

Article



Redescription of *Porcellio brevicaudatus* Brandt, 1833 (Isopoda: Oniscidea); with some notes on other synonyms of *Hemilepistus reaumurii* (Milne-Edwards, 1840)

GHASEM M. KASHANI^{1,4}, JOHANN-WOLFGANG WÄGELE² & HELMUT SCHMALFUSS³

- ¹Department of Biology, Faculty of Science, University of Zanjan, Zanjan, Iran
- ²Museum Koenig, Adenauerallee 160, 53113 Bonn, Germany
- ³Staatliches Museum für Naturkunde, Rosenstein, D-7000, Stuttgart, Germany
- ⁴Corresponding author. E-mail: kashani_gm@znu.ac.ir; gmkashani@gmail.com

Abstract

In the present study, *Porcellio brevicaudatus* Brandt, 1833 is resurrected and redescribed. It is shown that *Hemilepistus sottii* Arcangeli, 1932, *H. rostratus* Arcangeli, 1932 and *H. patrizii* Brian, 1932, currently synonyms of *H. reaumurii* (Milne-Edwards, 1840), are conspecific with *P. brevicaudatus*. The other synonyms of *H. reaumurii* are reinvestigated based on type material or comparison with descriptions. *Porcellio syriacus* Koch, 1847, *Hemilepistus bodenheimeri* Verhoeff, 1931, *H. palaestinus* Verhoeff, 1931 and *Paraniambia tuberculata* Collinge, 1914 are confirmed as synonymies.

Key words: Oniscidea, Porcellio brevicaudatus, Hemilepistus reaumurii, redescription, lectotype

Introduction

The terrestrial isopod genus *Porcellio* Latreille, 1804, with 300 nominal species (Schmidt 2003) and about 200 valid species (Schmalfuss 2003), is one of the biggest genera of the terrestrial isopods. This genus has an autochtonous distribution in Europe, eastern Asia and the northern half of Africa, but some species have a world wide distribution due to human activity (Schmalfuss & Ferrara 1978). Schmalfuss (1998) divided the genus into two groups, a northern group called *scaber-obsoletus*-group in the northern part of the Mediterreanian region including northern Europe and western Asia and a southern group called *laevis-hoffmannseggii*-group with a distribution throughout North Africa and deep into the Sahara.

Superficial similarities between some species of *Porcellio* and those of *Hemilepistus* in the dorsal tuberculation resulted in misidentification of some species of *Porcellio* as species of *Hemilepistus*. Moreover, old and obscure descriptions of some species of *Hemilepistus* (e.g. Brandt 1833, Budde-Lund 1885; Arcangeli 1932) brought about many problems and ambiguities.

Brandt (1833) described two male specimens collected in Egypt as *Porcellio brevicaudatus*. These specimens were later examined by Budde-Lund (1885) and transferred to the genus *Hemilepistus*. Brian (1930) identified some specimens collected in Libya as *H. brevicaudatus*, but Arcangeli (1932) created a new species for Brian's material and some other material collected in Libya and named it *H. sottii*. He also erected another new species, i.e. *H. rostratus*, based on one female specimen from Libya. Based on one female specimen from Algeria, Brian (1932) erected *H. patrizii* as a new species. Currently, because of unclear descriptions and illustrations, all these species are considered as synonyms of *H. reaumurii* (Milne-Edwards, 1840) (see Schmalfuss 2003). Holthuis (2005) provided a very detailed paper on the nomenclatural status of *H. reaumurii*; a species with a wide distribution in North Africa and Asia Minor (Budde-Lund 1909; Lincoln 1970). The main aims of the present study are to redescribe *Porcellio brevicaudatus* as a valid species and to clarify the taxonomic status of synonymous species of *H. reaumurii*.