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; Haspeslagh, 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. vietnamesensis* (Iharos, 1966b). The claws structure (of the *Isohypsibius* type), and the presence of rigid buccal tube with ventral lamina (previously considered a *Macrobiotus* 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 *Macrobiontus* by Ramazzotti & Maucci (1983).

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