



<http://dx.doi.org/10.11646/zootaxa.3955.4.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:AE60AACB-4794-4494-AE3D-F46189911FAC>

## The genus *Milnesium* (Eutardigrada: Milnesiidae) in the Sierra Nevada de Santa Marta (Colombia), with the description of *Milnesium kogui* sp. nov.

ROSANA LONDOÑO<sup>1,4</sup>, ANISBETH DAZA<sup>1</sup>, MARTÍN CAICEDO<sup>1</sup>, SIGMER QUIROGA<sup>1</sup> & ŁUKASZ KACZMAREK<sup>2-3</sup>

<sup>1</sup>Universidad del Magdalena, Grupo de Investigación MIKU, Carrera 32 No 22-08, Santa Marta D.T.C.H., Colombia.

E-mails: [rosanalondono@gmail.com](mailto:rosanalondono@gmail.com), [anisbeth.daza@gmail.com](mailto:anisbeth.daza@gmail.com), [mcamaranto@gmail.com](mailto:mcamaranto@gmail.com), [sigmerquirolga@unimagdalena.edu.co](mailto:sigmerquirolga@unimagdalena.edu.co)

<sup>2</sup>Department of Animal Taxonomy and Ecology, Adam Mickiewicz University, Umultowska 89, 61-614 Poznań, Poland.

E-mail: [kaczmar@amu.edu.pl](mailto:kaczmar@amu.edu.pl)

<sup>3</sup>Prometeo Researcher, Laboratorio de Ecología Natural y Aplicada de Invertebrados, Universidad Estatal Amazónica, Campus Principal Km 2.1/2 via a Napo (Paso Lateral) Puyo, Pastaza, Ecuador

<sup>4</sup>Corresponding author

### Abstract

A new species, *Milnesium kogui* sp. nov. is described from the Sierra Nevada de Santa Marta, Colombia. The new species belongs to the *tardigradum* group and is most similar, by the claw configuration [2-2]-[2-2], to *Milnesium dujiangensis* and *Milnesium katarzynae*. *Milnesium kogui* sp. nov. differs from *M. dujiangensis* mainly by the presence of primary branches on all legs and from *M. katarzynae* by the absence of dorsal sculpture. Additionally, in this paper we present a list of all *Milnesium* species recorded in Colombia including *Milnesium* cf. *barbadosense* Meyer & Hinton, 2012 and *M. brachyungue* Binda & Pilato, 1990, new additions to the recorded fauna of Colombia.

**Key words:** biodiversity, *Milnesium* cf. *barbadosense*, *M. brachyungue*, *M. katarzynae*, *M. krzysztofi*, Neotropics, Tardigrada, water bears

### Introduction

The phylum Tardigrada (water bears) consists currently of 1220 species (Guidetti & Bertolani 2005; Degma & Guidetti 2007; Vicente & Bertolani 2013; Degma *et al.* 2009-2014) that inhabit terrestrial, freshwater and marine environments throughout the world (Ramazzotti & Maucci 1983). Our knowledge of the diversity and distribution of South American tardigrades is rather poor and selective. To date *ca.* 220 taxa (including nine *Milnesium* species) have been reported from this region (Roszkowska *et al.* 2015).

Although the first records of Colombian tardigrades are from 1911 (Richters 1911a, b), the water bears of this region are still very poorly known. To date, 44 species have been recorded in the departments of Antioquia, Cundinamarca, Arauca, Bogotá, Magdalena, Santander, Cauca and Tolima (Richters 1911a, b; Heinis 1914; Marcus 1936; Jerez & Narváez 2001; Jerez *et al.* 2002; Degma *et al.* 2008; Meyer 2013; Caicedo *et al.* 2014; Lisi *et al.* 2014; Melo *et al.* 2014).

The genus *Milnesium* for a long time had only one described species, *Milnesium tardigradum* (Doyère, 1840) (*sensu lato*), characterized by high morphological plasticity (Tumanov 2006) and an apparent cosmopolitan distribution. However, since the description of *Milnesium brachyungue* (Binda & Pilato 1990) and *Milnesium eurystomum* (Maucci 1991), a larger number of taxonomic characters, such as buccal tube length/width ratio, claw configuration and cuticular sculpture, have been taken into account and proposed as important features on the species level (Tumanov 2006; Michalczyk *et al.* 2012a, b). Currently, 27 taxa of *Milnesium* are known worldwide (Degma *et al.* 2009-2014; Ciobanu *et al.* 2014; Bartels *et al.* 2014; Roszkowska *et al.* 2015), nevertheless, according to Michalczyk *et al.* (2012a, b), most of the specimens identified as *M. tardigradum* in the past and reported throughout the world need a deep revision according to modern taxonomy methods.