



Zootaxa 2770: 1–60 (2011)
www.mapress.com/zootaxa/

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Monograph

ISSN 1175-5326 (print edition)

ZOOTAXA

ISSN 1175-5334 (online edition)

ZOOTAXA

2770

**New species of the oribatid mite genus *Phyllhermannia* Berlese, 1916
(Acari, Oribatida, Hermanniiidae) from wet forests in south-eastern Australia
show a high diversity of morphologically-similar, short-range endemics**

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Magnolia Press
Auckland, New Zealand

Accepted by H. Schatz: 24 Nov. 2010; published: 21 Feb. 2011

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New species of the oribatid mite genus *Phyllhermannia* Berlese, 1916 (Acari, Oribatida, Hermanniidae) from wet forests in south-eastern Australia show a high diversity of morphologically-similar, short-range endemics

(*Zootaxa* 2770)

60 pp.; 30 cm.

21 February 2011

ISBN 978-1-86977-655-8 (paperback)

ISBN 978-1-86977-656-5 (Online edition)

FIRST PUBLISHED IN 2011 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)

Table of contents

Abstract	3
Introduction	3
Materials and Methods	5
Diagnosis of <i>Phyllhermannia</i>	5
<i>Phyllhermannia</i> Berlese, 1916	5
Descriptions of New Species	6
<i>Phyllhermannia acalepha</i> sp. nov.	6
<i>Phyllhermannia bandabanda</i> sp. nov.	10
<i>Phyllhermannia colini</i> sp. nov.	12
<i>Phyllhermannia craticula</i> sp. nov.	16
<i>Phyllhermannia croajingolongensis</i> sp. nov.	18
<i>Phyllhermannia errinundrae</i> sp. nov.	19
<i>Phyllhermannia gigas</i> sp. nov.	22
<i>Phyllhermannia hunti</i> sp. nov.	23
<i>Phyllhermannia leei</i> sp. nov.	25
<i>Phyllhermannia lemanna</i> sp. nov.	27
<i>Phyllhermannia leonilae</i> sp. nov.	34
<i>Phyllhermannia luxtoni</i> sp. nov.	35
<i>Phyllhermannia namadjiensis</i> sp. nov.	37
<i>Phyllhermannia sauli</i> sp. nov.	39
<i>Phyllhermannia strigosa</i> sp. nov.	47
<i>Phyllhermannia tanjili</i> sp. nov.	49
New Record and Supplementary Description	54
<i>Phyllhermannia eusetosa</i> Lee, 1985	54
Discussion	54
Acknowledgements	57
References	58

Abstract

This paper contains descriptions of sixteen new species of *Phyllhermannia* from temperate rainforest and wet sclerophyll forest in the Australian Capital Territory (*P. namadjiensis* sp. nov.), New South Wales (*P. bandabanda* sp. nov., *P. colini* sp. nov. and *P. tanjili* sp. nov.), Tasmania (*Phyllhermannia acalepha* sp. nov., *P. craticula* sp. nov., *P. lemanna* sp. nov., *P. luxtoni* sp. nov. and *P. strigosa* sp. nov.) and Victoria (*P. croajingolongensis* sp. nov., *P. errinundrae* sp. nov., *P. gigas* sp. nov., *P. hunti* sp. nov., *P. leei* sp. nov. and *P. leonilae* sp. nov. and *P. sauli* sp. nov.). A partial supplementary description and new distribution record is given for *P. eusetosa* Lee, 1985 from South Australia. *Phyllhermannia dentata glabra* Hammer, 1962 is elevated to specific status. *Hermannia macronychus* Trägårdh, 1907 and *H. fungifer* Mahunka 1988 are recombined to *Phyllhermannia*. A new diagnosis of *Phyllhermannia* is given and immature stages are described for the first time. Three species-groups are tentatively recognised: *Acalepha*, confined to Tasmania, *Colini*, found in the Australian Capital Territory, Victoria and New South Wales and *Eusetosa*, found in Victoria and South Australia.

Key words: Taxonomy, morphology, systematics, species-groups, biogeography, distribution, setal ontogeny

Introduction

The Hermannidae Sellnick, 1928 has a pivotal position in the morphological organisation and evolution of the oribatid mites. They are members of the cohort Nothrina and are on the phylogenetic interface between the so-called ‘lower’ (macropyline) and ‘higher’ (brachypyline) oribatid mites. Woas (2002) considered the organisation of the Hermannidae is ‘strongly anticipating that of the higher Oribatida.’ *Hermannia* Nicolet, 1855 is indicated as the sister group of the Astigmata in a molecular phylogeny of the Acariformes, and a clade of Astigmata + Hermannidae as the sister group of the rest of the Nothrina + Brachypyline (Dabert *et al.*, 2010). The molecular phylogeny of Domes *et al.* (2007) also places *Hermannia* as basal to Nothrina + Brachypyline.