

FIOCRUZ

UPDATED MARCH, 2017
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BRAZILIAN SPECIES OF BITING MIDGES

ESPÉCIES DE MARUINS DO BRASIL

(DIPTERA: CERATOPOGONIDAE)

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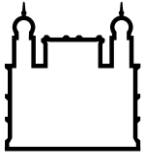
Coleção de Ceratopogonidae (CCER / FIOCRUZ)

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MARIA CLARA ALVES SANTARÉM and MARIA LUIZA FELIPPE-BAUER

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Catalogs and lists of species are important tools in the study of biodiversity of localities, states, countries and zoogeographic regions. Throughout the years, several catalogs as well as lists of Ceratopogonidae tribes and genera have been created in order to update the species lists for family study facilitation. Ceratopogonidae catalogs and lists from different parts of the World are accessible in < <http://campus.belmont.edu/cienews/cie.html>>. From the Neotropical Region, the most recent Ceratopogonidae species catalogs have been elaborated by Borkent & Spinelli (2000, 2007). Nicaraguan, Argentine and Mexican species were published sequentially by Maes & Wirth (1990), Spinelli & Wirth (1993) and Ibanez-Bernal et al. (1996). Ceratopogonidae fauna was also mentioned by Wirth (1952, 1957), Davies & Giglioli (1979) and Borkent (1991) for Juan Fernandez, Grand Cayman and Galápagos Islands, respectively. *Culicoides* species lists from Argentina, Colombia and Costa Rica are available in the publications by Spinelli et al. (2005, 2009) and Spinelli & Borkent (2004). However from Brazil, no list of species has ever been published despite the big country size and biome diversity. Surveys of species, particularly from *Culicoides*, has been conducted in different Brazilian States due to the medical and veterinary importance as well as the emerging *Culicoides*-borne diseases. Thus, the data of the Ceratopogonidae species records in Brazil are scattered in different manuscripts, which complicates investigation.

The purpose of this list is to provide the described and recorded Ceratopogonidae species to Brazil and the current distribution in the 26 Brazilian States. A table with species number distributed with respect to genera reported in the Neotropical region, Brazil and the Brazilian Amazon Region is included together with a brief history of Brazilian Ceratopogonidae fauna studies. The distribution of Neotropical species out of Brazil can be accessed in Borkent & Spinelli (2000, 2007).

In this list, we follow the species arrangement according to the catalog of “World Ceratopogonidae fauna” and “Subgeneric classification of species of *Culicoides*” by Borkent (2015a, b) and “Catalog of Neotropical Ceratopogonidae” by Borkent & Spinelli (2007). The distribution of species was adopted from specific literature including the most recent records of *Culicoides* from the Brazilian Amazon Region States from Castellón & Felipe-Bauer (2015) in addition to reliable localities with regard to the pertinent species deposited in the entomological collections of the following Institutions: Faculty of Public Health, University of São Paulo, São Paulo, Brazil; Ceratopogonidae Collection of Oswaldo Cruz Foundation, Rio de Janeiro, Brazil; National Museum of Natural History, Washington, DC, United States and British Museum, London, United Kingdom. In doubt of species presence in the cited localities, we chose to maintain them in the distribution until further studies, as revisions of genera, subgenera or species group are carried out to confirm or not their presence.

The species records are included in alphabetical order of Brazilian States after the indication of the locality type, considering the geopolitical regions (North, Northeast, Midwest, Southeast and South). In 1977, the state of Mato Grosso was split into the states of Mato Grosso and Mato Grosso do Sul and in 1989, the state of Goiás divided into the states of Goiás and Tocantins. Localities mentioned in manuscripts prior to these dates had to be updated due to the newly created States. When the collection site of the species is not provided in the original paper, we consider the cited geographic region of the species.

To set the species in the Neotropical Region we relied on the biogeographical regionalisation of the Neotropical Region by Morrone (2014). For inclusion of species in the Brazilian Amazon Region, we considered the political map of the “Amazônia Legal Brasileira”, despite the fragility of geographical borders in the delimitation of the species distribution. Brazilian municipalities and states included here can be accessed in: <http://www.cidades.ibge.gov.br/xtras/home.php>

This list recognizes 1249 extant valid Ceratopogonidae species in the Neotropical Region, 491 in Brazil and 268 in the Brazilian Amazon Region. The Ceratopogoninae subfamily is the most represented according to the studies of the sanitary important *Culicoides* genus. This subfamily is better studied in the North and Southeast Brazilian regions and few species have been reported for the Brazilian northeast region despite containing nine States in an area of 1.558.196 km². Forcipomyiinae is the second subfamily with a higher number of species, followed by Dasyheleinae. These two subfamilies are founded in the north, northeast, southeast and south of Brazil, and for Midwest Brazil, only four species have been reported for Forcipomyiinae. For Leptoconopinae, only *Leptoconops brasiliensis* (Lutz) and *Leptoconops knowltoni* Clastrier & Wirth have been cited for the northern and southern Brazilian coastal areas. A close look at the number of listed species indicates the need for further studies in the five Brazilian geopolitical regions, especially in the Midwest and Northeast that encompass the natural biomes of Cerrado, Pantanal and Caatinga. In the Northeast, no Ceratopogonidae species has ever been reported for the States of Alagoas and Sergipe. Despite political inclusion in the northern region, Tocantins State presents a Cerrado biome and has no records of Ceratopogonidae as of yet.

We intend to update annually the species reported from Brazil and their records for the Brazilian States. We hope that the cited data and references available online may aid the systematic, biodiversity, biogeographical and epidemiological studies regarding the Ceratopogonidae fauna.

For corrections and additions, please contact the authors through e-mails included in the list cover.

Brief historical report of the Brazilian Ceratopogonidae fauna studies.

Jean Jacques Kieffer was one of the most important naturalists who studied the world Ceratopogonidae fauna during the first quarter of the 20th Century. He proposed hundreds of taxa, of which several tribe, genera, subgenera and species are still valid. The species from Kieffer later reported for Brazil have been described based on material, particularly, from Paraguay. **Daniel William Coquillett** (1904) described the first Ceratopogonidae species from Brazil, *Ceratopogon guttatus* (*Culicoides guttatus*), based on three specimens collected by Adolpho Lutz in São Paulo State. **Emílio Augusto Goeldi**, from Paraense Museum, later Museu Paraense Emilio Goeldi, described a new genus and species, *Haematomyidium paraense* (*Culicoides paraensis*) in the manuscript “Os moquitos no Pará” published in 1905. Actually, *C. paraensis* is considered the most medical important species, due to Oropouche fever transmission and the possible implication in the transmission of Mansonellose in the Brazilian Amazon region. **Adolpho Lutz** (1913, 1914) described 15 new species belonging to diverse genera of Ceratopogonidae, and **Ângelo Moreira da Costa Lima** (1928, 1937) described four new *Culicoides* and *Forcipomyia* species and designed a key for the identification of the *Culicoides* of the Neotropical Region. **Frederico Simões Barbosa** (1943-1952) described new Neotropical *Culicoides* species, some still valid, his primary focus of study being *Culicoides* from the State of Pernambuco. **John William Scott Macfie** has produced several important manuscripts concerning the world Ceratopogonidae fauna, in which from Brazil, he described from 1935 to 1953 numerous species, especially from Santa Catarina State, based on specimens collected by Fritz Plaumann. In “A report on a collection of Brazilian Ceratopogonidae”, Macfie characterized 40 new species belonging to 13 genera. From 1942 to 1964, **Irving Fox** published a series of papers, primarily on the Caribbean *Culicoides*, also electing *Avaritia*, *Hoffmania* and *Macfiella* as subgenera of *Culicoides*. **John Lane** (1944-1964) and **Oswaldo P. Forattini** (1953-1960) described and redescribed several Neotropical species and published bionomic data about *Culicoides* from the mangrove swamp in São Vicente, São Paulo. In 1957, Forattini published a book intitled “*Culicoides* da Região Neotropical” including a key for identification of species. His life and bibliography, written in Portuguese, can be found in <<http://www.scielosp.org/pdf/rsp/v41n6/03.pdf>>. **Ignacio Ortíz** (1950-1961) in collaboration with Luis A. León and Marie Mirsa, dealing especially with the *Culicoides* from Venezuela and Ecuador, described dozens of species, some of them reported later in Brazil. **Jean Clastrier** carried on his Ceratopogonidae research activities from 1968 to 1995 also in the Neotropical Region, focusing primarily on the Guyana fauna. He also published Brazilian species of *Forcipomyia* with material

from Pará and Santa Catarina States. His life and scientific contributions can be accessed in <<http://campus.belmont.edu/cienews/Clastrier.html>>. From 1953 until his death in 1994, **Willis W. Wirth** motivated the studies of World Ceratopogonidae fauna with descriptions of hundreds of taxa in important and numerous manuscripts, extensive revisions, including handbooks, catalogs and species lists. **Wirth and Blanton** (1973) published “A review of the maruins or biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae) in the Amazon Basin”, the first consolidation of the *Culicoides* species from the Brazilian Amazon Region, with a description of 15 new species. His life and contributions is available in <<http://campus.belmont.edu/cienews/Wirth.html>>. During three years, from 1978 to 1980, **Omar Tavares** and collaborators studying material from Rio de Janeiro, characterized 14 new species, actually belonging to the *Culicoides*, *Monohelea* and *Downshelea* genera. More recently, since 1990, **Eloy G. Castellón** has been publishing papers regarding survey and some bionomic aspects of *Culicoides* from the Amazonas and Pará States. Since 1981, **Gustavo R. Spinelli** and co-authors have been concentrating on Neotropical Ceratopogonidae, publishing studies, including revisions, which contributed with knowledge of the Brazilian biting midges, especially those of the Argentine fauna. Since 1987, **Maria Luiza Felipe-Bauer** and collaborators have been conducting taxonomy studies of Neotropical Ceratopogonidae, mainly of Brazilian *Culicoides*, describing several new species.

Catálogos e listas de espécies são ferramentas importantes no estudo da biodiversidade de localidades, estados, países e regiões zoogeográficas. Ao longo dos anos, vários catálogos e listas de tribos e gêneros de Ceratopogonidae têm sido feitos a fim de atualizar as listas de espécies para facilitar o estudo da família. Catálogos e listas de Ceratopogonidae de diferentes partes do mundo estão disponíveis em <<http://campus.belmont.edu/cienews/cie.html>>. Para a região Neotropical, os mais recentes catálogos das espécies de Ceratopogonidae foram realizados por Borkent & Spinelli (2000, 2007). Espécies de Nicarágua, Argentina e México foram publicadas sequencialmente por Maes & Wirth (1990), Spinelli & Wirth (1993) e Ibanez-Bernal et al. (1996). A fauna de Ceratopogonidae foi também mencionada por Wirth (1952, 1953), Davies & Giglioli (1979) e Borkent (1991) para as Ilhas de Juan Fernandez, Grand Cayman e Galápagos, respectivamente. Listas das espécies de *Culicoides* para a Argentina, Colômbia e Costa Rica são obtidas nas

publicações de Spinelli et al. (2005, 2009) e Spinelli & Borkent (2004). No entanto para o Brasil, nenhuma lista de espécie tem sido publicada, apesar da grande dimensão do país e da diversidade de biomas. Levantamentos de espécies, especialmente de *Culicoides*, têm sido realizados em diferentes estados brasileiros devido a importância médica e veterinária, bem como a transmissão de enfermidades emergentes por *Culicoides*. Assim, dados de registros de espécies de Ceratopogonidae no Brasil estão dispersos em diferentes manuscritos, o que torna a pesquisa trabalhosa.

O propósito dessa lista é fornecer as espécies de Ceratopogonidae descritas e reportadas para o Brasil e sua atual distribuição nos 26 estados brasileiros. Uma tabela com o número das espécies distribuídas por gênero reportadas para a Região Neotropical, Brasil e para a Região Amazônica Brasileira é incluída juntamente com um breve histórico dos estudos da fauna brasileira de Ceratopogonidae. A distribuição das espécies neotropicais fora do território brasileiro pode ser obtida em Borkent & Spinelli (2000, 2007).

Nessa lista, seguimos a ordenação das espécies conforme o catálogo “World Ceratopogonidae fauna” e “Subgeneric classification of species of *Culicoides*” de Borkent (2015a, b) e o “Catalog of Neotropical Ceratopogonidae” de Borkent & Spinelli (2007). A distribuição das espécies foi baseada na literatura específica incluindo os mais recentes registros de *Culicoides* para os estados da Região Amazônica Brasileira de Castellón & Felipe-Bauer (2015) além das localidades fiáveis relacionadas as espécies depositadas nas coleções entomológicas das seguintes instituições: Faculdade de Saúde Pública, Universidade de São Paulo, Brasil; Coleção de Ceratopogonidae da Fundação Oswaldo Cruz, Rio de Janeiro, Brasil; Museu Nacional de História Natural, Washington, DC, Estados Unidos e Museu Britânico, Londres, Inglaterra. Na dúvida da presença de espécies nas localidades citadas, optamos por mantê-las na distribuição até que futuros estudos, como revisões de gênero, subgênero ou grupo de espécies sejam realizados para confirmar ou não a presença das mesmas.

Os registros das espécies estão incluídos em ordem alfabética dos estados brasileiros após a indicação da localidade tipo, considerando as regiões geopolíticas (Norte, Nordeste, Centro-oeste, Sudeste e Sul). Em 1977, o estado de Mato Grosso foi separado nos estados de Mato Grosso e Mato Grosso do Sul e em 1989, o estado de Goiás foi dividido nos estados de Goiás e Tocantins. Localidades mencionadas em manuscritos anteriores a essas datas foram atualizadas devido a criação desses novos estados. Quando a localidade de coleta da espécie não é fornecida no trabalho original, consideramos a região geográfica citada para a espécie.

Para inserir as espécies na Região Neotropical contamos com o trabalho de regionalização biogeográfica da Região Neotropical de Morrone (2014). Para inclusão das espécies na Região Amazônica Brasileira, nós consideramos o mapa político da “Amazônia Legal Brasileira”, apesar da fragilidade das fronteiras geográficas na delimitação da distribuição das espécies. Os municípios e estados brasileiros aqui incluídos podem ser acessados em <http://www.cidades.ibge.gov.br/xtras/home.php>

Essa lista reconhece 1249 espécies de Ceratopogonidae existentes e válidas para a Região Neotropical, 491 para o Brasil e 268 para a Região Amazônica Brasileira. A subfamília Ceratopogoninae é a melhor representada devido aos estudos do gênero *Culicoides*, com importância sanitária. Essa subfamília é bem estudada nas regiões norte e sudeste do Brasil e poucas espécies têm sido reportadas para o nordeste brasileiro, apesar de abranger nove estados em uma área de 1.558.196 km². Forcipomyiinae é a segunda subfamília com maior número de espécies, seguida de Dasyheleinae. Essas duas subfamílias são encontradas nas regiões norte, nordeste, sudeste e sul do Brasil, e para o Centro-oeste, apenas quatro espécies têm sido reportadas para Forcipomyiinae. Para Leptoconopinae, apenas *Leptoconops brasiliensis* (Lutz) e *Leptoconops knowltoni* Clastrier & Wirth têm sido citadas para as áreas costeiras do norte e sul do Brasil. Um olhar atento ao número das espécies listadas indica a necessidade de futuros estudos nas cinco regiões geopolíticas brasileiras, especialmente na Centro-oeste e Nordeste que abriga os biomas

naturais de Cerrado, Pantanal e Caatinga. No Nordeste, nenhuma espécie de Ceratopogonidae tem sido reportada para os estados de Alagoas e Sergipe. Apesar de politicamente incluído na região norte, o estado de Tocantins apresenta um bioma de cerrado e não tem registros de Ceratopogonidae até o presente.

Pretendemos atualizar anualmente as espécies reportadas para o Brasil e seus registros para os estados brasileiros. Esperamos que os dados incluídos e as referências disponíveis possam auxiliar os estudos da Sistemática, Biodiversidade, Biogeografia e Epidemiologia relacionados à fauna de Ceratopogonidae.

Para correções e inclusões, favor contactar os autores através dos e-mails incluídos na primeira página.

Breve histórico dos estudos da fauna de Ceratopogonidae do Brasil.

Jean Jacques Kieffer foi um dos mais importantes naturalistas que estudou a fauna mundial de Ceratopogonidae durante o primeiro quartel do Século XX. Ele propôs centenas de taxons, dos quais várias tribos, gêneros, subgêneros e espécies são ainda válidos. As espécies de Kieffer relatadas posteriormente para o Brasil têm sido descritas baseadas em material, especialmente, do Paraguai. **Daniel William Coquillett** (1904) descreveu a primeira espécie de Ceratopogonidae para o Brasil, *Ceratopogon guttatus* (*Culicoides guttatus*), baseada em três exemplares coletados por Adolpho Lutz no estado de São Paulo. **Emílio Augusto Goeldi**, do Museu Paraense, posteriormente, Museu Paraense Emilio Goeldi, descreveu um novo gênero e espécie, *Haematomyidium paraense* (*Culicoides paraensis*) no manuscrito “Os mosquitos no Pará” publicado em 1905. Atualmente, *C. paraensis* é considerada a espécie de maior importância médica, devido a transmissão da Febre de Oropouche e a possível implicação na transmissão da Mansonelose na Região Amazônica

Brasileira. **Adolpho Lutz** (1913, 1914) descreveu 15 novas espécies pertencentes a diversos gêneros de Ceratopogonidae, e **Ângelo Moreira da Costa Lima** (1928, 1937) descreveu quatro novas espécies de *Culicoides* e *Forcipomyia* e fez uma chave para a identificação dos *Culicoides* da Região Neotropical. **Frederico Simões Barbosa** (1943–1952) descreveu novas espécies de *Culicoides* neotropicais, algumas ainda válidas, focando seus estudos principalmente nos *Culicoides* do estado de Pernambuco. **John William Scott Macfie** publicou vários manuscritos importantes no que concerne a fauna mundial de Ceratopogonidae, dos quais para o Brasil, ele descreveu de 1935 a 1953 numerosas espécies, especialmente para o estado de Santa Catarina, baseadas em espécimes coletados por Fritz Plaumann. Em “A report on a collection of Brazilian Ceratopogonidae”, Macfie caracterizou 40 novas espécies incluídas em 13 gêneros. De 1942 a 1964, **Irving Fox** publicou uma série de trabalhos, principalmente sobre os *Culicoides* do Caribe, elegendo também *Avaritia*, *Hoffmania* e *Macfiella* como subgênero de *Culicoides*. **John Lane** (1944–1964) e **Oswaldo P. Forattini** (1953–1960) descreveram e redescreveram várias espécies neotropicais e publicaram dados bionômicos sobre *Culicoides* de manguezal em São Vicente, São Paulo. Em 1957, Forattini publicou um livro intitulado “*Culicoides* da Região Neotropical” incluindo uma chave para identificação das espécies. Sua vida e bibliografia, escritas em Português, podem ser encontradas em <<http://www.scielo.org/pdf/rsp/v41n6/03.pdf>>. **Ignacio Ortiz** (1950–1961) em colaboração com Luis A. León e Marie Mirsa, trabalharam especialmente com os *Culicoides* da Venezuela e Equador, descrevendo dezenas de espécies, algumas delas reportadas posteriormente para o Brasil. **Jean Clastrier** exerceu suas atividades de pesquisa em Ceratopogonidae de 1968 a 1995 também na Região Neotropical, focado principalmente na fauna da Guiana. Ele também publicou espécies de *Forcipomyia* do Brasil com material dos estados do Pará e de Santa Catarina. Sua vida e contribuições científicas podem ser acessadas através do site <<http://campus.belmont.edu/cienews/Clastrier.html>>. De 1953 até sua morte em 1994, **Willis W. Wirth** impulsionou os estudos da fauna mundial de Ceratopogonidae com descrições de centenas

de taxons em importantes e numerosos manuscritos, amplas revisões, incluindo livros, catálogos e listas de espécies. **Wirth and Blanton** (1973) publicaram “A review of the maruins or biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae) in the Amazon Basin”, a primeira reunião das espécies de *Culicoides* da Região Amazônica Brasileira, com descrição de 15 novas espécies. Sua vida e contribuições estão disponíveis em <<http://campus.belmont.edu/cienews/Wirth.html>>. Durante três anos, de 1978 a 1980, **Omar Tavares** e colaboradores estudando material do Rio de Janeiro, caracterizaram 14 novas espécies, atualmente pertencentes aos gêneros *Culicoides*, *Monohelea* e *Downshelea*. Mais recentemente, desde 1990, **Eloy G. Castellón** tem publicado manuscritos relativos ao levantamento e alguns aspectos da bionomia de *Culicoides* dos estados do Amazonas e Pará. Desde 1981, **Gustavo R. Spinelli** e coautores têm se dedicado aos Ceratopogonidae neotropicais, publicando estudos, incluindo revisões, os quais contribuem com o conhecimento dos ceratopogonídeos brasileiros, principalmente os da fauna Argentina. Desde 1987, **Maria Luiza Felipe-Bauer** e colaboradores têm conduzido estudos taxonômicos dos Ceratopogonidae neotropicais, principalmente de *Culicoides* do Brasil, descrevendo várias espécies novas.

Table 1. Number of species of Ceratopogonidae genera reported in Neotropical Region, Brazil and in the Brazilian Amazon Region.

Subfamily	Tribe	Genus	Subgenus	Neotropical Region	Brazil	Brazilian Amazon Region
Ceratopogoninae	Ceratopogonini	<i>Allohelea</i>		1	-	-
		<i>Alluaudomyia</i>		19	7	5
		<i>Austrohelea</i>		1	-	-
		<i>Baeodasomyia</i>		5	-	-
		<i>Baeohelea</i>		1	-	-
		<i>Bahiahelea</i>		1	1	-
		<i>Borkenthelea</i>		4	-	-
		<i>Brachypogon</i>	<i>Brachypogon</i>	23	8	6
		<i>Brachypogon</i>	<i>Isohelea</i>	7	1	-
		<i>Bhachypogon</i>	Out of subgenus	2	-	-
		<i>Cacaohelea</i>		1	-	-
		<i>Ceratoculicoides</i>		1	-	-
		<i>Diaphanobezzia</i>		4	-	-
		<i>Downshelea</i>		21	9	4
		<i>Echinohelea</i>	<i>Echinohelea</i>	10	5	4
		<i>Echinohelea</i>	<i>Echinoideshelea</i>	1	1	1
		<i>Fittkauhelea</i>		1	1	1
		<i>Isthmohelea</i>		1	-	-
		<i>Leptohelea</i>		1	-	-
		<i>Macrurohelea</i>		12	-	-
		<i>Monohelea</i>		18	8	2
		<i>Nannohelea</i>		1	-	-
		<i>Notiohelea</i>		2	-	-
		<i>Parabezzia</i>		29	8	2
		<i>Rhynchohelea</i>		1	-	-

Table 1. Continued

Subfamily	Tribe	Genus	Subgenus	Neotropical Region	Brazil	Brazilian Amazon Region
		<i>Schizonyxhelea</i>		7	4	2
		<i>Spinellihelea</i>		1	-	-
		<i>Stilobezzia</i>	<i>Acanthohelea</i>	38	3	3
		<i>Stilobezzia</i>	<i>Eukraiohelea</i>	3	3	1
		<i>Stilobezzia</i>	<i>Stilobezzia</i>	42	23	6
	Culicoidini	<i>Culicoides</i>	<i>Amosovia</i>	1	-	-
		<i>Culicoides</i>	<i>Anilomyia</i>	20	2	1
		<i>Culicoides</i>	<i>Avaritia</i>	8	3	2
		<i>Culicoides</i>	<i>Beltranmyia</i>	3	-	-
		<i>Culicoides</i>	<i>Cotocripus</i>	6	2	-
		<i>Culicoides</i>	<i>Culicoides</i>	6	-	-
		<i>Culicoides</i>	<i>Diphaomyia</i>	14	3	2
		<i>Culicoides</i>	<i>Drymodesmyia</i>	13	3	1
		<i>Culicoides</i>	<i>Glaphiromyia</i>	2	-	-
		<i>Culicoides</i>	<i>Haematomyidium</i>	37	23	18
		<i>Culicoides</i>	<i>Hoffmania</i>	46	37	35
		<i>Culicoides</i>	<i>Macfiella</i>	2	1	1
		<i>Culicoides</i>	<i>Mataemyia</i>	19	13	10
		<i>Culicoides</i>	<i>Oecacta</i>	5	2	2
		<i>Culicoides</i>	<i>Psychophaena</i>	2	1	-
		<i>Culicoides</i>	Out of subgenus	115	59	50
		<i>Paradasyhelea</i>		3	-	-
	Heteromyiini	<i>Clinohelea</i>	<i>Ceratobezzia</i>	1	1	1
		<i>Clinohelea</i>	<i>Clinohelea</i>	11	9	6
		<i>Heretomyia</i>		11	6	4
		<i>Pellucidomyia</i>		4	1	-

Table 1. Continued

Subfamily	Tribe	Genus	Subgenus	Neotropical Region	Brazil	Brazilian Amazon Region
		<i>Physohelea</i>		2	-	-
	Palpomyiini	<i>Amerohelea</i>		13	4	3
		<i>Bezzia</i>		49	19	11
		<i>Clastrieromyia</i>		4	1	1
		<i>Pachyhelea</i>		2	1	1
		<i>Palpomyia</i>		51	30	4
		<i>Phaenobezzia</i>		2	2	1
	Johannsenomyiini	<i>Groganhelea</i>		1	1	1
		<i>Johannsenomyia</i>		2	1	-
		<i>Lanehelea</i>		2	-	-
		<i>Mallochohelea</i>		6	4	2
		<i>Neobezzia</i>		8	6	5
		<i>Nilobezzia</i>		3	3	2
	Sphaeromyiini	<i>Austrosphaeromias</i>		4	-	-
		<i>Sphaerohelea</i>		1	-	-
	Stenoxenini	<i>Paryphoconus</i>		41	29	17
		<i>Stenoxenus</i>		16	7	4
Dasyheleinae		<i>Dasyhelea</i>		94	18	7
Forcipomyiinae		<i>Atrichopogon</i>	<i>Atrichopogon</i>	92	22	-
		<i>Atrichopogon</i>	<i>Lophomyidium</i>	5	1	1
		<i>Atrichopogon</i>	<i>Psilokempia</i>	17	6	3
		<i>Forcipomyia</i>	<i>Blantonia</i>	1	-	-
		<i>Forcipomyia</i>	<i>Caloforcipomyia</i>	11	9	4
		<i>Forcipomyia</i>	<i>Euprojoannisia</i>	16	5	3
		<i>Forcipomyia</i>	<i>Forcipomyia</i>	37	11	4
		<i>Forcipomyia</i>	<i>Lasiohelea</i>	11	5	-

Table 1. Continued

Subfamily	Tribe	Genus	Subgenus	Neotropical Region	Brazil	Brazilian Amazon Region
		<i>Forcipomyia</i>	<i>Lepidohelea</i>	22	10	1
		<i>Forcipomyia</i>	<i>Metaforcipomyia</i>	22	1	-
		<i>Forcipomyia</i>	<i>Microhelea</i>	50	22	11
		<i>Forcipomyia</i>	<i>Pedilohelea</i>	5	3	2
		<i>Forcipomyia</i>	<i>Phytohelea</i>	11	5	1
		<i>Forcipomyia</i>	<i>Pterobosca</i>	3	2	-
		<i>Forcipomyia</i>	<i>Rhynchoforcipomyia</i>	7	2	1
		<i>Forcipomyia</i>	<i>Saliohelea</i>	2	1	1
		<i>Forcipomyia</i>	<i>Schizoforcipomyia</i>	2	1	1
		<i>Forcipomyia</i>	<i>Synthyridomyia</i>	5	1	-
		<i>Forcipomyia</i>	<i>Thyridomyia</i>	8	2	-
		<i>Forcipomyia</i>	<i>Trichohelea</i>	13	2	1
		<i>Forcipomyia</i>	<i>Warkea</i>	7	4	4
	Unplaced	<i>Didymophleps</i>		1	-	-
Leptoconopiinae		<i>Leptoconops</i>	<i>Brachyconops</i>	1	-	-
		<i>Leptoconops</i>	<i>Holoconops</i>	3	1	-
		<i>Leptoconops</i>	<i>Leptoconops</i>	7	1	1
		<i>Leptoconops</i>	<i>Megaconops</i>	1	-	-
Unplaced	Unplaced	<i>Ceratopogon</i>		1	-	-
TOTAL				1249	491	268

SUBFAMILY CERATOPOGONINAE NEWMAN, 1834

TRIBE CERATOPOGONINI

Genus ALLUAUDOMYIA Kieffer

ALLUAUDOMYIA Kieffer, 1913a: 12. Type species: *Alluaudomyia imparunguis* Kieffer, by monotypy.

NEOCERATOPOGON Malloch, 1915a: 310. Type species: *Ceratopogon bellus* Coquillett, by original designation.

PRIONOGNATHUS Carter, Ingram & Macfie, 1921: 309 (preoccupied by *Prionognathus* LaFerté-Sénectère, 1851). Type species: *Prionognathus marmoratus* Carter, Ingram & Macfie, by original designation.

THYSANOGNATHUS Ingram & Macfie, 1922: 244. New name for *Prionognathus* Carter, Ingram & Macfie. Type species: *Prionognathus marmoratus* Carter, Ingram & Macfie, automatic.

ISOECACTA Garrett, 1925: 9. Type species: *Isoecacta poeyi* Garrett (= *Ceratopogon bellus* Coquillett), by original designation.

amazonica Spinelli & Wirth, 1984a: 676. Brazil (Amazonas)

catarinensis Spinelli & Wirth, 1984a: 681. Brazil (Santa Catarina)

distispinulosa Spinelli & Wirth, 1984a: 682. Brazil (Amazonas)

fittkaui Spinelli & Wirth, 1984a: 686. Brazil (Amazonas). Brazil records – Amazonas, Pará

nubeculosa Spinelli & Wirth, 1984a: 689. Brazil (Amazonas). Brazil records – Amazonas, Pará

plaumanni Spinelli & Wirth, 1984a: 691. Brazil (Santa Catarina)

punctivenosa Wirth & Grogan, 1988: 20. New name for *punctiradialis*.

punctiradialis Spinelli & Wirth, 1984a: 692 (preoccupied by *Alluaudomyia punctiradialis* Chaudhuri, Das Gupta & Chaudhuri, 1972). Brazil (Pará)

Genus BAHIAHELEA Wirth

BAHIAHELEA Wirth, 1992: 276. Type species: *Bahiahelea brasiliensis* Wirth, by original designation.

brasiliensis Wirth, 1992: 280. Brazil (Bahia)

Genus BRACHYPOGON Kieffer

BRACHYPOGON Kieffer, 1899: 69. Type species: *Ceratopogon vitiosus* Winnertz, by original designation.

Subgenus BRACHYPOGON Kieffer

- apunctipennis** Spinelli & Grogan, 1998: 64. Brazil (Rondônia)
- bimaculatus** Spinelli & Grogan, 1998: 67. Colombia. Brazil records – Mato Grosso
- fuscivenosus** (Lutz), 1914: 94 (*Palpomyia*). Brazil (Rio de Janeiro)
- impar** (Johannsen), 1938: 223 (*Ceratopogon*). Puerto Rico (USA). Brazil records – Santa Catarina
- paraensis** Wirth & Blanton, 1970a: 99 (as *parasensis*). Brazil (Pará)
- pseudoparaensis** Spinelli & Grogan, 1998: 64. Brazil (Pará)
- schmitzi** Spinelli & Grogan, 1998: 65. Brazil (Rondônia)
- spatuliformis** Spinelli & Grogan, 1998: 65. Brazil (Rondônia)

Subgenus ISOHELEA Kieffer

- ISOHELEA** Kieffer, 1917a: 295. Type species: *Ceratopogon lacteipennis* Zetterstedt (misidentified, = *Psilohelea sociabilis* Goetghebuer), by original designation.
- NILOHELEA** Kieffer, 1921a: 22. Type species: *Nilohalea albipennis* Kieffer, by monotypy.
- TRISHELEA** Kieffer, 1925a: 153. Type species: *Trishelea incompleta* Kieffer, by original designation.

- misionensis** Spinelli, 1990: 752. Argentina. Brazil records – Southeast

Genus DOWNESHELEA Wirth & Grogan

- DOWNESHELEA** Wirth & Grogan, 1988: 50. Type species: *Monohalea stonei* Wirth, by original designation.
- bicornis** Felipe-Bauer & Quintelas, 1993a: 185. Brazil (Rio de Janeiro)
- carioca** (Tavares & Silva Pereira), 1978: 157 (*Monohalea*). Brazil (Rio de Janeiro)
- castroi** (Tavares & Silva Pereira), 1978: 159 (*Monohalea*). Brazil (Rio de Janeiro)
- fluminensis** Felipe-Bauer & Quintelas, 1993b: 33. Brazil (Rio de Janeiro)
- guianae** (Wirth), 1953a: 150 (*Monohalea*). Guyana. Brazil records – Pará
- lanei** Felipe-Bauer & Borkent in Felipe-Bauer et al., 2011: 21. Brazil (Pará)
- multilineata** (Lutz), 1914: 93 (*Palpomyia*). Brazil (Mato Grosso, Rio de Janeiro)
- oliveirai** Felipe-Bauer, in Felipe-Bauer and Silva, 2008: 400. Brazil (Rondônia). Brazil records – Pará, Rondônia
- quasidentica** Felipe-Bauer & Quintelas, 1993b: 37. Brazil (Rio de Janeiro)

Genus ECHINOHELEA Macfie

ECHINOHELEA Macfie, 1940a: 187. Type species: *Echinohelea ornatipennis* Macfie, by original designation.

Subgenus ECHINOHELEA Macfie

lanei Wirth, 1951: 319. USA (Virginia). Brazil records – Pará, Rondônia

macfiei Lane, 1947a: 228. Brazil (São Paulo)

neotropica Wirth, 1994: 237. Colombia. Brazil records – Amazonas, Pará, Rio de Janeiro

ornatipennis Macfie, 1940a: 188. Guyana. Brazil records – Pará

richardsi Macfie, 1940a: 189. Guyana. Brazil records – Pará, Rondônia, Rio de Janeiro, São Paulo

Subgenus ECHINOIDESHELEA Wirth

ECHINOIDESHELEA Wirth, 1994: 231 (as subgenus of *Echinohelea*). Type species: *Echinohelea aitkeni* Wirth, by original designation.

aitkeni Wirth, 1994: 231. Brazil (Pará)

Genus FITTKAUHELEA Wirth & Blanton

FITTKAUHELEA Wirth & Blanton, 1970b: 7. Type species: *Fittkauhelea amazonica* Wirth and Blanton, by original designation.

amazonica Wirth and Blanton, 1970b: 9. Brazil (Amazonas)

Genus MONOHELEA Kieffer

MONOHELEA Kieffer, 1917a: 294. Type species: *Monohelea hieroglyphica* Kieffer, by original designation.

affinis Felipe-Bauer & Spinelli, 1991: 201. Brazil (Amazonas)

aguirrei Tavares & Souza, 1980: 97. Brazil (Rio de Janeiro). Brazil records – Rio de Janeiro, Santa Catarina

archibaldoi Tavares & Souza, 1980: 98. Brazil (Rio de Janeiro)

brasiliensis Lane, 1947a: 226. Brazil (Rio de Janeiro). Brazil records – Rio de Janeiro, São Paulo

hieroglyphica Kieffer, 1917a: 312. Paraguay. Brazil records – Distrito Federal, Rio de Janeiro

maculipennis (Coquillett), 1905: 64. USA (Florida). Brazil records – Rio de Janeiro.

poncai Lane & Wirth, 1964: 228. Panama. Brazil records – Rio de Janeiro

roraimensis Felipe-Bauer & Spinelli, 1991: 202. Brazil (Roraima)

Genus PARABEZZIA Malloch

PARABEZZIA Malloch, 1915b: 358. Type species: *Parabezzia petiolata* Malloch, by original designation.

balseiroi Spinelli & Grogan, 1987: 13. Argentina. Brazil records – Rio Grande do Sul

brasiliensis Spinelli & Grogan, 1987: 34. Brazil (Mato Grosso)

casimirensis Felipe-Bauer & Spinelli, 2015: 396. Brazil (Rio de Janeiro)

costalis Wirth, 1965a: 221. Panama. Brazil records – Rio de Janeiro

fluminensis Felipe-Bauer & Spinelli, 2015: 399. Brazil (Rio de Janeiro)

inaequalis Spinelli & Grogan, 1987: 38. Brazil (Amazonas)

indistincta Felipe-Bauer & Spinelli, 2015: 393. Brazil (Rio de Janeiro)

unica Felipe-Bauer & Spinelli, 2015: 391. Brazil (Rio de Janeiro)

Genus SCHIZONYXHELEA Clastrier

SCHIZONYXHELEA Clastrier, 1984: 1. Type species: *Schizonyxhelea guyana* Clastrier, by original designation.

forattinii Wirth & Grogan, 1988: 81. Brazil (Santa Catarina)

guyana Clastrier, 1984: 2. French Guiana. Brazil records – Mato Grosso

panamensis (Lane & Forattini), 1958: 218 (*Stilobezzia*). Panama. Brazil records – Rio de Janeiro, São Paulo

thomsenae (Wirth), 1953b: 83 (*Stilobezzia*). USA (Florida). Brazil records – Pará
scutata Lane & Forattini, 1961: 92. Panama

Genus STILOBEZZIA Kieffer

STILOBEZZIA Kieffer, 1911a: 118. Type species: *Stilobezzia festiva* Kieffer, by original designation.

HARTOMYIA Malloch, 1915b: 339. Type species: *Ceratopogon pictus* Coquillett (= *Stilobezzia coquilletti* Kieffer), by original designation.

Subgenus ACANTHOHELEA Kieffer

ACANTHOHELEA Kieffer, 1917b: 198. Type species: *Acanthohelea pruinosa* Kieffer, by monotypy.

PALEOTETRAGONEURA Meunier, 1920: 897 (1920: 1221). Type species: *Tetragoneura veterana* Meunier, by monotypy.

NEOSTILOBEZZIA Goetghebuer, 1934a: 53 (as subgenus of *Stilobezzia*). Unavailable name; proposed after 1930 without type species designation.

NEOSTILOBEZZIA Wirth, 1953b: 63. Type species: *Ceratopogon ochraceus* Winnertz, by original designation.

longiradix Cazorla & Spinelli, 2016: 189. Brazil (Rondônia)

manasensis Lane & Forattini, 1958: 205. Brazil (Amazonas)

tarsispinosa Cazorla & Spinelli, 2016: 191. Brazil (Rondônia)

Subgenus EUKRAIOHELEA Ingram & Macfie

EUKRAIOHELEA Ingram & Macfie, 1921: 347. Type species: *Eukraiohelea africana* Ingram & Macfie, designation by Macfie, 1940b: 22.

amnigena (Macfie), 1935a: 56 (*Eukraiohelea*). Brazil (Maranhão)

dorsofasciata (Lutz), 1914: 96 (*Palpomyia*). Brazil (Rio de Janeiro)

elegantula (Johannsen), 1907: 109 (*Bezzia*). USA (Kansas). Brazil records – Amazonas

maculitibia Lane & Forattini, 1956: 207. Panama

subsessilis Kieffer, 1917a: 311. Paraguay

Subgenus STILOBEZZIA Kieffer

albocincta Kieffer, 1917a: 309. Paraguay. Brazil records – Rio de Janeiro

bicolor Lane, 1947b: 208. Brazil (São Paulo)

bimaculata Lane & Forattini, 1956: 211. Panama. Brazil records – Rio de Janeiro

bispinosa Kieffer, 1917a: 310. Paraguay. Brazil records – Rio de Janeiro, São Paulo

chaconi Macfie, 1938: 166. Trinidad and Tobago. Brazil records – Goiás, São Paulo

coquilletti Kieffer, 1917a: 308. New name for *picta*. Brazil records – Amazonas, São Paulo

picta (Coquillett), 1905: 60 (*Ceratopogon*) (preoccupied by *Sphaeromyias pictus* (Meigen), 1818). USA (Virginia)

coracina Kieffer, 1917a: 311. Paraguay. Brazil records – São Paulo

dubitans Lane, Forattini & Rabello, 1955: 85. Brazil (São Paulo)

dureti Lane & Forattini, 1958: 210. Brazil (São Paulo)

fiebrigi Kieffer, 1917a: 309. Paraguay. Brazil records – Rio de Janeiro, São Paulo

glauca Macfie, 1939a: 204. Brazil (Santa Catarina). Brazil records – Rio de Janeiro, São Paulo, Santa Catarina
fluminensis Lane, 1947b: 210. Brazil (Rio de Janeiro)

kiefferi Lane, 1947b: 205. Brazil (Minas Gerais). Brazil records – Pará, Minas Gerais
punctipes Wirth, 1953b: 79. USA (Florida)

macfie Lane, 1947b: 213. Brazil (São Paulo). Brazil records – Rio de Janeiro, São Paulo

maculata Lane, 1947b: 207. Brazil (Rio de Janeiro)

modesta Lane, 1947b: 206. Brazil (Rio de Janeiro). Brazil records – Rio de Janeiro, São Paulo

pallenscens Lane & Forattini, 1958: 218. Panama. Brazil records – São Paulo

paulistensis Lane, 1947b: 200. Brazil (São Paulo). Brazil records – Pará, Rio de Janeiro, São Paulo

punctulata Lane, 1947b: 204. Brazil (Rio de Janeiro). Brazil records – Amazonas, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro

pseudopunctulata Cazorla & Ronderos, 2012: 400. Argentina. Brazil records – Amazonas

rabelloi Lane, 1947b: 203. Brazil (Rio de Janeiro). Brazil records – Amazonas, Mato Grosso do Sul, Rio de Janeiro

simplex Lane & Forattini, 1958: 222. Panama. Brazil records – Rio de Janeiro

travassosi Lane, 1947b: 210. Brazil (Espírito Santo). Brazil records – Espírito Santo, São Paulo

wygodzinskyi Lane, 1947b: 212. Brazil (São Paulo)

TRIBE CULICOIDINI KIEFFER, 1911b,1911c

Genus **CULICOIDES** Latreille

CULICOIDES Latreille, 1809: 251. Type species: *Culicoides punctatus* Latreille (= *Ceratopogon punctatus* Meigen), by monotypy.

PADROSIA Rafinesque, 1815: 130 (unnecessary new name for *Culicoides* Latreille). Type species: *Culicoides punctatus* Latreille (= *Ceratopogon punctatus* Meigen), automatic.

OXYHELEA Kieffer, 1921a: 14 (as subgenus of *Culicoides*). Type species: *Culicoides dentatus* Kieffer, by monotypy.

PROSAPELMA Kieffer, 1925b: 417. Type species: *Prosapelma cinerea* Kieffer, by original designation.

NEOCULICOIDES Boorman & Lane, 1979: 327 (preoccupied by *Neoculicoides* Pierce, 1966). Type species: *Neoculicoides taylora* Boorman & Lane, by original designation.

Subgenus **ANILOMYIA** Vargas

ANILOMYIA Vargas, 1960: 37 (as subgenus of *Culicoides*). Type species: *Culicoides covagarciai* Ortíz, by original designation.

efferus Fox, 1952: 365. Peru. Brazil records – Acre, Amazonas, Pará, Rondônia

trapidoi Wirth & Barreto, 1978: 554. Colombia. Brazil records - ??

Subgenus AVARITIA Fox

AVARITIA Fox, 1955: 218 (as subgenus of *Culicoides*). Type species: *Ceratopogon obsoletus* Meigen, by original designation.

impusilloides Spinelli & Wirth, 1984b: 178. Brazil (Santa Catarina)

pusilloides Wirth & Blanton, 1955a: 104. Panama. Brazil records – Acre, Amazonas

pusillus Lutz, 1913: 52. Brazil (Rio de Janeiro). Brazil records – Acre, Amapá, Amazonas, Pará, Rondônia, Bahia, Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina

Subgenus COTOCRIPUS Brèthes

COTOCRIPUS Brèthes, 1912: 451. Type species: *Cotocripus caridei* Brèthes, by monotypy.

bambusicola Lutz, 1913: 62. Brazil (Rio de Janeiro). Brazil records – Bahia, Espírito Santo, Rio de Janeiro, São Paulo

bahiensis Barbosa, 1947: 11. Brazil (Bahia)

caridei (Brèthes), 1912: 451 (*Cotocripus*). Argentina. Brazil records – Rio Grande do Sul
setifer (Lutz), 1913: 64 (*Centrorhynchus*). Brazil (Rio Grande do Sul)

Subgenus DIPHAOMYIA Vargas

DIPHAOMYIA Vargas, 1960: 40 (as subgenus of *Culicoides*). Type species: *Culicoides baueri* Hoffman, by original designation.

freitasi Wirth & Blanton, 1973: 434. Brazil (Pará). Brazil records – Amazonas, Pará

iriartei Fox, 1952: 368. Venezuela. Brazil records – Pará

vargasi Wirth & Blanton, 1953a: 74. Panama

minasensis Felipe-Bauer, 1987: 147. Brazil (Minas Gerais)

Subgenus DRYMODESMYIA Vargas

DRYMODESMYIA Vargas, 1960: 40 (as subgenus of *Culicoides*). Type species: *Culicoides copiosus* Root & Hoffman, by original designation.

jamaicensis Edwards, 1922: 165 (as *loughnani* var.). Jamaica. Brazil records – Rio de Janeiro

pilosus Wirth & Blanton, 1959: 332. Panama. Brazil records – Pará

poikilonotus Macfie, 1948: 82. Mexico. Brazil records – Bahia, Rio de Janeiro

cacozelus Macfie, 1948: 85. Mexico

hertigi Wirth and Blanton, 1953b: 229. Panama

Subgenus HAEMATOMYIDIUM Goeldi

HAEMATOMYIDIUM Goeldi, 1905: 137. Type species: *Haematomyidium paraensis* Goeldi, by original designation.

aragaoi Tavares & Dias, 1980: 393. Brazil (Rio de Janeiro)

crucifer Clastrier, 1968: 85. French Guiana. Brazil records – Amazonas, Pará

debilipalpis Lutz, 1913: 60. Brazil (São Paulo). Brazil records – Acre, Amapá, Amazonas, Pará, Roraima, Ceará, Maranhão, Pernambuco, Goiás, Mato Grosso do Sul, Espírito Santo, São Paulo, Santa Catarina

khalafi Beck, 1957: 104. USA (Florida)

ichesi Ronderos & Spinelli, 1995: 77. Argentina

denisae Clastrier, 1971: 290. French Guiana. Brazil records – Amazonas, Pará

espinolai Felipe-Bauer & Lourenco-de-Oliveira, 1987: 149. Brazil (Minas Gerais)

flinti Wirth, 1982a: 251. Argentina. Brazil records – Santa Catarina

ginesi Ortíz, 1951a: 586. Venezuela. Brazil records – Pará

glabrior Macfie, 1940c: 27 (as variety of *debilipalpis*). Guyana. Brazil records – Acre, Amazonas, Pará, Rondônia, Roraima

grahambelli Forattini, 1956a: 35. Panama

hoffmani Fox, 1946: 251. Trinidad and Tobago. Brazil records – Amazonas

horticola Lutz, 1913: 61. Brazil (São Paulo). Brazil records – Espírito Santo, Rio de Janeiro, São Paulo

bachmanni Spinelli, in Spinelli et al., 2005: 146. Argentina

insinuatus Ortíz & León, 1955: 577. Ecuador. Brazil records – Acre, Amapá, Amazonas, Pará, Roraima, Maranhão, São Paulo

jurutiensis Trindade & Felipe-Bauer, 2011a: 61. Brazil (Pará)

kampa Felipe-Bauer, Veras & Castellon in Felipe-Bauer et. al, 2000: 35. Brazil (Acre). Brazil records – Acre, Rondônia

lahillei (Iches), 1906: 264 (*Ceratopogon*). Argentina. Brazil records – São Paulo

limonensis Ortíz & León, 1955: 576. Ecuador. Brazil records – Pará, Bahia, São Paulo, Santa Catarina

martyrius Trindade & Felipe-Bauer, 2011a: 62. Brazil (Pará)

neoparaensis Tavares & Souza, 1978: 621. Brazil (Rio de Janeiro). Brazil records – Amazonas, Rio de Janeiro, Santa Catarina

paraensis (Goeldi), 1905: 137 (*Haematomyidium*). Brazil (Pará). Brazil records – Acre, Amazonas, Pará, Rondônia, Roraima, Bahia, Ceará, Maranhão, Pernambuco, Mato Grosso do Sul, Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina

undecimpunctatus Kieffer, 1917a: 307. Argentina

quasiparaensis Clastrier, 1971: 286. French Guiana. Brazil records – Acre, Amazonas, Pará, Rondônia, Roraima, Maranhão

rachoui Tavares & Souza, 1978: 622. Brazil (Rio de Janeiro). Brazil records – Minas Gerais, Rio de Janeiro

spurius Wirth & Blanton, 1959: 433. Panama. Brazil records – Acre, Amazonas, Roraima

todatanga Wirth & Blanton, 1973: 447. Brazil (Pará). Brazil records – Acre, Amapá, Amazonas, Pará, Santa Catarina

youngi Wirth & Barreto, 1978: 562. Colombia. Brazil records – Amazonas

Subgenus **HOFFMANIA** Fox

HOFFMANIA Fox, 1948: 21 (as subgenus of *Culicoides*). Type species: *Culicoides inamollae* Fox & Hoffman (= *Culicoides insignis* Lutz), by original designation.

aitkeni Wirth & Blanton, 1968a: 214. Trinidad and Tobago. Brazil records – Amazonas, Pará

baniwa Felipe-Bauer, in Felipe-Bauer et al., 2009: 852. Brazil (Amazonas)

batesi Wirth & Blanton, 1973: 426. Brazil (Pará). Brazilian records – Amazonas, Pará, Rondônia
sanmartini Wirth & Barreto, 1978: 553. Colombia

bimaculatus Floch & Abonnenc, 1942a: 3. French Guiana. Brazil records – Amazonas, Pará

brasilianum Forattini, 1956b: 81. Brazil (São Paulo). Brazil records – Amazonas, Pará, Pernambuco, Rio de Janeiro, São Paulo, Santa Catarina

brownei Spinelli, in Spinelli et al., 1993: 24. Colombia. Brazil records – Amazonas

contubernalis Ortíz & León, 1955: 574. (as a variety of *rozemboomi*). Ecuador. Brazil records - Rondônia

coutinhoi Barretto, 1944: 96. Brazil (São Paulo). Brazil records – Amazonas, Pará, Rondônia, São Paulo

diabolicus Hoffman, 1925: 294. Panama. Brazil records – Amazonas, Rondônia, Roraima, Maranhão

diffusus Spinelli, in Spinelli et al., 1993: 34. Brazil (Espírito Santo)

fernandoi Tavares & Souza, 1979: 611. Brazil (Rio de Janeiro). Brazil records – Maranhão, Bahia, Espírito Santo, Minas Gerais, Rio de Janeiro, Santa Catarina

filariferus Hoffman, 1939: 172. Mexico. Brazil records – Amazonas, Pará, Maranhão

flavivenulus Costa Lima, 1937a: 418. Brazil (Rio de Janeiro). Brazil records – Amazonas, Pará, Bahia, Maranhão, Pernambuco, Mato Grosso do Sul, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina

foxi Ortíz, 1950a: 461. Puerto Rico (USA). Brazil records – Amazonas, Pará, Rondônia, Roraima, Bahia, Maranhão, Pernambuco, Piauí, Goiás, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, São Paulo, Paraná

franklini Spinelli, in Spinelli et al., 1993: 45. Panama. Brazil records – Amazonas, Pará

fusipalpis Wirth & Blanton, 1973: 435. Brazil (Pará). Brazil records – Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, Bahia, Maranhão, Rio de Janeiro

guttatus (Coquillett), 1904a: 35 (*Ceratopogon*). Brazil (São Paulo). Brazil records – Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina

heliconiae Fox & Hoffman, 1944: 108. Venezuela. Brazil records – Acre, Amazonas, Pará

hylas Macfie, 1940c: 26. Guyana. Brazil records – Amapá, Amazonas, Pará, Rondônia, Roraima, Maranhão

ignacioi Forattini, 1957: 215. Brazil (São Paulo). Brazil records – Acre, Amazonas, Pará, Roraima, Maranhão, Minas Gerais, Rio de Janeiro, São Paulo
saintjusti Tavares & Ruiz, 1980: 27. Brazil (Rio de Janeiro)

insignis Lutz, 1913: 51. Brazil (Bahia e Rio de Janeiro). Brazil records – Amazonas, Pará, Rondônia, Bahia, Ceará, Paraíba, Pernambuco, Maranhão, Goiás, Mato Grosso, Mato Grosso do Sul, Espírito Santo, Minas Gerais, São Paulo, Rio de Janeiro, Rio Grande do Sul, Santa Catarina
inamollae Fox & Hoffman, 1944: 110. Puerto Rico (USA)
painteri Fox, 1946: 257. Honduras

lutzi Costa Lima, 1937a: 419. Brazil (Pará). Brazil records – Acre, Amazonas, Pará, Rondônia, Roraima, Maranhão, Goiás, Mato Grosso, Minas Gerais, Rio de Janeiro, São Paulo, Paraná, Santa Catarina

maruim Lutz, 1913: 48. Brazil (Rio de Janeiro). Brazil records – Pará, Bahia, Ceará, Pernambuco, Maranhão, Espírito Santo, Rio de Janeiro, São Paulo
recifei Barbosa, 1947: 25. Brazil (Pernambuco)

ocumarensis Ortíz, 1950b: 455. Venezuela. Brazil records – Amazonas, Pará, Rondônia

palpalis Macfie, 1948: 78. Mexico. Brazil records – Amazonas

paraignacioi Spinelli, in Spinelli et al., 1993: 66. Colombia. Brazil records – Amazonas, Pará, Rondônia

paramaruim Wirth & Blanton, 1973: 443. Brazil (Pará). Brazil records – Amazonas, Pará, Maranhão

parauapebensis Trindade & Felipe-Bauer, 2011b: 42. Brazil (Pará)

plaumanni Spinelli, in Spinelli et al., 1993: 69. Argentina. Brazil records – Amazonas, Pará, Rondônia, Minas Gerais

polypori Wirth & Blanton, 1968a: 212. Panama. Brazil records – Amazonas

pseudodiabolicus Fox, 1946: 256. Trinidad and Tobago. Brazil records – Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, Maranhão

pseudoheliconiae Felipe-Bauer, in Felipe-Bauer et al., 2008: 260. Peru. Brazil records – Amazonas, Roraima

ruizi Forattini, 1954a: 189. Brazil (Goiás). Brazil records – Amazonas, Pará, Maranhão, Goiás

tidwelli Spinelli, in Spinelli et al., 1993: 74. Colombia. Brazil records – Amazonas, Rondônia

travassosi Forattini, 1957: 198. Brazil (Pará). Brazil records – Amazonas, Pará, Mato Grosso

trinidadensis Hoffman, 1925: 286. Trinidad and Tobago. Brazil records – Roraima
oliveri Fox & Hoffman, 1944: 108. Haiti
wokei Barbosa, 1947: 28 (preoccupied by *Culicoides wokei* Fox, 1947). Panama.
diminutus Barbosa, 1951: 163. New name for *wokei*.

verecundus Macfie, 1948: 76. Mexico. Brazil records – Amazonas, Pará, Roraima

Subgenus MACFIELLA Fox

MACFIELLA Fox, 1955: 217 (as subgenus of *Culicoides*). Type species: *Ceratopogon phlebotomus* Williston, by original designation.

phlebotomus (Williston), 1896: 281 (*Ceratopogon*). St. Vincent. Brazil records – Pará, Maranhão, Ceará, Pernambuco, Goiás
amazonius Macfie, 1935a: 52. Brazil (Pará)

Subgenus MATAEMYIA Vargas

MATAEMYIA Vargas, 1960: 43 (as subgenus of *Culicoides*). Type species: *Culicoides mojingaensis* Wirth & Blanton, by original designation.

albuquerquei Wirth & Blanton, 1973: 424. Brazil (Pará)

aldomari Felipe-Bauer & Trindade, *in* Felipe-Bauer et al., 2013:56. Brazil (Pará). Brazil records – Amazonas, Pará.

barthi Tavares & Souza, 1978: 619. Brazil (Rio de Janeiro)

bricenoi Ortíz, 1951b: 445. Venezuela. Brazil records – Amazonas, Pará, Roraima

cuiabai Wirth, 1982a: 250. Brazil (Mato Grosso)

dalessandroi Wirth & Barreto, 1978: 556. Colombia. Brazil records – Roraima

daviesi Wirth & Blanton, 1968b: 251. Guyana. Brazil records – Pará

discrepans Ortíz & Mirsa, 1951: 595. Venezuela. Brazil records – Amazonas

felippebaueræ Spinelli, *in* Spinelli et al., 2007: 660. Brazil (Amazonas)

lenti Tavares & Dias, 1980: 396. Brazil (Rio de Janeiro)

macieli Tavares & Ruiz, 1980: 29. Brazil (Rio de Janeiro). Brazil records – Bahia, Rio de Janeiro

sherlocki Felipe-Bauer & Trindade, *in* Felipe-Bauer et al., 2013:56. Brazil (Pará)

wallacei Wirth & Blanton, 1973: 449. Brazil (Pará). Brazil records – Amazonas, Pará, Maranhão

Subgenus OECACTA Poey

OECACTA Poey, 1853: 238. Type species: *Oeacta furens* Poey, by monotypy.

DIPLOSELLA Kieffer, 1921b: 113 (as subgenus of *Culicoides*). Type species: *Culicoides sergenti* Kieffer, by monotypy.

SENSICULICOIDES Shevchenko, 1977: 133 (as subgenus of *Culicoides*). Type species: *Ceratopogon pictipennis* Staeger, by original designation.

alahialinus Barbosa, 1952: 11 (1953:12). Ecuador. Brazil records – Amazonas

furens (Poey), 1853: 238 (*Oecacta*). Cuba. Brazil records – Pará, Maranhão, Rio de Janeiro, São Paulo

maculithorax (Williston), 1896: 277 (*Ceratopogon*). St. Vincent

dovei Hall, 1932: 88. USA (Georgia)

birabeni Cavalieri, 1966: 59. Venezuela

Subgenus PSYCHOPHAENA Philippi

PSYCHOPHAENA Philippi, 1865: 628. Type species: *Psychophaena pictipennis* Philippi (= *Culicoides venezuelensis* Ortíz & Mirsa), by monotypy.

venezuelensis Ortíz & Mirsa, 1950: 137. Venezuela. Brazil records – Pernambuco, Minas Gerais, São Paulo, Rio Grande do Sul, Santa Catarina

pictipennis (Philippi), 1865: 628 (*Psychophaena*, preoccupied by *Culicoides pictipennis* (Staeger), 1839). Chile

ortizi Fox, 1952: 366. Venezuela

Subgenus unplaced, acotylus species group

acotylus Lutz, 1913: 69. Brazil (Mato Grosso). Brazil records – Amazonas, Pará, Roraima, Mato Grosso

panamericanus Fox, 1947: 90. Mexico

atripalpis Wirth & Blanton, 1973: 325. Brazil (Pará)

carsiomelas Wirth & Blanton, 1955a: 100. Panama. Brazil records – Pará

Subgenus unplaced, carpenteri species group

belemensis Wirth & Blanton, 1973: 427. Brazil (Pará). Brazil records – Amazonas, Pará

camposi Ortíz & León, 1955: 569. Ecuador. Brazil records – Amazonas

fairchildi Wirth & Blanton, 1955a: 102. Panama

carpenteri Wirth & Blanton, 1953a: 72. Panama. Brazil records – Amazonas

Subgenus unplaced, daedalus species group

pseudocrescentis Tavares & Dias, 1980: 397. Brazil (Rio de Janeiro). Brazil records – Espírito Santo, Rio de Janeiro

Subgenus unplaced, dasyophrus species group

dasyophrus Macfie, 1940c: 27. Guyana. Brazil records – Amazonas, Pará, Roraima, Mato Grosso

guerrai Wirth & Blanton, 1971: 41. Trinidad and Tobago. Brazil records – Pará, Rondônia, Roraima, Bahia

Subgenus unplaced, *eublepharus* species group

eublepharus Macfie, 1948: 86. Guyana. Brazil records – Amazonas, Pará, Roraima
transferrans Ortíz, 1953: 801. Venezuela

propriipennis Macfie, 1948: 84. Mexico. Brazil records – Amazonas, Pará, Rondônia, Bahia

rangeli Ortíz & Mirsa, 1952: 126. Venezuela. Brazil records – Amazonas
donajii Vargas, 1954: 28. Mexico
patulipalpis Wirth & Blanton, 1959: 421. Panama

Subgenus unplaced, *fluvialis* species group

balsapambensis Ortíz & León, 1955: 569 (as variety of *pifanoi*). Ecuador. Brazil records – Rio de Janeiro

fluvialis Macfie, 1940c: 25. Guyana. Brazil records – Amazonas, Pará, Rondônia, Roraima

leopoldoi Ortíz, 1951a: 579. Venezuela. Brazil records – Amapá, Amazonas, Pará, Rondônia, Roraima, Bahia, Ceará, Maranhão, Pernambuco, Espírito Santo, Minas Gerais, Rio de Janeiro

pulchripennis Macfie, 1939a: 200. Brazil (Santa Catarina)

tetrathyris Wirth & Blanton, 1959: 409. Panama. Brazil records – Acre, Amazonas, Pará, Rondônia, Roraima, Bahia

Subgenus unplaced, *leoni* species group

benarrochi Ortíz & Mirsa, 1952: 126 (as *benarrochei*). Venezuela. Brazil records – Amazonas, Roraima, Rio de Janeiro

fieldi Wirth & Blanton, 1956: 50. Honduras. Brazil records – Amazonas, Pará, Rio de Janeiro, Rondônia

gabaldoni Ortíz, 1954: 221. Venezuela. Brazil records – Pará, Rondônia, Roraima, Bahia

glabellus Wirth & Blanton, 1956: 47. Panama. Brazil records – Amazonas, Pará, Rondônia, Roraima, Bahia

leoni Barbosa, 1952: 17 (1953: 19). Ecuador. Brazil records – Amazonas

Subgenus unplaced, *limai* species group

antunesi Forattini, 1954b: 315. Brazil (Goiás). Brazil records – Amazonas, Goiás, Mato Grosso do Sul, Minas Gerais, São Paulo

boliviensis Spinelli & Wirth, 1984b: 172. Bolivia. Brazil records – Maranhão, Goiás, Minas Gerais

carvalhoi Wirth & Blanton, 1973: 429. Brazil (Pará)

duartei Tavares & Dias, 1980: 395. Brazil (Rio de Janeiro)

galindoi Wirth & Blanton, 1953a: 73. Panama. Brazil records – Acre, Amazonas, Roraima, Maranhão

limai Barretto, 1944: 99. Brazil (São Paulo). Brazil records – Amapá, Amazonas, Pará, Rondônia, Roraima, Maranhão, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina

lobatoi Felipe-Bauer, *in* Felipe-Bauer & Quintelas, 1994: 25. Brazil (Rio de Janeiro)

lopesi Barretto, 1944: 102. Brazil (São Paulo). Brazil records – Acre, Amazonas, Rio de Janeiro, São Paulo

santanderi Browne, 1980: 536. Colombia. Brazil records – Amazonas, Rondônia

vernoni Wirth & Blanton, 1973: 448. Brazil (Pará). Brazil records – Amazonas, Pará

Subgenus unplaced, *pachymerus* species group

caprilesi Fox, 1952: 364. Venezuela. Brazil records – Amazonas, Pará, Mato Grosso
kintzi Wirth and Blanton, 1953a: 72. Panama

cylindricornis Wirth & Blanton, 1973: 430. Brazil (Pará)

pachymerus Lutz, 1914: 83. Brazil (Amazonas). Brazil records – Amazonas, Rondônia

Subgenus unplaced, *reticulatus* species group

amazonicus Santarém, Felipe-Bauer & Trindade *in* Santarém et. al, 2014: 259. Brazil (Pará)

aureus Ortíz, 1951a: 585. Venezuela. Brazil records – Amazonas, Goiás
miyamotoi Wirth & Blanton, 1953b: 231. Panama

castelloni Santarém & Felipe-Bauer 2015: 959. Brazil (Amazonas)

fittkai Wirth & Blanton, 1973: 432. Brazil (Pará). Brazil records – Amazonas, Pará

fluminensis Santarém & Felipe-Bauer *in* Santarém et. al, 2014: 263. Brazil (Rio de Janeiro)

forattinii Ortíz, 1961: 211. Venezuela. Brazil records – Roraima

goeldii Wirth & Blanton, 1973: 437. Brazil (Pará)

guamai Wirth & Blanton, 1973: 438. Brazil (Pará). Brazil records – Amazonas, Pará

guyanensis Floch & Abonnenc, 1942b: 4. French Guiana. Brazil records – Amapá, Pará, Ceará, Maranhão, Pernambuco, Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo
recifensis Barbosa, 1943: 263. Brazil (Pernambuco)
stubalensis Fox, 1946: 254. Trinidad and Tobago

hildebrandoi Farias, Pereira Júnior, Felipe-Bauer, Pessoa, Medeiros & Santarém, 2016: 107. Brazil (Rondônia). Brazilian records – Amazonas, Rondônia

irregularis Santarém, Felipe-Bauer & Castellón *in* Santarém et. al, 2014: 265. Brazil (Roraima)
Brazil records – Amazonas, Roraima

kuripako Felipe-Bauer, *in* Felipe-Bauer et al., 2010: 863. Brazil (Amazonas). Brazil records – Amazonas, Rondônia

lanei Ortíz, 1950c: 431. Panama. Brazil records – Amazonas, Pará, Roraima

lyrinotatus Wirth & Blanton, 1955b: 126. Panama. Brazil records – Pará

paucienfuscatus Barbosa, 1947: 23. Brazil (Amazonas). Brazil records – Acre, Amazonas, Pará, Rondônia, Roraima, Maranhão, Goiás

pifanoi Ortíz, 1951a: 588. Venezuela. Brazil records – Pará, Bahia, Rio de Janeiro
tricoloratus Wirth & Blanton, 1953b: 233. Panama

profundus Santarém, Felipe-Bauer & Trindade *in* Santarém et. al, 2014: 266. Brazil (Pará). Brazil records – Amazonas, Pará

pseudoreticulatus Santarém, Felipe-Bauer & Castellón *in* Santarém et. al, 2014: 268. Brazil (Roraima). Brazil records – Amazonas, Roraima

reticulatus Lutz, 1913: 49. Brazil (Bahia). Brazil records – Bahia, Pernambuco

rhombus Santarém, Felipe-Bauer & Castellón *in* Santarém et. al, 2014: 270. Brazil (Roraima). Brazil records – Amazonas, Rondônia, Roraima

tavaresi Felipe-Bauer & Wirth, 1988: 261. Brazil (Rio de Janeiro). Brazil records – Rio de Janeiro, Santa Catarina

Subgenus unplaced, *stigmalis* species group

deanei Felipe-Bauer & Wirth, 1987: 416. Brazil (Rio de Janeiro)

fluviatilis (Lutz), 1914: 82 (*Johannseniella*). Brazil (Amazonas)
scorzai Ortíz, 1956: 93. Venezuela

Miscellaneous unplaced species

wokei Fox, 1947: 90. Panama. Brazil records - Amazonas
aethionotus Wirth & Blanton, 1955b: 121. Panama

TRIBE HETEROMYIINI WIRTH, 1962

Genus CLINOHELEA Kieffer

CLINOHELEA Kieffer, 1917a: 295. Type species: *Ceratopogon variegatus* Winnertz (= *Ceratopogon unimaculata* Macquart), by original designation.

Subgenus CERATOBIZZIA Kieffer

CERATOBIZZIA Kieffer, 1917a: 326. Type species: *Ceratobizzia fallax* Kieffer, by original designation.

fallax Kieffer, 1917a: 326. Paraguay. Brazil records – Amazonas, Pará, Rondônia, Mato Grosso, Rio de Janeiro, São Paulo
barrettoi Lane & Duret, 1954: 249. Brazil (São Paulo)

Subgenus CLINOHELEA

albopennis Lane, 1944: 259. Brazil (São Paulo). Brazil records – Pará, São Paulo

damascenoi Lane & Duret, 1954: 250. Brazil (Pará)

horacioi Lane, 1944: 257. Brazil (São Paulo). Brazil records – Amapá, Pará, Rondônia, Bahia, Mato Grosso, Mato Grosso do Sul, Rio de Janeiro, São Paulo, Paraná

neivai Lane, 1944: 252. Brazil (São Paulo). Brazil records – Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, São Paulo, Paraná

nigripes Macfie, 1939a: 205. Brazil (Santa Catarina). Brazil records – Rondônia, São Paulo, Santa Catarina

rubriceps Kieffer, 1917a: 318. Paraguay. Brazil records – Rio de Janeiro

saltanensis Lane & Duret, 1954: 252. Argentina. Brazil records – Rondônia, Paraná, Santa Catarina,

townsendi Lane, 1944: 256. Brazil (São Paulo). Brazil records – Amazonas, Pará, Rondônia, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, São Paulo

townesi Lane, 1944: 254. Brazil (Mato Grosso do Sul)

wygodzinskyi Lane, 1947a: 231. Brazil (Rio de Janeiro)

Genus HETEROMYIA Say

HETEROMYIA Say, 1825: plate 35. Type species: *Heteromyia fasciata* Say, by monotypy.

PACHYLEPTUS Walker, 1856: 426. Type species: *Pachyleptus fasciatus* Walker (= *Heteromyia nigra* Kieffer), by monotypy.

castanea Lane, 1946a: 214. Brazil (São Paulo)

clavata Williston, 1900: 225. Mexico. Brazil records – Amazonas

rufa Kieffer, 1917a: 325. Colombia

caloptera Kieffer, 1919a: 192. Unnecessary new name for *H. rufa* Kieffer, not Loew, 1861.

chaquensis Duret & Lane, 1955: 37. Argentina. Brazil records – Amazonas, Minas Gerais

correntina Duret & Lane, 1955: 39. Argentina. Brazil records – Amazonas, Rondônia

kiefferi Lane, 1946a: 213. Brazil (Rio de Janeiro)

nigra Kieffer, 1917a: 326. Paraguay. Brazil records – Amapá, Rio Grande do Norte, Rio de Janeiro, São Paulo, Paraná

fasciatus (Walker), 1856: 426 (*Pachyleptus*, preoccupied by *Heteromyia fasciata* Say, 1825). South America

Genus PELLUCIDOMYIA Macfie

PELLUCIDOMYIA Macfie, 1939b: 99. Type species: *Pellucidomyia ugandae* Macfie, by original designation.

MACFIEHELEA Lane, 1946a: 208. Type species: *Macfiehelea oliveirai* Lane, by original designation.

oliveirai (Lane), 1946a: 209 (*Macfiehelea*). Brazil (Minas Gerais). Brazil records – Mato Grosso do Sul, Minas Gerais

TRIBE JOHANNSENYIINI CRAMPTON, 1925

Genus GROGANHELEA Spinelli & Dippolito

GROGANHELEA Spinelli & Dippolito, *in* Spinelli et al., 1995: 166. Type species: *Groganhelea rondoniensis* Spinelli & Dippolito, by original designation.

rondoniensis Spinelli & Dippolito, *in* Spinelli et al., 1995: 167. Brazil (Rondônia)

Genus JOHANNSENYIA Malloch

JOHANNSENYIA Malloch, 1915b: 332. Type species: *Johannsenomyia halteralis* Malloch (= *Ceratopogon argentata* Loew), designation by Wirth, 1952: 211.

DICROHELEA Kieffer, 1917a: 363. Type species: *Palpomyia filicornis* Kieffer, designation by Macfie, 1940b: 26.

lanei Wirth, 1965b: 4. Brazil (Santa Catarina)

Genus MALLOCHOHELEA Wirth

MALLOCHOHELEA Wirth, 1962: 278. Type species: *Johannsenomyia albibasis* Malloch, by original designation.

aenipes (Macfie), 1940a: 193 (*Bezzia*). Guyana. Brazil records – Rio de Janeiro

nigripes (Macfie), 1939a: 216 (*Johannsenomyia*). Brazil (Santa Catarina)

pullata (Wirth), 1952: 213 (*Johannsenomyia*). USA (California). Brazil records – Amapá
bicellii (Lane), 1961a: 449 (*Nilobezzia*). Brazil (Amapá)

termophila (Spinelli), 1984: 197 (*Neobezzia*). Argentina. Brazil records – Rondônia

Genus NEOBEZZIA Wirth & Ratanaworabhan

NEOBEZZIA Wirth and Ratanaworabhan, 1972: 477. Type species: *Neobezzia clavipes* Wirth & Ratanaworabhan, by original designation.

albitarsis Wirth & Ratanaworabhan, 1972: 478. Brazil (Pará)

annicola (Macfie), 1940c: 30 (*Bezzia*). Guyana. Brazil records – Amazonas, Pará, Rondônia, Mato Grosso do Sul, Rio de Janeiro, São Paulo

blantoni Wirth & Ratanaworabhan, 1972: 482. Panama. Brazil records – Amazonas, Pará, Rondônia

brasiliae (Lane), 1961b: 37 (*Macropeza*). Brazil (Distrito Federal)

clavipes Wirth & Ratanaworabhan, 1972: 485. Brazil (Amazonas)

fittkai Wirth & Ratanaworabhan, 1972: 489. Brazil (Amazonas)

Genus NILOBEZZIA Kieffer

NILOBEZZIA Kieffer, 1921a: 24. Type species: *Nilobezzia armata* Kieffer, by monotypy.
CRESPINIA Kieffer, 1923: 141. Type species: *Crespinia brevialpis* Kieffer, by monotypy.
PARROTIA Kieffer, 1923: 140. Type species: *Parrotia flaviventris* Kieffer (= *Nilobezzia kiefferi* Wirth), by original designation.
SPHAEROBEZZIA Zilahi-Sebess, 1940: 108 (as subgenus of *Bezzia*). Type species: *Bezzia paradoxa* Zilahi-Sebess (= *Ceratopogon formosa* Loew), by monotypy.

neotropica (Macfie), 1940d: 78 (*Bezzia*). Brazil (Northeast). Brazil records – Rondônia, Bahia, Ceará

paraensis (Lane), 1958: 33 (*Bezzia*). Brazil (Pará). Brazil records – Amapá, Pará

schwarzii (Coquillett), 1901: 605 (*Ceratopogon*). USA (Texas). Brazil records – Rio de Janeiro
setipes (Coquillett), 1905: 59 (*Ceratopogon*). USA (Texas)
banksi (Gerry), 1933: 94 (*Bezzia*). Cuba
brasiliensis (Lane), 1958: 28 (*Bezzia*). Brazil (Rio de Janeiro)

TRIBE PALPOMYIINI ENDERLEIN, 1936

Genus AMEROHELEA Grogan & Wirth

AMEROHELEA Grogan & Wirth, 1981: 1280. Type species: *Amerohelea galindoi* Grogan & Wirth, by original designation.

dalcyi Grogan & Wirth, 1981: 1289. Brazil (Amazonas)

nelsoni Grogan & Wirth, 1981: 1290. Brazil (Amazonas)

pseudofasciata Grogan & Wirth, 1981: 1286. Brazil (Santa Catarina). Brazil records – Goiás, Santa Catarina

sordidipes (Macfie), 1939a: 209 (*Palpomyia*). Brazil (Santa Catarina). Brazil records – Pará, Minas Gerais, São Paulo, Santa Catarina

Genus BEZZIA Kieffer

BEZZIA Kieffer, 1899: 69. Type species: *Ceratopogon ornatus* Meigen, by original designation.
PSEUDOBEZZIA Malloch, 1915b: 351. Type species: *Ceratopogon explitus* Coquillett, by original designation.
ALLOBEZZIA Kieffer, 1917a: 296. Type species: *Ceratopogon explitus* Coquillett, by original designation.
LASIOBEZZIA Kieffer, 1925c: 54. Type species: *Bezzia pilipennis* Lundström, by original designation.
HOMOBEZZIA Macfie, 1932a: 496. Type species: *Homobezzia nyasae* Macfie, by monotypy.
SIVABEZZIA Remm, 1974: 440 (as subgenus of *Bezzia*). Type species: *Bezzia campanai* Clastrier, by original designation.

PYGOBEZZIA Remm, 1974: 441 (as subgenus of *Bezzia*). Type species: *Bezzia strobli* Kieffer (= *Ceratopogon albicornis* Meigen), by original designation.

ASPINABEZZIA Dow & Turner, 1976: 122 (as subgenus of *Bezzia*). Type species: *Ceratopogon glaber* Coquillett, by original designation.

aitkeni Spinelli & Wirth, 1991: 5. Brazil (Pará)

albuquerquei Lane, 1961b: 43. Brazil (Distrito Federal)

carioca Lane, 1958: 30. Brazil (Rio de Janeiro)

catarinensis Spinelli & Wirth, 1990: 17. Brazil (Santa Catarina)

clavipennis Spinelli & Wirth, 1989: 775. Brazil (Amazonas). Brazil records – Amazonas, Rondônia

dentifemur Spinelli & Wirth, 1991: 3. Colombia. Brazil records – Pará

fluminensis Lane, 1947a: 236. Brazil (Rio de Janeiro). Brazil records – Distrito Federal, Rio de Janeiro

goianensis Lane, 1961b: 44. Brazil (Distrito Federal)

lenkoi Lane, 1958: 31. Brazil (São Paulo). Brazil records – Amazonas, Pará, Distrito Federal, Rio de Janeiro, São Paulo

mazaruni Macfie, 1940a: 193. Guyana. Brazil records – Amazonas, Rondônia
coloradensis Wirth, 1952: 238. USA (California)

megatheca Spinelli & Wirth, 1990: 22. Colombia. Brazil records – Rondônia

nobilis (Winnertz), 1852: 79 (*Ceratopogon*). Germany. Brazil records – Rio Grande do Sul

setulosa (Loew), 1861: 312 (*Ceratopogon*). USA (District of Columbia)

barberi (Coquillett), 1901: 601 (*Ceratopogon*). USA (Maryland)

punctata Lundström, 1910: 42 (as variety of *leucogaster*). Finland

leucosticta Kieffer, 1919b: 124. Russia

cinerella Kieffer, 1919b: 124. Hungary

armaticrus Kieffer, 1919b: 125. Hungary

csikiana Kieffer, 1919b: 126. Russia

chrysocoma Kieffer, 1922: 355. Poland

acanthodes Macfie, 1940a: 192. Guyana

atlantica Wirth & Williams, 1957: 13. Bermuda (Great Britain)

nobiliformis Clastrier, 1962: 74. France

pseudovenustula Spinelli & Wirth, 1991: 8. Brazil (Pará)

pulchripes Kieffer, 1917a: 330. Paraguay. Brazil records – Amazonas, Pará, Rondônia, Mato Grosso

punctipennis (Williston), 1896: 278 (*Ceratopogon*). St. Vincent. Brazil records – Amazonas

schmitzorum Dippolito & Spinelli, in Dippolito et al., 1995: 54. Brazil (Rondônia)

snowi Lane, 1958: 34. Guatemala. Brazil records – Pará

subfusca Macfie, 1939a: 218. Brazil (Santa Catarina). Brazil records – Distrito Federal, Goiás, Santa Catarina

venustula (Williston), 1896: 278. (*Ceratopogon*). St. Vicent. Brazil records – Bahia
concoloripes Macfie, 1940c:31. Guyana

Genus CLASTRIEROMYIA Spinelli & Grogan

CLASTRIEROMYIA Spinelli & Grogan, 1985: 330. Type species: *Clastrieromyia schnacki* Spinelli & Grogan, by original designation.

kremeri Spinelli & Grogan, 1985: 332. Brazil (Amazonas)

Genus PACHYHELEA Wirth

PACHYHELEA Wirth, 1959a: 50. Type species *Ceratopogon magnus* Coquillett (= *Ceratopogon pachymerus* Williston), by original designation.

pachymera (Williston), 1900: 224 (*Ceratopogon*). Mexico. Brazil records – Rondônia, Mato Grosso do Sul, Rio de Janeiro
latifemoris (Ingram & Macfie), 1931: 231 (*Johannsenomyia*). Argentina

Genus PALPOMYIA Meigen

PALPOMYIA Meigen, 1818: 82. Type species: *Ceratopogon flavipes* Meigen, by monotypy. Generic name first published in synonymy with *Ceratopogon* but available under ICZN Code Article 11(e).

APOGON Rondani, 1856: 175 (preoccupied by *Apogon* Lacepede, 1802). Type species: *Ceratopogon hortulanus* Meigen (= *Ceratopogon flavipes* Meigen), by original designation.

ALASION Rondani, 1857: 14. New name for *Apogon* Rondani. Type species: *Ceratopogon hortulanus* Meigen (= *Ceratopogon flavipes* Meigen), automatic.

MIOPALPOMYIA Pierce, 1966: 95. Type species: *Miopalpomyia shilo* Pierce, by original designation.

NEOPALPOMYIA Pierce, 1966: 95. Type species: *Neopalpomyia freyi* Pierce, by original designation.

PARAPALPOMYIA Pierce, 1966: 97. Type species: *Parapalpomyia ryshkoffi* Pierce, by original designation.

GLUHHOVIA Remm, 1976: 174 (as subgenus of *Palpomyia*). Type species: *Palpomyia miki* Goetghebuer, by original designation.

almeidai (Lane), 1946b: 219 (*Sphaeromias*). Brazil (São Paulo)

barrettoi Lane, 1947c: 442. Brazil (Rio de Janeiro)

brasiliensis Macfie, 1939a: 213. Brazil (Santa Catarina). Brazil records – Minas Gerais, São Paulo, Santa Catarina

carioca Lane, 1960: 384. Brazil (Rio de Janeiro)

carrerai (Lane), 1947a: 235 (*Dicrobezzia*, as *carreirai*). Brazil (São Paulo)

castanea Macfie, 1939a: 211. Brazil (Santa Catarina). Brazil records – São Paulo, Santa Catarina

catarinensis Lane, 1960: 385. Brazil (Santa Catarina)

conifera Macfie, 1939a: 214. Brazil (Santa Catarina). Brazil records – Distrito Federal, Goiás, São Paulo, Santa Catarina

crassicus Kieffer, 1917a: 321. Paraguay. Brazil records – São Paulo

guarani Lane, 1946b: 221. Brazil (São Paulo). Brazil records – Espírito Santo, Rio de Janeiro, São Paulo

johannseni (Lane), 1947a: 233 (*Dicrobezzia*). Brazil (São Paulo). Brazil records – Rio de Janeiro, São Paulo

lacustris Lane, Forattini & Rabello, 1955: 83. Brazil (São Paulo)

limnochares (Macfie), 1940d: 76 (*Sphaeromias*). Brazil (Pernambuco)

lutzi Lane, 1947c: 440. Brazil (Rio de Janeiro)

mellichroa Macfie, 1939a: 212. Brazil (Santa Catarina)

nigroflava Lane, 1947c: 446. Brazil (São Paulo)

nigroscutellata Lane, 1947c: 444. Brazil (São Paulo). Brazil records – Rio de Janeiro, São Paulo

oliveirai Lane, 1947c: 443. Brazil (Minas Gerais). Brazil records – Rondônia, Minas Gerais

pampana Lane, 1960: 386. Brazil (Rio Grande do Sul)

paraensis Lane, 1960: 387. Brazil (Pará)

paulistensis Lane, 1947c: 445. Brazil (São Paulo). Brazil records – Rio de Janeiro, São Paulo

pseudolacustris Dippolito & Spinelli, *in* Dippolito et al., 1995: 55. Brazil (Rondônia)

spinifemur (Lane), 1947a: 234 (*Dicrobezzia*). Brazil (São Paulo). Brazil records – Rio de Janeiro, São Paulo

spinosa Lutz, 1914: 93. Brazil (Rio de Janeiro).

subfuscata Ingram & Macfie, 1931: 216. Chile. Brazil records – Minas Gerais

tamoioi Lane, 1960: 388. Brazil (Rio de Janeiro)

tanycornis Borkent, *in* Borkent & Wirth, 1997: 134. New name for *longicornis*.
longicornis (Williston), 1896: 280 (*Ceratopogon*, preoccupied by *Ceratopogon longicornis* Waltl, 1837). St. Vincent. Brazil records – Distrito Federal

umbella Macfie, 1939a: 208. Brazil (Santa Catarina). Brazil records – Distrito Federal, Mato Grosso do Sul, Rio de Janeiro, Rio Grande do Sul, Santa Catarina

versicolor Macfie, 1939a: 215. Brazil (Santa Catarina). Brazil records – Rondônia, Santa Catarina

wirthi Lane, Forattini & Rabello, 1955: 82. Brazil (São Paulo)

Genus PHAENOBEZZIA Haeselbarth

PHAENOBEZZIA Haeselbarth, 1965: 297. Type species: *Probezzia pistiae* Ingram & Macfie, by original designation.

ateles (Macfie), 1940d: 78 (*Bezzia*). Brazil (Bahia). Brazil records – Bahia, Distrito Federal
astyla Spinelli & Wirth, 1986: 232. Colombia

maya Spinelli & Wirth, 1986: 234. Belize. Brazil records – Rondônia

TRIBE STENOXENINI COQUILLET, 1899

Genus PARYPHOCONUS Enderlein

PARYPHOCONUS Enderlein, 1912: 57. Type species: *Paryphoconus angustipennis* Enderlein, by original designation.

aemulus Macfie, 1940e: 180. Guyana. Brazil records – Amazonas, Mato Grosso do Sul

amapaensis Lane, 1961a: 450. Brazil (Amapá)

angustipennis Enderlein, 1912: 57. Brazil (Santa Catarina). Brazil records – Goiás, São Paulo, Santa Catarina

anomalicornis Kieffer, 1917a: 333. Colombia and Paraguay. Brazil records – Amazonas

barrettoi Lane, 1946a: 203. Brazil (Goiás) Brazil records – Goiás, São Paulo

batesi Lane, 1961c: 455. Brazil (Distrito Federal)

brunneipennis Spinelli & Wirth, 1984c: 890. Brazil (Amazonas)

enderleini Lane, 1956: 301. Brazil (Mato Grosso do Sul)

fittkai Spinelli & Wirth, 1984c: 892. Brazil (Amazonas)

flavidus (Johannsen), 1943: 761 (*Ceratobezzia*). Guyana. Brazil records – Amazonas, Mato Grosso
lanei Wirth, 1959b: 236. Brazil (Amazonas)

fusciradialis Spinelli & Wirth, 1984c: 895. Brazil (Pará)

fuscus Lane, 1946a: 206. Brazil (Goiás)

goianensis Lane, 1961c: 456. Brazil (Distrito Federal)

grandis Macfie, 1939c: 6. Brazil (Santa Catarina). Brazil records - Pará, Ceará, Mato Grosso do Sul, Santa Catarina

guianae Macfie, 1940e: 180. Guyana. Brazil records – Pará, Mato Grosso do Sul, São Paulo

kiefferi Lane, 1956: 302. Brazil (Goiás)

macfie Lane, 1946a: 203. Brazil (São Paulo). Brazil records – Pará, Mato Grosso, São Paulo

mayeri Wirth, 1959b: 236. Brazil (Amazonas). Brazil records – Amazonas, Rondônia

neotropicalis (Lane), 1947a: 229 (*Macropeza*). Brazil (São Paulo)

nigripes Macfie, 1939c: 8. Argentina. Brazil records – Pará, Rondônia

nubifer Macfie, 1939c: 5. Brazil (Santa Catarina). Brazil records - Amazonas, Goiás, Minas Gerais, Rio de Janeiro, Santa Catarina

oliveirai Lane, 1956: 303. Brazil (Pará). Brazil records – Amazonas, Pará

paulistensis Lane, 1961c: 457. Brazil (São Paulo)

subflavus Macfie, 1940c: 23. Guyana. Brazil records – Amazonas, Pará, Rondônia, Distrito Federal
travassosi Lane, 1956: 304. Brazil (Pará)

telmatophilus (Macfie), 1940d: 77 (*Bezzia*). Brazil (Paraíba). Brazil records – Paraíba, Rio de Janeiro

terminalis (Coquillett), 1904b: 90 (*Ceratopogon*). Nicaragua. Brazil records – Amazonas, Santa Catarina

unimaculatus Macfie, 1940e: 179. Guyana. Brazil records – Pará

wirthi Lane, 1961c: 458. Brazil (Distrito Federal)

wygodzinskyi Lane, 1946a: 208. Brazil (Rio de Janeiro)

Genus STENOXENUS Coquillett

STENOXENUS Coquillett, 1899: 61. Type species: *Stenoxenus johnsoni* Coquillett, by monotypy.

aductus Dippolito & Spinelli, in Dippolito et al., 1995: 56. Brazil (Rondônia)

brasiliensis Macfie, 1939a: 140. Brazil (Santa Catarina). Brazil records – Amazonas, Santa Catarina

carrerai Lane, 1956: 305 (as *carreirai*). Brazil (Goiás)

excentricus Lane, 1961c: 453. Brazil (Pará)

niger Lane, 1947a: 230 (as *nigrus*). Brazil (Goiás). Brazil records – Goiás, Rio de Janeiro

paraensis Lane, 1956: 306. Brazil (Pará)

setiger Macfie, 1939a: 138. Brazil (Santa Catarina). Brazil records – São Paulo, Santa Catarina

SUBFAMILY DASYHELEINAE LENZ, 1934

Genus DASYHELEA Kieffer

DASYHELEA Kieffer, 1911b: 5. Type species: *Dasyhelea halophila* Kieffer, by monotypy.
PROKEMPIA Kieffer, 1913b: 163, 179 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea ornaticornis* Kieffer, designation by Wirth, 1973: 358.
PSEUDOCULICOIDES Malloch, 1915b: 309. Type species: *Ceratopogon mutabilis* Coquillett, by original designation.

TETRAHELEA Kieffer, 1925b: 423. Type species: *Culicoides insignicornis* Kieffer, by original designation.

DICRYPTOSCENA Enderlein, 1936: 51. Type species: *Dasyhelea inclusa* Kieffer, by original designation.

SEBESSIA Remm, 1979: 55 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea flavopyga* Zilahi-Sebess, by original designation.

BORKENTIMYIA Yu, Liu, Liu, Liu, Hao, Yan & Zhao, 2006: 321 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea forsteri* Grogan & Wirth, by original designation.

borgmeieri Wirth & Waugh, 1976: 225. Trinidad and Tobago. Brazil records – Pará, Bahia, Santa Catarina

cacaoi Wirth & Waugh, 1976: 231. Trinidad and Tobago. Brazil records – Pará

cincta (Coquillett), 1901: 605 (*Ceratopogon*). USA (Florida). Brazil records – Maranhão, Santa Catarina

albopicta Ingram & Macfie, 1931: 187. Argentina

penthesileae Macfie, 1935a: 55. Brazil (Maranhão)

eloyi Díaz & Ronderos *in* Díaz et al., 2013: 86. Brazil (Amazonas)

filibranchia (Lutz), 1914: 85 (*Ceratopogon*). Brazil (Rio de Janeiro)

flavicauda Macfie, 1939a: 201. Brazil (Santa Catarina)

hippolytae Macfie, 1935a: 54. Brazil (Maranhão)

mineira Díaz, Felipe-Bauer & Spinelli, 2017: 19. Brazil (Minas Gerais)

parahybae Macfie, 1940d: 74. Brazil (Paraíba)

paulistana Forattini & Rabello, 1957: 245. Brazil (São Paulo). Brazil records – Amazonas, Minas Gerais, São Paulo

pseudopollinosa Díaz & Ronderos *in* Díaz et al., 2014: 716. Brazil (Amazonas)

pumila Macfie, 1939a: 202. Brazil (Santa Catarina)

pusilla (Lutz), 1913: 65 (*Centrorhynchus*). Brazil (Rio de Janeiro). Brazil records – Rio de Janeiro, São Paulo

soriai Wirth & Waugh, 1976: 229. Brazil (Bahia)

thalestris Macfie, 1935a: 55. Brazil (Maranhão)

viridans Forattini & Rabello, 1957: 247. Brazil (Rio de Janeiro)

williamsi Wirth & Waugh, 1976: 228. Trinidad and Tobago. Brazil records – Pará, Bahia

winderi Wirth & Waugh, 1976: 233. Brazil (Bahia). Brazil records – Pará, Bahia, Santa Catarina

SUBFAMILY FORCIPOMYIINAE LENZ, 1934

Genus ATRICHOPOGON Kieffer

ATRICHOPOGON Kieffer, 1906: 53 (as subgenus of *Ceratopogon*). Type species: *Ceratopogon exilis* Coquillett (= *Ceratopogon levis* Coquillett), designation by Coquillett, 1910: 512.

KEMPIA Kieffer, 1913b: 162, 179 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea calcuttensis* Kieffer, designation by Wirth, 1952: 117.

GYMNOHELEA Kieffer, 1921b: 115. Type species: *Kempia longiserrus* Kieffer, designation by Wirth, 1973: 348.

DOLICHOHELEA Edwards, 1929: 8. Type species: *Dolichohelea polita* Edwards, by monotypy.

MELOEHELEA Wirth, 1956: 16 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon meloesugans* Kieffer.

PSAMMOPOGON Remm, 1979: 57 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon trifasciata* Kieffer (= *Atrichopogon flavolineatus* Strobl), by original designation.

ROSTROPOGON Remm, 1979: 57 (as subgenus of *Atrichopogon*). Type species: *Ceratopogon rostratus* Winnertz, by original designation.

IMPENSUKEMPIA Yu, in Liu et al., 2001: 47 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon impensus*, by original designation.

BESSAMYIA Yu, Liu, Liu, Liu, Hao, Yan and Zhao, 2006: 355 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon bessa* Yu and Yan, by original designation.

Subgenus ATRICHOPOGON Kieffer

bifidus Ewen, in Ewen & Saunders, 1958: 694. Brazil (Rio de Janeiro)

brasiliensis Macfie, 1939a: 184. Brazil (Santa Catarina)

cavus Felipe-Bauer, in Felipe-Bauer et al., 2012:45. Brazil (Rio de Janeiro)

columbianus Kieffer, 1917a: 303. Colombia. Brazil records – Santa Catarina

costalis Macfie, 1939a: 179. Brazil (Santa Catarina)

cryptogamus Macfie, 1939a: 182. Brazil (Santa Catarina)

dactilus Felipe-Bauer, in Felipe-Bauer et al., 2012:40. Brazil (Rio de Janeiro)

depilis Macfie, 1939a: 178. Brazil (Santa Catarina)

eucnemus Macfie, 1939a: 185. Brazil (Santa Catarina)

flavicaudae Macfie, 1939a: 181. Brazil (Santa Catarina)

pilosior Macfie, 1939a: 182 (as variety of *flavicaudae*). Brazil (Santa Catarina)

flavipes Lutz, 1914: 90. Brazil (Rio de Janeiro)

flumineus Macfie, 1935a: 52. Brazil (Maranhão). Brazil records – Maranhão, Santa Catarina

globulifer Macfie, 1939a: 191. Brazil (Santa Catarina)

insignipalpis Macfie, 1940d: 73. Brazil (Northeast). Brazil records – Paraíba, Rio Grande do Norte

nebulosus Macfie, 1939a: 192. Brazil (Santa Catarina)

novaeteutoniae Macfie, 1939a: 189. Brazil (Santa Catarina)

palpalis Macfie, 1939a: 196. Brazil (Santa Catarina)

pictipennis Clastrier, 1979: 30. French Guiana. Brazil records – Rio Grande do Sul

remigatus Ewen, *in* Ewen & Saunders, 1958: 687. Brazil (Rio de Janeiro)

rusticus Macfie, 1939a: 190. Brazil (Santa Catarina)

taeniatus Macfie, 1939a: 186. Brazil (Santa Catarina)

umbratilis Macfie, 1935a: 51. Brazil (Maranhão)

Subgenus LOPHOMYIDIUM Cordero

LOPHOMYIDIUM Cordero, 1929: 94. Type species: *Lophomyidium uruguayense* Cordero, by original designation.

fuscus (Coquillett), 1901: 605 (*Ceratopogon*). USA (New Jersey). Brazil records – Pará, Rio Grande do Sul

polydactylus Nielsen, 1951: 27. Denmark

Subgenus PSILOKEMPIA Enderlein

PSILOKEMPIA Enderlein, 1936: 49. Type species: *Kempia appendiculata* Goetghebuer, by monotypy.

echinodes Macfie, 1939a: 194. Brazil (Santa Catarina)

glaber Macfie, 1935a: 50. Brazil (Maranhão). Brazil records – Pará, Rondônia, Maranhão.

gordoni Macfie, 1938: 164. Trinidad and Tobago. Brazil records – Rondônia, Bahia, Santa Catarina

fimbriatus Macfie, 1939a: 194 (as variety of *gordoni*).

insigniventris Macfie, 1935a: 51. Brazil (Maranhão)

javieri Spinelli, Marino & Huerta, 2015: 35. St. Vicent. Brazil records – Pará

pectinatus Macfie, 1939a: 195. Brazil (Santa Catarina)

Genus FORCIPOMYIA Meigen

FORCIPOMYIA Meigen, 1818: 73,75. Type species: *Tipula bipunctata* Linnaeus, designation by Westwood, 1840: 126. Generic name first published *in* synonymy with *Ceratopogon* but available under ICZN Code Article 11(e).

LABIDOMYIA Stephens, 1829: 52 (1829: 239) (unnecessary new name for *Forcipomyia* Meigen, as *Forcipomyia* Megerle). Type species: *Tipula bipunctata* Linnaeus, designation by Westwood, 1840: 126.

TETRAPHORA Philippi, 1865: 630. Type species: *Tetraphora fusca* Philippi, by monotypy.

PROHELEA Kieffer, 1911c: 319 (as subgenus of *Forcipomyia*). Type species: *Ceratopogon decipiens* Kieffer, designation by Brunetti, 1920: 48.

Subgenus CALOFORCIPOMYIA Saunders

CALOFORCIPOMYIA Saunders, 1957: 680 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia caerulea* Saunders, by original designation.

caerulea Saunders, 1957: 681. Brazil (Rio de Janeiro). Brazil records – Pará, Rio de Janeiro

eukosma Macfie, 1939a: 148. Brazil (Santa Catarina). Brazil records – Pará, Rio de Janeiro, São Paulo, Santa Catarina

furcifera Macfie, 1940f: 920. Brazil (Santa Catarina)

glauca Macfie, 1934: 144. Great Britain. Brazil records – Southern

monilis Goetghebuer, 1934b: 287. Russia

diversipes Goetghebuer, 1936: 319. Belgium

splendida Wirth, 1951: 315. USA (Virginia)

hermosa Utmar & Wirth, 1976: 117. Brazil (Pará). Brazil records – Amazonas, Pará

nigrescens Macfie, 1939a: 156. Brazil (Santa Catarina). Brazil records – Rio de Janeiro, São Paulo, Santa Catarina

remigera Utmar & Wirth, 1976: 121. Colombia. Brazil records – Pará

sabalitensis Utmar & Wirth, 1976: 127. Costa Rica. Brazil records – Rio de Janeiro, São Paulo, Paraná, Santa Catarina

varicolor Saunders, 1957: 683. Brazil (Rio de Janeiro)

Subgenus EUPROJOANNISIA Brèthes

EUPROJOANNISIA Brèthes, 1914: 155. Type species: *Euprojoannisia platensis* Brèthes, by original designation.

EUFORCIPOMYIA Malloch, 1915a: 312. Type species: *Euforcipomyia hirtipennis* Malloch (= *Ceratopogon palustris* Meigen), by original designation.

CRYPTOSCENA Enderlein, 1936: 51. Type species: *Ceratopogon palustris* Meigen, by monotypy.

PROFORCIPOMYIA Saunders, 1957: 662 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia wirthi* Saunders, by original designation.

blantoni Soria & Bystrak, 1975: 3. Brazil (Bahia). Brazil records – Pará, Bahia

bromeliae Saunders, 1957: 665. Brazil (Rio de Janeiro). Brazil records – Pará, Rio de Janeiro

longispina Saunders, 1957: 669. Brazil (Rio de Janeiro)

quasiingrami Macfie, 1939a: 164. Brazil (Santa Catarina). Brazil records – Bahia, Santa Catarina

spatulifera Saunders, 1957: 667. Brazil (São Paulo). Brazil records – Pará, Bahia, São Paulo

Subgenus FORCIPOMYIA Meigen

argenteola Macfie, 1939a: 146. Brazil (Santa Catarina). Brazil records – Mato Grosso do Sul, Rio de Janeiro, Santa Catarina

calathea Wirth, 1982b: 573. Dominica. Brazil records – Bahia, Santa Catarina

catarinensis Marino & Spinelli, 2002: 309. Brazil (Santa Catarina)

genualis (Loew), 1866: 128 (*Ceratopogon*). Cuba. Brazil records – Amazonas, Bahia, Rio de Janeiro, Santa Catarina
propinqua (Williston), 1896: 279 (*Ceratopogon*). St. Vincent
raleighi Macfie, 1938: 160. Trinidad and Tobago

harpegonata Wirth & Soria, 1975: 19. Puerto Rico (USA). Brazil records – Amazonas, Pará, Bahia

ornatipennis Macfie, 1939a: 151. Brazil (Santa Catarina). Brazil records – Mato Grosso do Sul, Santa Catarina

pictoni Macfie, 1938: 161. Trinidad and Tobago. Brazil records – Amazonas, Pará, Bahia, São Paulo

pinamarensis Spinelli, 1983: 121. Argentina. Brazil records – Pará, Bahia, Rio de Janeiro

poulaineae Ingram & Macfie, 1931: 227. Argentina. Brazil records – Bahia, Santa Catarina

quatei Wirth, 1952: 142. USA (California). Brazil records – Bahia, Santa Catarina

squamitibia Lutz, 1914: 88. Brazil (Santa Catarina). Brazil records – Bahia, Mato Grosso do Sul, Rio de Janeiro, São Paulo, Santa Catarina
soriai Wirth, 1991: 168. Brazil (Bahia).

Subgenus LASIOHELEA Kieffer

CENTRORHYNCHUS Lutz, 1913: 62 (preoccupied by *Centrorhynchus* Steven or Fisher Waldheim, 1829). Type species: *Centrorhynchus stylifer* Lutz, by original designation.

LASIOHELEA Kieffer, 1921b: 115. Type species: *Atrichopogon pilosipennis* Kieffer (= *Ceratopogon velox* Winnertz), by original designation.

PARAPTEROBOSCA Harant, Huttel and Huttel, 1951: 468. Type species: *Parapterobosca anthropophila* Harant, Huttel and Huttel, by original designation.

DACNOFORCIPOMYIA Chan and Saunders, 1965: 527 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia anabaenae* Chan and Saunders, by original designation.

anitae Huerta & Ibañez-Bernal, 1996: 350. Mexico. Brazil records – Bahia

cornuta Saunders, 1964: 464. Costa Rica. Brazil records – São Paulo

insigniforceps Macfie, 1939a: 165. Brazil (Santa Catarina)

multidentata Ronderos & Spinelli, 1999: 153. Brazil (Bahia)

stylifer (Lutz), 1913: 63 (*Centrorhynchus*). Brazil (Minas Gerais). Brazil records – Bahia, Goiás, Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina

Subgenus LEPIDOHELEA Kieffer

LEPIDOHELEA Kieffer, 1917a: 364. Type species: *Ceratopogon chrysolophus* Kieffer, by original designation.

annulatipes Macfie, 1939a: 154. Brazil (Santa Catarina). Brazil records – Pará, Bahia, Santa Catarina

bahiensis Wirth & Spinelli, 1993: 113. Brazil (Bahia)
bicolor Lutz, 1914: 89. Brazil (Rio de Janeiro). Brazil records – Rio de Janeiro, Santa Catarina
discoloripes Macfie, 1939a: 159. Brazil (Santa Catarina)
brasilensis Macfie, 1939a: 153. Brazil (Santa Catarina)
dubia Macfie, 1939a: 162. Brazil (Santa Catarina)
kuanoskeles Macfie, 1939a: 150. Brazil (Santa Catarina)
lacrimatorii Macfie, 1939a: 161. Brazil (Santa Catarina)
luteigenua Wirth & Spinelli, 1992: 353. Costa Rica. Brazil records – Bahia
seminole Wirth, 1976: 81. USA (Florida). Brazil records – Rio de Janeiro
winderi Wirth, 1991: 171. Brazil (Bahia)

Subgenus METAFORCIPOMYIA Saunders

METAFORCIPOMYIA Saunders, 1957: 685 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia cerifera* Saunders, by original designation.

cerifera Saunders, 1957: 685. Brazil (Rio de Janeiro)

Subgenus MICROHELEA Kieffer

MICROHELEA Kieffer, 1917a: 364. Type species: *Atrichopogon microtomus* Kieffer, designation by Kieffer, 1921a: 7, with explanatory notation on erroneous previous type designation).
PHASMIDOHELEA Mayer, 1937: 233. Type species: *Phasmidohelea crudelis* Mayer (= *Forcipomyia mayeri* Forattini & Lane), by original designation.

amazonica Wirth, 1971: 241. Brazil (Amazonas)
belemensis Clastrier & Wirth, 1995: 140. Brazil (Pará)
castneri Clastrier & Wirth, 1995: 111. Peru. Brazil records (Pará)
catarina Clastrier & Wirth, 1995: 131. Brazil (Santa Catarina)
cristata Clastrier & Wirth, 1995: 135. Brazil (Santa Catarina)
desutterae Clastrier & Wirth, 1995: 100. French Guiana. Brazil records – Pará
eriophora (Williston), 1896: 279 (*Ceratopogon*). St. Vincent. Brazil records – Bahia
fuliginosa (Meigen), 1818: 86 (*Ceratopogon*). Germany. Brazil records – Pará, Bahia, Rio de Janeiro, São Paulo, Santa Catarina
villosa (Zetterstedt), 1850: 3645 (*Ceratopogon*). Sweden
crudelis (Karsch), 1886: 18 (*Ceratopogon*). Germany
hirtipes (de Meijere), 1907: 209 (*Ceratopogon*). Indonesia
brevimana Lundström, 1910: 32. Finland
inornatipennis (Austen), 1912: 107 (*Ceratopogon*). Nigeria
erucicida Knab, 1914: 65. USA (Florida)
crudelis Knab, 1914: 66 (preoccupied by *Forcipomyia crudelis* (Karsch), 1886). Mexico

coquilletti (Kieffer), 1917a: 297 (*Ceratopogon*). USA (New York)
tropica (Kieffer), 1917a: 297 (*Ceratopogon*). Costa Rica
obscura Santos Abreu, 1918: 276 (as variety of *bipunctata*, preoccupied by *Forcipomyia obscura* (Walker), 1848). Canary Islands (Spain)
alboclavata (Kieffer), 1919b: 12 (*Ceratopogon*, also as *asticta*). Slovak Republic
canaliculata (Goetghebuer), 1920: 110 (*Ceratopogon*). Belgium
nilotheres Macfie, 1924: 62. Egypt
ornaticrus Ingram & Macfie, 1924: 577 (as variety of *inornatipennis*; preoccupied by *Forcipomyia ornaticrus* Kieffer, 1912). Ghana
atripennis Goetghebuer, 1935: 149. Democratic Republic of the Congo
auripila Goetghebuer, 1935: 150. Democratic Republic of the Congo
curtimana Goetghebuer, 1935: 151. Democratic Republic of the Congo
grisescens Goetghebuer, 1935: 154. Democratic Republic of the Congo
vicina Goetghebuer, 1935: 161. Democratic Republic of the Congo
longiradialis Tokunaga, 1940: 66. Japan
takagii Tokunaga, 1941: 90. China
wansonii (Harant & Baur), 1946: 141 (*Lasiohelea*, preoccupied by *Forcipomyia wansonii* de Meillon, 1939). Democratic Republic of the Congo
brookmani Wirth, 1952: 140. USA (California)
santosi Remm, 1981: 32. New name for *obscura*

insignipalpis Macfie, 1949: 109. Mexico. Brazil records – Pará

luteisquamosa Wirth, 1972: 575. Brazil (Santa Catarina)

microtoma (Kieffer), 1917a: 299. Paraguay. Brazil records – Amazonas, Bahia, Rio de Janeiro, Santa Catarina.

minisquamosa Wirth, 1972: 570. Belize. Brazil records – Amazonas, Pará

moorei Clastrier & Wirth, 1995: 133. Brazil (Santa Catarina)

novaeteutoniae Clastrier & Wirth, 1995: 107. Brazil (Santa Catarina)

obesa Costa Lima, 1928: 85. Brazil (Amazonas). Brazil records – Amazonas, Pará

paulista Falaschi, Albertoni & Fusari, 2014: 381. Brazil (São Paulo)

penultimata Wirth, 1972: 573. Brazil (Santa Catarina)

plaumanni Clastrier & Wirth, 1995: 127. Brazil (Santa Catarina)

squamosa Lutz, 1914: 87. Brazil (Rio de Janeiro). Brazil records – Amazonas, Bahia, Rio de Janeiro, São Paulo, Santa Catarina

thomasi Clastrier & Wirth, 1995: 115. Brazil (Pará)

wagneri (Séguy), 1941: 85 (*Phasmidohelea*). Brazil (Rio de Janeiro)

willistoni Wirth, 1971: 242. Puerto Rico (USA). Brazil records – Santa Catarina

Subgenus **PEDILOHELEA** de Meillon & Wirth

PEDILOHELEA de Meillon & Wirth, 1980: 9 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia clastrieri* Dessart, by original designation.

aitkeni de Meillon & Wirth, 1980: 12. Brazil (Pará)

archboldi de Meillon & Wirth, 1980: 13. Dominica. Brazil records – Pará

spilmani de Meillon & Wirth, 1980: 22. Dominica. Brazil records – Santa Catarina

Subgenus PHYTOHELEA Remm

PHYTOHELEA Remm, 1971: 189 (as subgenus of *Forcipomyia*). Type species: *Ceratopogon bromelicola* Lutz, by original designation.

bromelicola (Lutz), 1914: 84 (*Ceratopogon*). Brazil (Rio de Janeiro)

edwardsi (Saunders), 1925: 260 (*Apelma*). Brazil (Rio de Janeiro). Brazil records – Pernambuco, Rio de Janeiro

keilini (Saunders), 1925: 265 (*Apelma*). Brazil (Pernambuco)

magna (Saunders), 1925: 266 (*Apelma*). Brazil (Pernambuco)

musae Clastrier & Delécolle, 1994: 51. French Guiana. Brazil records – Amazonas

Subgenus PTEROBOSCA Macfie

PTEROBOSCA Macfie, 1932b: 266. Unavailable name; proposed after 1930 without type species designation.

PTEROBOSCA Macfie, 1940b: 16. Type species: *Ceratopogon aeshnosuga* de Meijere, by original designation.

fusicornis (Coquillett), 1905: 63 (*Ceratopogon*). USA (Florida). Brazil records – Rio de Janeiro

fur (Johnson), 1913: 444 (*Ceratopogon*). Bermuda (Great Britain)

macfiei (Costa Lima), 1937b: 616 (*Pterobosca*). Brazil (Rio de Janeiro)

floridana (Johannsen), 1950: 143 (*Pterobosca*). USA (Florida)

incubans (Macfie), 1937: 111. Belize. Brazil records – Minas Gerais

Subgenus RHYNCHOFORCIPOMYIA Wirth and Dow

RHYNCHOFORCIPOMYIA Wirth & Dow, 1972: 863 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia messersmithi* Wirth & Dow, by original designation.

brachyrhyncha Wirth & Dow, 1972: 867. Colombia. Brazil records – Bahia

guamai Wirth & Dow, 1972: 869. Brazil (Pará)

Subgenus SALIOHELEA Wirth & Ratanaworabhan

SALIOHELEA Wirth & Ratanaworabhan, 1978: 494 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia leei* Wirth & Ratanaworabhan, by original designation.

leei Wirth & Ratanaworabhan, 1978: 498. Colombia. Brazil records – Amazonas, Pará, Bahia, Rio de Janeiro, Santa Catarina

Subgenus SCHIZOFORCIPOMYIA Chan & LeRoux

SCHIZOFORCIPOMYIA Chan & LeRoux, 1971: 271 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia petersoni* Chan & LeRoux (= *Forcipomyia borbonica* Clastrier), by original designation.

cinctipes (Coquillett), 1905: 64 (*Ceratopogon*). USA (Florida). Brazil records – Pará, Bahia

Subgenus SYNTHYRIDOMYIA Saunders

SYNTHYRIDOMYIA Saunders, 1957: 688 (as subgenus of *Forcipomyia*). Type species: *Lasiohelea acidicola* Tokunaga, by original designation.

tenuiforceps Macfie, 1939a: 167. Brazil (Santa Catarina)

Subgenus THYRIDOMYIA Saunders

THYRIDOMYIA Saunders, 1925: 268. Type species: *Thyridomyia palustris* Saunders (= *Ceratopogon monilicornis* (Coquillett), by original designation.

nana (Macfie), 1939a: 171 (*Lasiohelea*). Brazil (Santa Catarina)

univesicula Macfie, 1939a: 170. Brazil (Santa Catarina)

Subgenus TRICHOHELEA Goetghebuer

APELMA Kieffer, 1919b: 64 (preoccupied by Billberg, 1820). Type species: *Apelma auronitens* Kieffer (= *Trichohelea tonnoiri* Goetghebuer), designation by Macfie, 1940b: 16.

TRICHOHELEA Goetghebuer, 1920: 39. Type species: *Trichohelea tonnoiri* Goetghebuer, by original designation.

NEOFORCIPOMYIA Tokunaga, in Tokunaga and Murachi, 1959: 200 (as subgenus of *Forcipomyia*). Type species: *Ceratopogon pectinunguis* de Meijere, by original designation.

aeronautica Macfie, 1935b: 265. Guyana. Brazil records – Pará

opilionivora (Lane), 1947d: 159 (*Lasiohelea*). Brazil (São Paulo)

Subgenus WARMKEA Saunders

WARMKEA Saunders, 1957: 671 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia bicolor* Saunders (= *Forcipomyia lesliei* Wirth), by original designation.

galindoi Wirth & Soria, 1980: 146. Panama. Brazil records – Pará

louriei (Macfie), 1935a: 49 (*Lasiohelea*). Brazil (Maranhão). Brazil records – Pará, Maranhão, Santa Catarina

narthekephora Macfie, 1939a: 166. Brazil (Santa Catarina)

spinosa Saunders, 1957: 676. Puerto Rico (USA). Brazil records – Pará, Bahia, Rio de Janeiro

tuberculata Saunders, 1957: 677. Trinidad and Tobago. Brazil records – Amazonas, Pará

SUBFAMILY LEPTOCONOPINAE NOË, 1907

Genus **LEPTOCONOPS** Skuse

LEPTOCONOPS Skuse, 1889: 288. Type species: *Leptoconops stygius* Skuse, by monotypy.

TERSESTHES Townsend, 1893: 370. Type species: *Tersesthes torrens* Townsend, by original designation.

MYCTEROTYPUS Noè, 1905: 114. Type species: *Mycterotypus bezzii* Noè, designation by Carter, 1921: 3.

PROTERSESTHES Kieffer, 1921b: 107. Type species: *Tersesthes brasiliensis* Lutz, by original designation.

SCHIZOCONOPS Kieffer, 1918: 135. Type species: *Schizoconops indicus* Kieffer, by monotypy.

Subgenus **HOLOCONOPS** Kieffer

HOLOCONOPS Kieffer, 1918: 135. Type species: *Leptoconops kerteszi* Kieffer, by original designation.

MICROCONOPS Kieffer, 1921b: 108. Type species: *Microconops vexans* Kieffer, by original designation.

knowltoni Clastrier & Wirth, 1978: 26. USA (California). Brazil records – Santa Catarina

Subgenus **LEPTOCONOPS** Skuse

brasiliensis (Lutz), 1913: 66 (*Tersesthes*). Brazil (Amazonas). Brazil records – Acre, Amazonas, Pará

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