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The oribatid mite genus *Nothrus* Koch, 1836 (Acari: Oribatida: Nothridae) of South Africa, including a key to African species

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Abstract

The oribatid mite genus *Nothrus* (Nothridae) is reported for the first time from South Africa, represented by *Nothrus bilongisetosus* **sp. nov.**, *N. monolongisetosus* **sp. nov.** and *Nothrus anauniensis* Canestrini & Fanzago. *Nothrus bilongisetosus* **sp. nov.** is decribed base on adult, *N. monolongisetosus* **sp. nov.** is decribed base on all instars. Additional description of *N. anuniensis* is given. An identification key to all known African species of *Nothrus* is presented.

Key words: oribatid mites, *Nothrus*, new species, juvenile instars, ontogeny, key, South Africa

Introduction

The family Nothridae (Acari: Oribatida) comprises three genera (*Nothrus* Koch, 1835, *Novonothrus* Hammer, 1966, *Trichonothrus* Mahunka, 1986) and 86 species. *Nothrus* is the largest genus and was proposed by Koch (1835) with *Nothrus palustris* Koch, 1839 as type species. Currently, it comprises 78 species that collectively have a cosmopolitan distribution (except in the Antarctic region) (Subías 2004, online version 2011). The diagnostic characters of *Nothrus* are presented by several authors (in particular, Fujikawa 1999; Colloff 2011).

Representatives of the genus *Nothrus* have not previously been recorded for the fauna of South Africa. Only one species in the family Nothridae is known, namely *Trichonothrus austroafricanus* Mahunka, 1986 (Mahunka 1986). During studies of the oribatid mite collection of the National Museum (Bloemfontein, South Africa) we discovered two new *Nothrus* species and *Nothrus anauniensis* Canestrini & Fanzago, 1876. Thus, this genus is recorded in South Africa for the first time.

The main purpose of this paper is to describe and illustrate both new species under the names *Nothrus bilongisetosus* **sp. nov.** and *N. monolongisetosus* **sp. nov.** and also to make additional description and illustrations of *Nothrus anauniensis* based on the South African specimens. *Nothrus anauniensis* were redescribed by Mahunka (1978) and Olszanowski (1996).

The second goal is to describe and illustrate juvenile instars of *Nothrus monolongisetosus* **sp. nov.** At present, the morphology of juvenile stages of only a few species of *Nothrus* has been studied (Michael 1888; Tuxen 1943, 1952; Shaldybina 1984; Seniczak 1992; Seniczak & Żelazna 1992; Seniczak & Norton 1993; Fujikawa 1999; Kuty 2007). Additionally, Grandjean (1953) listed several generic characteristics of juvenile instars of *Nothrus*.

The third goal is to propose an identification key to all known African species of *Nothrus*. At present, only 13 species of this genus were recorded from Africa: *N. anauniensis* Canestrini & Fanzago, 1876 (cosmopolitan species), *N. angolensis* Balogh, 1958 from Angola, *N. basilewskyi* Balogh, 1958 from Tanzania, *N. crassisetus* Mahunka, 1982 from Ethiopia, *N. crinitus* (Berlese, 1916) from eastern Africa, *N. hauseri* Mahunka, 1973 from Zimbabwe, *N. ifeensis* Badejo, Woas & Beck, 2002 from Nigeria, *N. incavatus* Badejo, Woas & Beck, 2002 from Nigeria, *N. lasebikani* Badejo, Woas & Beck, 2002 from Nigeria, *N. leleupi* Balogh, 1958 from Tanzania, *N. mystax* Mahunka, 1986 from Tanzania, *N. reunionensis* Mahunka, 1978 from Reunion and *N. senegalensis* Mahunka, 1992 from Senegal.

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