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New genera of Afrotropical limosinine sphaerocerids (Diptera: Sphaeroceridae)

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Abstract

Eight new genera of the subfamily Limosiniinae are described from the Afrotropical region: *Afrolimosina* **gen. n.** (type species *A. albitarsis* sp. n.), *Biphallapodema* **gen. n.** (type species *B. polydentata* sp. n., additional species *B. oligodentata* sp. n.), *Chelilimosina* **gen. n.** (type species *Ch. baloghi* sp. n.), *Mislocatus* **gen. n.** (type species *Ceroptera ealensis* Vanschuytbroeck, 1951), *Oligochaetosella* **gen. n.** (type species *O. inconspicua* sp. n.), *Permixonimosina* **gen. n.** (type species *P. sexsetosa* sp. n.), *Preepiphallus* **gen. n.** (type species *P. nitidifacies* sp. n., additional species *P. endrodyi* sp. n.), *Subacuminiseta* **gen. n.** (type species *S. minor* sp. n.). Comparisons to the key for the identification of Old World genera of Limosiniinae (Papp 2008) are given. With 118 original figures.

Key words: Sphaeroceridae, Limosiniinae, new genera, *Afrolimosina*, *Biphallapodema*, *Chelilimosina*, *Mislocatus*, *Oligochaetosella*, *Permixonimosina*, *Preepiphallus*, *Subacuminiseta*, new species, Afrotropical

Introduction

The fauna of Sphaeroceridae in the Afrotropical region is particularly rich: together with the new genera described below more than 60 genera have been described. This is the highest regional diversity in the family at the generic level.

We may say that the fauna of the two smaller (less species-rich) subfamilies at the generic level is probably well-known: the last Afrotropical genus of those subfamilies was described in 1978 (*Trichosphaerocera* L. Papp; *Norrbomia* L. Papp, 1988 is a large Old World genus with some species also in the New World). The reason is the more amenable life-habits of Sphaerocerinae and Copromyziinae: a majority of the species known hitherto are coprophagous. All those form a base to know the sphaerocerid diversity on the savannah areas. It is a matter of course, that new species are expected to be described also in those two subfamilies.

Richards described ten reduced-winged or wingless genera and species of the subfamily Limosiniinae in a number of papers (e.g. 1951, 1957, 1960, 1965); for a complete bibliography see Roháček *et al.* (2001) and Marshall *et al.* (2011). Also *Gobersa* De Coninck, 1983, another reduced-winged genus, was described. The numerous wingless genera (by Richards and some others) have hitherto not been revised and so their relationships to fully winged genera are not recognized (their genital structures are unknown or not adequately depicted in the original papers). It is possible that some of the new fully winged genera will be demonstrated later as congeneric with some of these apterous genera. I managed to study only *Ocellipsis* Richards, 1938 and *Scutelliseta* Richards, 1960 in the course of the present study, which are not related to the genera described below. However, since I have not had the opportunity to study the other ones (and I will not have it in the near future), I took the risk that one or more of the genera described here may end up as junior synonyms. With regard to the normally winged Limosiniinae, Richards was a follower of Duda's (1925) large but few genera concept. Later, even longer papers with broad inclusion of sphaerocerids (e.g. Hackman 1965) were without descriptions of new genera. Roháček's (1982–3) *magnum opus* on the Palaearctic Limosiniinae affected numerous species also found in the Afrotropical region. Otherwise not too much has been done for a generic overview of the Afrotropical Limosiniinae. Papp (2008) described eight new genera based on species from the Afrotropical region, and noted some other undescribed species from Africa, which would belong to genera described from the Oriental region.

In the course of preparation to make a manuscript for the new Manual of Afrotropical Diptera, I studied all the

mm and 0.03 mm. 2 closely set short fronto-orbital setae. One long posterior and 1 very long (0.07–0.08 mm) anterior interfrontal setae. Ocellar seta not long (0.075 mm) but comparatively thick. Both inner and outer vertical setae strong, inner and outer occipital setae weak, postocellar indistinct. A definite row of pale preocular setulae present. Scape small, its medial seta only 0.03 mm. Pedicel with long setae in inner and dorsal apex only. First flagellomere with a distinct dorsal edge; apex with long cilia. Arista extremely long, c. 0.50 mm (paratype female).

Thorax with only 1 prescutellar dorsocentral seta. Apical scutellar seta 0.09 mm long. Anepisternum bare, 1 comparatively long (0.09 mm) katepisternal seta.

Legs with short and sparse setae. Trochanters without any setae. Claws and pulvilli normal, or rather, claws minute. Mid tibia without mid ventral seta, ventroapical seta comparatively strong. Mid tibial armature: anterodorsals at 9/26 (rather strong), 21/26 (strong), posterodorsal seta at 20/26. Mid basitarsus not particularly long, anteroventral and posteroventral rows of setulae even and normal. Hind tibia apical thornlet very short, only 0.015 mm. Hind basitarsus 0.06 mm long, second tarsomere 0.09 mm.

Wings. Costal vein much overruns apex of R_{4+5} . Vein R_{4+5} strongly upcurved. Inter-crossvein section of M_{1+2} 0.09 mm, M-M crossvein 0.075 mm, *i.e.* not much shorter. Both distal edges of discal cell larger than 90°, lower edge with a short appendage.

Abdomen. Preabdominal sclerites (except for male sternite 5) do not show any peculiarities. Male and female genitalia are described under the genus.

Etymology. The specific epithet of this new species refers to the Latin name ‘minor’ (small, noun).

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