

<http://dx.doi.org/10.11646/zootaxa.3846.3.4>  
<http://zoobank.org/urn:lsid:zoobank.org:pub:47DD5009-C837-4A1D-B800-DB8BE098F960>

## A re-description of rare alpheid shrimp *Amphibetaeus jousseaumei* (Coutière, 1896) and description of a new species of the genus *Athanopsis* Coutière, 1897 (Crustacea: Decapoda: Alpheidae) from Iranian coast of the Persian Gulf

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### Abstract

A new record of rare alpheid shrimp *Amphibetaeus jousseaumei* (Coutière, 1896) (Decapoda: Caridea: Alpheidae) is presented based on material collected from Qeshm Island, Iran, the Persian Gulf. This is the first record of the species for the Iranian waters as well as the second record and re-description of *A. jousseaumei* from its original description given by Coutière (1896). Besides, a new alpheid shrimp species *Athanopsis tarahomii* sp. nov. is described from the same locality. The new species can be clearly separated from all remaining species of the genus *Athanopsis* by deep rostrum curved downward and the presence of well marked blunt extra-cornea tooth on carapace.

**Key words:** Crustacea, Decapoda, Alpheidae, *Amphibetaeus*, *Athanopsis*, new records, new species, Persian Gulf, Iran

### INTRODUCTION

The invertebrate fauna of the Northwest Indian Ocean including the Persian Gulf and the Gulf of Oman are purely studied and crustaceans are not the exception in this regard. Several new species of caridean shrimp were recently described from Iranian waters (Marin, 2009; Anker et al., 2010). During the course of study on caridean shrimps of the Iranian intertidal zone (Sheibani, 2008) at Qeshm Island, the largest Iranian Island of the Persian Gulf located at the entrance of the Persian Gulf at the Hormoz Strait ( $26^{\circ} 51' N$ ,  $56^{\circ} 08' E$ ), at January 2008, representatives of two rare genera of the family Alpheidae were found. Below, the first re-description of *Amphibetaeus jousseaumei* (Coutière, 1896), since its original description (Coutière, 1896) based on freshly collected material is given. Three Coutière's syntypes from Djibouti and southern Yemen, Gulf of Aden were deposited in the Museum National d'Histoire Naturelle, Paris (MNHN). Presently, only the major cheliped of one of these specimens is designated as the lectotype of *A. jousseaumei* in MNHN (MNHN-Na 13677). The other record belongs to undescribed species of the relatively rare alpheid genus *Athanopsis* Coutière, 1897, which is described here in as a new species.

All shrimps were caught by small hand net at subtidal zone under rocks and coral boulders and were immediately preserved in 70% solution of ethanol. Carapace length (cl., in mm), the length from the tip of rostrum to the posterior margin of the carapace, and total length (tl., in mm), the length from the tip of rostrum to the distal margin of the telson, are used as the standard measurement of size. The material of *Amphibetaeus jousseaumei* and *Athanopsis tarahomii* sp. nov. is deposited at Senckenberg Museum (SMF), Frankfurt am Main, Germany and Zoological Museum, University of Tehran (ZUTC), Tehran, Iran.

## References

- Anker, A. & Jeng, M.S. (2006) *Richalpheus palmeri*, n. gen., n. sp., an infaunal alpheid shrimp from the Philippines, with redescription of *Amphibetaeus jousseaumei* (Coutière, 1896) (Decapoda: Alpheidae). *Journal of Crustacean Biology*, 26 (3), 379–391.
- Anker, A. & Ahyong, S. (2007) A rediagnosis of *Athanopsis australis* Banner & Banner, 1982, a rare alpheid shrimp from southern Australia, with a phylogeny of *Athanopsis* Coutière, 1897 and remarks on antitropical distributions in the Alpheidae (Decapoda, Caridea). *Crustaceana*, 80 (6), 685–698.
- Anker, A. & Marin, I. (2007) *Athanas anatidactylus*, n. sp., a new alpheid shrimp associated with crinoids in the tropical western Pacific (Crustacea: Decapoda). *Zoological Studies*, 46 (2), 162–167.
- Anker, A. & Marin, I. (2009) The alpheid shrimp genus *Leptalpheus* Williams, 1965 in the tropical western Pacific, with description of two new species (Crustacea: Decapoda: Caridea). *Raffles Bulletin of Zoology*, 57 (1), 91–107.
- Anker, A., Naderloo, R. & Marin, I. (2010) On a new species of the shrimp genus *Athanas* Leach, 1814 (Crustacea, Decapoda, Alpheidae) from Iran. *Zootaxa*, 2372, 53–60.
- Banner, D.M. & Banner, A.H. (1981) Annotated checklist of the alpheid shrimp of the Red Sea and Gulf of Aden. *Zoologische Verhandelingen*, 190, 1–99. [Leiden]
- Banner, D.M. & Banner, A.H. (1982) The alpheid shrimp of Australia. Part III: The remaining alpheids, principally the genus *Alpheus*, and the family Ogyrididae. *Records of the Australian Museum*, 34 (1–2), 1–357.
- Berggren, M. (1991) *Athanopsis rubricinctuta*, new species (Decapoda: Natantia: Alpheidae), a shrimp associated with an echiuroid at Inhaca Island, Moçambique. *Journal of Crustacean Biology*, 11, 166–178.
- Coutière, H. (1896a) Note sur un nouvel alpheide', *Betaeus jousseaumei*. *Bulletin de la Socie'te' Entomologique de France* 1896, 65, 313–317.
- Coutière, H. (1896b) Note sur *Betaeus jousseaumei*, nouvelle espe'ce d'alphe'e de la Mer Rouge. *Bulletin du Muse'um d'Histoire Naturelle*, 2, 236–237.
- Coutière, H. (1896c) Note sur quelques genres nouveaux ou peu connus d'alphe'ide's, formant la sous-famille des alpheopside's. *Bulletin du Muse'um d'Histoire Naturelle*, 2, 380–386.
- Coutière, H. (1897) Note sur un nouveau genre d'Alphéidés. *Bulletin du Muséum national d'Histoire Naturelle*, Paris, 3 (7), 301–303.
- Coutière, H. (1899) Les "Alpheidae", morphologie externe et interne, formes larvaires, bionomie. *Annales des Sciences Naturelles, Zoologie*, Se're 8, 9, 1–560, pls. 1–6. [Masson et Cie Ed., Paris]
- De Man, J.G. (1905) Diagnoses of new species of macrurous decapod Crustacea from the "Siboga-Expedition". *Tijdschrift der Nederlandse Dierkundige Vereeniging*, 9 (3/4), 587–614.
- Dworschak, P., Marin, I. & Anker, A. (2006) A new species of *Naushonia* Kingsley, 1897 (Decapoda: Thalassinidea: Laomediidae) from Vietnam and the Philippines with notes on the genus *Espeleonaushonia* Juarrero & Martínez-Iglesias, 1997. *Zootaxa*, 1372, 1–16.
- Marin, I. (2009) Crinoid-associated shrimps of the genus *Laomenes* A.H. Clark, 1919 (Caridea: Palaemonidae: Pontoniinae): new species and probable diversity. *Zootaxa*, 1971, 1–49.
- Marin, I. (2010) A second species of the genus *Manipontonia* Bruce, Okuno & Li, 2005 (Crustacea, Decapoda, Palaemonidae). *Zootaxa*, 2372, 61–68.
- Miya, Y. (1980) Two new records of the genera, *Athanopsis* and *Prionalpheus*, from Japan, with description of a new species (Crustacea, Decapoda, Alpheidae). *Publications from the Amakusa Marine Biological Laboratory, Kyushu University*, 5, 117–131.
- Sheibani, R. (2008) Taxonomy and Biogeography of littoral Caridean Shrimps (Crustacea, Decapoda) in the Persian Gulf and Gulf of Oman. Unpublished M.Sc. thesis, University of Tehran, Tehran, 144 pp. [in Farsi with English abstract]