



## **A Remarkable New Genus of Robber Flies, *Akatiomyia* gen. n., from the Western Cape Province of South Africa, and a New Key to the Genera of Afrotropical Stenopogoninae (Diptera: Asilidae)**

Author: Londt, Jason G. H.

Source: African Invertebrates, 54(1) : 57-68

Published By: KwaZulu-Natal Museum

URL: <https://doi.org/10.5733/afin.054.0103>

---

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](http://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## A remarkable new genus of robber flies, *Akatiomyia* gen. n., from the Western Cape Province of South Africa, and a new key to the genera of Afrotropical Stenopogoninae (Diptera: Asilidae)

Jason G. H. Londt

KwaZulu-Natal Museum, P. Bag 9070, Pietermaritzburg, 3200 South Africa, and School of Life Sciences, University of KwaZulu-Natal, Pietermaritzburg, South Africa; robber4afr@telkomsa.net

### ABSTRACT

The genus *Akatiomyia* gen. n. is described from the Western Cape Province of South Africa. The genus is monotypic, with *A. eremnos* sp. n. being the type species. This rather unique genus appears morphologically very similar to species of *Afroholopogon* Londt, 1994, *Oligopogon* Loew, 1847 and *Rhabdogaster* Loew, 1858. An updated key to the genera of Afrotropical Stenopogoninae is provided.

KEY WORDS: Afrotropical, Asilidae, Stenopogoninae, *Akatiomyia*, new species, identification key.

### INTRODUCTION

In preparation for a study of the Afrotropical species of *Oligopogon* Loew, 1847, a problematic and fairly speciose genus of tiny asilids confined to the Palaeartic and Afrotropical regions, a pair of unusual flies, collected by me in the Clanwilliam area of the Western Cape Province of South Africa, was found in the collection of the KwaZulu-Natal Museum (NMSA). These flies had been misplaced among the many unidentified *Oligopogon* specimens, probably because they were of a similar size and possessed setose antennal styli. On closer examination it became obvious that these specimens not only represented an undescribed species, morphologically similar to species of *Afroholopogon* Londt, 1994, *Oligopogon* Loew, 1847 and *Rhabdogaster* Loew, 1858, but that the species was deserving of placement in a new genus. Having already planned a fieldtrip to South Africa's western coastline, I adjusted my programme so as to have a few days in the area from which the specimens had been collected. This adjustment was rewarded by the collection of a single additional male specimen, which was found a short distance from where the original pair had been found some 23 years earlier. This paper is dedicated to the description of this interesting species. Terminology follows mainly that proposed by McAlpine (1981) and Stuckenberg (1999). The opportunity is taken to present an updated key to the genera of Afrotropical Stenopogoninae based on one originally published some 13 years ago (Londt 1999).

### TAXONOMY

#### Genus *Akatiomyia* gen. n.

Etymology: From Greek *akátion* (a dwarf) and *μυία* (a fly). Refers to small size of this robber fly.

Type species: *Akatiomyia eremnos* sp. n.

Diagnosis: Tiny flies (wing length <5 mm). *Head*: Clearly wider than high in anterior view; antennal scape longer than pedicel; postpedicel greatly elongate (*c.* twice the length of scape and pedicel combined), cylindrical (not widening toward the middle) and with distinct well-developed style; style with numerous, short, tightly packed setae

<http://www.africaninvertebrates.org.za>

urn:lsid:zoobank.org:pub:1E74A8F0-9CF6-43B7-B472-AF7E00FAC788

(not longish, loosely arranged setae as in *Oligopogon*); face narrower than width of one eye in anterior view; facial swelling weak and not well-defined dorsally; mystax occupying about half of facial profile; occiput with macrosetae; palpus 2-segmented; proboscis shorter than antenna, straight and without spine-like processes distally. *Thorax*: Prosternum small and isolated (not large and abutting pronotum as in *Oligopogon*); propleuron fine setose; mesonotum flat (not greatly elevated and hump-like as in *Oxynoton* Janssens, 1951 and some *Oligopogon*) and punctate; acrostichal, dorso-central, postpronotal and postalar macrosetae undifferentiated; scutellum lacking apical macrosetae; scutellar disc setose; anepimeral macroseta absent; katatergite setose; anatergites aetose; postmetacoxal area membranous; prothoracic femora slender; mesothoracic tarsomeres 4 and 5 without modified setae (as in *Habropogon* Loew, 1847); pulvilli well developed; metathoracic empodia simple (not large and laterally compressed as in *Empodiodes* Oldroyd, 1972); costa extends only as far as  $CuA_1$  (not bordering anterior cubital cell, anal cell and alula); cell  $m_3$  open; cell cup closed and stalked. *Abdomen*: Tergites punctate; female with acanthophorites.

### ***Akatiomyia eremnos* sp. n.**

Figs 1–10

**Etymology:** From Greek *ερεμνός* (black). Refers to the largely shiny black coloration of this species.

**Description** (based on all available material):

**Head** (Fig. 3): Dark red-brown to black, mostly shiny apruinose, black, pale yellowish and white setose. **Antenna** (Fig. 4): Dark red-brown to black; scape and pedicel weakly black setose; postpedicel aetose except for cluster of short, fine, tightly packed setae distally; style composed of at least two reasonably discernible segment-like elements (terminal sensory structure, if present, invisible through setae), a short proximal element and a longer distal element, both being entirely covered with short, fine, densely-packed setulae which appear longer distally (giving style a somewhat clavate appearance). Segmental ratios (scape taken as 1): 1:0.77:3.69:1.15. Scape slender (*c.* 3 times longer than broad), pedicel fairly robust (fractionally longer than broad), postpedicel elongate, slender (*c.* 8 times longer than broad), style, including setae, fairly robust (1.5 times longer than broad). **Face**: Dark red-brown to black, shiny apruinose except for narrow, silvery, laterally situated pruinose stripes adjacent to eye margin. Profile slightly convex ventrally. Face has a medial, vertical, shallow groove extending from between antennal sockets to epistomal margin. Mystax weak (*c.* 24 setae), mostly black (few pale yellow-white setae laterally on epistomal margin), covering little more than ventral half of face. Frons and vertex shiny apruinose, pale yellowish setose laterally. Ocellar tubercle prominent, weakly pale yellow setose. Occiput shiny blackish apruinose except for weakly silvery pruinose areas ventrally along eye margins, occipital setae short blackish dorsally, pale yellow-white ventrally. Eyes large (somewhat ‘goggle-eyed’), head much wider than high in anterior view; head width:face width ratio 3.7:1 (each eye clearly wider than face in anterior view). Palpus dark red-brown to black, apparently 2-segmented (proximal segment small, distal segment well developed, elongate), pale yellow-white setose. Proboscis dark red-brown to black, short (projects a little beyond level of face), straight, pale yellow-white setose.



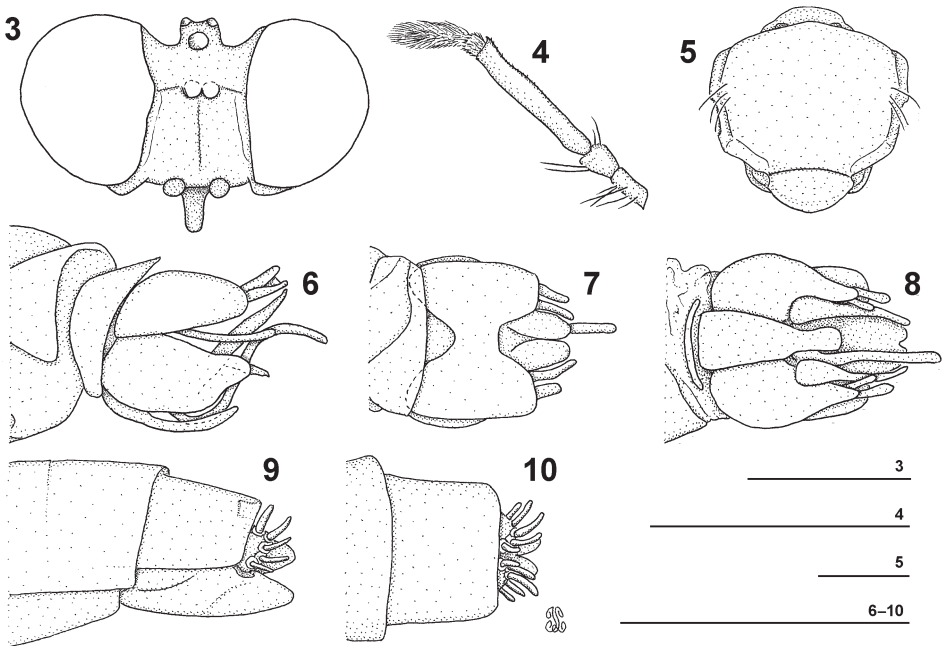
Figs 1, 2. *Akatiomyia eremnos* gen. et sp. n., male: (1) entire holotype, (2) left wing of paratype.

*Thorax*: Dark red-brown to black, extensively shiny apruinose, macrosetae poorly developed brown-red, fine setae pale yellow-white. Prothorax small, narrow with single row of moderately developed brown-red anteprenotal macrosetae. Mesonotum: Short and broad (Fig. 5), shiny apruinose except for narrow silver pruinose posterolateral and posterior margins; macrosetae not evident except for 3 moderately developed brown-red supra-alars; all fine mesonotal setae, which cover entire mesonotum, arise from shallow depressions, giving surface punctate appearance. Scutellum shiny apruinose, covered with fine, tiny whitish setae, apical macrosetae absent. Pleura dark red-brown to black, extensively silver pruinose except for substantial areas of anepisternum, katapisternum, meron and anepimeron which are shiny apruinose; setae white, largely confined to anepisternum and katatergite. Mediotergite largely silver pruinose except

medially; anatergites asetose. Postmetacoxal area membranous. Legs: Dark red-brown to black except for distal tips of femora and proximal ends of tibiae which are narrowly orange-brown, macrosetae brown-red, fine setae whitish; coxae extensively silver pruinose, white setose; claws, pulvilli and empodia moderately well developed. Wings (Fig. 2): Holotype 4.6×2.1 mm, paratype ♂ 4.0×1.9 mm, paratype ♀ 3.8×1.7 mm (length measured from tip to humeral crossvein, width at widest level); extensively blackish stained except for paler central parts of most cells and an almost transparent narrow subtriangular window between 1<sup>st</sup> radial and radial sector. Venation: Costa extends around wing margin terminating at point where first branch of anterior cubitus reaches margin; anterior cubital cell (cua<sub>1</sub>), anal cell (a<sub>1+2</sub>) and alula not bordered by C; posterior cubital (cup) cell closed before margin and stalked (all other veins reach margin independently). Haltere: Pale yellow-white.

**Abdomen:** Dark red-brown to black (including terminalia). Tergites entirely shiny apruinose, fine white setose (no macrosetae evident); setae arise from small depressions giving tergites punctate appearance. T1–6 well developed, T7–8 reduced, poorly sclerotized. Sterna entirely dull silver-gold pruinose, longish white setose. S1–6 well developed, S7–8 highly reduced, weakly sclerotized, hardly evident.

♂ terminalia (Figs 6–8): Epandrium shorter than wide in dorsal view, lobes fused dorsally for about half length, tips broadly rounded. Proctiger simple, jutting out far beyond epandrial lobes. Gonocoxites well developed, jutting out slightly beyond level achieved by epandrium, dorsodistal lobe broadly rounded, with short, pointed, terminal process and unusual, long, slightly curved, setose process appearing to arise



Figs 3–9. *Akatiomyia eremnos* gen. et sp. n.: (3) holotype head, anterior; (4) holotype antenna, lateral; (5) holotype thorax, dorsal; (6–8) paratype male terminalia, lateral (6), dorsal (7), ventral (8); (9, 10) paratype female terminalia, lateral (9), dorsal (10). Scale bars = 1 mm.



posterodorsally. Gonostylus elongate, straight, with enlarged proximal end and pointed distal tip. Hypandrium poorly developed, about 3 times as long as wide, with weakly sclerotized distal, dorsoventrally flattened lobe. Aedeagus S-shaped in lateral view, of fairly uniform width, with truncate tip.

♀ terminalia (Figs 9, 10): Ovipositor about as long as wide. T8 wider than long, almost parallel-sided in dorsal view. Acanthophorites moderately well developed, each with 5 pale, upcurved macrosetae. S8 (subgenital plate) weakly sclerotized distally, somewhat keel-like, jutting out slightly beyond proctiger in lateral view.

Holotype (Fig. 1): 1♂ SOUTH AFRICA: 'STH AFRICA: W Cape / 2.5 km SW Clanwilliam / Cedar Inn area 135m / 32°11'44"S 18°52'29"E / J & A Londt 8.ix.2012 / Renosterbos near dam' (NMSA-DIP. 66434; Type no. 2740).

Paratypes: 1♂ 1♀ SOUTH AFRICA: 'STH AFRICA: Cape Prov / 4 km SW Clanwilliam / 32°11'30"S 18°52'20"E / 28.viii.1989 225m / J Londt B Stuckenberg / & P Croeser Sandy E / slope macchia nr dam' (♂ NMSA-DIP 66435, ♀ NMSA-DIP 66436; Type no. 2740).

*Note:* Data are cited as they appear on labels, each line of information is separated by a slash (/).

**Distribution, phenology and biology:** Despite the apparently conflicting label data, all three specimens were captured at the same locality which is *c.* 4 km from Clanwilliam by road and 2.5 km as the crow flies. I collected all three specimens in an area of indigenous vegetation located behind a small development called the Cedar Inn which overlooks the Clanwilliam Dam. The two collecting episodes, one early in September, the other at the end of August, indicate that the species flies during spring. The locality is situated on the lower slopes of a hilly area known as the Uitkomsberge which reaches altitudes of only about 250 m. The area has rocky outcrops separated by sandy areas and boasts a wide variety of plant species. Figure 11 shows the exact spot where the holotype was collected as it perched at the end of a twig. Morphologically the species appears to be similar to species of *Afroholopogon*, *Oligopogon* and *Rhabdogaster* and so it is tempting to believe that its biology may also be similar to species allocated to these genera.



Fig. 11. Site at which the holotype of *Akatiomyia eremnos* gen. et sp. n. was collected (note Clanwilliam Dam in background).

## Key to genera of Afrotropical Stenopogoninae

This key has been developed from that published originally by Londt (1999) in order to accommodate *Oligopogon* and genera described after 1999. The number of currently recognized species, and references to the most recent taxonomic literature relating to species is provided after generic names.

- 1 Anatergites setose.....2
- Anatergites asetose.....10
- 2 Postpedicel tipped with a small apical pit enclosing a ‘seta-like’ sensory element (remains of a style).....9
- Postpedicel bearing a distinct style made up of 2 or 3 elements (including a terminal ‘seta-like’ sensory element); abdominal T1–4 with a group of strong dorsolateral macrosetae.....3
- 3 Occiput with obvious macrosetae .....5
- Occiput lacking macrosetae (i.e. with weak setae only).....4
- 4 Eye:face width ratio <1.1:1; scape clearly longer than pedicel; hypandrium less than half as long as epandrial lobes .....  
..... **Diocobroma** Hull, 1962 (1 sp., Londt 1983)
- Eye:face width ratio >1.3:1; scape and pedicel about equal in length; hypandrium about as long as epandrial lobes..... **Dogonia** Oldroyd, 1970 (1 sp., Londt 2008)
- 5 Proepisternum with a few strong macrosetae as well as fine setae; pronotal and mesonotal macrosetae very strong (flies have bristly appearance).....  
..... **Anasillomos** Londt, 1983 (1 sp., Dikow & Londt 2000)
- Proepisternum with fine setae only (some may be stronger than others, but never as strong as mesonotal macrosetae) .....6
- 6 Abdominal T1–4 with group of strong macrosetae dorsolaterally; antennal style consists of 2 elements (1 small basal segment and a ‘seta-like’ sensory element); ♂ genitalia bulbous; ♀ T7 and T8 of nearly equal length.....  
..... **Ontomyia** Dikow & Londt, 2000 (1 sp., Dikow & Londt 2000)
- Only abdominal T1 with group of strong macrosetae dorsolaterally; antennal style consists of 3 elements (2 basal segments and a ‘seta-like’ sensory element); ♂ genitalia slender, never bulbous; ♀ T8 distinctly shorter than T7 (*Fishermyia* ♀ unknown) .....7
- 7 Facial swelling pronounced in lower and upper regions.....  
..... **Oratostylum** Ricardo, 1925 (3 spp., Dikow & Londt 2000)
- Facial swelling weak, only lower margin moderately pronounced.....8
- 8 Two or more pairs of apical scutellar macrosetae; mystax occupying almost entire face although sometimes weak in dorsal part; antennal postpedicel usually somewhat clavate, <1.5× longer than scape and pedicel combined (southern Africa) .....  
..... **Remotomyia** Londt, 1983 (4 spp., Dikow & Londt 2000)
- A single pair of apical scutellar macrosetae; mystax occupying ventral 1/3 of face only, dorsal part asetose; antennal postpedicel elongate, spindle shaped, >1.5× longer than scape and pedicel combined (Madagascar).....  
..... **Fishermyia** Londt, 2012 (1 sp., Londt 2012*b*)

- 9 Facial swelling occupying about  $\frac{3}{4}$  of face and entirely covered with macrosetae and setae; presutural dorsocentral setae well developed; vein  $M_1$  not strongly arched anteriorly; postmetacoxal membrane covered with long setae ..... **Daspletis** Loew, 1858 (8 spp., Londt 1983, 2010a)
- Facial swelling occupying at most  $\frac{1}{2}$  of face and often with macrosetae only on lower half; dorsocentral setae present only on posterior half of mesonotum; vein  $M_1$  usually strongly arched anteriorly; postmetacoxal membrane usually asetose ..... **Microstylum** Loew, 1838 (79 spp., requires revision)
- 10 Anal lobe and alula without bordering vein (i.e. costa terminates at or before point where anal vein joins wing margin) ..... 11
- Costa extends around entire wing margin (i.e. borders anal lobe and alula; weakly in *Trichoura*) ..... 21
- 11 Pulvilli minute or absent ..... 12
- Pulvilli well developed ..... 16
- 12 Abdomen broad and dorsoventrally compressed (width:length ratio of  $T_2 > 2$ )... 13
- Abdomen cylindrical. Not obviously dorsoventrally compressed (width:length ratio of  $T_2 < 1.5$ ) ..... 15
- 13 Costal vein extending around wing tip, terminating at point where  $CuA_2$  and  $A_1$  reach wing margin; cells  $r_5$  and  $m_3$  open at wing margin ..... 14
- Costal vein falling short of juncture of  $CuA_2$  and  $A_1$ ; cells  $r_5$  and  $m_3$  stalked, stalks frequently failing to reach wing margin ..... **Sisyrodytes** Loew, 1856 (15 spp., Londt 2009a)
- 14 Cell  $m_3$  open; vein  $R_4$  usually with basal stump-vein; pulvilli poorly developed, but clearly discernable; hypandrium somewhat flat or only gently concave ..... **Acnephatomyia** Londt, 2010 (7 spp., Londt 2010c)
- Cell  $m_3$  closed and stalked; vein  $R_4$  lacking basal stump-vein; pulvilli minute and difficult to detect; hypandrium distinctly cup-shaped ..... **Astiptomyia** Londt, 2010 (1 sp., Londt 2010c)
- 15 Small flies (wing length  $< 3.5$  mm); empodia apparently absent; vein  $R_4$  lacking basal stump-vein; macrosetae of mesonotum greatly developed, many times longer than accompanying setae ..... **Ammodaimon** Londt, 1985 (2 spp., Londt 2010c)
- Larger flies (wing length  $> 6.0$  mm); empodia well developed; vein  $R_4$  with basal stump-vein; macrosetae of mesonotum moderately developed, not many times longer than accompanying setae ..... **Sporadothrix** Hermann, 1907 (1 sp., Londt 2010c)
- 16 Postmetacoxal sclerotized bridge present ..... **Rhabdogaster** Loew, 1858 (38 spp., Londt 2006)
- Postmetacoxal area membranous ..... 17
- 17 Antennal style with long loosely arranged setae; prosternum large, abutting proepisternum and prothoracic coxae; alula highly reduced ..... **Oligopogon** Loew, 1847 (11 spp., requires modern revision)
- Note: See discussion below on the inclusion of this genus in the subfamily.*
- Antennal style lacking long setae; prosternum small, disassociated from proepisternum and prothoracic coxae; alula moderately well developed ..... 18



- 18 Mesonotum greatly elevated anteriorly and hump-like .....  
 ..... **Oxynoton** Janssens, 1951 (2 spp., Londt 1996)  
 – Mesonotum not hump-like, but of more usual form ..... 19
- 19 Antennal style apparently robust, broader than postpedicel, covered with numerous,  
 short, tightly-packed setae..... **Akatiomyia** gen. n. (1 sp., this paper)  
 – Antennal style slender, aetose..... 20
- 20 Metacoxae with elongate, distally rounded, peg-like process on anterior surface...  
 ..... **Ischiolobos** Londt, 2005 (4 spp., Londt 2005)  
 – Metacoxae lacking peg-like process on anterior surface .....  
 ..... **Afroholopogon** Londt, 1994 (18 spp., Londt 2005)
- 21 Palpi 1-segmented ..... 22  
 – Palpi 2-segmented ..... 24  
*Note: Palpi are not always easy to study. One-segmented palpi are usually fairly robust and curved,  
 such that their distal ends converge. Two-segmented palpi may have weak distal parts that are tucked  
 away below epistomal margin.*
- 22 Proboscis with spine-like processes distally; antennal style not clearly differentiated,  
 distal seta-like sensory element sub-terminally situated.....  
 ..... **Hynirhynchus** Lindner, 1955 (2 spp., Londt 1992a, 2010b)  
 – Proboscis of more usual form and lacking spine-like processes distally; antennal  
 style clearly defined with terminal pit-enclosed seta-like sensory element ..... 23
- 23 Proboscis shorter than antenna; mystax covering ventral third of face; ♂ mesotar-  
 someres 4 and 5 with highly modified, rather spade-shaped setae (usually reddish)  
 ..... **Habropogon** Loew, 1847 (8 spp., Londt 2000)  
 – Proboscis longer than antenna; mystax covering ventral half of face; ♂ mesotarso-  
 meres 4 and 5 with normally shaped setae.....  
 ..... **Pycnomerinx** Hull, 1962 (3 spp., Londt 1990)
- 24 Head almost circular in anterior view (i.e. face narrow) ..... 25  
 – Head clearly wider than high in anterior view ..... 29
- 25 Katatergites bare..... 26  
 – Katatergites setose..... 27
- 26 Prothoracic femur with large, proximoventral spinose process (i.e. strongly rap-  
 torial)..... **Gonioscelis** Schiner, 1866 (38 spp., Londt 2004)  
 – Prothoracic femur of more usual form and lacking large spinose process .....  
 ..... **Stenopogon** Loew, 1847 (2 spp., Londt 1999)
- 27 Dorsocentral macrosetae extend along entire length of mesonotum .....  
 ..... **Haroldia** Londt, 1999 (2 spp., Londt 1999)  
 – Dorsocentral macrosetae confined to posterior region of mesonotum..... 28
- 28 Antennal style composed of 2 elements (cylindrical segment-like element and  
 terminal spine-like element); ♂ hypandrium usually bifurcate distally.....  
 ..... **Afroscleropogon** Londt, 1999 (7 spp., Londt 1999)  
 – Antennal style composed of 3 elements (narrow basal segment-like element, cy-  
 lindrical segment-like element and terminal spine-like element); ♂ hypandrium  
 usually simple ..... **Rhacholaemus** Hermann, 1907 (9 spp., Londt 1999)

- 29 Proboscis strongly downward-curved, resembling a parrot's beak.....  
 ..... **Ancylorhynchus** Berthold, 1827 (29 spp., Londt 2011)  
 – Proboscis of more usual form, not strongly down-curved .....30
- 30 Face strongly projecting ventrally (not dorsally), giving a pointed, nose-like appearance in profile; mystacial macrosetae largely confined to small area at apex of pointed gibbosity.....**Lycostommyia** Oldroyd, 1980 (6 spp., Londt 1992a)  
 – Face not projecting ventrally and of more usual form .....31
- 31 Mystax extends from antennal bases to epistomal margin (i.e. entire profile) ....32  
*Note: Pedomyia astoptica keys out here, but has characteristic antennal structure.*  
 – Mystax less extensive, there being a clearly visible gap between antennal sockets and dorsal mystacial setae .....36
- 32 Antenna with compressed, strap-like postpedicel and terminal 2-segmented style of similar form .....**Hermannomyia** Oldroyd, 1962 (2 spp., Londt 1981)  
 – Antenna of different form .....33
- 33 Large flies (wing length >15 mm); palpi well developed; anepimeral macroseta absent ..... **Bana** Londt, 1992 (2 spp., Londt 2013)  
 – Small flies (wing length <10 mm); palpi moderately developed; anepimeral macroseta usually present .....34
- 34 ♂ terminalia club-like; epandrium greatly developed, hemispherical; hypandrium greatly reduced..... **Corymyia** Londt, 1994 (4 spp., Londt 1994)  
 – ♂ terminalia of more usual form; epandrium not greatly developed; hypandrium not greatly reduced.....35
- 35 ♂ gonocoxite with 2 subequal pointed distal processes, the outer one with at most a small tumid dorsodistal projection; mystax well developed, extending to antennal sockets; scutellum with many apical setae that usually extend weakly onto the disc (central area usually asetose) .....**Connomyia** Londt, 1992 (20 spp., Londt 1993)  
 – ♂ gonocoxite with outer process having a distal or dorsodistal flange-like process; mystax moderately well developed, extending to antennal sockets, but usually weak in upper part; scutellum usually with few apical setae that rarely extend onto disc .....**Danomyia** Londt, 1993 (9 spp., Londt 1993)
- 36 Anepimeral macroseta present; metathoracic empodia laterally compressed and blade-like..... **Empodiodes** Oldroyd, 1972 (4 spp., Londt 2012a)  
 – Anepimeral macroseta absent; metathoracic empodia seta-like, not laterally compressed and blade-like .....37
- 37 Lower  $\frac{3}{4}$  of face strongly gibbose, upper part of swollen area clearly defined ...38  
 – Face at most gently gibbose, upper part of swollen area not clearly defined .....39
- 38 Body entirely metallic blue-black; postpedicel elongate, cylindrical, about twice as long as first two segments combined; wing uniformly blackish.....  
 .....**Teratopomyia** Oldroyd, 1980 (1 sp., Londt 2009b)  
 – Body not entirely metallic blue-black; postpedicel strongly club-shaped, about as long as first two segments combined; wing largely transparent with dark spots (especially a 'stigma-like' marking at base of cell  $r_1$ ).....  
 ..... **Hypenetes** Loew, 1858 (21 spp., Londt 1985)

- 39 *Mystax* occupies at most the lower one-third of face ..... 40  
 – *Mystax* occupies at least the lower half of face ..... 44
- 40 Wing cells  $m_3$  and cup closed and stalked; ♂ hypandrium reduced and largely fused with gonocoxites ..... **Trichoura** Londt, 1994 (6 spp., Londt 1994)  
 – Wing cells  $m_3$  and cup open at wing margin (even if only narrowly); ♂ hypandrium moderately well developed and not fused with gonocoxites ..... 41
- 41 Epandrial lobes almost entirely separated (joined proximally) ..... 42  
 – Epandrial lobes fused for at least proximal half of length ..... 43
- 42 Small (wing length <3 mm) ..... **Microphontes** Londt, 1994 (3 spp., Londt 1994)  
 – Larger (wing length >5 mm) ..... **Antiscylaticus** Londt, 2010 (1 sp., Londt 2010b)
- 43 Scutellar disc lacking setae; epandrial lobes fused for about half of length .....  
 ..... **Macroetra** Londt, 1994 (3 spp., Londt 1994)  
 – Scutellar disc with few (*c.* 4) setae; epandrium with slight distal indentation, otherwise fused for entire length ..... **Irwinomyia** Londt, 1994 (2 spp., Londt 1994)
- 44 Antennal postpedicel widening toward the middle (in lateral view), apical half appearing strongly ventrally incised; *mystax* occupies about  $\frac{3}{4}$  of face .....  
 ..... **Pedomyia** Londt, 1994 (9 spp., Londt 1994)  
 – Antennal postpedicel spindle-shaped; *mystax* occupies about  $\frac{1}{2}$  of face ..... 45
- 45 ♂ epandrial lobes long, entirely separated or very narrowly joined proximally; hypandrium more or less straight and distally directed .....  
 ..... **Scylaticus** Loew, 1858 (35 spp., Londt 1992b)  
 – ♂ epandrial lobes short, fused proximally for about  $\frac{1}{3}$  their length; hypandrium elongate, ventrally directed with upturned distal region .....  
 ..... **Agrostomyia** Londt, 1994 (1 sp., Londt 1994)

#### *Taxonomic position of Oligopogon Loew, 1847*

The systematic position of *Oligopogon* has been adequately summarized by Geller-Grimm and Hradský (2003) who also reviewed the Palaearctic fauna. Although there have been arguments for its inclusion in no fewer than three subfamilies (Stenopogoninae, Stichopogoninae, Trigonomiminae), these authors opted to classify it in the Stenopogoninae, an action repeated by Geller-Grimm (2004). Dikow (2009) undertook an extensive phylogenetic study involving representatives of 158 species in 140 genera and was unable to clarify the placement of *Oligopogon*, regarding the genus as *incertae sedis*. It appears, therefore, that until studies indicate otherwise, the genus should continue to be assigned to the Stenopogoninae. I am of the opinion that the possession of acanthophorites, indicative of a biological strategy clearly aligned with the Stenopogoninae, is strong evidence in support of its placement in this subfamily.

#### ACKNOWLEDGEMENTS

The National Research Foundation of South Africa and the University of KwaZulu-Natal allocated funding in support of my research, while the KwaZulu-Natal Museum provided various services. Special thanks are due to Mr Burgert Muller (KwaZulu-Natal Museum) for work done on my illustrations. I also acknowledge the assistance of the many conservation authorities that have issued collecting permits to me over the years I have been working on Afrotropical Asilidae; without their assistance sampling would have been difficult. Finally, my wife Ann is thanked for her continued assistance and support both in my home laboratory and in the field.

## REFERENCES

- DIKOW, T. 2009. Phylogeny of Asilidae inferred from morphological characters of imagines (Insecta: Diptera: Brachycera: Asiloidea). *Bulletin of the American Museum of Natural History* **319**: 1–175, 131 figs, 8 tables.
- DIKOW, T. & LONDT, J.G.H. 2000. A review of the genera *Anasillomos* Londt, 1983, *Oratostylum* Ricardo, 1925, and *Remotomyia* Londt, 1983 with the description of a new genus and two new species (Diptera: Asilidae: Stenopogoninae). *Annals of the Natal Museum* **41**: 107–121.
- GELLER-GRIMM, F. 2004. A world catalogue of the genera of the family Asilidae (Diptera). *Studia dipterologica* **10** (2003) (2): 473–526.
- GELLER-GRIMM, F. & HRADSKÝ, M. 2003. The genus *Oligopogon* Loew, 1847 (Diptera: Asilidae) in the Palearctic region, including the description of new species and comments on the placement of this genus. *Studia dipterologica* **10** (1): 165–179.
- LONDT, J.G.H. 1981. The genera *Habropogon* Loew and *Hermannomyia* Oldroyd in southern Africa (Diptera: Asilidae: Dasyopogoninae). *Journal of the Entomological Society of Southern Africa* **44** (1): 69–78.
- 1983. The genus *Daspletis* Loew, 1858 and the description of two new genera, *Anasillomos* and *Remotomyia* (Diptera: Asilidae: Stenopogoninae). *Journal of the Entomological Society of Southern Africa* **46** (2): 283–308.
- 1985. Afrotropical Asilidae (Diptera) 10. The genus *Hyphenetes* Loew, 1858 (Dasyopogoninae). *Annals of the Natal Museum* **26** (2): 377–405.
- 1990. Afrotropical Asilidae (Diptera) 20. The genus *Pycnomerinx* Hull, 1962 (Stenopogoninae). *Annals of the Natal Museum* **31**: 19–32.
- 1992a. Revision of three small Afrotropical asilid genera, *Empodiodes* Oldroyd, *Hynirhynchus* Lindner and *Lycostommyia* Oldroyd (Diptera: Asilidae: Stenopogoninae). *Journal of African Zoology* **106** (1): 55–79.
- 1992b. Afrotropical Asilidae (Diptera) 22. The genus *Scylaticus* Loew, 1858 (Stenopogoninae). *Annals of the Natal Museum* **33** (1): 95–187.
- 1993. Afrotropical Asilidae (Diptera) 23. The genera *Connomyia* Londt, 1992 and *Danomyia* gen. n. (Stenopogoninae). *Annals of the Natal Museum* **34** (1): 103–151.
- 1994. Afrotropical Asilidae (Diptera) 25. A key to the genera of the subfamily Stenopogoninae with new synonymy and descriptions of six new genera. *Annals of the Natal Museum* **35**: 71–96.
- 1996. Afrotropical Asilidae (Diptera) 28. A review of the genus *Oxynton* Janssens, 1951 and its transfer from the subfamily Trigonimiminae to the Stenopogoninae. *Annals of the Natal Museum* **37**: 173–181.
- 1999. Afrotropical Asilidae (Diptera) 31. A review of the genera *Stenopogon* Loew, 1847 and *Rhacholaemus* Hermann, 1907 with the description of new genera and species (Stenopogoninae). *Annals of the Natal Museum* **40**: 47–82.
- 2000. A revision of Afrotropical *Habropogon* Loew, 1847 (Diptera: Asilidae: Stenopogoninae) with the description of four new species. *Annals of the Natal Museum* **41**: 139–150.
- 2004. A review of the afrotropical genus *Gonioscelis* Schiner, 1866 (Diptera: Asilidae), with descriptions of new species. *African Invertebrates* **45**: 21–124.
- 2005. A review of afrotropical *Afroholopogon* Londt, 1994 with the description of a new genus and new species (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **46**: 203–252.
- 2006. A review of afrotropical *Rhabdogaster* Loew, 1858 including descriptions of new species (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **47**: 243–313.
- 2008. A review of the Afrotropical genus *Dogonia* Oldroyd, 1970, with new synonymy (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **49** (1): 123–128.
- 2009a. A review of Afrotropical *Sisyrondytes* Loew, 1856 (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **50** (1): 137–183.
- 2009b. A revision of the Afrotropical genus *Teratopomyia* Oldroyd, 1980 (Diptera: Asilidae: Stenopogoninae). *African Entomology* **17** (2): 192–199.
- 2010a. A review of *Daspletis* Loew, 1858 with the addition of a remarkable South African species (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **51** (1): 183–199.
- 2010b. A taxonomic analysis of Gambian Asilidae (Diptera) based chiefly on a collection assembled by W.F. Snow between 1974 and 1977. *African Entomology* **18** (2): 328–353.
- 2010c. A review of Afrotropical *Acnephalum* Macquart, 1838, including the reinstatement of *Sporadothrix* Hermann, 1907 and descriptions of two new genera (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **51** (2): 431–482.
- 2011. A review of Afrotropical *Ancylorhynchus* Berthold, 1827 (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **52** (2): 471–556.

- 2012a. A new Namibian *Empodiodes* Oldroyd, 1972 and some interesting new records of robber flies from Namibia and South Africa (Diptera: Asilidae). *African Entomology* **20** (2): 259–265.
- 2012b. *Fishermiya stuckenbergi*, a new genus and species of Afrotropical robber fly from Madagascar (Diptera: Asilidae: Stenopogoninae). *African Invertebrates* **53** (1): 221–230.
- 2013. A revision of *Bana* Londt, 1992 with the description of *Bana madiba* sp. n. from South Africa (Diptera: Asilidae: Stenopogoninae). *African Entomology* **21** (1): 24–28.
- MCALPINE, J.F. 1981. Morphology and terminology—Adults. In: McAlpine, J.F. et. al., eds, *Manual of Nearctic Diptera*. Vol. 1. Monograph 27. Ottawa: Agriculture Canada, Research Branch, pp. 9–63.
- STUCKENBERG, B.R. 1999. Antennal evolution in the Brachycera (Diptera), with a reassessment of terminology relating to the flagellum. *Studia Dipterologica* **6** (1): 33–48.