

ZOOTAXA

1954

**Taxonomical, ecological and zoogeographical studies on
anisitsiellid water mites (Acari: Hydrachnidia:
Anisitsiellidae Koenike, 1910) from Madagascar**

TOM GOLDSCHMIDT



Magnolia Press
Auckland, New Zealand

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(*Zootaxa* 1954)

120 pp.; 30 cm.

5 Dec 2008

ISBN 978-1-86977-305-2 (paperback)

ISBN 978-1-86977-306-9 (Online edition)

FIRST PUBLISHED IN 2008 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

<http://www.mapress.com/zootaxa/>

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ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)



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Abstract

Herein the Malagasy Anisitsiellidae are studied for the first time, resulting in records of 24 species in six genera, of which 23 are new to science. Two genera new to science are described: *Sotropalpus* **gen. nov.** with the only species *S. manga* **sp. nov.**, and *Bitabulata* **gen. nov.**, with *B. kelycoxae* **sp. nov.**, *B. paoma* **sp. nov.** and *B. sagai* **sp. nov.** Two new subgenera, *Telotaolana* **subgen. nov.** and *Cookonia* **subgen. nov.**, and nine new species of *Nilotonia* Thor, 1905 are described: *Nilotonia (Dartiella) ivelany* **sp. nov.**, *N. (Dartiella) onilahy* **sp. nov.**, *N. (Dartonia) nifymanana* **sp. nov.**, *N. (Telotaolana) ankaratra* **subgen. et sp. nov.**, *N. (Telotaolana) hodivaventy* **subgen. et sp. nov.**, *N. (Telotaolana) kiraro* **subgen. et sp. nov.**, *N. (Telotaolana) longipalpis* **subgen. et sp. nov.**, *N. (Cookonia) anjzorobe* **subgen. et sp. nov.** and *N. (Cookonia) avomonina* **subgen. et sp. nov.** Two further species (possibly *Nilotonia*) were found as deutonymphs only and are therefore described tentatively. *Mamersella thienemanni* K. Viets, 1929, widely distributed in Southern Asia, was found in Madagascar for the first time; the variability of this species is discussed and the deutonymph described. Eight new species of *Platymamersopsis* K. Viets, 1914 were found, of which two represent a new subgenus — *Platymamersopsis (Lavorona)* **subgen. nov.**: *Platymamersopsis (s. str.) angulatus* **sp. nov.**, *P. loharano* **sp. nov.**, *P. davecooki* **sp. nov.**, *P. palustris* **sp. nov.** and *P. spinalis* **sp. nov.**, *Platymamersopsis (Lavorona) pinocchio* **subgen. et sp. nov.** and *P. (Lavorona) volovitsy* **subgen. et sp. nov.** Additional descriptions are given of *Mamersella tototaensis* Cook, 1966, *Platymamersopsis agnewi* K.O. Viets, 1981, *P. chutteri* K.O. Viets, 1981, *P. nordenskiöldi* K. Viets, 1914, *P. similis* Cook, 1966 and *P. vietsi* Cook, 1966. The morphological patterns, biogeography, diversity and ecology of the Malagasy Anisitsiellidae — especially the krenobiosis of many species — are discussed.

Key words: Springs, new species, biogeography, diversity, ecology, systematics, morphology