# New records of and key to Tardigrada from Costa Rica 

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#### Abstract

Moss samples collected near the research station "La Selva" on the edge of Costa Rican tropical rain forest has yielded three species of Tardigrada: Hypsibius pallidus Thulin, Astatumen trinacriae (Arcidiacono) and Macrobiotus polyopus Marcus. Another three unidentified species from the genus Macrobiotus were also found. All identified species are new for Costa Rica. A key to the identification of all known species from Costa Rica is given.


Key words: Tardigrada, Costa Rica, new records, identification, key

## Introduction

The earliest known published account of the Tardigrada fauna of Costa Rica is Riggin (1963). Subsequently, two papers were published by Schuster \& Grigarick (1966) and Mehlen (1969). Those three papers reported a total of 12 species in Costa Rica: Echiniscus arctomys Ehrenberg; Echiniscus bigranulatus Richters; Echiniscus crassispinosus Murray; Macrobiotus areolatus Murray; Macrobiotus harmsworthi Murray; Macrobiotus occidentalis Murray; Macrobiotus richtersi Murray; Minibiotus intermedius (Plate); Hypsibius convergens Urbanowicz; Isohypsibius sattleri (Richters); Diphascon (Adropion) scoticum Murray and Milnesium tardigradum Doyére. The present contribution reports three species new to Costa Rica and provides a key to all Coata Rican species.

## Materials and methods

Samples of mosses were collected by Dr Z. Olszanowski in August 2000. All samples were collected on the edge of the tropical rain forest, near the ecological research station "La Selva". Two samples (\#1 and \#2) were collected from the bark of a tree and one (\#3) from a concrete wall.

