

Revision of the *Echiniscus bigranulatus* group with a description of a new species *Echiniscus madonnae* (Tardigrada: Heterotardigrada: Echiniscidae) from South America

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Abstract

A new species, *Echiniscus madonnae* **sp. nov.**, is described from moss samples collected in Peru. So far it is the only species within the *Echiniscus bigranulatus* group that does not have true pores in the dorsal plate cuticle. This paper contains also a redescription of *Echiniscus bigranulatus* Richters and updated descriptions of *Echiniscus ollantaytamboensis* Nickel *et al.* and *Echiniscus ranzii* Ramazzotti. In this paper we also provide a SEM analysis of the dorsal plate cuticle structure.

Key words: Tardigrada, *Echiniscus bigranulatus*, *E. madonnae* **sp. nov.**, *E. ollantaytamboensis*, *E. ranzii*, new species, redescription, South America

Introduction

The number of described tardigrade species is nearing one thousand (Guidetti & Bertolani 2005). Around 15% of all known species belong to the genus *Echiniscus* Schultze which makes it currently the most species rich genus within the phylum.

In this paper we provide a redescription of *Echiniscus bigranulatus* Richters, 1908, updated descriptions on *Echiniscus ollantaytamboensis* Nickel *et al.*, 2001 and *Echiniscus ranzii* Ramazzotti, 1964 and a description of a new species *Echiniscus madonnae* **sp. nov.** We also provide some notes on the cuticular structure of the dorsal plate.