

Cumaceans (Crustacea: Peracarida) from the Persian Gulf

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Abstract

The study of a benthic macroinvertebrate collection from the Iranian coasts off Assaluyeh led to obtain the first data on the cumacean fauna of the Persian Gulf. During two sampling campaigns carried out in August 1998 and November 2002, eight species belonging to the families Bodotriidae and Nannastacidae were collected. Four of them are new to science, namely *Cyclaspis adiaستolos*, *Eocuma carinocurvum*, *Heterocuma inerme* and *Pseudosympodomma persicum*. All new species, and two rare ones (i.e. *Cumella* sp. and *Eocuma travancoricum*), are described and keys to the species of *Heterocuma* and *Pseudosympodomma* are provided. The local distribution of the cumacean assemblages off Assaluyeh is characterized by its homogeneity during the different sampling periods.

Key words: Cumacea, Bodotriidae, Nannastacidae, Persian Gulf

Introduction

The Persian Gulf is a shallow (36 m mean depth), semi-enclosed basin with a low rate of water exchange (up to 5 years) (Sheppard 1993). Higher than freshwater inputs (i.e. precipitation and river inflow), evaporation causes increase water density in surface layer. Dense, salty water sinks to the bottom and move out from the Persian Gulf through deeper portion of the Strait of Hormuz. The reverse estuary circulatory model is analogue to that observed in the Mediterranean Sea (Reynolds 1993).

A relatively low biotic diversity has been reported for the area. It is often attributed to the natural stress induced in the ecosystem by the existing extreme environmental conditions (Price *et al.* 1993). For instance, surface temperature varies from <15°C at the north coast during winter time to 30°C near the Strait of Hormuz in the summer period, and it may reach over 35°C at 30 m deep in the Iranian coasts. In turn, always high salinity