

ZOOTAXA

2251

Revision of the Oriental species of the *Bengalia peuhii* species-group (Diptera, Calliphoridae)

KNUT ROGNES

University of Stavanger, Faculty of Arts and Education, Department of Early Childhood Education, NO-4036 Stavanger, Norway.
E-mail: knut@rognes.no or knut.rognes@uis.no



Magnolia Press
Auckland, New Zealand

Knut Rognes

Revision of the Oriental species of the *Bengalia peuhii* species-group (Diptera, Calliphoridae)

(Zootaxa 2251)

76 pp.; 30 cm.

8 Oct. 2009

ISBN 978-1-86977-427-1 (paperback)

ISBN 978-1-86977-428-8 (Online edition)

FIRST PUBLISHED IN 2009 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

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

© 2009 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	4
Introduction	5
Confusion affecting the names <i>B. varicolor</i> , <i>B. latro</i> , <i>B. bezzii</i> and <i>B. emarginata</i>	5
Confusion regarding literary source of the name <i>B. latro</i>	6
Need for revision	7
Methods	7
Genus <i>Bengalia</i> Robineau-Desvoidy	9
Description and diagnosis of the Oriental species of the <i>Bengalia peuhi</i> species-group	9
Notes on the Afrotropical species of the <i>Bengalia peuhi</i> species-group	14
Key to males of the Oriental <i>Bengalia peuhi</i> species-group	15
1. <i>Bengalia emarginata</i> Malloch, 1927	17
2. <i>Bengalia emarginatoides</i> sp. nov.	24
3. <i>Bengalia emdeniella</i> (Lehrer, 2005), comb. nov.	28
4. <i>Bengalia fani</i> Feng & Wei, 1998	31
5. <i>Bengalia inermis</i> Malloch, 1927	33
6. <i>Bengalia latro de Meijere</i> , 1910	38
7. <i>Bengalia lyneborgi</i> James, 1966	42
8. <i>Bengalia pseudovaricolor</i> Kurahashi & Tumrasvin, 1979	44
9. <i>Bengalia surcoufi</i> Senior-White, 1923	46
10. <i>Bengalia taksina</i> (Lehrer, 2005), comb. nov.	49
11. <i>Bengalia unicolor</i> Séguy, 1946	52
12. <i>Bengalia varicolor</i> (Fabricius, 1805)	54
13. <i>Bengalia weii</i> sp. nov.	61
Phylogenetic analysis of the <i>Bengalia peuhi</i> species-group	66
Acknowledgements	70
References	71
Appendix 1. Translation of the Chinese original description of <i>Bengalia fani</i> Feng & Wei.	74
Appendix 2. Characters and states used for the phylogenetic analysis.	74

Abstract

The Oriental species of the *Bengalia peuhi* species-group are revised and their male genitalia illustrated by means of digital colour photography. A key to males is presented, complete synonymies are given for all the species and their geographical distribution reconsidered. The 13 Oriental species making up the group are: *Bengalia emarginata* Malloch, 1927 (China, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, Vietnam); *B. emarginatoides* sp. nov. (India, Sri Lanka); *B. emdeniella* (Lehrer, 2005), comb. nov. (China); *B. fani* Feng & Wei, 1998 (China); *B. inermis* Malloch, 1927 (Philippines); *B. latro* de Meijere, 1910 (Indonesia); *B. lyneborgi* James, 1966 (Philippines); *B. pseudovaricolor* Kurahashi & Tumrasvin, 1979 (Thailand); *B. surcoufi* Senior-White, 1923 (India, Nepal, Pakistan, Vietnam); *B. taksina* (Lehrer, 2005), comb. nov. (Laos, Malaysia, Nepal, Thailand, Vietnam); *B. unicolor* Séguy, 1946 (Pakistan); *B. varicolor* (Fabricius, 1805) (China, India, Indonesia, Japan, Laos, Malaysia, Pakistan, Singapore, Sri Lanka, Taiwan, Thailand, Vietnam); and *B. weii* sp. nov. (China). A lectotype is designated for *Bengalia latro* to fix the interpretation of the name. *Bengalia bezzii* Senior-White, 1923 is established as a junior synonym of *Musca varicolor* Fabricius, 1805, syn. nov. *Bengalia chromatella* Séguy, 1946 and *Bengalia pallidicoxa* Séguy, 1946 are treated as junior synonyms of *Musca varicolor* Fabricius, 1805, syn. nov. *Afridigalia bezziella* Lehrer, 2005 is established as a junior synonym of *Bengalia emarginata* Malloch, 1927, syn. nov. *Afridigalia pinatuba* Lehrer, 2005 and *Ashokiana ramsdalei* Lehrer, 2005 are established as junior synonyms of *Bengalia inermis* Malloch, 1927, syn. nov. *Ashokiana ramsdalei* and *Afridigalia laguna* Lehrer, 2005 are both based on a holotype with a partly destroyed aedeagus. *Afridigalia tenggeria* Lehrer, 2006 is established as a junior synonym of *Bengalia latro* de Meijere, 1910, syn. nov. *Afridigalia thaisia* Lehrer, 2008 is established as a junior synonym of *Afridigalia taksina* Lehrer, 2005, syn. nov. The Afrotropical *Afridigalia walkeriana* Lehrer, 2005 is established as a junior synonym of *Bengalia depressa* Walker, 1858, syn. nov. The Afrotropical *Afridigalia zouloupyga* Lehrer, 2006 is established as a junior synonym of *Bengalia floccosa* Wulp, 1885, syn. nov. *Afridigalia arawakia* Lehrer, 2006 is established as a junior synonym of *Bengalia peuhi* Villeneuve, 1914, syn. nov. *Bengalia taiwanensis* Fan, 1965, not a member of the *peuhi* species-group, is established as a junior synonym of *Bengalia fuscipennis* Bezzi, 1913, syn. nov. Sri Lanka is deleted from the distributional range of this species. New morphological terms are introduced for the description of the aedeagus. The ovipositor is described for *Bengalia emarginata* and *Bengalia lyneborgi*. A preliminary phylogenetic analysis is performed using NONA and Pee-Wee.

Key words: Diptera, Calliphoridae, *Bengalia*, revision, new species, new synonyms, Oriental Region, phylogeny