



A new tardigrade *Doryphoribius maasaimarensis* sp. nov. (Eutardigrada: Hypsibiidae) from Kenya

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Abstract

A new tardigrade, *Doryphoribius maasaimarensis* sp. nov., is described from a moss sample collected in Masai Mara Game Reserve, Kenya. The new species is characterized by having a reticulate dorsal cuticle with small tubercles; nine transverse rows of dorsal gibbosities (configuration IX:4-6-4-6-4-6-4-4-2); pharyngeal bulb with two macroplacoids and no microplacoid; claws with short and thin accessory points; small, smooth lunules under the claws. The new species is most similar to *Doryphoribius zyxiglobus* (Horning, Schuster & Grigarick, 1978). Both exhibit two macroplacoids, similar cuticular pattern and the same configuration of gibbosities. However, in *Doryphoribius maasaimarensis* sp. nov. the cuticular tubercles are less close, buccal tube slightly longer with respect to the body length, more gradual curvature of the buccal tube, different claws shape and thinner accessory points.

Key words: Tardigrada, Masai Mara, Africa

Introduction

In excess of 960 tardigrade species are known worldwide (Degma *et al.*, 2012). However, the entire African continent has barely been explored with *ca.* 200 tardigrade species from 26 countries currently known (Jørgensen, 2001; Pilato & Binda, 2001; McInnes & Pugh, 2007; Garey *et al.*, 2008; Kaczmarek *et al.*, 2008; Meyer & Hinton, 2009; Fontoura *et al.*, 2010; 2011). Though there are records for Kenya (Murray, 1913; Haspelslagh, 1982; De Smet & Bafort, 1990; Van Rompu *et al.*, 1991; Jørgensen, 2001), this is the first report for the Masai Mara Game Reserve.

The genus *Doryphoribius* was instituted by Pilato in 1969 for four species originally attributed to *Hypsibius* and *Isohypsibius*: *D. doryphorus* (Binda & Pilato, 1969), *D. evelinae* (Marcus, 1928), *D. flavus* (Iharos, 1966a), *D. vietnamensis* (Iharos, 1966b). The claws structure (of the *Isohypsibius* type), and the presence of rigid buccal tube with ventral lamina (previously considered a *Macrobotus* trait) distinguished this genus. The introduction of metric taxonomic characters, such as the *pt* index (Pilato, 1981), and utilizing more sophisticated optical equipment, has enhanced the discovery of new *Doryphoribius* species, which have included newly explored regions all around the world and re-descriptions of species first attributed to other genera (especially *Isohypsibius*); in particular, *Doryphoribius zyxiglobus* (Horning, Schuster & Grigarick, 1978) was transferred from the genus *Macrobotus* by Ramazzotti & Maucci (1983).

In this paper, a new species, very similar to *D. zyxiglobus*, is described from Masai Mara Game Reserve, Kenya.