



## Redescription of *Desertoniscus taschkentensis* (Verhoeff, 1930) and description of *Desertoniscus schmalfussi* n. sp. (Isopoda: Oniscidea)

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### Abstract

*Desertoniscus schmalfussi* n. sp. is described, *D. taschkentensis* (Verhoeff, 1930) formerly considered as *Protracheoniscus taschkentensis* is redescribed and a lectotype is designated, and their diagnostic characters are figured. *Desertoniscus schmalfussi* n. sp. differs from all other species of the genus in having long setae on the apex of the male pleopod endopodite I and in having male pereopod VII carpus with a distinct ridge on the dorsal margin.

**Key words:** Oniscidea, *Desertoniscus*, new species, redescription, lectotype

### Introduction

The genus *Desertoniscus* (Isopoda, Oniscidea, Agnaridae) was erected by Verhoeff (1930) for *D. subterraneus*. In 1945, Borutzky described seven new species of the genus, though he later (Borutzky 1975) transferred two of them to the genus *Protracheoniscus*. Borutzky (1978) described later three other new species and divided *D. subterraneus* into four subspecies, but considered the genus *Desertoniscus* to include only four species and excluded the formerly described species (see Taiti & Checcucci 2011). The members of the genus *Desertoniscus* occur in Central Asia (Schmalfuss 2003) except a recently described species, i.e. *D. arabicus* Taiti & Checcucci, 2011, occurring in the Arabian Peninsula.

Comparing *Protracheoniscus* and *Desertoniscus*, Verhoeff (1930) mentioned the characteristics of antennae as main characteristics to distinguish between the two genera. In the same paper, Verhoeff (1930) introduced *Protracheoniscus taschkentensis* as a new species. Examination of the type material of *P. taschkentensis* in Zoologische Staatssammlung, München (ZSM), and additional non-type material, collected and identified by Verhoeff and held in the Museum für Naturkunde der Humboldt-Universität, Berlin (MNB) revealed that the species belongs to the genus *Desertoniscus*. In addition, some specimens in the Senckenberg Museum, Frankfurt (SMF), identified as *Desertoniscus* sp. by H. Schmalfuss, are here described as a new species. The aims of the present study are to describe *Desertoniscus schmalfussi* n. sp. and provide redescription of *Desertoniscus taschkentensis* (Verhoeff, 1930) formerly ascribed to *Protracheoniscus taschkentensis* and to designate a lectotype for the latter species.

### Agnaridae Schmidt, 2002

#### *Desertoniscus* Verhoeff, 1930

Type species: *Desertoniscus subterraneus* Verhoeff, 1930

**Diagnosis.** Small body, up to maximum 10 mm, usually about 4–8 mm; tergites with conspicuous scale setae, with or without tubercles; short antenna, usually not surpassing posterior margin of pereion tergite I, with flagellum of