

# Monograph

urn:lsid:zoobank.org:pub:A2D9C9ED-C0BA-4B5F-A330-C9AB7D625704

# ZOOTAXA

3592

## The ant genus *Tetramorium* Mayr (Hymenoptera: Formicidae) in the Malagasy region—taxonomic revision of the *T. kelleri* and *T. tortuosum* species groups

FRANCISCO HITA GARCIA<sup>1,\*</sup> & BRIAN L. FISHER<sup>2</sup>

<sup>1</sup> Entomology, California Academy of Sciences, 55 Music Concourse Drive, San Francisco, CA 94118, U.S.A.  
Email: phitagarcia@calacademy.org

<sup>2</sup> Entomology, California Academy of Sciences, 55 Music Concourse Drive, San Francisco, CA 94118, U.S.A.  
Email: bfisher@calacademy.org  
\* Corresponding author



Magnolia Press  
Auckland, New Zealand

FRANCISCO HITA GARCIA & BRIAN L. FISHER

**The ant genus *Tetramorium* Mayr (Hymenoptera: Formicidae) in the Malagasy region—taxonomic revision of the *T. kelleri* and *T. tortuosum* species groups**

(Zootaxa 3592)

85 pp.; 30 cm.

19 Dec. 2012

ISBN 978-1-77557-072-1 (paperback)

ISBN 978-1-77557-073-8 (Online edition)

FIRST PUBLISHED IN 2012 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

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

© 2012 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

## Table of contents

Abstract .....	3
Introduction .....	4
Abbreviations of depositories .....	4
Material and methods .....	5
Synopsis of species of the malagasy region examined in this study .....	6
Notes on the species groups treated in this study .....	7
Review of species .....	8
<i>Tetramorium kelleri</i> species group .....	8
Key to species of the <i>t. kelleri</i> species group (workers) .....	8
<i>Tetramorium ankaranum</i> Hita Garcia & Fisher sp. n. ....	9
<i>Tetramorium kelleri</i> Forel, 1887 .....	11
<i>Tetramorium tortuosum</i> species group .....	14
Key to species of the <i>t. tortuosum</i> species group (workers) .....	14
<i>Tetramorium andrei</i> species complex .....	20
<i>Tetramorium ala</i> Hita Garcia & Fisher sp. n. ....	21
<i>Tetramorium andohahela</i> Hita Garcia & Fisher sp. n. ....	23
<i>Tetramorium andrei</i> Forel, 1892a .....	26
<i>Tetramorium electrum</i> Bolton, 1979 .....	31
<i>Tetramorium elf</i> Hita Garcia & Fisher sp. n. ....	34
<i>Tetramorium isectum</i> Bolton, 1979 .....	37
<i>Tetramorium isolectrum</i> Hita Garcia & Fisher sp. n. ....	40
<i>Tetramorium nify</i> Hita Garcia & Fisher sp. n. ....	42
<i>Tetramorium voasary</i> Hita Garcia & Fisher sp. n. ....	45
<i>Tetramorium jedi</i> species complex .....	47
<i>Tetramorium avaratra</i> Hita Garcia & Fisher sp. n. ....	47
<i>Tetramorium jedi</i> Hita Garcia & Fisher sp. n. ....	50
<i>Tetramorium pleganon</i> Bolton, 1979 .....	53
<i>Tetramorium noeli</i> species complex .....	56
<i>Tetramorium aherni</i> Hita Garcia & Fisher sp. n. ....	56
<i>Tetramorium ambanizana</i> Hita Garcia & Fisher sp. n. ....	59
<i>Tetramorium noeli</i> Hita Garcia & Fisher sp. n. ....	61
<i>Tetramorium singletonae</i> Hita Garcia & Fisher sp. n. ....	64
<i>Tetramorium smaug</i> species complex .....	66
<i>Tetramorium adamsi</i> Hita Garcia & Fisher sp. n. ....	66
<i>Tetramorium latreillei</i> Forel, 1895 .....	69
<i>Tetramorium marojejy</i> Hita Garcia & Fisher sp. n. ....	71
<i>Tetramorium nazgul</i> Hita Garcia & Fisher sp. n. ....	74
<i>Tetramorium sabatra</i> Hita Garcia & Fisher sp. n. ....	76
<i>Tetramorium smaug</i> Hita Garcia & Fisher sp. n. ....	79
Acknowledgements .....	84
References .....	84

## Abstract

The taxonomy of the *T. kelleri* and *T. tortuosum* groups is revised for the Malagasy zoogeographical region. Twenty-four species are recognised of which 18 are described as new and six re-described. This raises the species richness for the genus *Tetramorium* in the Malagasy region to 84 species. The *T. kelleri* group is endemic to the Malagasy region, and contains the two species *T. ankaranum* sp. n. and *T. kelleri* Forel. The *T. tortuosum* group is distributed in most zoogeographical regions, but reaches its highest species richness in the Malagasy region with the 22 species treated herein. All species are endemic to the island of Madagascar. Based on morphological key characters, the group was divided into four species complexes. The largest species complex is the *T. andrei* complex with the nine species: *Tetramorium ala* sp. n., *Tetramorium andohahela* sp. n., *Tetramorium andrei* Forel, *Tetramorium electrum* Bolton, *Tetramorium elf* sp. n., *Tetramorium isectum* Bolton, *Tetramorium isolectrum* sp. n., *Tetramorium nify* sp. n., and *Tetramorium voasary* sp. n. The name *Tetramorium robustior* Forel is proposed as junior synonym of *T. andrei*. The most species-poor is the *T. jedi* species complex with just the three species *Tetramorium avaratra* sp. n., *Tetramorium jedi* sp. n., and *Tetramorium pleganon* Bolton. The *T. noeli* species complex holds four species: *Tetramorium aherni* sp. n., *Tetramorium ambanizana* sp. n., *Tetramorium noeli* sp. n., and *Tetramorium singletonae* sp. n. The *T. smaug* species complex includes the six species: *Tetramorium adamsi* sp. n., *Tetramorium marojejy* sp. n., *Tetramorium latreillei* Forel, *Tetramorium nazgul* sp. n., *Tetramorium sabatra* sp. n., and *Tetramorium smaug* sp. n. Furthermore, lectotypes and paralectotypes are designated