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New species and new record of hadzioids (Amphipoda: Senticaudata, Hadzioidea) from the Persian Gulf, Iran

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Abstract

New record and new species of the families Melitidae Bousfield, 1973 and Maeridae Krapp-Schickel, 2008 are described from the Iranian shorelines of the Persian Gulf. *Melita persia* **sp. nov.** is differentiated from other members of *M. zeylanica* Stebbing, 1904 group by: the presence of two setae on inner ramus of third uropod, the setal arrangement on the telson, and a recurved proximal lobe of sixth coxa in females. Also, *Elasmopus menurte* Barnard, 1974 previously described from Western Australia and Mauritius is recorded, for the first time, from Persian Gulf in the north-western Indian Ocean.

Key words: *Melita persia* **sp. nov.**, *Elasmopus menurte*, Qeshm Island, Iran

Introduction

The family Maeridae in the superfamily Hadzioidea was established by Krapp-Schickel (2008). Based on a new comprehensive review of amphipod taxonomy and phylogeny by Lowry & Myers (2013) the superfamily Hadzioidea is composed of eight families. The Hadzioidea is characterized by the first antenna longer than second antenna and the peduncle of first uropod with a basofacial robust seta. Three families of the superfamily Hadzioidea, Hadziidae S. Karaman, 1943, Melitidae Stebbing, 1904 and Maeridae Krapp-Schickel, 2008 are most similar, the family Hadziidae can be differentiated by the stalked coxal gills. Maeridae and Melitidae differ from each other by the characters of cephalic lobe, gnathopod 1, the forms of the first and second uropods and the inner ramus of third uropod.

Previous studies on Senticaudata in the Persian Gulf and the Gulf of Oman have led to the description of *Grandidierella exilis* Myers, 1981, *Siphonoecetes arabicus* Barnard & Thomas, 1984, *Stenothoe irakiensis* Salman, 1985, *Parhyale basrensis* Salman, 1986, *Metaprotella macoranicus* Momtazi & Sari, 2013, *Monoliropus kazemii* Momtazi & Sari, 2013 and *Pseudaeginella hormozensis* Momtazi & Sari, 2013.

The present contribution describes a new species and a new record of the hadzioid group from the Iranian shorelines of the Persian Gulf.

Material and methods

Specimens were collected during January 2014 from the intertidal zone of Qeshm Island (Fig. 1). Collected material was preserved in 70% ethanol. Dissections were made in glycerol and material mounted in glycerin gelatin. Selected material was drawn by Camera Lucida. Material is deposited on Iranian National Institute for Oceanography Collection (INIOC).

Abbreviations are: A, antenna; A.F, accessory flagellum; EP, epimeron; G, gnathopod; L.L, lower lip; LMd, left mandible; Mx, maxilla; Mxp, maxilliped; P, pereopod; PL, pleopod; RMd, right mandible; T, telson; U, uropod; U.L, upper lip.

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Gulf. *Melita persia* belongs to the *Melita zeylanica* group, that is defined by morphologically similar species of *Melita* with 1-articulate outer ramus on the third uropod (Appadoo & Myers 2005). The *Melita zeylanica* group is comprised of *M. corticis* Appadoo & Myers, 2005, *M. persia* sp. nov, *M. setiflagella* Yamato, 1988, *M. zeylanica* Stebbing, 1904 and *M. zeylanica kauerti* Barnard 1972. Between the members of this group *M. persia* is more close to *Melita zeylanica kauerti* Barnard, 1972 based on similar characters on the urosomites, first antenna, curved sixth coxa on females and bearing more than one stout seta on inner ramus of the third uropod. Differences between species of this group were shown on Table 1. The proximal lobe of the female coxa 6 shows different degree of curvature in this group (Fig. 8). *Melita persia* has the most highly curved anterior lobe on coxa 6 of known female *Melita*. Other species level characters that could be distinguished *M. persia* from other members of *Melita zeylanica* group were a submedial robust setae along outer margin of telson, the presence of two robust setae on inner ramus of uropod 3 and the presence of marginal setae on both sides of the third article of the mandibular palp (see Table 1, for more details).

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