



## A new cunaxid genus with descriptions of two new species from Brazil (Acari: Prostigmata: Bdelloidea: Cunaxidae)

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### Abstract

The genus *Pseudobonzia* Smiley 1975 is revised and divided into two genera. The genus *Pseudobonzia* Smiley, 1975, with its type species and five other related species, is retained. The remainder of the group is now known as *Coleobonzia* **gen. nov.** of which the main characteristics are provided. *Coleobonzia argillae* (Den Heyer, 1977) is designated as type species for the new genus. Two species from Brazil, viz. *Coleobonzia clava* **sp. nov.** and *C. moraesii* **sp. nov.** are described and figured. A key to the two genera as well as a key to the Brazilian and South African species of the new genus are provided.

**Key words:** *Pseudobonzia*, *Coleobonzia*, new species, taxonomy, identification key

### Introduction

Members of the family Cunaxidae are predatory mites on small Arthropoda and Nematoda (Walter & Kaplan 1991; Walter & Proctor 1999). A classification system for the family was provided by Den Heyer (1981), and later modified by Smiley (1992). The genus *Pseudobonzia* was proposed by Smiley (1975) based on *Cunaxa reticulata* Heryford. Smiley (1992) considered that the genus consisted of two species groups. He named one of them the “*reticulata*” group but did not provide a name for the other group. He included in his “*reticulata*”-group those species having subcuticular reticulation patterns on the propodosomal shield, ventral coxal region of the gnathosoma, coxae I–IV, proximal podomeres and genital valves. It is obvious that he chose that specific group to be *Pseudobonzia* as he designated *P. reticulata* (Heryford), 1965 as its type species. Other species included in that group are *P. neoreticulata* Den Heyer, *P. delfinadobakerae* Smiley, *P. clathratus* (Shiba), *P. landwehri* Smiley and *P. yini* Smiley. It appears as if *P. parvirostris* Berlese and *P. halacaroides* Berlese also can be included in that group. As that characteristics stands out so clearly in all of those but not in other species of *Pseudobonzia* we are of opinion that at this stage a separation of the two groups is warranted.

In order to clarify the cunaxid ventral chaetotaxy, the following is proposed: in most cunaxid genera a pair of simple tactile setae (sts) occurs in the region medially to coxae IV. In some genera these setae are situated clearly on the integument medially to these coxae; in some other genera, this pair is positioned in an area that could be interpreted as being the median edge of coxae IV. It is proposed that these setae be termed *paracoxal* setae. They should not be regarded as coxal setae. Their absence or presence should be indicated as such in the ventral chaetotaxy of the idiosoma. This is also the case with regard to the propodogastral setae on a sternal plate which are also not regarded as coxal setae but mentioned separately from the coxal setae formula.