



First record of the genus *Typhlocirolana* Racovitza, 1905 (Isopoda: Cirolanidae) from Tunisia and description of a new species from the National park of Ichkeul

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Abstract

An intensive exploration of groundwater habitats in Tunisia led to the discovery of *Typhlocirolana ichkeuli* **sp. nov.**, the first record of the genus from Tunisia. *Typhlocirolana ichkeuli* **sp. nov.** is characterised especially by the lack of a propodal organ and the shape and the number of plumose setae on the medial lobe of maxilla 2. *T. ichkeuli* **sp. nov.** shows clear affinities with *T. fontis*, another species from Algeria.

Key words: Crustacea, Isopoda, Cirolanidae, *Typhlocirolana*, Stygobitic fauna, Ichkeul, Tunisia

Introduction

The first survey of the underground aquatic fauna in Tunisia was by Seurat (1921, 1934) at the beginning of the 20th century. It led to the discovery of the colourless and anophtalmous peracarid *Thermosbaena mirabilis* Monod, 1924, in the hydrothermal spring of El Hamma in the south of Tunisia. The subterranean aquatic fauna in Tunisia is fairly scarce, holding only a few gastropod species and two isopod crustacean species (Juberthie *et al.* 2001), i.e. *Proasellus bagradicus* Henry & Magniez, 1976 (Asellidae) and *Saharolana seurati* Monod, 1930 (Cirolanidae), both found in the northwest of Tunisia. The second stygobitic cirolanid species has now been found, belonging to the genus *Typhlocirolana* Racovitza, 1905, a western Mediterranean genus with nine described and several yet undescribed species, whose phylogenetic relationships have been and are presently being investigated (Baratti *et al.* 2004). From 2003 to 2005 many specimens of the species were repeatedly collected in a well located in the Park of Ichkeul, northern Tunisia, during several surveys.

Materials and methods

The Ichkeul Park is situated in the extreme north of Tunisia, 75 km from Tunis. It is registered in the list of wet zones of international interest according to the RAMSAR Convention. It is also part of the world network of the Biosphere, Natural and Cultural Wealth reserves (UNESCO).

The Djebel of Ichkeul has a surface of 13 km² and is 511 m high. The relief is constituted by the Trias represented by a Germanic facies and the carbonated Jurassic (Melki 1997; Sousi 2000; Ben M'Barek 2001). It is shaped by massive dolomites, crystalline limestones and gypsum occupying nearly the half of the Djebel. The Jurassic is represented to the West by massive limestones that have been exploited as marble. All the facies is affected by a light metamorphism.