



The genus *Zambedania* Mahunka 1972 (Acari: Heterostigmatina: Pygmephoridae) —redescription of the type species *Z. africana* and descriptions of two new species from Africa and South America

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Abstract

The type species of the genus *Zambedania* Mahunka, 1972 (*Z. africana* Mahunka, 1972) is redescribed based on the holotype collected from soil in Zimbabwe. Two new species are described and illustrated herewith: *Z. madagascariana* from Madagascar and *Z. argentiniana* from Argentina. The generic diagnosis of *Zambedania* is amended, and the key to its species is supplied. Morphology, taxonomy and biology of included species are briefly discussed. The first record of the genus being phoretic on a South American nemesiid spider is presented.

Key words: *Z. madagascariana* sp. n., *Z. argentiniana* sp. n., Zimbabwe, Madagascar, Argentina, phoresy, *Stenoterommata*, Araneae

Introduction

Mahunka described the monotypic genus *Zambedania* (then in the cohort Tarsonemina *sensu* Mahunka, 1970) in 1972 with the phoretomorph female of *Z. africana* collected from a soil sample in Zimbabwe as its type species. Recently another *Zambedania* species was found in South Africa. In order to confirm the different identity of this species, the type material of *Z. africana* had to be examined.

When redescribing the holotype of *Z. africana* Mahunka 1972 from Zimbabwe, we received a second slide from the Natural History Museum, Geneva. The specimen was identified as *Z. africana* by Sandor Mahunka and Luise Mahunka-Papp in 1972 (according to the label). After a closer look at the specimens, we decided that this specimen represented a different species from the one Mahunka first described in 1972 as *Z. africana*. As far as is known to us, this is the only specimen of this new species available.

In the collections of Zoological Museum and Institute of the University of Hamburg we also found some mounted *Zambedania* specimens originating from Argentina. These are the first *Zambedania* females known to be collected phoretic from a spider species, *Stenoterommata platensis* (Aranaeae: Nemesiidae), and the third species of *Zambedania* to be known.

Material and methods

Specimens (types) were drawn in pencil under the 100x oil immersion objective of a Leitz Laborlux K Phase-Contrast Microscope, fitted with a drawing tube. Thereafter figures were scanned, reduced to appropriate size with Epson Expression 1640XL photocopier/ scanner and subsequently retraced in CorelDraw graphics Suite 12 computer software. SEM pictures of *Zambedania* sp.n. from Argentina were kindly handed to us by Dr. H. Dastych (Zoological Institute and Museum of the University of Hamburg) as analogue negatives (and subsequently digitized), but he was unable to give data on the make of the instrument, or the photographer.

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