

Supporting information: An overview of the horseflies of South Africa – centralising and assessment of major collections for spatiotemporal analysis (Diptera: Tabanidae)

The following tables (S1-S8) comprise a list of the species as recorded from South Africa. All new additions to the species list, specifically biome endemic species represented by two or less records are briefly discussed following the tables based on feedback received from museum curators supplemented by literature. The identification of the specimens housed in NMSA were most likely determined the by renowned Dipterologist and author of the previous review of Tabanidae in South Africa, Pam Stuckenberg (né Usher) (pers. comm. J Midgley), however, no determiner labels are present on the specimens and cannot be assured.

A total of 203 species are here recorded with South Africa as a distribution. Additions to the list of Usher (1972) are either newly described species, taxonomic status of taxa that underwent revision, or new distributions of species described elsewhere in Africa. Some taxa did not have precise localities and was omitted by Usher. Some of those taxa are also discussed here. *Rhigioglossa (Perisilvius) algoensis* Oldroyd, 1957, *Philoliche (Ommatiosteres) nitida* Usher, 1968, *Cidistomyia (Amanella) atra* Oldroyd, 1954, *C. (A.) minor* Oldroyd, 1954, *Limata facialis* Oldroyd, 1954, *L. laevifrons* (Loew 1858) and *Tabanus denschamii* Austen, 1908 was present in the Usher (1972) list, but in the collated database, these are all denoted with a superscript “a”.

The distribution of common and widely distributed species from Usher (1972) were indicated by negatively assigning biomes (i.e. species not present) by placing the distribution in braces, “{}”.

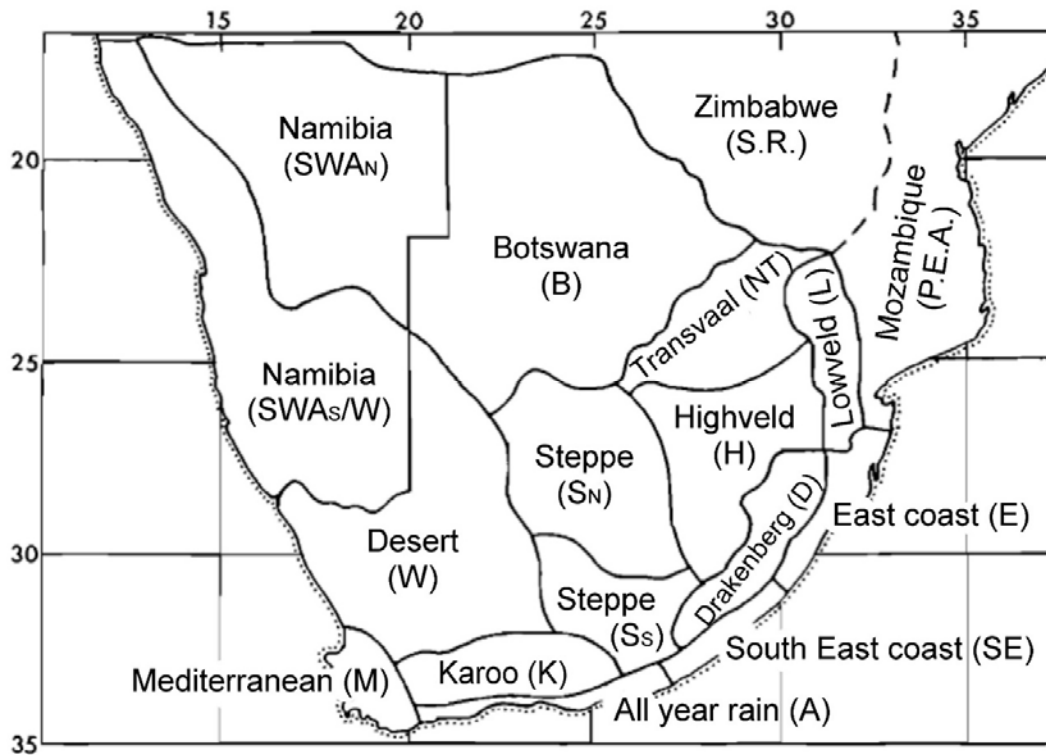


Figure S1: Climatic regions used by Usher (1972) (M: Mediterranean climate; A: Rainfall throughout the year; K: Little and Great Karoo; W: Desert and poor steppe; SS and SN. Southern and northern steppes respectively; SE: South-east coastal region; E: East coastal region; D: Drakensberg region; L: The Transvaal lowveld; H: The highveld; NT: northern Transvaal; SWAs/W: Namibia; SWAn: Namibia; B: Botswana; S.R.: Zimbabwe; P.E.A.: Mozambique).

Section S1: Adersinae and Scepisidinae: The taxonomy of this group remains unresolved (Morita *et al.* (2016). See main text for a full explanation. Here species are treated as currently accepted.

Table S1: Species list of Adersinae and Scepisidinae of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal.

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)
Adersiinae															
Adersiini															
<i>Adersia</i>															
<i>ambigua</i> Oldroyd, 1957	•							•						3	A
<i>callani</i> Oldroyd, 1957	•							•						5	A, SE, E
<i>oestroides</i> Karsch, 1888	•	•		•		•		•					1	19	A, SE, E
Scepisidinae															
Scepisidini															
<i>Braunsiomyia</i>															
<i>cinerea</i> Surcouf, 1921	•	•					•							6	W, A, E

Section S2: Chrysopsisinae

Table S2: Species list of the Bouvieromyiini of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal).

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)
Chrysopsisinae															
Bouvieromyiini															
Rhigioglossa															
<i>(Dasycompsa) apiformis</i> Neave, 1915											□			1	New
<i>(Mesomyia) aurantiaca</i> Oldroyd, 1957		•		•		•	•		•	•			1	12	M
<i>(Mesomyia) decora</i> Macquart, 1850									•	•	•			17	SN, E
<i>(Mesomyia) hirsuta</i> Ricardo, 1920		•												6	M
<i>(Mesomyia) munroi</i> Chainey, 1987	□													1	New ¹
<i>(Mesomyia) namaquina</i> Oldroyd, 1957				•										7	W
<i>(Mesomyia) smaragdops</i> Manning, 1991								□						1	New ¹
<i>(Mesomyia) turneri</i> Austen, 1937								□						2	D
<i>(Perisilvius) algoensis</i> Oldroyd, 1957 ^a															A
<i>(Perisilvius) andrewesi</i> Chainey, 1987								□						2	New ¹
<i>(Perisilvius) anomala</i> Oldroyd, 1957								•	•					4	E
<i>(Perisilvius) argentea</i> Oldroyd, 1957									□					3	SE
<i>(Perisilvius) barnardi</i> Oldroyd, 1957		•						•						2	SE
<i>(Perisilvius) callosa</i> Ricardo, 1920		•						•						11	E (as <i>M. callosus</i>)

<i>(Perisilvius) confluens</i> Loew, 1858		•		•		•		3	E
<i>(Perisilvius) contraria</i> Austen, 1937					•	•		17	SS, D (as <i>M. contrarius</i>)
<i>(Perisilvius) coriaria</i> Oldroyd, 1957	□							2	M (As <i>M. conriarius</i>)
<i>(Perisilvius) designata</i> Oldroyd, 1957	□							6	M (As <i>M. designatus</i>)
<i>(Perisilvius) divergens</i> Oldroyd, 1957					•	•		6	E
<i>(Perisilvius) lineacallosa</i> Chainey, 1987						□		3	New ¹
<i>(Perisilvius) marieps</i> Usher, 1965					•	•		2	L
<i>(Perisilvius) mossambicensis</i> Dias, 1955							•	7	E
<i>(Perisilvius) provincialis</i> Oldroyd, 1957	□							5	M
<i>(Perisilvius) redunda</i> Oldroyd, 1957		□						1	W (as <i>M. redundus</i>)
<i>(Perisilvius) tinleyi</i> Usher, 1965						•		4	E
<i>(Pronopes) constrictifrons</i> Oldroyd, 1957	□							1	M
<i>(Pronopes) flavipes</i> Hine, 1923	□							1	K, A
<i>(Pronopes) nigricans</i> Loew, 1858		□						1	New
<i>(Pseudoscaptia) costata</i> Loew, 1860	•	•	•	•			•	19	M, W, K, SS, H
<i>(Pseudoscaptia) flavibasalis</i> Chainey, 1987			•	•				4	New ¹
<i>(Pseudoscaptia) milleri</i> Chainey, 1987		•		•				6	New ¹
<i>(Rhigioglossa) capensis</i> Chainey, 1987		•		•				21	New ¹
<i>(Rhigioglossa) edentula</i> Wiedemann, 1828		•	•	•	•			56	M, W, K
<i>(Rhigioglossa) nitens</i> Chainey, 1987		•		•				8	New ¹
<i>(Rhigioglossa) obtundata</i> Oldroyd, 1957						□		1	M
<i>(Rhigioglossa) pusilla</i> Schiner, 1868						□		1	W (as <i>E. pusillus</i>)

^a Species not present in collated database, but present in Usher (1972)

The Bouvieromyiini is represented by a single genus in South Africa, *Rhigioglossa*, subdivided into six subgenera. The subgenus *Dasycompsa* is here recorded as occurring in South Africa. *R. (D.) apiformis* is represented by a single specimen housed in Skukuza. The collection was identified by JE Chainey (pers. comm. LEO Braack). According to Oldroyd, the species is possibly an overlooked species with “tree-top habits”, widespread through Africa occupying patches of wooded savannah outside of forests. *R. (M.) munroi* is represented by a single specimen housed in NMSA, the holotype, collected in 1923 in the Port Elizabeth area of the Eastern Cape (Chainey 1987). *R. (M.) smaragdops* is known only from the holotype, collected in 1983 in the Cobham Forest Reserve, Drakensberg, housed in NMSA. *R. (M.) turneri* has been collected on two separate occasions as seems to be a confirmed biome endemic, but rarely collected species. (*Perisilvius*) *algoensis* is not present in the database which is only known from the description from a single male specimen in Naturhistorisches Museum Wien (Vienna Museum, NHMW). *R. (P.) andrewesi* is known only from the male holotype housed in BMNH collected in 1957 from Ongeluksnek (now Malekgonyane wildlife reserve), Drakensberg. *R. (P.) coriaria* has been collected on two separate occasions in Kirstenbosch, Cape Town. Usher (1972) did not include *R. (P.) nigricans* due to lack of locality information. The holotype is from Caledon, Western Cape (BMNH).

Table S3: Species list of the Chrysopsini of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN:** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal. Braces {} indicate the area where the species DO NOT occur.

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)
Chrysopsinae															
Chrysopsini															
Chrysops															
<i>calidus</i> Walker, 1848	•	•												2	A? (As <i>C. calida</i>)
<i>funebri</i> Austen, 1907								□						1	New
<i>fuscipennis</i> Ricardo, 1902									•		•			4	E, NT
<i>inflaticornis</i> Austen, 1910	•													6	SE
<i>laniger</i> Loew, 1860							•	•	•		•		1	7	A, D
<i>laticeps</i> Austen, 1910								•			•			7	E
<i>longicornis</i> Macquart, 1838						•		•						22	SE, E

<i>obliquefasciatus</i> Macquart, 1838	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	85	{M, W, K, SE}
<i>streptobalius</i> Speiser, 1912																4	New
<i>woodi</i> Neave, 1915																1	New

Chrysops funebris is thought to occur in forests in Eastern Africa, here a record from Umfolosi (De Waal farm) in KwaZulu Natal adds the species to the South African fauna. Small areas with indigenous forests are common in the IOB. High enough locality resolution could unfortunately not indicate if this is a forest species in South Africa. *Chrysops streptobalius*, according to Oldroyd (1957), occurs only in Eritrea and Somalia (northeastern Africa). This species is regarded as new to South Africa with four records from four localities in South Africa. All specimens are housed in NMSA. Usher (1972) only make mention to the "woodi" group with a single species *C. calidus* Walker, 1848 from the Grahamstown area, South Africa. Here a single specimen, identified as *Chrysops woodi* is from Hatherley, Gauteng, housed in NMSA.

Table S4: Species list of the Rhinomyzini of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal).

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)	
Chrysopsinae																
Rhinomyzini																
<i>Jashinea</i>																
<i>lugubris</i> Austen, 1937						•			•					3	L	
<i>pertusa</i> Loew, 1858			•				•			•	•			7	E	
<i>Oldroydiella</i>																
<i>fallax</i> Macquart, 1846									□					12	E	
<i>Sphecodemyia</i>																
<i>lamborni</i> Austen, 1937											□			4	E	
<i>natalensis</i> Oldroyd, 1957								•			•			4	E	
<i>Tabanocella (Tabanocella)</i>																

<i>bilineata</i> Oldroyd, 1957															10	D
<i>denticornis</i> Wiedemann, 1828	•	•	•		•	•	•	•		•					170	A, SE, E, D, H, L
<i>immaculata</i> Oldroyd, 1957									□						2	SE
<i>schofieldi</i> Usher, 1965									□						5	E
<i>zoulouensis</i> Ricardo, 1914						•	•	•		•					14	E, D, L
<i>Thriambeutes</i>																
<i>v-albus</i> Surcouf, 1908															6	L

According to Oldroyd (1957), *Tabanocella (Tabanocella) denticornis* form *natalensis* Wiedeman 1828 is the predominant form in southern Africa. Usher (1972) in turn argues that a melanic *natalensis* form is mainly present in KwaZulu Natal and Pondoland, but that intermediates are abundant. Here all records were treated as *Tabanocella (Tabanocella) denticornis*.

Section 3: Pangoniinae

Table S5: Species list of the Pangoniinae of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal. Braces {} indicate the area where the species DO NOT occur.

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)	
Pangoniinae																
Pangoniini																
<i>Stuckenbergina</i>																
<i>africana</i> Oldroyd, 1962		□												6	M	
<i>callani</i> Oldroyd, 1962						□								2	E	
Philolichini																
<i>Philoliche</i>																
<i>(Buplex) basalis</i> Oldroyd, 1957		□												3	M, W	
<i>(Buplex) brachyrrhyncha</i> Bigot, 1892		□												5	New	

<i>(Buplex) dissimilis</i> Ricardo, 1914	•	•							6	W		
<i>(Buplex) fuscinervis</i> Austen, 1920						□			4	SE		
<i>(Buplex) nigricornis</i> Bigot, 1892 ^a										M (as <i>P. (B.) brincki</i>)		
<i>(Buplex) praeterita</i> Oldroyd, 1957						□			4	M		
<i>(Buplex) suavis</i> Loew, 1858	•	•				•	•	•	•	14	K, SE, H, L, NT	
<i>(Buplex) subfascia</i> Walker, 1854		•	•	•	•	•	•	•	•	32	E, L	
<i>(Buplex) vittata</i> (Thunberg, 1827)									□	9	M, A	
<i>(Dorcaloemus) auricoma</i> Austen, 1911										1	New	
<i>(Dorcaloemus) medialis</i> Oldroyd, 1957							•	•		4	New	
<i>(Dorcaloemus) silverlocki</i> Austen, 1912							•	•		4	E, NT	
<i>(Maverica) spiloptera</i> Wiedemann, 1821		•	•					•		16	M, W, K	
<i>(Ommatiosteres) angulata</i> Fabricius, 1805	•	•	•	•	•			•		88	M, W, K, A	
<i>(Ommatiosteres) atricornis</i> Wiedemann, 1821	•	•	•	•			•		•	45	W, A	
<i>(Ommatiosteres) caffra</i> Macquart, 1847		•					•			11	M, SS, SN, H	
<i>(Ommatiosteres) hispanica</i> Kroker, 1921	•	•		•						6	New ¹	
<i>(Ommatiosteres) ingrata</i> Oldroyd, 1957		•	•							12	M, K	
<i>(Ommatiosteres) lateralis</i> Fabricius, 1805	•	•	•	•	•			•		81	M, W, K, A	
<i>(Ommatiosteres) londti</i> Chainey, 1983										2	New ¹	
<i>(Ommatiosteres) marriotti</i> Usher, 1967									□	2	D	
<i>(Ommatiosteres) nitida</i> Usher, 1968 ^a											A	
<i>(Ommatiosteres) peringueyi</i> Chainey, 1983									□	2	New ¹	
<i>(Ommatiosteres) stuckenbergi</i> Chainey, 1983								•	•	8	New ¹	
<i>(Phara) andrenoides</i> Usher, 1965							•			7	D	
<i>(Phara) bivirgulata</i> Austen, 1937							•		•	16	E, D	
<i>(Phara) chrysostigma</i> Wiedemann, 1828									□	2	New	
<i>(Phara) crassipalpis</i> Macquart, 1838									□	1	A	
<i>(Phara) flavipes</i> Macquart, 1838									□	1	A	
<i>(Phara) fuscipennis</i> Macquart, 1855		•	•							1	10	M
<i>(Phara) melanopyga</i> Wiedemann, 1819	•	•				•	•			23	SS, H, NT	

<i>(Phara) nobilis</i> Wiedemann, 1830	•											4	A, SS, D, NT	
<i>(Phara) oreophila</i> Usher, 1967												2	D	
<i>(Phara) quinquemaculata</i> Austen, 1908	•				•	•	•	•				13	SE, E, D, NT	
<i>(Phara) rubramarginata</i> Macquart, 1855		•	•	•	•	•	•	•	•			29	M, W, K, A, SE, E, NT	
<i>(Phara) tertiomaculata</i> Oldroyd, 1957												2	L	
<i>(Phara) tumidifacies</i> Austen, 1937												11	K, SE, H, L, NT	
<i>(Phara) turpis</i> Usher, 1968												1	A	
<i>(Philoliche) aethiopica</i> Thunberg, 1789	•	•	•	•	•	•	•	•	•	•	1	1	220	{M, SN}
<i>(Philoliche) elegans</i> Bigot, 1892	•	•	•	•								1	31	W, K, A
<i>(Philoliche) formosa</i> Austen, 1920						•	•						12	SS, E, L
<i>(Philoliche) gulosa</i> Wiedemann, 1828	•	•	•	•		•					1		63	M, W, K, A?
<i>(Philoliche) rondani</i> Bertoloni, 1861	•		•	•	•	•	•	•	•	•			216	New ¹
<i>(Philoliche) rostrata</i> Linnaeus, 1764		•		•	•						?		72	M, W, K
<i>(Philoliche) rubiginosa</i> T.S-Dias, 1966								•					10	New
<i>(Philoliche) umbratipennis</i> (Ric., 1900)	□												13	New ¹
<i>(Returneria) adjuncta</i> Walker, 1848		•		•									5	M, K
<i>(Returneria) alternans</i> Macquart, 1855	•	•		•							1		30	M, W, A

^a Species not present in collated database, but present in Usher (1972)

Usher (1972) mentions that no precise locality data for two specimens (only as Cape of Good Hope) was available for *P. (Buplex) brachyrrhyncha* at the time of publication. Here five different records place the species only within fynbos and could therefore be regarded as a biome endemic species. *P. (Buplex) nigricornis* was removed from synonymy under *P. (Ommatiosteres) lateralis* and was assigned as a senior synonym of *P. (Buplex) brincki* (Chainey 1983). The distribution of *P. (Dorcaloemus) auricoma* is thought to be in the DRC, through to Tanganyika for “unknown limit” (Oldroyd, 1957). Here a single specimen from Mkuze game reserve in KwaZulu Natal is housed in NMSA. The distribution of *P. (D.) medialis*, previously only recorded in southern Zimbabwe and Mozambique now extends into South Africa in the biomes bordering both countries. Following the revision of Chainey (1983), the species *P. (O.) londti*, *P. (O.) peringueyi* and *P. (O.) stuckenbergi* were described as new and, *P. (O.) hispanica* was separated from *P. (O.) lateralis* and its status was revised to species. All of these are thus new additions to the list. *P. (O.) nitida* was confirmed as a species occurring in South Africa by Usher (1972), but no record is present in the database. *P. (Phara) chryso stigma* was not included by Usher (1972) due to only two dateless specimens from “The Cape”. The species is here confirmed as a Fynbos endemic with two additional specimens for Elandsbay and Plumstead. *P. (Philoliche) rondani* and *P. (P.) umbratipennis* was separated from *P. aethiopica* and reinstated as a species by Morita *et al.* (2008) and therefore also new to the list. *P. (P.) rubiginosa* was confirmed as a species occurring in South Africa along the eastern side of the escarpment by Morita *et al.* (2008).

Section 4: Tabaninae

Table S6: Species list of the Diachlorini of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal.

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)
Tabaninae															
Diachlorini															
Cidistomyia															
<i>(Amanella) angusta</i> Oldroyd, 1954		□												1	A
<i>(Amanella) atra</i> Oldroyd, 1954 ^a															M
<i>(Amanella) emergens</i> Oldroyd, 1957	●	●					●				●			11	A
<i>(Amanella) furcata</i> Oldroyd, 1954	●	●												9	M
<i>(Amanella) ignota</i> Usher, 1965											□			3	L
<i>(Amanella) ingridina</i> Usher, 1965								●			●			2	E
<i>(Amanella) medialis</i> Oldroyd, 1954							●				●			25	E, D, L
<i>(Amanella) minor</i> Oldroyd, 1954 ^a															M
<i>(Amanella) nana</i> Wiedemann, 1821		●				●								3	A, SE
<i>(Amanella) pondo</i> Oldroyd, 1954											□			4	SE
<i>(Amanella) shaka</i> Usher, 1970											□			2	D
<i>(Amanella) sulcipalpus</i> Loew, 1858		□												5	A
<i>(Amanella) zimbiti</i> Usher, 1970												□		1	D
Limata															
<i>bedfordi</i> Oldroyd, 1954								●			●			6	E
<i>capensis</i> Wiedemann, 1821		●		●										24	M, W, K, A
<i>facialis</i> Oldroyd, 1954 ^a															M
<i>laevifrons</i> (Loew 1858) ^a															No locality

<i>miranda</i> Usher, 1968															1	D
<i>parafacialis</i> Oldroyd, 1957	□														9	A
<i>tenuicornis</i> Macquart, 1838		●	●											1	45	M, W, K
Neavella																
<i>producticornis</i> Austen, 1912	□														2	A

^a Species not present in collated database, but present in Usher (1972)

Cidistomyia (Amanella) angusta, was previously only known from the type locality, Tradouw Pass in Western Cape, RSA. This specimen from Tulbach, also Western Cape. Both localities in the Fynbos biome. No records of both *C. (Amanella) atra* and *C. (Amanella) minor* were present in the collated database. The former species is known only from its type locality, Ceres, Western Cape and the latter from Huguenot and Villiersdorp, both Fynbos in Western Cape. *C. (Amanella) zimbitei* is only known from a series (including a male) collected near a stream in Zimbitei Forest in the Drakensberg. It has not been collected since. No *Limata facialis* records are in the collated database, according to Oldroyd (1954) however, the species is known only from the type locality, Hout Bay near Cape Town in the Fynbos biome. *L. laevifrons* was omitted by Usher (1972) due to the lack of a precise locality, recorded only as “The Cape”. The type is apparently lost and is only known from its original description.

Table S7: Species list of the Haematopini of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal. Braces {} indicate the area where the species DO NOT occur.

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)	
Tabaninae																
Haematopotini																
Haematopota																
<i>albihirta</i> Karsch, 1888							●	●	●		●			38	SE, E, D, L, NT, NE	
<i>anomala</i> T.S-Dias, 1956											□			1	L	
<i>bedfordi</i> Oldroyd, 1952									□					4	H	
<i>bipunctata</i> Ricardo, 1906			●				●							14	M, SS, E, H	
<i>bistrigata</i> Loew, 1858	●			●			●	●						15	E, D, H	
<i>circumscripta</i> Loew, 1858							●		●	●	●			12	H, NT	

<i>daveyi</i> Austen, 1912								□	1	E
<i>decora</i> Walker, 1856	•			•	•	•	•	•	23	E, D
<i>distincta</i> Ricardo, 1906					•			•	2	New
<i>duplicata</i> Loew, 1858	□								1	SE
<i>imbrium</i> Wiedemann, 1828	•	•	•	•	•	•	•	•	1 77	{W, M, K}
<i>infernalis</i> Oldroyd, 1952	•				•				10	M
<i>ingluviosa</i> Austen, 1914								□	1	New
<i>insidiatrix</i> Austen, 1908								□	1	New
<i>maculosifacies</i> Austen, 1914								□?	1	E? M?
<i>megaera</i> Usher, 1965	□								2	A
<i>mephista</i> Usher, 1965					•			•	9	D
<i>montisdraconis</i> Usher, 1965								□	4	D, H
<i>nigripennis</i> Austen, 1914								□	1	New
<i>obscura</i> Loew, 1858	•	•	•	•	•	•	•	•	56	New
<i>ocellata</i> Wiedemann, 1819	•	•	•				•		47	{NT}
<i>ovazzai</i> T.S-Dias, 1956								□	1	SS
<i>pardalina</i> Oldroyd, 1952						•		•	19	E
<i>pertinens</i> Austen, 1908								□	1	New?
<i>quathlambia</i> Usher, 1965								□	2	D
<i>rubidicornis</i> Oldroyd, 1952			•			•	•		12	E
<i>spectabilis</i> Oldroyd, 1952	•	•	•						15	New
<i>theobaldi</i> Carter, 1915					•	•	•	•	23	D, H, L, NT
<i>zuluensis</i> Oldroyd, 1952					•			•	12	E, H

Haematopota anomala is probably a deformed *H. imbrum*, collected in the Lowveld near Nelspruit (Usher 1972). *H. distincta* is previously only known from DRC, Tanzania and Uganda (Oldroyd 1954). Here two records from different localities indicate a possible distribution in South Africa. *H. ingluviosa* previously known from Zimbabwe, Mosambique, DRC and Malawi (Oldroyd, 1952). The record here is from Umthloti, in KwaZulu Natal, bordering Mozambique. *H. insidiatrix* was previously only known from southern Zimbabwe (Oldroyd 1952). This record is from Weenen, north of Durban and should be investigated. The distribution of *H. maculosifacies* in South Africa remains controversial. Usher (1972) states that the Cape locality is suspect and the nearest record to South Africa is in the Dondo forest in Mozambique. These records are from a series of pinned specimens in SAMC. The label states only Witchwood valley as locality.

This is ambiguous with a Witchwood valley in both RSA and Zimbabwe. Both localities will be new distributions as the species is known to occur in Kenya, Tanzania, Malawi and Mozambique (Oldroyd, 1952). The *H. nigripennis* record is from a single specimen in NMSA collected in 1992 near Rhodes, Eastern Cape, probably identified by Pam Stuckenberg (pers. comm. J. Midgley). Usher (1972) treated both *H. obscura* and *H. spectabilis* as *H. ocellata* and hypothesised synonymy without formalising it. This still require investigation. The *H. pertinens* record is from a single unsexed specimen in SAMC collected near Potchefstroom, North West province. No determiner information is available. Oldroyd (1952) did however mention a wide Afrotropical distribution (Nigeria to Sudan to Zimbabwe) with north western Zimbabwe as the southern most distribution so the distribution is worth investigating.

Table S8: Species list of the Tabanini of South Africa (**AT:** Albany Thicket; **CF:** Cape floristic region (fynbos); **NK:** Nama karoo; **SK:** Succulent karoo; **D:** Desert; **F:** Forest; **G:** Grassland; **IOB:** Indian ocean belt; **CB:** Central bushveld savannah (sub-biome); **K:** Kalahari savannah (sub-biome); **L:** Lowveld savannah (sub-biome); **n?:** number of records with unknown locality; **AzV:** number of records in Azonal Vegetation; **n:** number of fixed records per species; distribution of species as in Usher (1972) (**M:** Mediterranean climate; **A:** Rainfall throughout the year; **K:** Little and Great Karoo; **W:** Desert and poor steppe; **SS** and **SN.** Southern and northern steppes respectively; **SE:** South-east coastal region; **E:** East coastal region; **D:** Drakensberg region; **L:** The Transvaal lowveld; **H:** The highveld; **NT:** northern Transvaal. Braces {} indicate the area where the species DO NOT occur.

Classification	AT	CF	NK	SK	D	F	G	IOB	CSv	KSv	LSv	n?	AzV	n	In Usher (1972)
Tabaninae															
Tabanini															
Ancala															
<i>africana</i> Griffith & Pidgeon, 1832							•	•			•			31	E
Atylotus															
<i>agrestis</i> Wiedemann, 1828	•						•	•	•	•	•	?		25	SE, E, NT
<i>albipalpus</i> Walker, 1850							•	•	•		•			31	SE, E, D, L
<i>diurnus</i> Walker, 1850		□												1	M
<i>fulvianus</i> Loew, 1858							□							1	SN
<i>nigromaculatus</i> Ricardo, 1900		•					•		•		•			18	SN, D, H, NT
Euancala															
<i>maculatissima</i> Macquart, 1838	•						•	•			•			30	A, SE, E, D, L
Hybomitra															
<i>chevalieri</i> Surcouf, 1906		•		•			•		•		•			10	M, W, A, E, D, NT
<i>vexans</i> Loew, 1858		•		•										2	M, A
Tabanus															
<i>albilinea</i> Walker, 1848		•					•	•			•			11	M, SS, SE, D

<i>atrimanus</i> Loew, 1858	•			•	•	•	•	25	A, SE, E, H, L, NT
<i>barclayi</i> Austen, 1912						•	•	19	E, L, NT
<i>biguttatus</i> Wiedemann, 1830	•	•		•	•	•	•	73	M, A, SE, E, D, NT
<i>congoiensis</i> Ricardo, 1908				□				1	New
<i>coniformis</i> Ricardo, 1908						□		1	New
<i>copemani</i> Austen, 1912							□	10	L
<i>corax</i> Loew, 1863				□				3	SN, D, H
<i>denshamii</i> Austen, 1908 ^a									E
<i>fraternus</i> Macquart, 1846						•	•	9	E
<i>gratus</i> Loew, 1858		•		•	•	•	•	68	E, D, L, NT
<i>guineensis</i> Wiedemann, 1824				•		•	•	12	New
<i>impertinens</i> Oldroyd, 1954		•	•					16	W, K
<i>insignis</i> Loew, 1858		•		•	•	•	•	51	E, D, H, L, NT
<i>laverani</i> Surcouf, 1907				•			•	3	E
<i>leucostomus</i> Loew, 1858	•	•	•	•	•		•	30	M, W, K, A, SS, E, D
<i>minuscularius</i> Austen, 1912						•	•	57	E, D, L, NT
<i>nyasae</i> Ricardo, 1900							□	1	E
<i>obliquemaculatus</i> Macquart, 1838	•		•					3	K
<i>par</i> Walker, 1854						•	•	39	A, SE, E
<i>pertinens</i> Austen, 1912							•	8	M?, E
<i>pullulus</i> Austen, 1912							□	8	L
<i>quadrisignatus</i> Ricardo, 1908						□		1	New
<i>saxicolus</i> Usher, 1965				□				11	D
<i>sericiventrtris</i> Loew, 1858			•	•		•	•	11	H, NT, SN
<i>sugens</i> Wiedemann, 1828							□	2	New
<i>taeniatus</i> Macquart, 1834	•	•		•	•	•	•	46	M, K, A, SS, SE, D, H
<i>taeniola</i> Palisot de Beauvois, 1806				•	•	•	•	78	M?, SE, E, D, H, NT
<i>thoracinus</i> Palisot de Beauvois, 1806				□				2	NT
<i>ustus</i> Walker, 1850						□		19	E
<i>variabilis</i> Loew, 1858				•	•		•	16	E, D

<i>zoulouensis</i> Bigot, 1892	• • •	11	E
<i>Theriopectus</i>			
<i>zumpti</i> T.S-Dias, 1956	□	1	New

^a Species not present in collated database, but present in Usher (1972)

Tabanus congoiensis was previously thought to be widely distributed from West to eastern Africa (Oldroyd, 1954). The record here is based on a single specimen housed in NMSA from Winterskloof, KwaZulu Natal. *T. coniformis* is based on an ambiguous record with the locality name of only Que Que, which might refer to the KweKwe district in Zimbabwe. This record was geolocated to Que Que near Durban in South Africa and should be regarded as suspicious. Interestingly there are no records of *T. denschamii* in the collated database. This large species is quite commonly collected in the eastern tropical corridor (Lowveld east of the escarpment and Indian Ocean coastal belt biomes) and the main author has seen several specimens from KwaZulu Natal Province. *T. guineensis* was treated as a synonym of *T. taeniola* by Oldroyd (1954). Mugasa *et al.* (2018), however, treated the species separately without any explanation. The records here were therefore kept separately. A single record of *T. quadrisignatus* is from a specimen in NMSA collected in Port St. Johns, Eastern Cape. This is a surprising record since Oldroyd (1954) described the species as an inhabitant of savannahs adjacent to west and central Afrotropical forests. Two specimens of *T. sugens*, both from Kruger National Park were collected on two separate occasions. Previously thought to be widely distributed from West to eastern Africa (Oldroyd, 1954). *Theriopectus zumpti* was not treated by Oldroyd (1954) or Usher (1972). According to Chainey (2017), the placement remains unknown. Here a specimen from Umtamvuna River, North West of Margate, KwaZulu Natal is recorded.