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World revision of *Xenomerus* Walker (Hymenoptera: Platygastroidea, Platygastridae)

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Abstract

The Old World genus *Xenomerus* Walker is revised. Thirty one (31) species are recognized based on 879 specimens. Twenty four (24) new species are described: *X. armatus* (Oriental)**,** *X. aureipes* (Ethiopian)*, X. bickeli* (Australian)**,** *X. comatus* (Ethiopian)*, X. fulleri* (Australian)*, X. gloriosus* (Australian)*, X. guinensis* (Australian)*, X. halteratus* (Australian)**,** *X. hilleri* (Australian)**,** *X. feehani* (Ethiopian)**,** *X. kalocsai* (Ethiopian)**,** *X. malawi* (Ethiopian)**,** *X. melikai* (Australian)**,** *X. melleus* (Australian)**,** *X. noyesi* (Oriental)**,** *X. ochraceus* (Ethiopian, Oriental)*, X. orientalis* (Oriental)*, X. parorientalis* (Oriental)*, X. rugifrons* (Oriental)*, X. scutellatus* (Ethiopian)*, X. spinosus* (Oriental)*, X. vanharteni* (Ethiopian)**,** *X. watshami* (Ethiopian) and *X. yamagishii* (Oriental, Palaearctic). Redescriptions and new combinations for the following species are provided: *Xenomerus buccatus* (Kononova & Kozlov) from *Trimorus***;** *Xenomerus calligetus* (Kononova & Kozlov) from *Trimorus***;** *X. cornutus* (Kononova & Kozlov) from *Trimorus***.** *Xenomerus canariensis* Huggert**,** *X. ergenna* Walker*, X. laticeps* Dodd and *X. varipes* Dodd are redescribed. New synonymies are proposed: *Trimorus mutator* Kononova & Kozlov = *X. canariensis* Huggert, *Trimorus curtum* Kononova & Kozlov = *X. ergenna* Walker, *Xenomerus hibernicus* Mineo & O'Connor = *X. canariensis* Huggert. *Xenomerus latimetascutum* Szabo is transferred to *Trimorus*. *Xenomerus atomus* Rajmohana & Narendran, *Xenomerus indicus* Mukerjee, *Xenomerus solox* Kozlov et Lé, *Xenomerus forax* Kozlov et Lé and *Xenomerus flavicornis* Dodd are considered species of uncertain status (holotypes not aviable). An identification key is provided, and four species groups are proposed.

Key words: Platygastroidea, systematics, taxonomy, new species, identification key, Xenomerus, revision

Introduction

With 466 species in 11 genera (Johnson, 1992) Teleasinae is one of the largest and most common groups of Platygastroidea. The limits of genera within the subfamily, however, are not well defined. This situation has caused many problems in generic placement of new teleasine species, including *Xenomerus* species, recently described in *Trimorus* by Kononova & Kozlov (2001) and Kononova & Petrov (1999). We revise the genus *Xenomerus* in order to resolve outstanding taxonomic issues, and we provide a diagnostic key to species and a character set for further systematic studies on Teleasinae.

Material and methods

Material (849 specimens): Specimens were borrowed from the following institutions (abbreviations after Evenhuis 2010; curators names are in parentheses after institutions).

ANIC	Australian National Insect Collection, CSIRO, Canberra City, Australian Capital Territory, Australia (J. Lasalle)
BMNH	The Natural History Museum, London, United Kingdom (S. Rider)
CNC	Canadian National Collection of Insects, Ottawa, Ontario, Canada (J. Huber/A. Bennett)
CMNH	Carnegie Museum of Natural History, Pittsburg, Pennsylvania, USA (J. Rawlins)
HNHM	Hungarian Natural History Museum, Budapest, Hungary (S. Csősz)
NMW	Naturhistorisches Museum, Vienna, Austria (S. Schödl/F. Zettel)
NHRS	Naturhistoriska riksmuseet, Stockholm, Sweden (B. Viklund)
NMKE	National Museum of Kenya, Nairobi, Kenya (S.W. Kimani)
NMSA	Natal Museum, Pietermaritzburg, Kwa-Zulu Natal, South Africa (M. Mostovski)
QSBG	Queen Sirikit Botanic Gardens, Chaing Mai, Thailand, (M. Sharkey)
ROME	Royal Ontario Museum, Toronto, Ontario, Canada (D.C. Darling)
SAMA	South Australian Museum, Adelaide, South Australia, Australia (J. Forrest)
SAMC	Iziko Museum of Cape Town, Cape Town, South Africa (S. van Noort)
SANC	South African National Collection of Insects, Pretoria, Republic of South Africa (G. Prinsloo)
UASK	Zoological Institute, Ukrainian Academy of Sciences, Kiev, Ukraine (S. V. Kononova)
USNM	National Museum of Natural History, Washington D.C., USA (M. Gates)

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We thank Antonius van Harten (UAE Insect Project, Sharjah), Anthony Watsham (Saint Ignatius College, Zimbabwe) and the curators of insect collections for providing *Xenomerus* material for our study (see list of curators in Material and Methods). H. Goulet for introducing IM to digital imaging, John Huber for introducing IM to slide mounting techniques with Canada balsam and for many valuable comments on composing species descriptions and measuring, S. Csősz for the assistance with Scanning Electron Microscopy, K. Rajmohana for providing information on the type specimen of *Xenomerus atomus*, G. Melika and M. Buffington for their valuable comments on the manuscript. This material based upon work supported in part by Synthesys DK-TAF2316, CanaCol Foundation for (2004, 2008, 2010), High-Lat (2003) and TIGER (DEB-0542864). The anatomical research desribed herein was funded in part by the National Science Foundation DBI-0850223.

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