



## Terrestrial isopods of the subgenus *Hemilepistus* (*Hemilepistus*) Budde-Lund, 1879 (Isopoda: Oniscidea) from Iran

GHASEM M. KASHANI<sup>1,3,4</sup>, ALIREZA SARI<sup>1</sup> & SHIDOKHT HOSSEINIE (OSTAVANI)<sup>2</sup>

<sup>1</sup>School of Biology, College of Science, University of Tehran, Tehran, Iran

<sup>2</sup>Department of Biology, Faculty of Science, Shiraz University, Shiraz, Iran.

<sup>3</sup>Department of Biology, Faculty of Science, University of Zanjan, Zanjan, Iran.

<sup>4</sup>Corresponding author; E-mail: kashani\_gm@znu.ac.ir

### Abstract

Five species of the subgenus *Hemilepistus* (*Hemilepistus*) collected in Iran are reported. Three of these (*Hemilepistus schirasi*, *H. cristatus* and *H. klugii*) have been previously reported from Iran, one (*H. aphganicus*) is a new record, and the fifth (*H. taftanicus* n. sp.) is a new species. *Hemilepistus taftanicus* n. sp. is distinguished from other species of the subgenus by the presence of two additional large tubercles on the dorso-median part of pereonites 1–4. All species are allopatric; *H. aphganicus* have the widest range and *H. taftanicus* shows a very restricted one. A key to the Iranian species of the subgenus is provided.

**Key words:** Oniscidea, *Hemilepistus taftanicus*, new species, Iran

### Introduction

The terrestrial isopod fauna of Iran is poorly known and there are only few studies partially (Brandt 1833; Budde-Lund 1885; Arcangeli 1932; Borutzky 1958; Lincoln 1970; Schmalfuss 1992) or totally (Schmalfuss 1986) devoted to this region. The present study is one of the works that were conducted on terrestrial isopods focusing on the subgenus *Hemilepistus* within the genus *Hemilepistus* Budde-Lund, 1879.

Budde-Lund (1879) divided the genus *Porcellio* Latreille, 1804 into seven subgenera, including *Hemilepistus*. He later (Budde-Lund 1885) relied on absence or presence of frontal line between the frons and the epistome in discrimination of two species groups within the subgenus *Hemilepistus* (*Hemilepistus*). This character was used by Verhoeff (1930) to erect two subgenera: *H. (Hemilepistus)* and *H. (Desertellio)*, and he raised *Hemilepistus* to the generic level. Arcangeli (1932) doubted the accuracy of this division, but Lincoln (1970) and Borutzky (1978) confirmed validity of the subgenera and therefore, these were used in their keys.

The subgenus *H. (Hemilepistus)* contains nine valid species (Schmalfuss 2003), all of which are burrowing isopods, inhabit arid and subarid regions (Schneider 1970; Linsenmair & Linsenmair 1971; Kozlovskaja & Striganova 1977; Linsenmair 1979), having a broad distribution in North Africa, the Near East and Central Asia (Lincoln 1970; Borutzky 1958, 1978). Members of this subgenus spend most of their time in their burrows, form monogamous pairs and exhibit limited parental care (Marikovski 1969; Schneider 1970; Linsenmair & Linsenmair 1971; Linsenmair 1972, 1979; Schneider 1975; Shachak 1980; Röder & Linsenmair 1999).

To date, three species have been reported from Iran including *H. cristatus* from "Serdscen" (an unknown locality in Iran) (Budde-Lund 1885) and *H. schirasi* and *H. klugii* from Shiraz and Tehran, respectively (Lincoln 1970).

In addition to summarizing the data on the distribution range of the species, the present study adds two additional species to the terrestrial isopod fauna of Iran including *H. aphganicus*, which is broadly distributed in east and northeast Iran and *H. taftanicus* n. sp. with limited distribution from southeast Iran. Therefore, the