New distribution records of Afrotropical Muscidae (Diptera) based on material at the National Museum, Bloemfontein

by

Márcia S. Couri, Ashley H. Kirk-Spriggs & Adrian C. Pont
NAVORSINGE VAN DIE NASIONALE MUSEUM, BLOEMFONTEIN is an accredited journal which publishes original research results. Manuscripts on topics related to the approved research disciplines of the Museum, and/or those based on study collections of the Museum, and/or studies undertaken in the Free State, will be considered. Submission of a manuscript will be taken to imply that the material is original and that no similar paper is being or will be submitted for publication elsewhere. Authors will bear full responsibility for the factual content of their publications and opinions expressed are those of the authors and not necessarily those of the National Museum. All contributions will be critically reviewed by at least two appropriate external referees. Contributions should be forwarded to: The Editor, Navorsinge, National Museum, P.O. Box 266, Bloemfontein, 9300, South Africa. Instructions to authors appear at the end of each volume or are available from the editor.

-----------------------------------------------------------------------------------

NAVORSINGE VAN DIE NASIONALE MUSEUM, BLOEMFONTEIN is 'n geakkrediteerde joernaal wat oorspronklike navorsing publiseer. Manuskripte wat erkende studierigtings van die Museum omsluit en/of wat op die studieversamplings van die Museum gebaseer is en/of wat handel oor studies wat in die Vrystaat onderneem is, sal oorweeg word. Voorlegging van 'n manuskrip impliseer dat die materiaal oorspronklik is en geen soortgelyke manuskrip elders voorgelê is of voorgelê sal word nie. Outeurs dra die volle verantwoordelikheid vir die feitlike inhoud van hulle publikasies en menings wat uitgespreek word, is dié van die outeurs en word nie noodwendig deur die Nasionale Museum onderskryf nie. Bydraes sal vir kritiese oorweging na ten minste twee geskikte buite-beoordelaars verwys word. Manuskripte vir publikasie moet voorgelê word aan: Die Redakteur, Navorsinge, Nasionale Museum, Posbus 266, Bloemfontein, 9300, Suid-Afrika. Voorskrifte aan outeurs verskyn afsonderlik aan die einde van 'n volume of kan van die redakteur verkry word.

Vol. 29, part 1
Cover: Neomyia macroviolata (Snyder) from Bomane village, Democratic Republic of Congo.
New distribution records of Afrotropical Muscidae (Diptera) based on material at the National Museum, Bloemfontein

by

Márcia S. Couri¹, Ashley H. Kirk-Spriggs² & Adrian C. Pont³

¹Museu Nacional, Quinta da Boa Vista, São Cristóvão, Rio de Janeiro, 20.940–040, RJ and Research fellow, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Brazil (E-mail: courimarcia@gmail.com)
²Department of Entomology, National Museum, P.O. Box 266, Bloemfontein 9300 and Honorary Research Fellow, School of Life Sciences, University of KwaZulu-Natal, Private Bag X01, Scottsville 3209, South Africa (E-mail: ashley.kirk-spriggs@mamus.co.za)
³Oxford University Museum of Natural History, Parks Road, Oxford OX1 3PW, United Kingdom (E-mail: pont.muscidae@btinternet.com)

ABSTRACT


CONTENTS

INTRODUCTION ..................................................................................................................2
MATERIALS AND METHODS ...........................................................................................2
RESULTS ...............................................................................................................................2
DISCUSSION ......................................................................................................................15
ACKNOWLEDGEMENTS .................................................................................................16
REFERENCES .....................................................................................................................16

INTRODUCTION

The distribution records of Afrotropical Muscidae were last summarized in the catalogue of Pont (1980). Subsequently, a few papers have contributed to the distribution of species, such as Deeming (1987) and Dike (1989, 1990) for Afrotropical Atherigona Rondani, 1856. More recently collected material generated through “An Arthropod Survey of Madagascar’s Protected Areas (1998–2009)” (see Couri et al. 2006) and from Namibia (Couri et al. 2012) have also provided new records for both genera and species.

Material collected recently in Democratic Republic of Congo, Burundi, Kenya and South Africa, deposited at the National Museum, Bloemfontein (South Africa), was studied and identified, and has expanded our knowledge of the geographic range of 51 species summarized herein. Some additional comments are also provided where pertinent.

MATERIALS AND METHODS

The Muscidae collection at the National Museum, Bloemfontein (South Africa) consists of material collected during various dedicated expeditions in Democratic Republic of Congo (D.R.C.; Boyekoli Ebale Congo Expedition 2010), Burundi, Kenya, Namibia and South Africa.

Sampling was conducted using mainly Gressitt and Gressitt-type and Townes-type Malaise traps, supplemented with material collected in hanging traps, baited with fermenting fruit and carrion baits, and by sweeping.

The recorded distribution of species listed here is derived mainly from the Afrotropical catalogue (Pont 1980).

RESULTS

Approximately 6550 specimens were examined and completely/partially identified, giving a total of 155 determined species (about 16% of all known Afrotropical Muscidae) in 39 genera (about 66% of known Afrotropical genera), resulting in new records for 51 species, including 50 new country records.
The following 51 species, listed alphabetically, had knowledge of their distribution increased:

**Aethiopomyia williamsi** Snyder, 1951

Recorded distribution: Kenya, Malawi and Tanzania.

New record: Democratic Republic of Congo.

Material examined: *Oriental Prov.*: 1♂, 1♀, Eyolo forest, ca. 2 km E Lieki, 0.69642°N, 24.24186°E, 26–28.v.2010, A.H. Kirk-Spriggs, hanging trap, baited fermenting fruit (BECE02604, 02603), Boyekoli Ebale Congo Expedition 2010.

Remarks: *Aethiopomyia williamsi* can be identified using Zumpt’s (1969) key, based largely on the colour pattern of the body and the presence of strong setae on tergites 4 and 5 (marginal and discal rows). According to Zumpt (1969) this species, together with *A. arguta* (Karsch, 1879) and *A. steini* Curran, 1935, should be regarded as varieties of a single species, and indeed Paterson (1960: 365) had previously synonymised *A. steini* with *A. arguta*. The genus was recorded from D.R.C. on the basis of *A. gigas* (Stein, 1906) and *A. steini*.

**Anaphalantus longicornis** (Macquart, 1843)

Recorded distribution: Widespread in the Afrotropical Region, including Annobón Island (Equatorial Guinea), Comoros, Madagascar, Réunion, and Yemen.

New record: Democratic Republic of Congo.


Remarks: Currently only a single species is recognised in this genus. However, two of the three males from D.R.C. (BECE03487, 00530) cited above have different ornamentation of setae on the foreleg and may represent a new species. Other apparently distinct taxa are in The Natural History Museum (London). There is a long list of synonyms for this species. Types should be examined and their identities determined before any new taxa are described.

**Brevicosta africana** Malloch, 1921

Recorded distribution: Nigeria and Uganda.

New record: Democratic Republic of Congo.


Remarks: *Brevicosta africana* is the only representative of the genus and can be easily separated from other Afrotropical Coenosiini by the short costal vein which ends close to the apex of vein \(R_{4+5}\). Both the genus and species represent new records for D.R.C.
Coenosia canifrons Stein, 1913
Recorded distribution: Rwanda, Tanzania and Uganda.
New record: South Africa.
Remarks: Coenosia Meigen, 1826 is one of the most speciose genera of Afrotropical muscids and occurs throughout this region. Coenosia canifrons, C. fumisquama Stein and C. niveifrons Stein are small species, with a characteristic frons with margins diverging from lunule to vertex, uniformly dusted (brown in C. fumisquama and entirely silver pollinose in the males of the two other species), with no differentiation of the fronto-orbital plates and ocellar triangle. Four species have their known ranges enlarged as a result of records presented here.

Coenosia fascigera Stein, 1918
Recorded distribution: Described from Uganda, but widespread from Eastern to Southern Africa (Ethiopia, Kenya, Tanzania, Rwanda, Zimbabwe and South Africa).
New record: Democratic Republic of Congo.

Coenosia fumisquama Stein, 1913
Recorded distribution: Ethiopia and Uganda.
New records: Democratic Republic of Congo, Kenya and South Africa.
Spriggs, Malaise traps, indigenous dune forest, BMSA(D)0529. *Western Cape Prov.*: 6♀, Tsitsikamma National Park, Bloukrans Pass, Platbos at: 33°56.558′S, 23°37.566′E, 22–25.i.2009, A.H. Kirk-Spriggs and S. Otto, sweeping forest paths indigenous forest (BMSA(D)0526, 0527, 0529, 05213, 05215, 05216); 1♀, Keurbos forest, 33°54.435′S, 23°43.714′E, 28–30.iii.2009, 500 m, A.H. Kirk-Spriggs and S. Otto, sweeping indigenous montane forest, BMSA(D)07180; 2♀, Same locality as previous except: Malaise trap, indigenous montane forest, BMSA(D)08220, 08225; 1♀, Tsitsikamma National Park, Bloukrans Pass, Platbos at: 33°56.558′S, 23°37.566′E, 22–25.i.2009, A.H. Kirk-Spriggs and S. Otto, sweeping forest paths, indigenous forest, BMSA(D)05210.

**Coenosia niveifrons** Stein, 1913

Recorded distribution: Widespread in eastern (Burundi, Kenya, Uganda, Tanzania) and West Africa (Nigeria). New record: Democratic Republic of Congo.


**Curranosia prima** (Curran, 1935)


Remarks: Three of the seven described species of *Curranosia* Paterson, 1957 have been previously recorded from D.R.C. (*C. cerciformis* Zielke, 1971, *C. congoensis* Zielke, 1974 and *C. gemma* [Bigot, 1878]).

**Dichaetomyia** (*Dichaetomyia*) *sellata* Emden, 1942


Material examined: *Kayanza Prov.*: 1♀, Parc National de la Kibira, Rwegura Sector, 02°55.320°S, 29°30.067°E, 25–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, hanging trap, baited decomposing fruit, BMSA(D)28308.

Remarks: *Dichaetomyia* Malloch, 1921 is another species-rich muscid genus, occurring throughout the Afrotropical Region. Four species (one in subgenus *Dichaetomyia*, three in subgenus *Panaga*) have their distribution ranges enlarged by data in this paper.
**Dichaetomyia (Panaga) cuthertsoni** Emeden, 1942

Recorded distribution: Namibia and Zimbabwe.

New record: South Africa.

Material examined: SOUTH AFRICA: *Eastern Cape Prov.:* 1♂, 1♀, Hogsback, Redwood trail, 32°35.337′S, 26°56.135′E, 8–10.iv.2010, 1169 m, A.H. Kirk-Spriggs and V.R. Swart, Malaise trap, indigenous (mixed) Afromontane forest (BMSA(D)22623, 22624); 1♀, Hogsback, Hobbiton, 32°35.798′S, 26°57.506′E, 6–8.iv.2010, 1186 m, A.H. Kirk-Spriggs and V.R. Swart, hanging trap baited with fruit, indigenous Afromontane forest, BMSA(D)22024; 1♂, below Sleepkloof hut, 33°56.974′S, 23°54.926′E, 31.iii–1.iv.2009, 300 m, A.H. Kirk-Spriggs, Malaise traps (2), indigenous forest (stream), BMSA(D)06172.

*Free State Prov.:* 1♂, Harrismith Dist., Mooihoekkop, 28°10′50.0′S, 29°10′51.1′E, 14–16.ix.2009, ca. 1800 m, A.H. Kirk-Spriggs, Malaise traps, *Leucosedea*-dominated scrub, BMSA(D)08837.


*Western Cape Prov.:* 3♂, Bloukrantz, Platbos forest at: 33°56.558′S, 23°37.566′E, 26–28.iii.2009, 300 m, A.H. Kirk-Spriggs and S. Otto, Malaise traps (2), indigenous forest (BMSA(D)08054–08056); 6♂, 6♀, Same data, except: hanging trap, baited fermenting fruit bait (BMSA(D)08542, 08543, 08544, 08545–08552, 08554); 1♂, 1♀, Buffelsbos forest, 33°54.154′S, 23°54.714′E, 28–30.iii.2009, 500 m, A.H. Kirk-Spriggs and S. Otto, Malaise trap, indigenous montane forest, BMSA(D)08083.

**Dichaetomyia (Panaga) fumaria** (Stein, 1906)

Recorded distribution: West Africa (Cameroon, Ghana, Liberia and Sierra Leone); Democratic Republic of Congo and Uganda.

New record: Kenya.

Material examined: *Central Prov.:* 2♂, 1♀, Katura Forest, Nairobi at: 01°14.504′S, 36°49.452′E, 23.iv.2011, 1720 m, A.H. Kirk-Spriggs, sweeping in shaded mixed upland indigenous forest (BMSA(D)32415, 32416, 32418); *Eastern Prov.:* 1♀, Njuki-Ini Forest station, 00.51660°S, 37°41843°E, 19–20.iv.2011, 1455 m, A.H. and M.K. Kirk-Spriggs, Malaise traps, remnant indigenous upland forest, BMSA(D)32694.

**Dichaetomyia (Panaga) immaculiventris** Malloch, 1930

Recorded distribution: Ethiopia, ?Malawi, Mozambique, Tanzania and Zimbabwe.

New records: Burundi and South Africa.

**Dimorphia latifrons** Malloch, 1929  
Recorded distribution: Cameroon, Ethiopia, Kenya, Malawi and Nigeria.  
New record: Burundi.  
Material examined: **Kayanza Prov.**: 1♂, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)24748.

**Graphomya eustolia** (Walker, 1849)  
Recorded distribution: Described from Sierra Leone, widespread in West and East Africa.  
New record: Democratic Republic of Congo.  
Remarks: This is a beautiful species, with three black vittae contrasting with the vivid yellow scutellum. Unlike other species of *Graphomya* Robineau-Desvoidy, 1830, *G. eustolia* sometimes has a short or long anterior katepisternal seta, as in the above-mentioned male from D.R.C.

**Gymnodia platypozeoides** Emeden, 1951  
Recorded distribution: Cameroon, Democratic Republic of Congo, Kenya and Uganda.  
New record: South Africa.  

**Haematobosca uniseriata** (Malloch, 1932)  
Recorded distribution: Botswana, Mozambique, Namibia, South Africa and Zimbabwe.  
New record: Namibia.  
Material examined: **Caprivi Prov.**: 1♂, Katima Mulilo Dist., near Mutonga village, 17°43.747′S, 24°32.384′E, 20–23.i.2012, 930 m, A.H. Kirk-Spriggs, Malaise traps, indigenous sand forest, BMSA(D)34768.

**Hydrotaea fuliginosa** Robineau-Desvoidy, 1830  
Recorded distribution: Democratic Republic of Congo, Mauritius and South Africa.  
New record: Namibia.  
Material examined: **Caprivi Prov.**: 1♀, Katima Mulilo Dist., near Mutonga village, 17°43.747′S, 24°32.384′E, 20–23.i.2012, 930 m, A.H. Kirk-Spriggs, Malaise traps, indigenous sand forest, BMSA(D)34422.
Remarks: All seven *Hydrotaea* Robineau-Desvoidy, 1830 species represented in the collection have provided new distribution data. Some of these species were previously known from only one country.

*Hydrotaea fumifera* (Walker, 1853)
Recorded distribution: Northeast Africa, South Africa and Yemen.
New record: Burundi.
Material examined: *Kayanza Prov.*: 1♂, 4♀, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, hanging trap, baited decomposing fish, BMSA(D)28221, 28228, 28231, 28232, 28254.

*Hydrotaea latitarsis* Emden, 1943
Recorded distribution: Uganda.
New record: Kenya.
Material examined: *Rift Valley Prov.*: 1♀, Timboroa Forest (compt. 9), 00°04.092′N, 35°30.909′E, 14–16.iv.2011, 2628 m, A.H. and M.K. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)31924.

*Hydrotaea longiciliata* Emden, 1943
Recorded distribution: Uganda.
New record: South Africa.
Material examined: *KwaZulu-Natal Prov.*: 1♂, main road at Ndumo Game Reserve, 26°54.288′S, 32°17.974′E, 4–8.xi.2009, A.H. Kirk-Spriggs, Malaise traps, sand and broad-leaved deciduous forest, BMSA(D)18054.

*Hydrotaea nigribasis* Stein, 1913
Recorded distribution: South Africa and Zimbabwe.
New records: Burundi and Kenya.

*Hydrotaea ochribasis* Emden, 1943
Recorded distribution: Kenya.
New record: Burundi.
Material examined: *Kayanza Prov.*: 2♀, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 22–24.xi.2010, 2237 m, A.H. Kirk-Spriggs, hanging trap, baited decomposing fish, BMSA(D)28225, 28226.
Hydrotaea polita Emden, 1943
Recorded distribution: Saudi Arabia, South Africa, Tanzania and Uganda.
New records: Kenya and Namibia.
Remarks: Specimens from Namibia are small, measuring ca. 2 mm in body length, while the single specimen from Kenya is larger, measuring ca. 3 mm, but diagnostic characters of the species are consistent.

Limnophora melanota Emden, 1951
Recorded distribution: Democratic Republic of Congo, Ethiopia, Kenya and Uganda.
New record: South Africa.
Remarks: Limnophora Robineau-Desvoidy, 1830 is another species-rich muscid genus widespread in the Afrotropical Region. The identified material includes new records for six species.

Limnophora obsignata Emden, 1951
Recorded distribution: Widespread in the Afrotropical Region, including Madagascar and Socotra, and the western Palaearctic Region.
New record: Burundi.
Material examined: Kayanza Prov.: 4♀, Parc National de la Kibira, Rwengura Sector, 02°55.320′S, 29°30.067′E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)25239, 25253, 25747, 28095.

Limnophora ochribasis Emden, 1951
New record: Burundi.
Material examined: Bururi Prov.: 1♀, Réserve Naturelle Forestière de Kigwena, 04°05.949′S, 29°30.455′E, 17–20.xi.2010, 810 m, A.H. Kirk-Spriggs, Malaise traps, circumguinean forest, BMSA(D)24565; 1♀, Réserve Naturelle de Rumonge, 04°00.940′S, 29°29.560′E, 17–20.xi.2010, 900 m, A.H. Kirk-Spriggs, Malaise traps, Brachystegia woodland, BMSA(D)23864.
**Limnophora parallelifrons** Emeden, 1951


**Limnophora stragula** (Séguy, 1950)


**Limnophora trigemina** Stein, 1913


Remarks: The two subspecies (ssp. *trigemina s. str.* and ssp. *vumbana* Emeden) differ from one another by the pattern of the scutum and the colour of the calypters. The entire series from Burundi is assigned to ssp. *trigemina* as the scutum is dark with a few grey pollinose areas on the posterior part of the postpronotum and anterior part of notopleuron, but also with a thin silver prescutellar fascia. The calypters are yellow. The colour pattern in the present series is entirely homogeneous.

**Lispe ambigua** Stein, 1913


**Lispe sexnotata** Macquat, 1843

Recorded distribution: Madagascar and Réunion.

New record: South Africa.


**Lispocephala pectinata** (Stein, 1900)

Recorded distribution: Madagascar, Socotra and Tanzania; Oriental and Australasian Regions as far east as Society Islands (French Polynesia).

New record: South Africa.


**Morellia longiseta** Emden, 1939

Recorded distribution: Democratic Republic of the Congo and Uganda.

New record: South Africa.


**Myospila cuthbertsoni** Snyder, 1940

Recorded distribution: Kenya, Rwanda, Uganda and Zimbabwe.

New record: South Africa.

**Neomyia macroviola** (Snyder, 1951)
Recorded distribution: Equatorial Guinea, Ghana, Liberia and Togo.
New record: Democratic Republic of Congo.

**Phaonia cuthbertsoni** Curran, 1938
Recorded distribution: Zimbabwe.
New record: Kenya.
Material examined: **Rift Valley Prov.**: 4♂, 4♀, Timboroa Forest (compt. 9), 00°04.092′N, 35°30.909′E, 14–16.iv.2011, 2628 m, A.H. and M.K. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)31864, 31870, 31871, 31887, 31894, 31895, 31904, 31923.
Remarks: Most Afrotropical species of *Phaonia* Robineau-Desvoidy, 1830 are known from South Africa and a few other countries, but some, such as the first three *Phaonia* species recorded here, were previously known from only one country.

**Phaonia metallica** Zielke, 1970
Recorded distribution: Zimbabwe.
New records: Burundi and South Africa.
Material examined: **BURUNDI**: **Kayanza Prov.**: 1♂, 3♀, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)24729, 24737, 25727, 28112. **SOUTH AFRICA**: **Eastern Cape Prov.**: 1♀, Hogsback, Hobbiton, 32°35.798′S, 26°57.506′E, 6–8.iv.2010, 1186 m, A.H. Kirk-Spriggs and V.R. Swart, Malaise trap, indigenous Afromontane forest, BMSA(D)22519.

**Phaonia parallelifrons** Emeden, 1943
Recorded distribution: Burundi, Uganda and Zimbabwe.
New record: South Africa.
Material examined: **Free State Prov.**: 1♂, Harrismith Dist., Scotland farm, 27°58′59.5″S, 29°37′09.8″E, 26–29.iii.2012, A.H. Kirk-Spriggs, Malaise traps, dense *Leucosedea*-dominated scrub, BMSA(D)35180.

**Phaonia varians** (Bigot, 1885)
Recorded distribution: Widespread throughout Afrotropical Region (including Annobón Island and Mauritius).
New record: Burundi.
Material examined: **Kayanza Prov.**: 1♂, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 25–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, hanging trap, baited decomposing fish, BMSA(D)28227.
**Prostomoxys saegerae** (Zumpt, 1969)
Recorded distribution: Democratic Republic of Congo.
New record: South Africa.
Remarks: *Prostomoxys* Zumpt, 1973 comprises a single species, *P. saegerae*, until now known only from D.R.C. It represents the first record of this genus and species for South Africa.

**Pseudohelina cockerelli** (Emden, 1951)
Recorded distribution: Democratic Republic of Congo and Uganda.
New record: Burundi.
Material examined: *Kayanza Prov.:* 1♂, 3♀, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)24735, 24745, 24757, 28306.

**Pseudohelina phaeoxantha** (Emden, 1951)
Recorded distribution: Tanzania and Uganda.
New records: Burundi and Kenya.
Material examined: BURUNDI: *Kayanza Prov.:* 3♀, Parc National de la Kibira, Rwegura Sector, 02°55.320′S, 29°30.067′E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)24715, 24727, 24740. KENYA: *Rift Valley Prov.:* 1♂, 1♀, Timboroa Forest (compt. 9), 00°04.092′N, 35°30.909′E, 14–16.iv.2011, 2628 m, A.H. and M.K. Kirk-Spriggs, sweeping, indigenous Afromontane forest, BMSA(D)32669, 32677.

**Pygophora acromiata** (Speiser, 1910)
Recorded distribution: Widespread from West to East Africa, south to Malawi and Mozambique.
New records: Burundi and South Africa.

**Pyrellia difficilis** Zielke, 1971
Recorded distribution: Ghana, Kenya, Tanzania and Uganda.
New record: South Africa.
Material examined: *Free State Prov.:* 1♂, Harrismith Dist., Scotland farm, 27°58′59.5″S, 29°37′09.8″E, 26–29.iii.2012, A.H. Kirk-Spriggs, Malaise traps, dense *Leucosedea*-dominated scrub, BMSA(D)35124.
**Pyrellina abdominalis** Zielke, 1971

Recorded distribution: Tanzania and Uganda.
New record: Burundi.
Material examined: *Kayanza Prov.:* 9♀, Parc National de la Kibira, Rwegura Sector, 02°55.320'S, 29°30.067'E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)24711, 24712, 24721–24724, 24730, 24731, 24739; 1♂, 2♀, Same data, except: hanging trap baited decomposing fish, BMSA(D)28222–28224; 3♂, 1♀, Same data, except: hanging trap baited fermenting fruit, BMSA(D)28290–28292, 28302.
Remarks. These specimens represent the first records of the genus *Pyrellina* Malloch, 1923 from Burundi.

**Pyrellina distincta** (Walker, 1853)

Recorded distribution: Widespread throughout Afrotropical Region, including Fernando Póo and Principe Islands.
New record: Burundi.
Material examined: *Bururi Prov.:* 1♂, Réserve Naturelle Forestière de Kigwena, 04°05.949'S, 29°30.455'E, 17–20.xi.2010, 810 m, A.H. Kirk-Spriggs, Malaise traps, circumguinean forest, BMSA(D)24087.

**Pyrellina marsya** (Walker, 1849)

Recorded distribution: South Africa and Zimbabwe.
New record: Burundi.

**Pyrellina versatilis** (Villeneuve, 1916)

Recorded distribution: Democratic Republic of Congo, Kenya, Rwanda and Uganda.
New record: Burundi.
Material examined: *Kayanza Prov.:* 2♀, Parc National de la Kibira, Rwegura Sector, 02°55.320'S, 29°30.067'E, 21–26.xi.2010, 2237 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest (BMSA(D)24752, 24754); 5♀, Same data, except: 25–26.xi.2010, hanging trap, baited decomposing fruit, BMSA(D)28285, 28289, 28293, 28295, 28305.

**Stomoxys inornatus** Grünberg, 1906

Recorded distribution: Widespread from West to East Africa.
New record: Burundi.

**Stomoxys varipes** Bezzi, 1907

Recorded distribution: West and East Africa, Malawi and Zimbabwe.
New record: South Africa.
Material examined: *Eastern Cape Prov.:* 1♂, Hogsback, Never Daunted, 32°35.725'S, 26°55.873'E, 28–29.iii.2011, 1138 m, A.H. Kirk-Spriggs, Malaise traps, indigenous Afromontane forest, BMSA(D)31711.
Xenomyia bispina Emden, 1951

Recorded distribution: Uganda.
New record: South Africa.
Remarks: Six species of Xenomyia Malloch, 1921 are represented in the collection, all from South Africa.

DISCUSSION

Some of the new records have enlarged the distribution ranges of species previously known only from a single country, and have indicated that some genera may be more speciose in certain countries. For example, six species of Limnophora Robineau-Desvoidy, 1830 have now been found in Burundi, where formerly only L. perfidodes Emden, 1951 was recorded.

The new records of Prostomoxys saegerae Zumpt, 1973 from KwaZulu-Natal (South Africa) and S. varipes Bezzi, 1907 from Eastern Cape (South Africa) are of medical and veterinary significance, as these two species belong to the stomoxyine biting muscid flies. The same applies to the two widespread species of Stomoxys Geoffroy, 1762 for which new records are listed above, namely S. inornatus Grünberg, 1906 and S. varipes Bezzi, 1907, even though their individual biologies have yet to be studied.

Besides the new records, the study of this new material has indicated that the diversity of some genera, such as Coenosia Meigen, 1826 and Helina Robineau-Desvoidy, 1830, is much higher than appears at present. There are about 40 undetermined species each in Coenosia and Helina, mainly from South Africa, in the collection of the National Museum, Bloemfontein (South Africa). The KwaZulu-Natal Museum (Pietermaritzburg, South Africa) and The Natural History Museum (London, United Kingdom) also have numerous specimens of unidentified Afrotropical muscids.

The material also includes undetermined species of other genera, such as Dichaetomyia Malloch, 1921 (especially the subgenus Panaga Curran, 1928) and Limnophora Robineau-Desvoidy, 1830, some of which may represent undescribed species.

The ongoing study of this rich material and also of new collections from other areas is necessary for a fuller understanding of the distribution of the Afrotropical Muscidae.
ACKNOWLEDGEMENTS

MSC is grateful to “Conselho Nacional de Desenvolvimento Científico e Tecnológico” (CNPq, 200963/2012-0), an agency of the Brazilian Government fostering scientific and technological development, for a grant to visit and work in the collection of the National Museum, Bloemfontein. AHK-S acknowledges the National Research Foundation (South Africa) for Incentive Funding for Rated Researchers, which allowed the sampling of some specimens used in this study. Claudio J.B. de Carvalho (UFPR, Curitiba, Brazil) and an anonymous reviewer are thanked for their helpful comments on the manuscript.

REFERENCES


EDITORIAL COMMITTEE


Consulting Editors: Prof. C. Chimimba (Department of Zoology and Entomology, University of Pretoria, South Africa); Dr J. Deacon (South African Heritage Resources Agency, Cape Town, South Africa – retired); Dr A. Dippenaar-Schoeman (ARC – Plant Protection Research Institute, Pretoria, South Africa); Dr A. Kemp (Northern Flagship Institution, National Museum of Natural History, Pretoria, South Africa – retired); Dr D.T. Rowe-Rowe (Ezemvelo KZN Wildlife, Pietermaritzburg, South Africa – retired); Prof. B.S. Rubidge (Bernard Price Institute for Palaeontological Research, University of the Witwatersrand, Johannesburg, South Africa); Prof. A.E. van Wyk (Department of Botany, University of Pretoria, South Africa); Prof. A. Wessels (Department of History, University of the Free State, Bloemfontein, South Africa).

Orders to: National Museum, P.O. Box 266, Bloemfontein 9300, South Africa
E-mail: library@nasmus.co.za
VOLUME 27 2011

Part 1: De Ruiter, D.J., Churchill, S.E., Brophy, J.K. & Berger, L.R. Regional Survey of Middle Stone Age Fossil Vertebrate Deposits in the Virginia-Theunissen area of the Free State, South Africa ................................................................. 1

Part 2: Lotz, I.N. The genus Cheiracanthium (Araneae: Miturgidae) in the Afrotropical Region. 3. Description of four new species ................................................................. 21


VOLUME 28 2012

Deel 1: Havenga, S. & Wessels, A. “Exemplair” – Victoriaanse merkappe met spesifieke verwysing na voorbeelde in die versameling van die Nasionale Museum, Bloemfontein ................................................................. 1


Deel 4: Haasbroek, H. Die rol van Charles (Charlie) Gustav Fichardt in Bloemfontein 1891-1923 ........................................ 49