



## Taxonomy and distribution of the genus *Eurydice* Leach, 1815 (Crustacea, Isopoda, Cirolanidae) from the Arabian region, including three new species

DAVID ALAN JONES<sup>1</sup> & MANICKAM NITHYANANDAN<sup>2</sup>

<sup>1</sup>Personal Postal, Box Number 443, Ctra. Cabo La Nao (Pla) 124-6, 03730, Javea, Alicante, Spain. E-mail: wendavjones@terra.es

<sup>2</sup>La'Ala Al-Kuwait, 6<sup>th</sup> Floor, Office 613, P.O. Box 22964, Safat 13090, Kuwait. E-mail: nithyanandanm@yahoo.com

### Abstract

Three new subtidal species of *Eurydice* are described, i.e. *Eurydice tridentata* **sp. nov.** and *Eurydice marisrubri* **sp. nov.** from the Red Sea, and *Eurydice marzouqui* **sp. nov.** from the Arabian/Persian Gulf. These species can be separated from all other *Eurydice* in the Arabian region by the absence of robust setae on the posterior margin of the pleotelson. *E. marisrubri* has a truncate posterior margin bearing 5 apical teeth, *E. marzouqui* has a rounded pleotelson posterior margin with 6 apical teeth and in *E. tridentata* the posterior margin is truncate, bearing 7 apical teeth, the central 3 prominent. Additional information is provided for two previously described species: *E. peraticis* Jones, 1974 and *E. arabica* Jones, 1974. Previous records of *E. inermis* are attributed to *E. tridentata* and *E. inermis* is excluded from the region. A key is provided to separate all the *Eurydice* species likely to be found in the Arabian region. The distribution of all the Arabian *Eurydice* is described, and morphology is discussed in relation to habitat.

**Key words:** taxonomy, Isopoda, *Eurydice*, Arabian Sea, /Persian Gulf, Red Sea

### Introduction

The isopod fauna of the Western Indian Ocean are now reasonably well known (Kensley 2001), and Cirolanidae have been recently reviewed with descriptions of new species including several from the Arabian Gulf (Schotte & Kensley 2005). Similarly isopods of the Mediterranean region are well known (Hansen 1905; Monod 1930; Jones 1969; Dexter 1986/87). In contrast there are few recent studies in the Red Sea (Monod 1933; Bruce & Jones 1978; Dexter 1989; Hobbins & Jones 1993).

Intertidal species of *Eurydice* Leach, 1815 were first described from Red Sea and Arabian Gulf sand beaches by Jones (1974), who also discussed the ecology of *E. arabica* Jones, 1974 from the Red Sea and *E. peraticis* Jones, 1974 from the Gulf coast of Saudi Arabia. The range of *E. peraticis* was extended to the Goan coast of India (Eleftheriou & Jones 1976) and this species has also been recorded from the northern Arabian sea (Kazmi *et al.* 2002). A second Indian species *E. indicis* Eleftheriou and Jones, 1976, occurs on coarse sand beaches in the south at Kerala, and is included in the key although it has yet to be found in the Arabian region. A third intertidal species *E. paxilli* Schotte and Kensley, 2005 was recently described from the Gulf coast of Saudi Arabia.

The only subtidal species of *Eurydice* previously recorded from the region was *E. inermis* Hansen, 1890, although the diagnosis of this Red Sea species was acknowledged to be tentative (Bruce & Jones 1978; Bruce 1986). Comparison of original material from Yanbu, Saudi Arabia, with present material from near Eilat, Israel confirms that this is a new species, *E. tridentata* **sp. nov.** Two further subtidal species of *Eurydice* are here described, *E. marisrubri* **sp. nov.** from material collected by Professor Lev Fishelson off Eilat, Red Sea, and *E. marzouqui* **sp. nov.** from Kuwait and Tarut Bay, Saudi Arabia.

A key is provided to the species of *Eurydice* and their morphology in relation to habitat is discussed.