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# Second contribution to the knowledge of water mites from the Comoros, with the description of one new species (Acari: Hydrachnidia)

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## Abstract

New records of water mites (Acari: Hydrachnidia) from the Comoros are presented. One species new to science, *Africasia comorosensis* is described; first records are given for *Torrenticola* sp. and *Atractides thoracatus* Koenike, 1898.

**Key words**: Acari, Hydrachnidia, new species, Comoros

## Introduction

The Comoros islands form an archipelago in the Indian Ocean some 400 km east of Tanzania and 300 km north of Madagascar. The archipelago consists of four major volcanic islands, of which Mayotte is the oldest (formed about 8 millions years ago). The Comoros are a French overseas department with two main islands which cover an area of about 374 km in all. The ages of the other islands decrease progressively from east to west. The most recent island is that of Grande Comore, and its volcano, Karthala, is still active and has one of the largest calderas in the world. Due to the volcanic origin, the Comoros archipelago has a fauna and flora resulted from dispersal, where the Malagasy and African mainland biota form the main sources (Rocha *et al.* 2005).

The hydrobiological survey that enabled one of us (Nathalie Mary-Sasal) to collect the present collection of water mites was conducted in the context of the Water Framework Directive (WFD), Directive 2000/60/EC adopted in 2000 by the European Parliament and of the Council establishing a framework for the Community action in the field of water policy. Its main objectives include the attainment of good status in water bodies that are of lesser status at present and retaining good status or better where such status exists at present. Our study aims to provide a key perspective for the establishment of the Surveillance Monitoring program (SM) for running waters of Mayotte (implementation, feasibility, logistics, number of stations needed).

Recently we published the results of the first collection of water mites of the Comoros, listing five water mite species were listed, three of which were new to science (Smit *et al.* 2009). Additional material was collected by the junior author during a second trip in October 2008. The paper is aimed to describe this material and to enlarge our knowledge on water mite distribution on the Comoros islands.

## Material and methods

In total 19 sites were visited in 12 rivers (see for an example Figs. 5C–D). Benthic samples were collected using a Surber sampler. All material was preserved in 70% ethanol. Holotypes are deposited in Muséum National d'Histoire naturelle, Paris (MNHN), paratypes and non-type material in the Zoological Museum in Amsterdam (ZMAN).

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