

Monograph

urn:lsid:zoobank.org:pub:0704C43A-73D8-4A28-915A-7FF8611C8606

ZOOTAXA

3461

Revision and cladistic analysis of the Afrotropical endemic genus *Smeringopus* Simon, 1890 (Araneae: Pholcidae)

BERNHARD A. HUBER

Alexander Koenig Research Museum of Zoology, Adenauerallee 160, 53113 Bonn, Germany. E-mail: b.huber@zfmk.de

This paper is dedicated to Prof. Otto Kraus



Magnolia Press
Auckland, New Zealand

BERNHARD A. HUBER

**Revision and cladistic analysis of the Afrotropical endemic genus *Smeringopus* Simon, 1890 (Araneae:
Pholcidae)**

(Zootaxa 3461)

138 pp.; 30 cm.

7 Sept. 2012

ISBN 978-1-86977-979-5 (paperback)

ISBN 978-1-86977-980-1 (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	4
Introduction	4
Material and methods	5
Cladistic analysis	6
Identification key	7
Taxonomy	8
<i>Smeringopus</i> Simon, 1890	8
<i>Smeringopus rubrotinctus</i> Strand, 1913	13
<i>Smeringopus bwindi</i> new species	17
<i>Smeringopus mgahinga</i> new species	19
<i>Smeringopus ruhiza</i> new species	22
<i>Smeringopus mpanga</i> new species	23
<i>Smeringopus chogoria</i> new species	29
<i>Smeringopus bujongo</i> new species	30
<i>Smeringopus ngangao</i> new species	31
<i>Smeringopus arambourgi</i> Fage, 1936	33
<i>Smeringopus affinitatus</i> Strand, 1906	37
<i>Smeringopus turkana</i> new species	38
<i>Smeringopus zonatus</i> Strand, 1906	40
<i>Smeringopus oromia</i> new species	40
<i>Smeringopus saruanle</i> new species	41
<i>Smeringopus lineiventris</i> Simon, 1890	43
<i>Smeringopus natalensis</i> Lawrence, 1947	44
<i>Smeringopus koppies</i> new species	51
<i>Smeringopus badplaas</i> new species	53
<i>Smeringopus florisbad</i> new species	54
<i>Smeringopus lesnei</i> Lessert, 1936	55
<i>Smeringopus harare</i> new species	57
<i>Smeringopus blyde</i> new species	58
<i>Smeringopus hanglip</i> new species	59
<i>Smeringopus lydenberg</i> new species	61
<i>Smeringopus mlilwane</i> new species	63
<i>Smeringopus ndumo</i> new species	63
<i>Smeringopus pallidus</i> (Blackwall, 1858)	65
<i>Smeringopus lesserti</i> Kraus, 1957	69
<i>Smeringopus hypocrita</i> Simon, 1910	74
<i>Smeringopus sederberg</i> new species	77
<i>Smeringopus lotzi</i> new species	79
<i>Smeringopus ubicki</i> new species	81
<i>Smeringopus dehoop</i> new species	83
<i>Smeringopus atomarius</i> Simon, 1910	83
<i>Smeringopus uisib</i> new species	85
<i>Smeringopus tombua</i> new species	87
<i>Smeringopus cylindrogaster</i> (Simon, 1907) new combination	89
<i>Smeringopus luki</i> new species	89
<i>Smeringopus isangi</i> new species	90
<i>Smeringopus peregrinus</i> Strand, 1906	93
<i>Smeringopus peregrinoides</i> Kraus, 1957	100
<i>Smeringopus butare</i> new species	103
<i>Smeringopus katanga</i> new species	105
<i>Smeringopus kalomo</i> new species	106
<i>Smeringopus chibububo</i> new species	109
<i>Smeringopus dundo</i> new species	110
<i>Smeringopus similis</i> Kraus, 1957	111
<i>Smeringopus moxico</i> new species	113
<i>Smeringopus thomensis</i> Simon, 1907	114
<i>Smeringopus principe</i> new species	118
<i>Smeringopus mayombe</i> new species	119
<i>Smeringopus roeweri</i> Kraus, 1957	122
<i>Smeringopus lubondai</i> new species	124
<i>Smeringopus carli</i> Lessert, 1915	125
<i>Smeringopus sambescicus</i> Kraus, 1957	128
Acknowledgements	130
References	130

Abstract

The genus *Smeringopus* Simon, 1890 is revised, with redescriptions of most previously known species and descriptions of 36 new species. With now 55 species, *Smeringopus* becomes the most species-rich pholcid genus in Africa. *Smeringopus* is largely restricted to central, southern, and eastern Africa, where it includes some of the largest and most conspicuous pholcid spiders in the region. A first cladistic analysis of *Smeringopus*, including outgroup representatives of all other genera of Smeringopinae, strongly suggests that the central and western African *Smeringopina* Kraus, 1957 is the sister taxon of *Smeringopus*. *Smeringopus* is here divided into twelve operational species groups, most of which are characterized by putative synapomorphies and by specific geographic distributions. Three species are newly synonymized with *S. pallidus* (Blackwall, 1858): *S. excavatus* (Simon, 1877); *S. pholcicus* Strand, 1907; and *S. buehleri* Schenkel, 1944. *Smeringopus madagascariensis* Millot, 1946 is newly synonymized with *S. carli* Lessert, 1915. *Crossopriza cylindrogaster* Simon, 1907 is transferred to *Smeringopus*. The following new species are described: *S. badplaas*; *S. blyde*; *S. bujongo*; *S. butare*; *S. bwindi*; *S. chibububo*; *S. chogoria*; *S. dehoop*; *S. dundo*; *S. florisbad*; *S. hanglip*; *S. harare*; *S. isangi*; *S. kalomo*; *S. katanga*; *S. koppies*; *S. lotzi*; *S. lubondai*; *S. luki*; *S. lydenberg*; *S. mayombe*; *S. mgahinga*; *S. mlilwane*; *S. moxico*; *S. mpanga*; *S. ndumo*; *S. ngangao*; *S. oromia*; *S. principe*; *S. ruhiza*; *S. saruanle*; *S. sederberg*; *S. tombua*; *S. turkana*; *S. ubicki*; *S. uisib*.

Key words: Pholcidae, Smeringopinae, *Smeringopus*, Africa, Madagascar, cladistic analysis, taxonomy

Introduction

Pholcids are among the dominant web-building spiders in tropical and subtropical regions around the world, occupying a wide variety of microhabitats from the leaf litter to tree canopies, and ranging from sea level to over 4000 m. The concentration of pholcid diversity in tropical and subtropical countries has long slowed and handicapped progress in understanding fundamental aspects of relationships, distribution patterns, and species-level diversity. Only recently has the situation started to change. After more than a decade of concentrated effort towards all taxonomic levels from species to subfamily, using both morphological and molecular tools and including new material from numerous focused expeditions, a stable phylogeny is finally beginning to emerge and rough estimates of actual distribution patterns and species-level diversity can be provided (Huber 2011a). Even though species numbers have doubled during the last 12 years, several genera continue to be very poorly known, with numerous species ‘described’ but unidentifiable with the existing literature and thus basically unknown. This is particularly true of *Smeringopus*, one of the most species rich pholcid genera in Africa that includes relatively large and conspicuous species but that has received essentially no taxonomic attention for over five decades.

While the type species of *Smeringopus*, the pantropical *S. pallidus*, is fairly well known, its many African cousins have remained very poorly studied. When Kraus (1957) published the only previous revision of the genus, only about 100 adult specimens (other than *S. pallidus*) were available to him, representing eight species. Several further nominal species were known at that time, but they were either not treated for lack of material or not even mentioned (e.g. *S. thomensis* Simon, 1907; *S. natalensis* Lawrence, 1947). Some species have never been illustrated (*S. affinitatus* Strand, 1906; *S. lineiventris* Simon, 1890; *S. pholcicus* Strand, 1907; *S. rubrotinctus* Strand, 1913; *S. thomensis*), and some were unidentifiable because of lost and/or juvenile type specimens (e.g. *S. affinitatus*; *S. arambourgi* Fage, 1936; *S. peregrinus* Strand, 1906; *S. zonatus* Strand, 1906), resulting in misidentification (e.g. in the case of *S. peregrinus* in Kraus 1957). Since then, intensive collecting in many African countries has increased the number of available specimens to over 3000, and in several cases it has become possible to reliably identify ‘old’ species even in problematic cases such as those with lost or juvenile types. However, not a single further species has been described since 1957 and with the exception of *S. pallidus* and *S. natalensis*, no taxonomic treatment nor even a single new record has been published. The present paper is intended to provide a long overdue update of Kraus’s revision. It gives an overview of the genus, redescribes as many as possible of the ‘old’ species, and describes a large part of the new species available in collections. With 55 species, *Smeringopus* becomes the most species rich pholcid genus in Africa (followed by *Pholcus* with 47 African species).

Together with seven other genera, *Smeringopus* constitutes the subfamily Smeringopinae which is geographically restricted to Africa, the Mediterranean, and the Middle East (Huber 2011a). The monophyly of the group has previously been supported both by morphological and molecular data (reviewed in Huber 2011a), but