Naushonia* is presented, a eliminating misinterpretation of an important character in previous keys.

Key words: Laomediidae, *Naushonia*, new records, gill formula, Japan, Papua New Guinea, Saudi Arabia, Caribbean Sea

Introduction

The taxonomy of the peculiar laomediid mud shrimp genus *Naushonia* Kingsley, 1897 was first reviewed by Goy & Provenzano (1979) and most recently, by Anker (2014). Three nominal genera were synonymized with *Naushonia*: *Homoriscus* Rathbun, 1901 (type species *H. portoricensis* Rathbun, 1901), originally placed in the Homaridae (Astacidea); *Coralliocrangon* Nobili, 1904 (type species *C. perrieri* Nobili, 1904), originally placed in the Crangonidae (Caridea); and *Espeleonaushonia* Juarrero & Martínez-Iglesias, in Juarrero *et al.*, 1997 (type species *E. augudrea* Juarrero & Martínez-Iglesias, in Juarrero *et al.*, 1997) (Chace 1939; Goy & Provenzano 1979; Anker 2014). As redefined by Anker (2014), *Naushonia* currently includes 14 species: *N. crangonoides* Kingsley, 1897; *N. portoricensis* (Rathbun, 1901); *N. perrieri* (Nobili, 1904); *N. macginitiei* (Glassell, 1938); *N. panamensis* Martin & Abele, 1982; *N. lactoalbida* Berggren, 1992; *N. augudrea* (Juarrero & Martínez-Iglesias, in Juarrero *et al.* 1997); *N. manningi* Alvarez, Villalobos & Iliffe, 2000; *N. japonica* Komai, 2004; *N. carinata* Dworschak, Marin & Anker, 2006; *N. palauensis* Alvarez, Villalobos & Iliffe, 2010; *N. latimana* Komai & Anker, 2010; *N. serratipalma* Komai & Anker, 2010; and *N. draconis* Anker, 2014.

Naushonia can be easily recognized by large, dorsoventrally flattened, subchelate first pereopods, which mislead earlier authors to refer this genus to the caridean family Crangonidae (e.g., Nobili 1904; de Man 1920; Balss 1933; Glassell 1938). Most species of the genus burrow in soft sediments or mixed sand–rubble–rock substrates in shallow coastal waters (Martin & Abele 1982; Berggren 1992; Komai 2004; Sirota & Martin 2005; Komai & Anker 2010; Anker 2014). Exceptions are *N. carinata*, which may be an obligate associate of callianassid burrows (Dworschak *et al.* 2006; Anker *et al.* 2014), and *N. augudrea*, *N. manningi*, and *N. palauensis*, which are marine or anchialine cave dwellers (Juarrero *et al.* 1997; Alvarez *et al.* 2000, 2010). Prior to Komai (2004), all records of *Naushonia* were from the Americas (eastern Pacific and western Atlantic) and western Indian Ocean, except for records of larvae of unknown species from New South Wales, Australia (Dakin & Colefax 1940),