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# ZOOTAXA

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## Catalog of the Biting Midges of the World (Diptera: Ceratopogonidae)

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*This catalog is dedicated to the memory of*

Willis Wagner Wirth  
(1916–1994)

We stand on the shoulders of this great taxonomist who set the foundation of our systematics, based on his vast worldwide knowledge. He was a person who freely gave his support to the research of all his colleagues.



## Abstract

A list of all valid 6,206 extant and 296 fossil species of Ceratopogonidae described worldwide is provided, along with all their synonyms. A full citation and the country of origin of the type is given, with some larger countries also providing a more specific state or province. For the first time, worldwide, *nomina dubia* are identified. Numbers of species of each genus and subgenus are listed. Within subfamilies and tribes, genera are listed alphabetically. Five species have newly recognized authors, four have new names and 28 new combinations are recognized, with these listed in a table. A commentary on the state of the systematics in the family and particularly of *Culicoides* Latreille is given. The museums of the world are listed with the types of various authors of Ceratopogonidae species indicated. Authors providing regional catalogs, as well as summation of various collections are tabulated. The rate of description since 1758 indicates a steady progression of description, with, for example, 1,231 valid species described since the compilation of the world species by Borkent & Wirth (1997), till the end of 2018. The diversity in each Region is compared and the numbers of species shared between adjacent Regions presented.

**Key words:** species list, taxonomy, no-see-ums, distribution, fossil, *Culicoides*, rate of description, new names, new combinations

## Introduction

The Ceratopogonidae are a diverse, abundant, and broadly distributed group. Known as biting midges or no-see-ums, there are 6,206 recognized extant valid species arranged in three subfamilies and 112 genera. There is also an abundant fossil record with 296 fossil species arranged in 21 fossil and 23 extant genera with these in one of two extinct subfamilies or three extant subfamilies (Table 1). They are present worldwide other than on Antarctica, occurring from tidal areas to the highest mountain peaks, with the upper record of 4,651 meters from lake Huacracocha in Peru (Tapia *et al.* 2018), 4,400 meters recorded from just north of Mount Everest (Howard-Bury, 1922—from Linga, Tibet) and between 4,000 and 4,400 meters in the Andes of Ecuador (Kuhn *et al.* 2011). Latitudinally, ceratopogonids are recorded from the tropics to within 150 km of permanent polar ice in the north (Borkent & Grogan 1995) and some subantarctic islands in the south (Gressitt 1962; Sublette & Wirth 1980). Immatures are present and often abundant in nearly all aquatic and many subaquatic habitats, from phytotelmata and rock pools to seeps, streams, river, ponds, marshes and lakes, wet substrates such as mud, decaying vegetative material, and dung, and some species are even terrestrial, present under the bark of logs, in moist mosses, and in fungi. Adults are a common and diverse component in Malaise and light traps (Borkent *et al.* 2018; Brown 2005; Carrasco *et al.* 2014; Kitching *et al.* 2004; Meiswinkel *et al.* 2004a; Samela *et al.* 2014; Solórzano Kraemer *et al.* 2015; Venter *et al.* 2012) and can be swept with an aerial net from most habitats where there is even a little moisture.

Adult females have by far the broadest feeding repertoire of any biting insect group, with many requiring a protein meal to develop their eggs. Those with vertebrates hosts include blood-feeding on turtles (freshwater and marine), lizards, mammals, birds and even fish (mud skippers in Malaysia; Wirth & Hubert 1989: 304). Invertebrate hosts include mostly small insects, generally other nematoceros Diptera, which are captured, injected with a proteolytic enzyme and upon liquefaction, have their contents sucked out. Another lineage has females which feed on the haemolymph of other arthropods much larger than themselves such as millipedes, spiders, phasmids, katydids, a variety of adult Coleoptera and caterpillars, and with some of them taking haemolymph from the wings of dragonflies, damselflies, lacewings, butterflies and moths (Borkent & Spinelli 2007; Borkent *et al.* 2009; Borkent 2017; Downes 1978). Some females feed on moribund or recently dead insects (Marshall *et al.* 2015) and others feed on the contents of pollen grains (Downes 1955).

Many Ceratopogonidae and especially those of earlier lineages, are important pollinators of a wide array of plants (Bogarin *et al.* 2018; Bystrak & Wirth 1978; Ollerton *et al.* 2009). Both males and females of these seek out nectar to fuel flight.

The notorious reputation of this family reflects the capacity of the females of many species of *Culicoides* Latreille, a hyperdiverse genus with 1,347 species, to function as vectors of a wide array of viruses, bacteria and nematodes that afflict humans, domestic animals and an untold number of bird and wild animal species (Borkent 2004). If not acting as vectors, some species of *Culicoides*, *Leptoconops* Skuse, *Austroconops* Wirth and Lee and

*Forcipomyia (Lasiohelea)* Kieffer occur in such large numbers that their biting habit affects tourism and even outdoor work projects in some areas (Hendry 2011). On the plus side, their presence protects various vulnerable habitats by restricting the distribution of humans in some localities, such as Scotland, some Caribbean beaches, areas of the Gold Coast of Australia, and some mangrove swamps which would otherwise be vulnerable to development and disturbance so characteristic of *Homo sapiens* Linnaeus.

**TABLE 1.** Numbers of extant and fossil species of Ceratopogonidae according to subgenus and genus and cumulatively. The four Madagascar fossil species described by Meunier (1912) from copal are likely Holocene (Evenhuis 1994) and are treated here as *nomina dubia* in the extant fauna; the types are lost and there are few clues as to what these species might be.

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Subgenus		Genus		Total Species	Nomina dubia
				Extant species	Fossil Species	Extant species	Fossil Species		
Lebanoculicoidinae		* <i>Lebanoculicoides</i>				4	4		
Leptoconopinae		* <i>Archiaustroconops</i>				14	14		
		<i>Austroconops</i>				2	8	10	
		* <i>Fossileptoconops</i>					1	1	
		* <i>Jordanoconops</i>					1	1	
		<i>Leptoconops</i>				154	19	173	13
			<i>Brachyconops</i>		2				
			<i>Holoconops</i>		78				
			<i>Leptoconops</i>		57	17			
			<i>Megaconops</i>		1				
			<i>Palaeoconops</i>			2			
		<i>Proleptoconops</i>		8					
		<i>Styloconops</i>		8					
		* <i>Minyohelea</i>					8	8	
Atriculicoidinae		* <i>Atriculicoides</i>					12	12	
Forcipomyiinae	Dasyheleini	<i>Dasyhelea</i>				617	14	631	40
	Forcipomyiini	<i>Atrichopogon</i>				513	3	516	13
		<i>Forcipomyia</i>				1142	32	1174	26
			<i>Atopomyia</i>		2				
			<i>Baliohelea</i>		1				
			<i>Bassoforcipomyia</i>		2				
			<i>Blantonia</i>		2				
			<i>Caloforcipomyia</i>		35				
			<i>Collesohelea</i>		2				
			<i>Dycea</i>		11				
			<i>Euprojoannisia</i>		101	5			
			<i>Forciphelea</i>		1				
			<i>Forcipomyia</i>		323	13			

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TABLE 1. (Continued)

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Genus					Nomina dubia	
				Subgenus	Extant species	Fossil Species	Extant species	Fossil Species		Total tSpecies
			<i>Gampsöhelea</i>		2					
			<i>Herakleohelea</i>		1					
			<i>Ixodehelea</i>		1					
			<i>Japygahelea</i>		1					
			<i>Katangomyia</i>		2					
			<i>Lasiohelea</i>		179	3				
			<i>Lepidohelea</i>		80	4				
			<i>Metaforcipomyia</i>		36					
			<i>Microhelea</i>		105					
			<i>Nicothohelea</i>		1					
			<i>Oreinohelea</i>		1					
			<i>Panhelea</i>		2					
			<i>Pedilohelea</i>		18					
			<i>Phytohelea</i>		26	1				
			<i>Pterobosca</i>		23					
			<i>Rhinohelea</i>		2					
			<i>Rhynchoforcipomyia</i>		8					
			<i>Saliohelea</i>		13					
			<i>Schineromyia</i>		1					
			<i>Schizoforcipomyia</i>		13					
			<i>Synthyridomyia</i>		25	1				
			<i>Thyridomyia</i>		46					
			<i>Trichohelea</i>		58	3				
			<i>Trithicomya</i>		1					
			<i>Typhonomyia</i>		1					
			<i>Warmkea</i>		14					
			unplaced		5	2				
Ceratopogoninae	Culicoidini	<i>Culicoides</i>					1347	52	1399	45
			<i>Amossovia</i>		12					
			<i>Anilomyia</i>		20					
			<i>Avaritia</i>		106					
			<i>Beltranmyia</i>		49					
			<i>Cotocripus</i>		6					
			<i>Culicoides</i>		67					
			<i>Diphaomyia</i>		23					
			<i>Drymodesmyia</i>		26					
			<i>Fastus</i>		12					

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TABLE 1. (Continued)

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Subgenus		Genus		Nomina dubia	
				Extant species	Fossil Species	Extant species	Fossil Species		Total tSpecies
			<i>Glaphiromyia</i>	3					
			<i>Groganomyia</i>	1					
			<i>Haemophoructus</i>	16					
			<i>Haematomyidium</i>	39					
			<i>Hoffmania</i>	83					
			<i>Jilinocoides</i>	5					
			<i>Macfiella</i>	2					
			<i>Marksomyia</i>	6					
			<i>Mataemyia</i>	19					
			<i>Meijerehelea</i>	11					
			<i>Monoculicoides</i>	24					
			<i>Nullicella</i>	1					
			<i>Oecacta</i>	152					
			<i>Pontoculicoides</i>	14					
			<i>Psychophaena</i>	2					
			<i>Remmia</i>	8					
			<i>Selfia</i>	8					
			<i>Sensiculicoides</i>	36					
			<i>Silvaticulicoides</i>	13					
			<i>Sinocoides</i>	9					
			<i>Synhelea</i>	32					
			<i>Trithecoides</i>	61					
			<i>Tokunagahelea</i>	3					
			<i>Wirthomyia</i>	6					
			in species groups	336					
			miscellaneous	136					
			<i>Paradasyhelea</i>			11		11	
			<i>Washingtonhelea</i>			1		1	
	Ceratopogonini		<i>Afrohelea</i>			1		1	
			<i>Afrostilobezzia</i>			2		2	
			<i>Agilihelea</i>			1		1	
			<i>Allohelea</i>			62		62	
			<i>Alluaudomyia</i>			201	1	202	3
			<i>Ankylohelea</i>			1		1	
			<i>Atyphohelea</i>			1	1	2	
			<i>Austrohelea</i>			9		9	

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TABLE 1. (Continued)

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Subgenus		Genus		Total Species	Nomina dubia
				Extant species	Fossil Species	Extant species	Fossil Species		
		<i>Baeodasymyia</i>				5	1	6	
		<i>Baeohelea</i>				1		1	
		<i>Bahiahelea</i>				1		1	
		<i>Borkenthelea</i>				4		4	
		<i>Bothahelea</i>				3		3	
		<i>Bothamia</i>				1		1	
		* <i>Brachycretacea</i>					1	1	
		<i>Brachypogon</i>				201	10	211	4
			<i>Brachypogon</i>	112	5				
			<i>Isohelea</i>	82	5				
			<i>Sarissohelea</i>	5					
			unplaced	2					
		<i>Cacaohelea</i>				4		4	
		<i>Calcarhelea</i>				1		1	
		<i>Camptopterohelea</i>				5	1	6	
		<i>Capehelea</i>				1		1	
		<i>Ceratoculicoides</i>				6	1	7	
		<i>Ceratohelea</i>				2		2	
		* <i>Ceratopalpomyia</i>					1	1	
		<i>Ceratopogon</i>				43	20	63	
		<i>Chairopogon</i>				1		1	
		<i>Congohelea</i>				1		1	
		<i>Diaphanobezzia</i>				4		4	
		<i>Downshelea</i>				42		42	
		<i>Echinohelea</i>				27		27	
			<i>Echinohelea</i>	26					
			<i>Echinoideshelea</i>	1					
		* <i>Eohelea</i>					8	8	
		<i>Fanthamia</i>				14		14	
		<i>Fittkauhelea</i>				1		1	
		* <i>Fossihelea</i>					2	2	
		* <i>Gedanohelea</i>					6	6	
		<i>Heteroceratopogon</i>				1		1	
		<i>Heterohelea</i>				1		1	
		<i>Hypsimyia</i>				1		1	
		<i>Isthmohelea</i>				1		1	

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TABLE 1. (Continued)

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Subgenus		Genus		Nomina dubia
				Extant species	Fossil Species	Extant species	Fossil Species	
		<i>Kolenohoelea</i>				19		19
		<i>Leptohelea</i>				1		1
		<i>Luciamyia</i>				1		1
		<i>Macrurohelea</i>				15		15
		<i>Metacanthohelea</i>				1		1
		* <i>Mantohelea</i>					3	3
		<i>Meunierohoelea</i>				1	7	8
		<i>Monohoelea</i>				94	2	96
		<i>Nannohelea</i>				4	2	6
		<i>Neohoelea</i>				1		1
		<i>Neurobezzia</i>				3		3
		<i>Notiohelea</i>				2		2
		<i>Notoceratopogon</i>				4		4
		<i>Oxyria</i>				1		1
		* <i>Palaeobrachypogon</i>					6	6
		<i>Parabezzia</i>				44		44
		<i>Paralluadomyia</i>				1		1
		<i>Parastilobezzia</i>				1		1
		* <i>Peronehelea</i>					3	3
		<i>Pseudostilobezzia</i>				2		2
		<i>Rhynchohelea</i>				1		1
		<i>Schizohelea</i>				6		6
		<i>Schizonyxhelea</i>				16		16
		<i>Serromyia</i>				38	8	46
		<i>Sinhalohoelea</i>				3		3
		<i>Spinellihelea</i>				1		1
		<i>Stilobezzia</i>				349	10	359
			<i>Acanthohoelea</i>	175	6			
			<i>Debenhamia</i>	2				
			<i>Eukraiohelea</i>	14				
			<i>Stilobezzia s. str.</i>	158	1			
			unplaced		3			
		<i>Stiloculicoides</i>				6		6
		* <i>Wirthohoelea</i>					1	1
		<i>Yungahoelea</i>				1		1
	Heteromyiini	<i>Clinohoelea</i>				40		40

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TABLE 1. (Continued)

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Subgenus		Genus		Nomina dubia
				Extant species	Fossil Species	Extant species	Fossil Species	
			<i>Ceratobezzia</i>	1				
			<i>Clinohelea s. str.</i>	39				
		<i>Heteromyia</i>				13	1	14
		<i>Metahelea</i>				2	1	3
		<i>Neurohelea</i>				1		1
		<i>Pellucidomyia</i>				9		9
		<i>Physohelea</i>				2	1	3
		<i>Tetrabezzia</i>				7		7
	Hebetulini	<i>Hebetula</i>				22		22
	Johannsenomyiini	<i>Anebomyia</i>				9		9
		<i>Calyptopogon</i>				6		6
		<i>Crispomyia</i>				2		2
		<i>Dibezzia</i>				5		5
		<i>Groganhelea</i>				1		1
		<i>Guihelea</i>				1		1
		<i>Indobezzia</i>				2		2
		<i>Jenkinshalea</i>				20		20
		<i>Johannsenomyia</i>				27		27
		<i>Lanatomyia</i>				3		3
		<i>Macropeza</i>				22		22
		<i>Mallochohelea</i>				44	1	45
		<i>Neobezzia</i>				8		8
		<i>Neosphaeromias</i>				4		4
		<i>Nilobezzia</i>				74		74
		<i>Niphanohelea</i>				1		1
		<i>Probezzia</i>				28		28
	Sphaeromiini s. str.	<i>Alloimyia</i>				1		1
		<i>Austrosphaeromias</i>				4		4
		<i>Chelohelea</i>				1		1
		<i>Homohalea</i>				19		19
		<i>Lanehelea</i>				2		2
		<i>Leehelea</i>				9		9
		<i>Mackerrasomyia</i>				8		8
		<i>Sphaerohelea</i>				1		1
		<i>Sphaeromias</i>				30		30
		<i>Wannohelea</i>				1		1

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TABLE 1. (Continued)

Subfamily	Tribe	Genus (* = fossil taxon)	Subgenus	Subgenus		Genus		Nomina dubia	
				Extant species	Fossil Species	Extant species	Fossil Species		Total Species
		<i>Xenohelea</i>				14		14	
	Palpomyiini	<i>Amerohelea</i>				13		13	
		<i>Bezzia</i>				321	2	323	2
		<i>Clastrieromyia</i>				4		4	
		<i>Pachyhelea</i>				2		2	
		<i>Palpomyia</i>				273	11	284	2
		<i>Phaenobezzia</i>				34	1	35	
	Stenoxenini	<i>Paryphoconus</i>				41		41	
		<i>Stenoxenus</i>				21		21	
	Unplaced genera	* <i>Adelohelea</i>					3	3	
		* <i>Alautunmyia</i>					1	1	
		* <i>Archiculicoides</i>					3	3	
		* <i>Gerontodacus</i>					4	4	
		* <i>Heleageron</i>					2	2	
		* <i>Protoculicoides</i>					2	2	
		<i>Sinicohelea</i>				1		1	
		suprageneric							36
		<b>Total</b>				<b>6206</b>	<b>296</b>	<b>6502</b>	<b>184</b>
		Total Number of Extant Genera—112							
		Total Number of Fossil Genera—21							
		Total Number of Genera—133							

Ceratopogonidae have a remarkable fossil record going back 142 million years (Borkent *et al.* 2013). Adults are common and diverse in ambers of every age bearing insect inclusions, and more than 15 major deposits have been studied to date (Borkent 2000a). For example, 125–129 million year old Lebanese amber, has 34 species based on 147 specimens. Baltic amber, dated at 43–48 mya, has 109 species (18 unnamed) based on 1,098 specimens. Equally important, the basic cladistic generic relationships within the family have been interpreted and most fossils can be placed phylogenetically (Borkent 1995, 2000a, 2019a, 2019b; Borkent & Craig 2004). There is a close congruence between cladistic divergence and the age of the fossils.

Catalogs are a vital resource not only for systematists revising groups and faunas but also ecologists, conservation biologists, and many others who desire to put their results into a broader context. There have been numbers of catalogs previously published (Table 2), especially at a regional level, and these often include details of distribution, available keys to species for each genus and other important information not presented here. The world catalog by Borkent & Wirth (1997) summarized these till that point. Since then, Borkent (2016) has kept the world catalog current on a yearly basis as an on-line document. Borkent & Wirth (1997) and the on-line version simply arranged all *Culicoides* species alphabetically. The on-line version also included a separate document organizing the species of *Culicoides* into subgenera, species groups and remaining miscellaneous species (more on this below). Of particular



concern, however, has been the previous inclusion of numerous *nomina dubia* in the catalog as merely currently recognized species, somewhat overinflating the true number of described species in some of the big genera. Increasing knowledge and revision of groups, especially in Europe, has resulted in a growing list of such names, which are here separated from the main listing of species. As such, this catalog is a more accurate portrayal of the true diversity known in some regions. However, it remains clear that for certain groups, such as *Atrichopogon* with 513 extant species, there are numerous species that cannot be confidently identified and which need revision before we will understand the true diversity of the group, especially in tropical regions (Borkent & Picado 2004).

**TABLE 2.** Regional catalogs or summaries of ceratopogonid faunas, arranged from New World to Old World, north to south. Many of these give detailed distributions, references for keys to species for a given genus, subgenus or species group or further pertinent information. Some older catalogs are not listed here when their information has been superceded.

<b>Geographical Area</b>	<b>Reference</b>
North America north of Mexico	Borkent & Grogan, 2009
Americas south of the USA	Borkent & Spinelli, 2007
Neotropical Region	Borkent & Spinelli, 2000
Colombia	Spinelli & Wolff, 2016
Brazil	Santarém & Felipe-Bauer, 2018
Palearctic Region	Remm, 1988a, 1988b
European countries	Szadziewski <i>et al.</i> , 2013
Europe	Havelka, 1978c
Finland	Huldén & Huldén, 2014
Lithuania	Pakalniškis <i>et al.</i> , 2006
Denmark	Petersen & Achim, 2001
Germany	Havelka & Aguilar, 1999
Britain	Chandler, 2017
Ireland	Ashe <i>et al.</i> , 2012
Netherlands	Knoz & Beuk, 2002
Belgium	Gosseries, 1991
Slovakia	Mraz, 1999
Spain and Portugal	Delécolle, 2002a
Switzerland	Szadziewski, 1998b
Italy	Boorman <i>et al.</i> , 1995
Hungary	Papp, 2001
Afrotropical Region	Wirth <i>et al.</i> , 1980a; Borkent, 2017
South Africa	Segerman, 1995, 1996
Oriental Region	Wirth, 1973
China	Yu <i>et al.</i> , 2005b; Yang <i>et al.</i> , in press
Japan	Kanasugi, 2014
Australasian and Oceania	Debenham, 1989
Australia	Bugledich, 1999
Fossils	Evenhuis, 1994

Table 1 provides the number of valid extant and fossil species within each genus of Ceratopogonidae known till the end of 2018 and with a few from early 2019. It is clear that there are yet many more needing naming. There are large areas of our planet which are virtually uncollected. Borkent *et al.* (2018) reported exactly 200 species of Ceratopogonidae from a four hectare area of Costa Rican cloudforest sampled for a one year period and this is equal to 55% of all named species from all of Central America and 18% of all named species from the Neotropical

Region. The Costa Rican species were mostly undescribed and this is a small taste of the huge diversity that must be present in at least the Neotropical Region. Most biological hotspots, particularly within tropical areas are virtually unsampled by a ceratopogonid taxonomist or were sampled in an incidental manner many years ago by those with more general interests. Many of these habitats are rapidly disappearing, making it especially urgent to sample remaining habitats. Moreover, a wealth of material is already housed in various collections and that also requires careful revision and naming of new species.

Aside from a significant number of morphologically distinct species that require description there are, as elegantly shown, for example, by Bellis *et al.* (2014), Meiswinkel (1989, 1991, 1992), Meiswinkel & Linton (2003) and Sebastiani *et al.* (2001), species complexes which require careful morphological and molecular resolution to determine the true identity of species. Recent barcoding has helped to define and understand some species (e.g. Augot *et al.* 2013a, 2013b; Bakhoun *et al.* 2013; Sarvašová *et al.* 2017; Stur & Borkent 2014; Talavera *et al.* 2017; Yildirim *et al.* 2019) and will certainly become an increasingly powerful tool for helping determine true species in nature, and especially so when combined with morphological studies.

### Format and Coverage

Each valid species name is printed in bold, followed by the original author and citation. If a species or genus was described as new and with the same name in further instances, the second description is placed in parentheses after the first description. The name of the original genus is given, if this differs from its current placement. Instances where species were first described as varieties or subspecies are noted by the statements “as variety of ..” or “as subspecies of ..”. Synonyms are italicized. Type localities are given as the country of origin. If a territory is not totally independent, the country with which it is associated is named in parentheses (e.g. Azores (Portugal)). For the largest countries such as Canada, United States of America, Mexico, Brazil, Argentina, China and Australia provinces or states are given in parentheses. For Russia oblasts, republics and autonomous okrugs are presented.

For fossil species, the geological epoch from which the fossil originates is given after the country of the type locality. Because of the size of the genus, fossil species of *Culicoides* are listed as a group at the end of that genus' entry. Some fossil *Culicoides* have been placed to subgenus (Szadziewski 1988) but these likely need to be revised in that regard. Fossils of all other genera are treated within the listing of extant species.

If a given genus was originally described as a subgenus, this is noted by the statement: “as subgenus of ..”. Subspecies are treated as synonyms but if currently considered as valid, their status is indicated by the statement “valid subspecies”.

*Nomina dubia* are listed after each category to which they likely belong. Generally they are of uncertain status because their types are lost or because they have not been studied. For many of these, if a type is studied and its name becomes a senior synonym of a recognized species, the 50 year rule by the International Code of Zoological Nomenclature (Article 23.9) may apply. It states that if the name has not been used as valid after 1899 and the junior synonym has been used in the preceding 50 years in 25 publications by at least 10 authors and encompassing a span of not less than 10 years, the newly discovered senior synonym should not replace current usage.

*Nomina nuda* are simply listed at the end of the catalog. The list is likely incomplete as it is difficult to find all names that have crept into the literature without description, type deposition or other vital information (International Commission on Zoological Nomenclature, 1999, 2012). It is a pity that some publications do not meet ICZN standards. For example, the nine species described by Sinha & Das Gupta (2010a, b, 2011) and eleven described by Yu (2019) do not state the type depository and their names are therefore invalid. In addition, Yu (2019) does not designate holotypes, also invalidating the names.

The classification here generally follows that by Borkent (2016), which reflects a number of significant changes introduced by Borkent (2014). Taxa are arranged phyletically by subfamily and tribes but genera and species are listed alphabetically thereafter. A major change in classification is presented here, reflecting the opinions of Remm (1975) and Szadziewski (1996), that *Dasyheleinae*, with its single genus *Dasyhelea* Kieffer, should be considered a tribe of the *Forcipomyiinae* and that *Forcipomyia* Meigen and *Atrichopogon* Kieffer, previously the sole genera in the *Forcipomyiinae*, be considered members of the tribe *Forcipomyiini*. These authors recognized the close affinity between these three genera. It is clear that *Dasyheleini* and *Forcipomyiini* (with its two genera *Forcipomyia* and *Atrichopogon*) are sister groups (Borkent 2014, Borkent & Craig 2004). Additional synapomorphies are clearly evident in the larvae but not yet completely interpreted (Fürst von Lieven 1998).

Although it is now clear that the tribe Ceratopogonini is paraphyletic in relation to the monophyletic group Heteromyiini + Hebetulini + Johannsenomyiini + Sphaeromyiini + Palpomyiini + Stenoxenini, numbers of genera within that group are poorly understood phylogenetically. Borkent (2014) suggested restraint until more genera of Ceratopogonini are interpreted before further tribes might be recognized. As such, the Ceratopogonini is recognized in this catalog but awaiting further phylogenetic interpretation. It is important to recognize that some of the included genera form the basis of family-group names, as listed in the authoritative work by Sabrosky (1999), which will become available once the Ceratopogonini is split into further tribes (Borkent 2014). Family-group names used here follows Sabrosky (1999).

Synonyms are listed in chronological order. Subgeneric recognition is only utilized in those genera where it is broadly applicable. Because only some species in *Atrichopogon*, *Dasyhelea*, *Bezzia* Kieffer and *Palpomyia* Meigen have been placed in subgenera or species groups, depending on the geographical region, these groupings are not used in this catalog because of the difficulty (or lack) of applying the concepts on a worldwide basis.

References are alphabetical but references with three or more authors are listed chronologically, regardless of the spelling of the second or more names. This allows for all “*et al.*” citations in the text to be located logically. Chinese authors with the last name of Li, Liu, Wang or Yu are also listed chronologically, regardless of their first name.

In our comparison between Regions, we follow the definitions of these as presented for the Nearctic and Neotropical Regions by Brown *et al.* (2009), for the Afrotropical and western portion of the Palaearctic Regions by Kirk-Spriggs & Sinclair (2017) and for the Australasian, Oceanian and southern portion of the Oriental Regions by Evenhuis (1989). For the Oriental Region we follow Delfinado & Hardy (1973), with the following exceptions. Our limited presentation of type localities, presented only as countries, meant that records from the Ryukyu Islands, which are clearly Oriental, were treated simply as Japanese records and hence Palaearctic. There are a few Chinese provinces that include both Palaearctic and Oriental elements for many other groups of organisms (Chen 1997, Chen *et al.* 2008). Here we consider Henan, Shaanxi, Sichuan and Tibet as simply Palaearctic. Similarly, some Mexican states include both Nearctic and Neotropical elements. Here we simply consider Baja California Sur as Nearctic and Guerrero, Hidalgo, Jalisco, México and Michoacán as Neotropical.

For comparisons between the Palaearctic and Oriental Regions we did not consider those species endemic to China and which may be present in both Palaearctic and Oriental provinces. West Papua (earlier Irian Jaya) is a province of Indonesia; because the Australasian and Oceanian catalog (Evenhuis 1989) recognized this division, we were able to properly record such records as Australasian (the country Indonesia would otherwise be included in its entirety as being part of the Oriental Region).

There are some species that are not included in the numbers of species shared between Regions (Fig. 3). *Forcipomyia fuliginosa* (Meigen) is present in all Regions and has 24 synonyms, more than any other species of Ceratopogonidae. Although presently considered to be one species, in our opinion there are at least several species present which differ, at least, in subtle differences of the male genitalia and await further taxonomic investigation.

A few species of Ceratopogonidae are known as invasives (Grogan *et al.* 2017) and these too were not considered in determining the presence of shared species between Regions (other than *Forcipomyia pulcherrima* Santos Abreu within the Old World and *Culicoides loughnani* Edwards within the New World). These are as follows:

- *Forcipomyia biannulata* Ingram and Macfie—introduced to the Nearctic from the Afrotropical Region.
- *Forcipomyia bromelicola* (Lutz)—introduced to the Nearctic from the Neotropical Region.
- *Forcipomyia genualis* (Loew)—introduced to Afrotropical Region from the Nearctic.
- *Forcipomyia pulcherrima*—introduced to the Nearctic from the Old World (known from the Palaearctic, Afrotropical and Oriental Regions).
- *Forcipomyia swezeyana* Tokunaga and Murachi—introduced to the Nearctic from the Australasian Region.
- *Culicoides loughnani* Edwards, 1922—introduced to Australia from the New World (with *Opuntia*).

Some species present in disjunct Regions are not indicated in Fig. 3. The following are known from such areas and at least some may indicate introductions by humans:

- *Leptoconops spinosifrons* Carter—Afrotropical and Oriental Regions.
- *Forcipomyia chrysolopha* (Kieffer)—Afrotropical and Oriental Regions (also the Canary Islands).
- *Forcipomyia frutetorum* (Winnertz)—Nearctic, Palaearctic, Afrotropical and Australasian Regions.
- *Forcipomyia fusicornis* (Coquillett)—Nearctic and Hawaiian Islands (recorded but not established).
- *Forcipomyia lefanui* Carter—Afrotropical and Oriental Regions.

- *Forcipomyia litoraurea* (Ingram and Macfie)—Afrotropical, Palaearctic and Australasian Regions.
- *Forcipomyia monilicornis* (Coquillett)—Nearctic, Afrotropical, Palaearctic and Australasian Regions.
- *Forcipomyia oligarthra* Saunders—Neotropical, Nearctic, Oriental and Oceanian Regions.
- *Dasyhelea calvescens* Macfie—Nearctic, Neotropical and Oceanian (Hawaii) Regions.

### Nomenclatural Changes, Status of Names and Commentary on Placement of some Taxa

This catalog results in a number of name changes, including replacement names for primary homonyms, the result of describing species or genera more than once, or because of new combinations. These are listed in Table 3. In addition, *Didymophleps* Weyenbergh is considered a new synonym of *Forcipomyia*.

There are numbers of nomenclatural changes that were made and discussed by Borkent & Wirth (1997: 6–9) and these are not repeated here. They also discussed some earlier problems concerning the status of some genera and type species, also not repeated here.

Notably, many species of the subgenus *Forcipomyia* (*Lasiohelea*) described by Chinese colleagues have been originally described as members of *Lasiohelea* as a full genus. There are presently two genera of the subfamily Forcipomyiinae, *Forcipomyia* and *Atrichopogon*, a group that is certainly monophyletic (Borkent & Craig 2004). Although *Atrichopogon* is also monophyletic, the monophyly of *Forcipomyia* is uncertain and phylogenetic relationships between the subgenera of *Forcipomyia* are fundamentally unknown, although rich in diverse morphological features (Chan & LeRoux 1971c). As such, it is conceivable that *Atrichopogon* is more closely related to a subgenus or group of subgenera of *Forcipomyia*. The subgenus *F.* (*Lasiohelea*) is presently considered a valid genus by some in large measure because it is the only group within the Forcipomyiinae in which female adults feed on vertebrate blood; the others either don't feed or feed on the haemolymph of arthropods much larger than themselves, such as caterpillars and adult Coleoptera, Odonata and Lepidoptera (Borkent 2017; Borkent & Correia 2006; Borkent & Spinelli 2007; Borkent *et al.* 2009). There are some features that are distinctive to species of *F.* (*Lasiohelea*), as there are in other subgenera of *Forcipomyia*. However, it has long been known that distinctiveness, always a relative and subjective criterion, should not be the basis for classification. Only understanding the cladistic relationships can help resolve whether *F.* (*Lasiohelea*) might be considered a full genus or not. Here we continue with the general historical consensus worldwide that it remains as a subgenus (Borkent & Wirth 1997; Debenham 1983; Wirth 1965d, 1973, 1974; Wirth *et al.* 1980).

**TABLE 3.** All name or authorship changes made in this catalog, with previous names arranged alphabetically.

Previous name	New name, combination or authorship
<i>Bezzia danica</i> Kieffer	<i>Bezzia danica</i> Reith, new authorship
<i>Ceratopogon kamus</i> de Meillon	<i>Ceratohelea kama</i> (de Meillon), new combination
<i>Dasyhelea flava</i> Yu, in Yu <i>et al.</i> 2005	<i>Dasyhelea neoflava</i> Borkent and Dominiak, in this work, new name
<i>Dasyhelea fusca</i> Yu, in Yu <i>et al.</i> 2005	<i>Dasyhelea neofusca</i> Borkent and Dominiak, in this work, new name
<i>Didymophleps hortorum</i> Weyenbergh	<i>Forcipomyia hortorum</i> (Weyenbergh), new combination
<i>Forcipomyia brevipalpis</i> Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009	<i>Forcipomyia neobrevipalpis</i> Borkent and Dominiak, in this work, new name
<i>Forcipomyia meinerti</i> Kieffer	<i>Forcipomyia meinerti</i> Reith, new authorship
<i>Forcipomyia oxyria</i> Yu, Ke and Li, in Sun <i>et al.</i> 2009	<i>Forcipomyia neoxyria</i> Borkent and Dominiak, in this work, new name
<i>Lasiohelea abditan</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia abditan</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea alia</i> Yu and Yan, 2007	<i>Forcipomyia alia</i> (Yu and Yan, 2007), new combination
<i>Lasiohelea bladapida</i> Yu and Yan, 2007	<i>Forcipomyia bladapida</i> (Yu and Yan, 2007), new combination
<i>Lasiohelea breviprobosca</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia breviprobosca</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea caelomacula</i> Liu, Yan and Liu, 1996a	<i>Forcipomyia caelomacula</i> (Liu, Yan and Liu, 1996a), new combination
<i>Lasiohelea curvopenis</i> Wang, Chen and Yu, in Wang <i>et al.</i> 2011b	<i>Forcipomyia curvopenis</i> (Wang, Chen and Yu, in Wang <i>et al.</i> 2011b), new combination

....Continued on the next page

**TABLE 3.** (Continued)

Previous name	New name, combination or authorship
<i>Lasiohelea cymodocea</i> Yu and Nie, in Nie <i>et al.</i> 2003	<i>Forcipomyia cymodocea</i> (Yu and Nie, in Nie <i>et al.</i> 2003), new combination
<i>Lasiohelea daiani</i> Wang, Huang and Yu, in Wang <i>et al.</i> 2013	<i>Forcipomyia daiani</i> (Wang, Huang and Yu, in Wang <i>et al.</i> 2013), new combination
<i>Lasiohelea eminenta</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia eminenta</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea fengyani</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia fengyani</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea gracilidenta</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia gracilidenta</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea habros</i> Liu, Chen and Yu, in Chen <i>et al.</i> 2012	<i>Forcipomyia habros</i> (Liu, Chen and Yu, in Chen <i>et al.</i> 2012), new combination
<i>Lasiohelea hygroecia</i> Yu, Liang and Chen, in Chen <i>et al.</i> 2007	<i>Forcipomyia hygroecia</i> (Yu, Liang and Chen, in Chen <i>et al.</i> 2007), new combination
<i>Lasiohelea interceda</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia interceda</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea jinileeii</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia jinileeii</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea koba</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia koba</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea liubaensis</i> Yu, Liu and Yan, in Yu <i>et al.</i> 2013	<i>Forcipomyia liubaensis</i> (Yu, Liu and Yan, in Yu <i>et al.</i> 2013), new combination
<i>Lasiohelea multidentis</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia multidentis</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea nemerosa</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia nemerosa</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea othneia</i> Wang, Tan and Yu, in Wang <i>et al.</i> 2011b	<i>Forcipomyia othneia</i> (Wang, Tan and Yu, in Wang <i>et al.</i> 2011b), new combination
<i>Lasiohelea quadrangula</i> Yu and Yan, 2007	<i>Forcipomyia quadrangula</i> (Yu and Yan, 2007), new combination
<i>Lasiohelea thyesta</i> Yu, Chen and He, in Chen <i>et al.</i> 2007	<i>Forcipomyia thyesta</i> (Yu, Chen and He, in Chen <i>et al.</i> 2007), new combination
<i>Lasiohelea tianmushana</i> Yu & Yang, in Yang and Yu 2017	<i>Forcipomyia tianmushana</i> (Yu & Yang, in Yang and Yu 2017), new combination
<i>Lasiohelea tibetana</i> Yu, in Yu <i>et al.</i> 2005	<i>Forcipomyia tibetana</i> (Yu, in Yu <i>et al.</i> 2005), new combination
<i>Lasiohelea tunchanga</i> Wang and Yu, in Wang <i>et al.</i> 2011b	<i>Forcipomyia tunchanga</i> (Wang and Yu, in Wang <i>et al.</i> 2011b), new combination
<i>Lasiohelea wuzhishana</i> Wang, Qi and Yu, in Wang <i>et al.</i> 2011b	<i>Forcipomyia wuzhishana</i> (Wang, Qi and Yu, in Wang <i>et al.</i> 2011b), new combination
<i>Mallochohelea breviforceps</i> (Kieffer)	<i>Mallochohelea breviforceps</i> (Reith), new authorship
<i>Palpomyia bispinosa</i> Kieffer	<i>Palpomyia bispinosa</i> Reith, new authorship
<i>Palpomyia microcera</i> Kieffer	<i>Palpomyia microcera</i> Reith, new authorship

Kieffer and Rieth worked together on reared material of Ceratopogonidae and the two authors both described new species, of adults and immatures respectively and used the same names, in the following two publications:

Kieffer, J.J. 1915c. Über dänische Chironomiden. *Entomologische Mitteilungen* 10, 280–297 [280–284 published July 31; 285–297 published Dec. 31].

Rieth, J.T. 1915. Die Metamorphose der Culicoidinen (Ceratopogoninen). *Archiv für Hydrobiologie, Suppl.* 2, 377–442. [June 8].

Historically, the new names have been attributed to Kieffer (1915c). However, according to the printed contents of *Entomologische Mitteilungen* covering the years 1913–1915, pp. 280–284 of the Kieffer paper was published in July 1915 (pages in part 6) and pp. 285–297 was published in December 1915 (pages in part 7) (Shahin Navai and Verner Michelson, pers. comm.). Ashe & Spies (2011) also indicate a date of July, 1915 (exactly date within July uncertain) for the first portion and sometime after that in 1915 for the second part. Rieth (1915) was published June 8, 1915 according to Patrick Ashe (pers. comm.) and Lorna Mitchell (BMNH) (pers. comm.) who noted that their copy says June, 1915 on its wrapper. Therefore, Rieth (1915) is the first of these publications, giving his descriptions

taxonomic priority. As such five names, which were attributed to Kieffer (1915c) are now considered to be those of Rieth (1915) (Table 3). There are other species described in the paper by Kieffer (1915c) but only mentioned by Rieth (1915), without any description. Finally, it is generally considered that many Kieffer types have been destroyed or lost. However, those types from Kieffer (1915c) are yet present in Copenhagen, Denmark (ZMUC). At least some Rieth material is present in the ZSMC (M. Spies, pers. comm.), which provides the possibility of accurate identification, particularly once immatures are better understood (as either Rieth or Kieffer types). This also pertains to some of the immatures described by Thienemann (International Commission on Zoological Nomenclature, 1980), who also remarked on the immatures of adults described by Kieffer (e.g. Thienemann, 1915, 1919, 1925).

The *Culicoides* species previously placed in the *chaetophthalmus* species group are here renamed the *saundersi* group. *Culicoides chaetophthalmus* Amosova is now considered a synonym of *C. comosioculatus* Tokunaga in the subgenus *Culicoides* (*Sensiculicoides* Shevchenko).

*Culicoides fengxiangensis* was placed in the subgenus *C. (Oecacta)* Poey by Liang *et al.* (2019) but the authors noted the close similarity to *C. subfasciipennis* which is in *C. (Silvaticulicoides)* Glukhova and where we have placed *C. fengxiangensis*.

*Ceratopogon kamus* de Meillon (1959a) was missed by previous catalogs and other compilations since its description, including Wirth & Grogan (1988), de Meillon & Wirth (1991), Borkent & Wirth (1997) and Borkent (2017). The species, known from a single South African male, keys out to the previously monotypic *Ceratohelea* Wirth and Grogan in Borkent (2017), based on the description by de Meillon (1959a) and we therefore consider it as such as a new combination. However, *C. kama* and *C. advena* (de Meillon) differ in a number of respects: *C. kama* has bare eyes, flagellomere 11 isn't notably elongate as in *C. advena*, the base of  $M_2$  is missing, and the parameres are fused. These differences, often important in defining other genera, suggest that further study of specimens and other life stages are needed to confirm that *Ceratohelea* is actually monophyletic or not.

*Culicoides neopalpifer* was described in the thesis by Chen (1983), and therefore is not available. It has since been described by Lee (1988), who incorrectly attributed it to Chen (1983), but thereby making the name available as *C. neopalpifer* Lee. *Culicoides flavitibialis* Kitaoka and Tanaka (1985) and *C. neopalpifer* have been previously considered synonyms but because of the change in date of the description of *C. neopalpifer*, the senior name is now *Culicoides flavitibialis*.

The genus *Didymophleps* Weyenbergh (1883) was described from Argentina with the single species *D. hor-torum* Weyenbergh as type species. The types are considered lost. Weyenbergh (1883) described the species from both a male and female, although he noted that the association is not certain (they weren't collected in copula). His description and the three figures provided are rudimentary and even his identifications of the sexes of the figures are incorrect. His figures 1 and 2 are stated to be male but figure 1 shows a broad wing, typical of female ceratopogonids and figure 2 is a female antenna, with the characteristic five distal flagellomeres elongate. Vice versa, the plumose male antennae of figure 3 was considered a female. Macfie (1940f) provided a summary of earlier considerations of this genus and his opinion that it was likely an *Atrichopogon*. More recently, Wirth (1974) also considered the genus a synonym of *Atrichopogon* but Borkent & Wirth (1997) and Borkent & Spinelli (2000) considered it an unplaced Ceratopogoninae and Borkent & Spinelli (2007) as an unplaced Forcipomyiinae. The figure of the wing by Weyenbergh (1883) shows a short costa and the intercalary veins in cell  $r_3$  and, although not drawn as such, he stated that the wing was hairy, all features typical of species of *Forcipomyia*. The wings of *Atrichopogon* are generally not hairy and the costa is significantly longer than that shown by Weyenbergh (1883). We are therefore interpreting this genus as a new synonym of *Forcipomyia*. The type species, however, is a *nomen dubium* and will certainly remain so unless the types are discovered in the future or a neotype designated.

Hong (2002a) described *Sinopogonites eocenicus* Hong (2002a: 167 [2002b: 109]) but without a type depositary. As such it is unavailable and the genus name he proposed, *Sinopogonites* Hong (2002a: 167 [2002b: 109]), based on an unavailable name, is also unavailable. Hong (2002b) published Sinopogonitinae as a new subfamily but, for similar reasons, this family-group name is also unavailable.

Evenhuis and Pape (2017) present additional uses of the generic name *Helea* and this is summarized under the generic synonyms of *Ceratopogon* below. As noted above, there are numerous further unnamed species from nearly every area on the planet. As we continue to explore the Earth's fauna, it is vital to check types of previously described species from one's own area as well as that of surrounding regions (for more broadly distributed species). As is too often the case, the failure to check types results in continuing confusion. There remain many instances like these in which names presently in use or in synonymy need treatment. These problems are widespread and reflect poor taxonomic practice. It is true that some types no longer exist but this too needs addressing (in some instances

by describing neotypes). However, there remain many types which haven't been studied or haven't been adequately considered. There are yet even 40 Meigen Ceratopogonidae species, for example, represented by syntypes and which need interpretation and designation of lectotypes (Muséum national d'Histoire naturelle, Paris, France; <http://coldb.mnhn.fr/catalognumber/mnhn/ed/ed916>). This important gap in our knowledge includes some names of species of *Culicoides*. A case in point is the current acceptance of *Culicoides lupicaris* Downes and Kettle as a synonym of *C. delta* Edwards in the catalog (which should generally reflect the present literature). Although evidence indicates that the two are actually valid and distinct species (Lassen *et al.* 2012; Meiswinkel *et al.* 2004b; Ramilo *et al.* 2012, 2013; Talavera *et al.* 2017), no one has formally made the change in a publication. The types should be re-examined to confirm the differences and ensure the names are properly applied. Another example is Delécolle *et al.* (1997) who without checking types, treat *Culicoides brevifrontis* Smatov and Isimbekov as a separate species but do not explain why they no longer consider it a synonym of *C. desertorum* Gutsevich. There are more examples, all indicative of the need for taxonomic revisions that include best practices (Harrup *et al.* 2015).

In the Catalogue of Palearctic Diptera (Remm 1988), some Strobl (1900, 1906, 1910) names are considered *nomina dubia*. Four of them still fall into this category in this catalog, but the type material of these species is available in the NMBA. The original description of *Ceratopogon cantabricus* Strobl, 1900 suggests it is a member of the genus *Culicoides*, and we list this name among *nomina dubia* of the genus instead of *Forcipomyia* as proposed by Remm (1988).

Although DNA barcoding is a powerful tool to determining many species (see below), it is also clear that very few barcoding papers indicate where their voucher specimens are housed – indeed, many do not even keep vouchers, preventing future studies from being able to check published identifications. As such many of these will become throw-away studies because of uncertain species identification. This poor practice should be rectified immediately so that future researchers can re-examine those vouchers and interpret discrepancies.

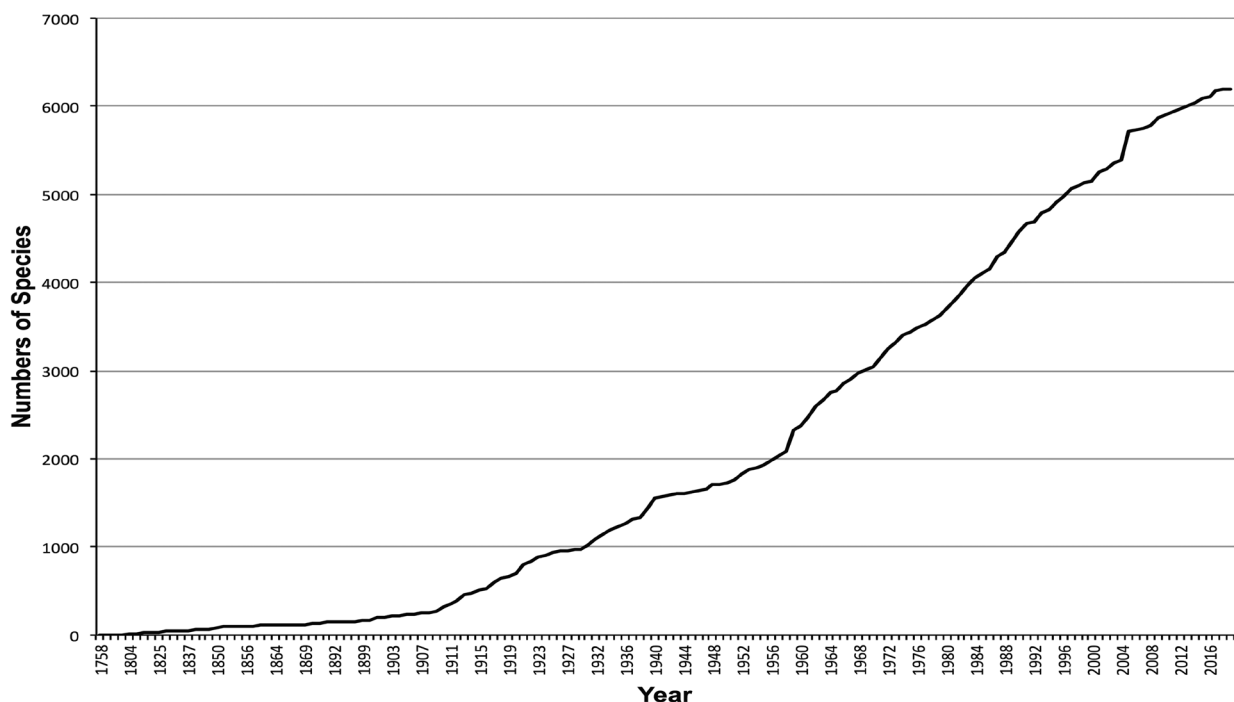


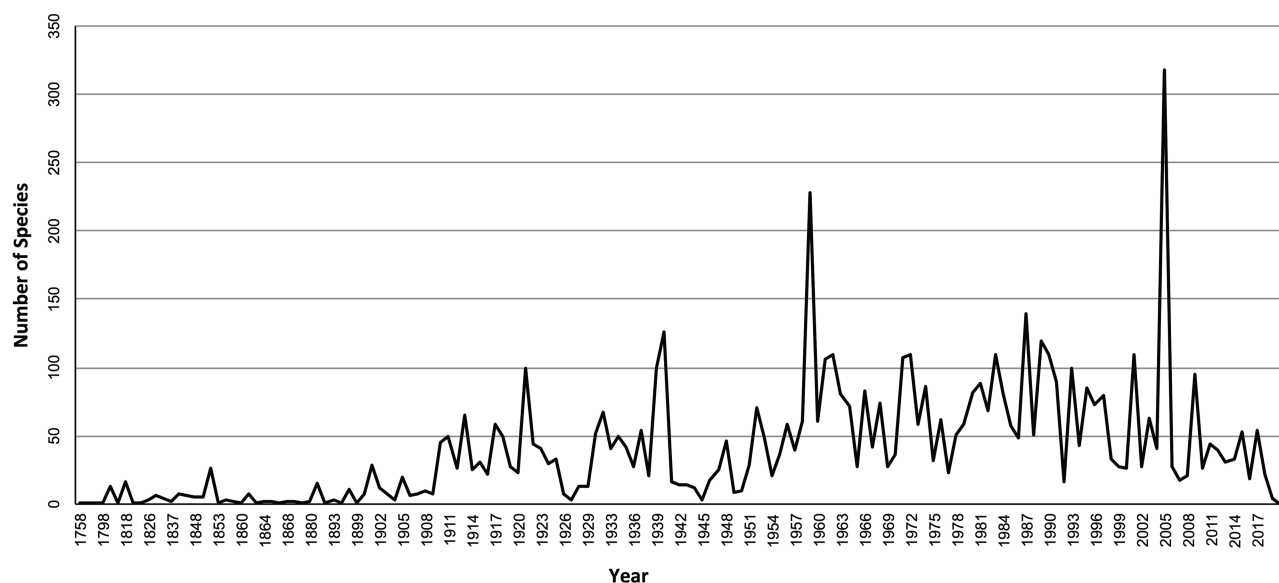
FIGURE 1. Graph indicating accumulation of descriptions of valid species over time.

### Current Numbers of Species of Ceratopogonidae and their General Distribution

The number of species for each genus of extant and fossil Ceratopogonidae is provided in Table 1, along with the totals for the family. Within the extant fauna, it is clear that certain genera are far more diverse than others. The earliest extant subfamily, Leptoconopinae, has two genera, *Leptoconops* and *Austroconops*, with 154 and 2 species, respectively. The greatest generic diversity is present in the four genera *Forcipomyia* (n= 1,142), *Atrichopogon* (n= 513), *Dasyhelea* (n= 617), and *Culicoides* (n= 1,347) which collectively make up 58% of the known extant diversity

of the family. The sister group of the Culicoidini, with its three genera *Culicoides*, *Paradasyhelea* Macfie (n= 11) and *Washingtonhelea* Wirth and Grogan (n= 1), includes the remainder of the subfamily Ceratopogoninae with 104 genera and 2,419 species and making up 39% of the family.

The world catalog by Borkent & Wirth (1997) reported 5,155 valid extant species and provided coverage till at least December, 1995 with a few species in 1996 and 1997 also included. With the publication of the present catalog, we have separated 184 *nomina dubia* which were included simply as valid species by Borkent & Wirth (1997). Figure 1 shows the accumulation of descriptions of all valid names of extant species (excluding those that are currently considered synonyms and *nomina dubia*), revealing the level of taxonomic activity over the years and a gauge of our understanding over time of the actual diversity present on our planet. Overall, there appears to be a steady rate of taxonomic description. Since the world catalog by Borkent & Wirth (1997) there have been 1,231 valid species described from 1996–2018, indicating a significant increase of 25% in our understanding of Ceratopogonidae worldwide in the past 23 years. In 1969, 50 years ago, 3,002 species were known and our present understanding of the fauna has more than doubled since. In 1919, 100 years ago, 592 species were known, about 10% of what is known today.



**FIGURE 2.** Graph indicating descriptions of valid species year by year.

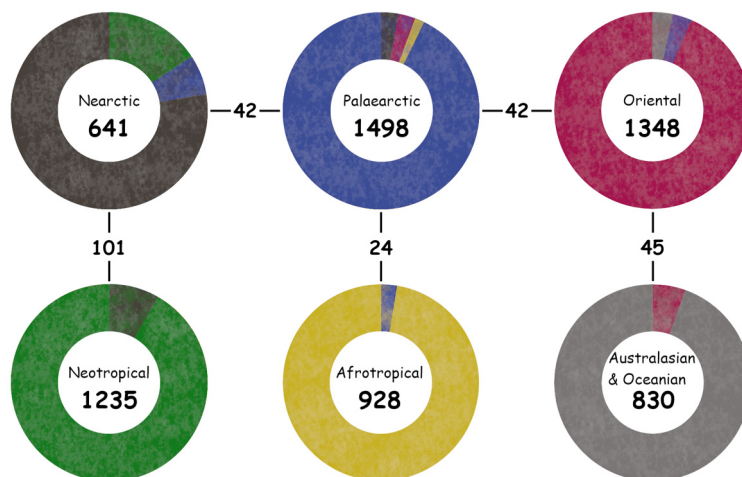
Figure 2 presents the same data but of numbers of species described year by year. There are several notably productive years that represent major contributions. The peak in 1940 was primarily due to the work of Tokunaga (1940a–e) on the Ceratopogonidae of Japan, China, Mongolia and Oceania, in 1959 to the 332 page monograph by Tokunaga & Murachi (1959) on the Micronesian fauna, and in 2005 to the massive 1,754 page and two volume work on the Ceratopogonidae of China by Yu *et al.* (2005a), in which they described 1,015 species, of which 301 were new. Much of the diversity described between 1951–1994 was otherwise due to the monumental and comprehensive contributions of W.W. Wirth, who published 50 generic and 1,034 species names during his career (Arnaud & Arnaud 1997). During a similar period of 1956–1997 J. Clastrier published 387 species.

As a broad gauge of regional diversity, we compiled the number of valid species described from each Region and indicate the number of species shared between adjacent Regions (Figure 3). The most diverse Region is the Palearctic, with 1,498 species. Some of that diversity is in the best known region in the world, Europe with 592 species (Szadziewski *et al.* 2013; subsequent species added). Of the 1,087 species in China, at least 617 of these are Palearctic (Yu *et al.* 2005a; subsequent species added). The Region with the fewest species known is the Nearctic, with not that many more species than are known from Europe. Although there is much that remains to be done in North America, the same could be said for each of the Regions. As such, it is difficult to determine the significance of the numbers for these areas.

There are relatively few species present in two or more adjacent Regions. The highest number is between the Nearctic and Neotropical Regions, with many of the 101 species shared being present in Mexico, where different states are either Nearctic or Neotropical and with these somewhat interdigitating. Although generally taxonomists have worked locally and have not compared material from different Regions, it appears that this restricted pattern is



generally present. For example, study of *Ceratopogon* Meigen, a northern hemisphere genus with species occurring in the very northern limits of land, indicates that only two of 43 species were Holarctic (Borkent & Grogan 1995; Stur & Borkent 2014). Although 6.5% of 641 species of Ceratopogonidae in the Nearctic are presently considered Holarctic, it seems likely that further study of at least some of these will show that they are actually distinct species in each Region. The same may well be true for those shared by other adjacent Regions. A better understanding of the taxonomy and biology of these species will enhance our understanding of such broadly distributed species.



**FIGURE 3.** Numbers of valid species in each of the World's Regions, with numbers of shared species between adjacent Regions indicated. Species shared between disjunct Regions are not shown but are noted in the text.

### Commentary on *Culicoides*

The organization of the species of *Culicoides* in this catalog requires comment. The present classification of species of *Culicoides* is, in our opinion, in poor condition, such that for many years the species were simply listed alphabetically in the world catalog of Borkent & Wirth (1997) and its descendent on-line versions. However, we hope that the classification in this catalog will provoke further study, as we begin to recognize monophyletic lineages.

The arrangement below of species of the genus *Culicoides* is almost entirely phenetic (based on overall similarity). Amazingly, and in spite of the tremendous medical, veterinary and economic importance of so many species in the genus, there has been very little cladistic interpretation of the genus or of any group within the genus based on morphology (i.e. interpretations of derived character states based on outgroup comparisons). Repeatedly, authors have classified species according to their similarity to one or another taxon, often noting that the antennal sensilla pattern is the same as one group, the wing similar to another group and the male genitalia to yet another. It is clear that basing a classification on such similarities retains phylogenetic uncertainty, and hence to continued instability in all future classifications. As such, there is a tremendous opportunity for future work to consider what character states might be derived within the genus. On a broad level, a good approach by an ambitious researcher would be to take the type species of every described subgenus, the characteristic species of each species group, and a goodly smattering of other species, compare these carefully in alcohol, cleared in glycerine, and then on slides (without crushing various parts), obtain the larvae and pupae of as many representative taxa as possible of each group (listed in Borkent 2014), determine derived character states (based on outgroup comparisons with other genera of Ceratopogonidae and especially in basal lineages) and combine the results to synthesize a phylogeny which would then provide the basis for further interpretation of species. It would be a gift to our science and a powerful tool to interpret their bionomic features including, for example, their role as vectors. At the present time, it appears that vectors of the variety of viruses, protozoa and nematodes (Borkent 2004) are scattered across a number of subgenera and species groups, suggesting that many of these have been independently acquired. Meiswinkel (2004) has pointed out that nearly half of the 30 world species vectoring orbiviral diseases to livestock are in the subgenus *C. (Avaritia)* Fox). However, until cladistic methods are applied more broadly throughout the genus, it will remain uncertain whether there has been phylogenetic tracking of species of *Culicoides* with their hosts and vectored organisms or evidence of independently acquired associations.

At present it is uncertain whether most of the subgenera or species groups are monophyletic, although we believe some of them to be so, mostly based on unpublished synapomorphies. A rare exception to this is the thesis by Shults (2015) who provided strong evidence that the subgenus *Culicoides* (*Monoculicoides* Khalaf) is monophyletic and in addition, interpreted the relationships between some of the included species. On the basis of that work, we newly recognize *C. erkaensis* Yu and Yang as a member of *C. (Monoculicoides)*. Meiswinkel & Dyce (1989) also provided a rare and welcome overview of some character states of phylogenetic importance. Szadziewski *et al.* (2016b) provided a synapomorphy for *C. (Oecacta)* which indicates that our placement of *C. picturatus* Kremer and Dedit is likely in error; there are numbers of further *C. (Oecacta)* which also lack the synapomorphy of this subgenus and require further study. Borkent (2014) and Shults *et al.* (2016) discuss synapomorphies of the genus as a whole.

The genus *Culicoides* presently includes 1,347 valid species. Of these, 875 species are placed to subgenus and 336 species are placed in separate species groups of uncertain affiliation. There are a further 136 miscellaneous species which no one knows what to do with. Aside from the theoretical problems noted above, this is also a reflection of various scientists working on their local fauna and constructing classifications as best they can on their local and inherently limited knowledge. There is a great need to study the systematics of *Culicoides* on a worldwide basis, initially using exemplars of the various groups from each region and to interpret their features in the light of other Ceratopogonidae.

Although often seen as a panacea for determining phylogenetic relationships (Harrup *et al.* 2015), molecular sequencing has had a tumultuous history, providing very different conclusions over the years. There are both theoretical and practical issues that suggest that they will continue to be of uncertain value (Borkent 2018). As such, a number of recent papers have used genomic methods (Harrup *et al.* 2015) to interpret purported phylogenetic relationships between select species of *Culicoides* (e.g. Ander *et al.* 2013; Augot *et al.* 2013a, 2013b, 2017; Bakhom *et al.* 2013; Bellis *et al.* 2014; Cen *et al.* 2018; Desvars *et al.* 2015; Harrup *et al.* 2016; Lassen *et al.* 2012; Linton *et al.* 2002; Liu *et al.* 2018; Morag *et al.* 2012; Muñoz-Muñoz *et al.* 2014; Pagès *et al.* 2009; Sarvašová *et al.* 2017; Schwenkenbecher *et al.* 2009; Talavera *et al.* 2017; Tay *et al.* 2016; Yildirim *et al.* 2019). Most use COI (or a couple of genes) as a measure but it is highly doubtful as to whether these genes (and especially COI on its own) can be used to interpret phylogenetic relationships, as has been explicitly challenged by Borkent (2018). For example, low percentages of chironomid and simuliid genera and subgroups are recovered using COI barcodes (Ekrem *et al.* 2007, 2010; Rivera & Currie 2009). Further to this, readers are reminded that 17 described species of *Culicoides* are known from the Cretaceous, going back to 95 million year old New Jersey amber (Borkent 1996, 2000b). Members of the genus are now known from 99 million year old Burmese amber (Szadziewski & Dominiak 2019), the oldest record of *Culicoides* known. The genus is clearly ancient and was certainly diverse before the Cenozoic.

The following arrangement of species does NOT follow the most recent literature (which a catalog should otherwise generally do), reflecting various problems in our present classification. One is the lack of cladistic studies as noted above. Another is due to poor taxonomic practices, including the failure to study types of previously described species. In instances of recent differences in opinion we have generally followed the opinions of Wirth who studied the genus worldwide. For example, the placement by Yu *et al.* (2005a) of *C. dendrophilus* Amosova (type species of *C. (Amosovia)* Glukhova), *C. segnis* Campbell and Pelham-Clinton (type species of *C. (Wirthomyia)* Vargas) and *C. fascipennis* Staeger (type species of *C. (Silvaticulicoides)*) in the subgenus *C. (Oecacta)* actually results in all the aforementioned subgenera becoming junior synonyms of the subgenus *C. (Oecacta)*; these subgeneric placements (without action on the subgeneric synonymy by Yu *et al.* 2005a) have not been followed. In relation to this, Szadziewski *et al.* (2016b) have recently redefined *C. (Oecacta)* with a synapomorphy and relegated a number of species previously placed in this subgenus or considered as miscellaneous to *C. (Sensiculicoides)*. Nandi & Mazumdar (2014a) suggested that the *clavipalpis* species group be placed within *C. (Diaphaomyia)* Vargas but the reasons for doing so are based on phenetic similarities that continue to plague a logical, cladistic basis for the classification of this genus.

The classification of African species of *Culicoides* is particularly messy and one need only compare the following to see major discrepancies in the placement of many species: Khamala & Kettle (1971), Boorman & Dipeolu (1979), Itoua *et al.* (1987) and Glick (1990).

Some workers have placed single species as the sole representative of a species group (e.g. Khamala & Kettle, 1971) and we have simply included these in the list of miscellaneous species.

As it stands now, species of *Culicoides* are placed in 33 subgenera and 38 species groups (these unplaced to subgenus). Readers will see that there is a particularly long list of miscellaneous species, not placed in any group,

representing 10% of the world fauna. There are also 45 species considered as *nomina dubia*, especially those in old publications. Many of these require taxonomic attention, either in tracking down the types and identifying them in the light of current knowledge, designating neotypes or retaining these as *nomina dubia* but with commentary.

It is remarkable that species of *Culicoides* are so poorly known, considering their medical and veterinary importance. Although it appears that the strong majority of European species are described, virtually every other area of the globe has been poorly surveyed and large numbers of species remain undescribed (e.g. Borkent 2017 and references therein; Spinelli & Borkent 2004).

At present there are no good keys to all the adults of species of *Culicoides* of any Region, although there are some local keys and/or guides that are very useful (these often only to females) (e.g. see summaries in Boorman (1997b), Borkent (2017), Borkent & Grogan 2009, Borkent & Spinelli (2007), Harrup *et al.* (2015)). A particularly innovative and outstanding key for females of western Palaearctic species by Mathieu *et al.* (2012) is available on-line and provides an approach that could be profitably applied in other areas. Gutsevich (1973) and Glukhova (1989, 2005) provided keys to both males and females from Russia and adjacent areas and González & Goldarazena (2011) produced a detailed and well-illustrated monograph of the *Culicoides* of the Basque region of Spain. Another excellent example is the comprehensive taxonomic work by Wirth & Hubert (1989) on the *Culicoides* of Southeast Asia. The Nearctic Region is striking in that there are keys to species only for a few states in the USA and these mostly of just the female adults (Atchley 1967, Battle & Turner 1971, Jamnback 1965, Jorgensen 1969, Khalaf 1957c, Wirth 1952a, Blanton & Wirth 1979). There is a great need for basic taxonomic work in this Region, as well as most other Regions.

As an increasingly vital component of taxonomic work, DNA barcoding is an important source of information for interpreting the diversity of species of *Culicoides* (e.g. Ander *et al.* 2013, Bakhoun *et al.* 2013, Bellis *et al.* 2014, Garros *et al.* 2014, Harrup *et al.* 2016, Nielsen & Kristensen 2011, Pagès *et al.* 2009, Sarvašová *et al.* 2017, Talavera *et al.* 2017, Yildirim *et al.* 2019). This is particularly true for the interpretation of species complexes, as well as the identification of larvae and pupae (Bakhoun *et al.* 2018). The immatures of the genus are poorly understood, in spite of the pioneering work on the larvae and pupae of British Ceratopogonidae by Kettle & Lawson (1952), the larvae of a number of the Nearctic species by Murphree & Mullen (1991), and a number of smaller papers describing various larvae and pupae of select species (Borkent 2014). Although it appears that the pupae likely have important morphological differences that will allow them to be identified morphologically, it is equally likely that the larvae will require DNA barcoding to allow them to be identified with confidence. The larvae of *Culicoides* generally appear to be morphologically similar and can only be distinguished with sophisticated and detailed study (Murphree & Mullen 1991). DNA barcoding of species will open up an avenue to a far better interpretation of the habitats and behaviour of immatures. In addition, at least pupal and some larval morphology will provide important information for interpreting phylogenetic relationships.

The literature describing the immatures (eggs, larvae, pupae) was listed in a recent publication by Borkent (2014, his Table 2). This publication also provided the first comprehensive generic keys to pupae of Ceratopogonidae and the first means of recognizing the pupae of *Culicoides* as such. Currently, the larvae of 13% and the pupae of 17% of described species of *Culicoides* are known (but many poorly described). As a consequence, we don't know the habitat (or the features of the immatures) of the large majority of named *Culicoides*.

### Location of Type Material

Publications that provide information on the location of type material of Ceratopogonidae are listed in table 4. A number of museums have websites listing their type material and this is not recorded here, as these sites are readily available and sometimes change their web address (e.g. ANCI, CNCI, MCZC, USNM). The location where ceratopogonid workers have deposited most or all of their type material is listed in table 5. The list is not complete; some authors who have described only one or a few species or whose type material could not be located or confirmed were not included. However, the list provides a basis for the study and loan of most type material.

**TABLE 4.** Published sources listing type material of Ceratopogonidae in a museum or geographic area (many other museums have websites listing their type specimens).

<b>Museum or Geographical Area</b>	<b>Reference</b>
Australasian Region	Debenham (1979)
British Museum (BMNH)	Townsend & Boorman (1990); Townsend unpublished ms
California Academy of Sciences (CASC)	Arnaud (1979)
Canadian National Collection (CNCI)	Cooper (1991)
Deutsches Entomologisches Institut (DEIC)	Blech & Rohlfien (1987)
Illinois Natural History Survey (INHS)	Webb (1980)
Musée Royal de l'Afrique Centrale, Belgium (MRAC)	Kremer <i>et al.</i> (1975b)
Museo de La Plata, Argentina	Marino <i>et al.</i> (2002)
Naturhistorisches Museum der Benediktiner-Abtei (NMBA)	Chvála (2008)
Philippines	Delfinado & Hardy (1971)
South African Institute for Medical Research (SAMR)	Segerman (1995)
Snow Entomological Museum (Kansas) (SEMC)	Byers <i>et al.</i> (1962)
Zoological Institute, St. Petersburg (ZMAS)	Glukhova & Brodskaya (1995)
University of Gdańsk, Poland (CEIG)	Dominiak <i>et al.</i> (2015)
University of São Paulo (DEFS)	Forattini <i>et al.</i> (1971)

**TABLE 5.** Location of type material described by most ceratopogonid systematists. Museums listed hold most or all of the type specimens designated by a given author although many authors have described scattered species held by museums not listed here. All authors who have coauthored with Wirth or Yu have deposited all or most of their material in the depositories given below under these two authors and they are not listed separately.

<b>Author</b>	<b>Museum</b>
Adams	SEMC
Alwin	CEIG; TAUI
Amosova	ZMAS
Arnaud	CASC; USNM
Atchley	USNM
Austen	BMNH
Barbosa	USNM
Beck	USNM
Becker	ZMHB
Boesel	PMNH; ROME
Boorman	BMNH
Borkent	CNCI; USNM; MNCR <sup>1</sup>
Brèthes	MNHN; MACN
Browne	USNM
Buyanova	ZMAS
Callot	IPSF
Carter	BMNH
Causey	USNM
Cavalieri	INMA?
Chan	LEMQ; CNCI; USNM
Chaudhuri	NZSI; ELBU
Chen	NIPM

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**TABLE 5.** (Continued)

<b>Author</b>	<b>Museum</b>
Chu	DPSC
Clastrier	MNHN
Cochrane	USNM
Coquillett	USNM
Cornet	IPSF; ORST
Das Gupta	NZSI
Debenham	ANIC <sup>1</sup>
Delécolle	MZSF
Delfinado	USNM; FMNH
de Meijere	ZMAN
de Meillon	SAMR; NMSA; USNM
Dessart	MRAC
Dominiak	CEIG; BMNH; TAUJ
Dow	USNM; CNCI
Downes	CNCI
Dzhafarov	ZMAS
Edwards	BMNH
Enderlein	ZMHB
Ewen	CNCI
Fabricius	ZMUC
Felippe-Bauer	FIOC
Floch	IPCG
Foote	USNM
Forattini	MZSP
Fox	EPRL
Garrett	CNCI
Giles	USNM
Gimmerthal	SZRL
Glick	USNM
Glukhova	ZMAS
Goeldi	BMNH
Goetghebuer	ISNB; MRAC
Gornostaeva	ZMAS
Grogan	USNM; CNCI; FSCA
Gutsevich	ZMAS
Haeselbarth	SAMR; USNM
Hardy	BPBM
Havelka	PEHC
Heyden	BMNH
Hoffman	NYSM; USNM
Hogue	LACM
Howarth	BPBM
Hubert	USNM

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**TABLE 5.** (Continued)

<b>Author</b>	<b>Museum</b>
Huttel	FMMF
Ingram	BMNH
Jamnback	NYSM
Johannsen	CUIC
Jones	USNM
Kalugina	PIAM
Kettle	BMNH
Khalaf	SMSH; BMNH
Khamala	BMNH
Kieffer	HNHM; DEIC; BMNH; MNHN <sup>2</sup> ; ZMSC (Thienemann material)
Kitaoka	NSMT
Knab	USNM
Knausenberger	USNM
Kremer	MNHN
Krivosheina	IEME
Lane, J.	DEFS; BMNH
Lane, R. P.	BMNH
Lee, D. J.	ANIC; SPUS
Lee, T-S.	IZAS
Lewis	USNM
Lien	NIPM
Linnaeus	contact BMNH; NHRS
Loew	MCZC; IMG P; ZMHB
Lutz	FIOC; BMNH (see discussion by Belkin <i>et al.</i> 1971)
Macfie	BMNH; DEIC
Macquart	MNHN
Malloch	INHS; SEMC
Mayer	DEIC; PEHC
McDonald	NIPM
Meigen	MNHN
Meiswinkel	VRIO
Meunier	IMG P
Mirzaeva	BIAR; ZMAS
Molotova	ZMAS
Mukherjee	NZSI
Navai	IPHT; USNM
Neveu	MNHN; personal collection
Nielsen	ZMUC
Ortiz	EPRL
Pappas	USNM
Petrunkevitch	ZMUC
Philippi	MEUC
Pierce	LACM

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**TABLE 5.** (Continued)

<b>Author</b>	<b>Museum</b>
Remm	IZBE; ZMAS
Roback	ANSP
Root	USNM
Rondani	MZRF
Ronderos	MLPA
Saha	NZSI
Sahuquillo	collection destroyed <sup>5</sup>
Santos Abreu	MABC
Saunders	CNCI; USNM
Séguy	MNHN
Sen	NZSI
Shannon	INMA
Shevchenko	ZMAS
Skuse	ANIC
Smatov	ZMAS
Smee	SPUS
Spinelli	MLPA; USNM
Staeger	ZMUC
Statz	LACM
Strobl	NMBA; ZMHB
Storå	UZMH
Szadziewski	CEIG; MAIG; MZWP; TAUJ
Thomsen	CUIC
Tokunaga	BPBM; ELKU; USNM; CASC
Tonnoir	NZAC
Townsend	SEMC
Vargas	IDRE
Vimmer	NMPC
Wada	NSMT
Walker	BMNH
Wiedemann	NHMW; ZMUC
Williams	USNM
Williston	SEMC; BMNH
Winnertz	NHMW; SMFD; ZMHB; MZLU; OUMNH
Wirth (and coauthors) <sup>3,4</sup>	USNM; CASC; CNCI; BMNH; FSCA
Yu (and coauthors)	IMBC
Zetterstedt	MZLU

## Footnotes:

- 1 Specimens originally recorded as deposited in SPHTM are now in the ANIC; specimens previously held by the Instituto Nacional de Biodiversidad in Costa Rica are now housed at the MNCR.
- 2 Many destroyed or lost.
- 3 Scattered specimens in many other museums.
- 4 See Arnaud and Arnaud, 1997 for detailed list.
- 5 Victor Sarto Monteys (pers. comm., March, 2012).

Acronyms for museums are generally those proposed by Arnett & Samuelson (1986) or follow their method for forming acronyms:

ANIC—Australian National Insect Collection, Division of Entomology, CSIRO, P.O. Box 1700, Canberra City, A.C.T. 2601, Australia.

ANSP—Department of Entomology, Academy of Natural Sciences, 19th and the Parkway, Philadelphia, Pennsylvania, 19103, USA.

BIAR—Biologicheskii Institut, Akademiya NAUK Russia, Sibirskoe Otdelenie, Frunze str. 11, 630091 Novosibirsk, Russia.

BMNH—Department of Entomology, Natural History Museum, London, SW7 5BD, United Kingdom.

BPBM—Department of Entomology, Bernice P. Bishop Museum, 1525 Bernice Street, P.O. Box 19000A, Honolulu, Hawaii, 96817 0916, USA.

CASC—Department of Entomology, California Academy of Sciences, Golden Gate Park, San Francisco, California, 94118, USA.

CNCI—Canadian National Collection of Insects, Eastern Cereal and Oilseed Research Centre, Agriculture Canada, K.W. Neatby Building, Ottawa, Ontario, K1A 0C6, Canada.

CUIC—Department of Entomology, Comstock Hall, Cornell University, Ithaca, New York, 14853-0999, USA.

DEFS—Departamento de Epidemiologia, Faculdade de Saúde Publica, Universidade de São Paulo, Av. Dr. Arnaldo, 715, 01.255, São Paulo, SP, Brazil.

DEIC—Deutsches Entomologisches Institut, Eberswalder Straße 90, Muencheberg 15374, Germany.

DPSC—Department of Parasitology, Second Military Medical College, Shanghai, China.

CEIG—Collection of Extant Invertebrates of the University of Gdańsk, Department of Invertebrate Zoology and Parasitology, University of Gdańsk, Wita Stwosza 59, Gdańsk, Poland.

ELBU—Entomology Laboratory, Department of Zoology, University of Burdwan, Burdwan 713 104, WB, India.

ELKU—Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka, Japan.

EPRL—Entomological Pioneering Research Laboratory, University of Puerto Rico, Mayaguez, Puerto Rico, 00708.

FIOC—Instituto Oswaldo Cruz, Departamento de Entomologia, Caixa Postal 926, 20010 Rio de Janeiro, Rio de Janeiro, Brazil.

FMMF—Laboratoire d'Ecologie Médicale et Parasitologie, Faculté de Médecine, Rue Auguste-Broussonet, F-34000, Montpellier, France.

FMNH—Insect Collection, Field Museum of Natural History, Roosevelt Road and Lake Shore Drive, Chicago, Illinois, 60605, USA.

FSCA—Florida State Collection of Arthropods, Florida Department of Agriculture and Consumer Services Division of Plant Industry, 1911 SW 34th Street, Gainesville, Florida, 32608-1268, USA.

HNHM - Zoological Dept., Hungarian Natural History Museum, Baross utca 13, H-1088, Budapest, Hungary.

IDRE—Laboratorio de Entomología, Instituto de Diagnóstico y Referencia Epidemiológicos, SSA. Carpio 470, Col. Santo Tomás, 2do. Piso, México D.F. 11340, Mexico (formerly, ISET=Instituto de Enfermedades Tropicales).

IEME—Institute for Evolution, Morphology, and Ecology of Animals, Leninsky pr. 33, Moscow 117071, Russia.

IMBC—Medical Insect Collection, Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences, Beijing, People's Republic of China.

IMGP—Institut und Museum für Geologie und Palaontologie der Georg-August-Universität, Göttingen, Germany.

INHS—Illinois Natural History Survey Insect Collection, 607 E. Peabody Drive, Champaign, Illinois, 61820, USA.

INMA - Departamento de Arthropodologia Sanitaria, Instituto Nacional de Microbiologia, "Dr. Carlos G. Malbran," Avda. Velez Sarfield 563, 1281 Capital Federal, Argentina.

IPCG—Institut Pasteur de la Guyane, Cayenne, Guyana.

IPHT—Institute of Public Health Research, Teheran, Iran.

IPSF—Institut de Parasitologie, Faculté de Médecine, 3, Rue Koeberlé, F 67000, Strasbourg, France.

ISNB—Collections Nationales Belges d'Insectes et d'Arachnides, Institut Royal des Sciences Naturelles de Belgique, 29, rue Vautier, B1040, Brussels, Belgium.



IZBE—Institute of Zoology and Botany, Vanemuise str. 21, Tartu, 202400, Estonia.

IZAS—Institute of Zoology, Academia Sinica, 7 Zhongguancun Lu, Haidian, 100080, Beijing, Republic of China.

LACM—Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, California, 90007, USA.

LEMQ—Lyman Entomological Museum and Research Laboratory, Macdonald College, 21111 Lakeshore, Ste. Anne-de-Bellevue, Quebec, H9X 1C0.

MABC—M. Baez, Departamento de Zoología, Facultad de Biología, Universidad de La Laguna, 38206 La Laguna, Tenerife Islas Canarias, Spain.

MACN—Division Entomología, Museo Argentino de Ciencias Naturales, Av. Angel Gallardo 470 (C.P. 220, Suc. 5), 1405 Buenos Aires, Argentina.

MAIG—Collection of Amber Inclusions, Department of Invertebrate Zoology and Parasitology, University of Gdańsk, Wita Stwosza 59, Gdańsk, Poland.

MCZC—Entomology Department, Museum of Comparative Zoology, Harvard University, 26 Oxford St., Cambridge, Massachusetts, 02138, USA.

MEUC—Museo Entomológico, Facultad de Agronomía, Universidad de Chile, Casilla 1004, Santiago, Chile.

MLPA—Museo de la Plata, Division Entomología, Universidad de La Plata, Paseo del Bosque, 1900 La Plata, Argentina.

MNHN—Museum National d’Histoire Naturelle, 45, rue Buffon, Paris, 75005, France.

MRAC—Section d’Entomologie, Musée Royal de l’Afrique Centrale, Leuvenesseleeweg 13, B-1980, Tervuren, Belgium.

MNCR—Museo Nacional de Costa Rica, P.O. Box 749-1000, San José, Costa Rica.

MZLU—Department of Zoology, Zoological Museum, Helgonavägen 3, S-223 62 Lund, Sweden.

MZRF—Museo Civico de Storia Naturale ”Giacomo Doria”, Via Brigita Liguria 9, I-16121, Genoa, Italy.

MZSF—Musée Zoologique, Université de Strasbourg, 29, blvd. de la Victoire, F-67000, Strasbourg, France.

MZSP—Museu de Zoologia da Universidade de São Paulo, Av. Nazare, 481, C.P. 7172, 01.051, São Paulo, SP, Brazil.

MZWP—Museum of the Earth, Al. Na Skarpie 20/26, 00-488, Warsaw, Poland.

NHMW - Naturhistorisches Museum Wien, Postfach 417, Burgring 7, 1040 Wien, Austria.

NHRS—Sektionen for entomologi, Naturhistoriska Riksmuseet, S-104 05, Stockholm, Sweden.

NIPM—Department of Medical Entomology, National Institute of Preventive Medicine, 161 Kunyang Street, Nankang, Taipei, Taiwan, 11513, Republic of China.

NMBA—Naturhistorisches Museum der Benediktiner-Abtei, A-8911 Admont, Austria.

NMPC—Department of Entomology, National Museum of Natural History, 148 00, Praha 4, Kunratice 1, Czech Republic.

NMSA—Natal Museum, 237 Loop Street, Pietermaritzburg 3201, Natal, South Africa.

NSMT—Entomological Collections, National Science Museum (Natural History), Hyakunin-cho 3-23-1, Shinjuku-ku, Tokyo 160, Japan.

NYSM—New York State Museum, Biological Survey, 2132 Cultural Education Center, Albany, New York, 12230, USA.

NZAC—New Zealand Arthropod Collection, Entomology Division, DSIR, Private Bag, Auckland 1001, New Zealand.

NZSI—National Zoological Collection, Zoological Survey of India, 535 M-Block, New Alipur, Calcutta 700 053, India.

ORST—Centre ORSTOM de Montpellier, Laboratoire de Taxonomie des Vecteurs 911, Avenue Agropolis, B.P. 5045, F-34032, Montpellier Cedex, France.

OUMNH—Oxford University Museum of Natural History, Parks Rd, Oxford OX1 3PW, United Kingdom.

PEHC—P. Havelka, Staatliche Vogelschutzwarte, Baden—Württemberg, Hermann Schneider Allee 47, D-7500 Karlsruhe—Rappenwört, Germany.

PIAM—Palaeontological Institute, The Russian Academy of Sciences, Profsoyuznaya, 113, Moscow 117321, Russia.

PMNH—Peabody Museum of Natural History, Yale University, New Haven, Connecticut, 06511, USA.

ROME—Department of Entomology, Royal Ontario Museum, Toronto, Ontario, M5S 2C6, Canada.

SAMR—South African Institute for Medical Research, P.O. Box 1038, Johannesburg, 2000, South Africa.  
 SEMC—Snow Entomological Museum, University of Kansas, Lawrence, Kansas, 66044, USA.  
 SMFD—Forschungsinstitut und Naturmuseum Senckenberg, Entomologische Section 1, Senckenberganlage 25, 6000 Frankfurt 1, Germany.  
 SMSH—Stovall Museum of Science and History, University of Oklahoma, Norman, Oklahoma, 73069, USA.  
 SZRL—Systematic Zoology Museum, University of Latvia, Kromvalda bulv. 4, Riga, LV 10, Latvia.  
 TAUI—Department of Zoology, Tel Aviv University, Ramat Aviv, Tel Aviv 69978, Israel; also referred to as SMNHTAU—the National Collection of Insects, The Steinhardt Museum of Natural History, Israel National Research Center, Tel Aviv University, Tel Aviv, Israel.  
 USNM—United States National Entomological Collection, Dept. of Entomology, U.S. National Museum of Natural History, Washington, DC 20560, USA.  
 UZMH—Zoological Museum, Finnish Museum of Natural History, University of Helsinki, Pohjoinen Rautatiekatu 13, SF-00100, Helsinki, Finland.  
 VRIO—Veterinary Research Institute, Onderstepoort 0110, Republic of South Africa.  
 ZMAN—Instituut voor Taxonomische Zoologie, Universiteit van Amsterdam, Plantage Middenlaan 64, Amsterdam, The Netherlands.  
 ZMAS—Zoological Institute, Academy of Sciences, Universitetskaya nab., 1, St. Petersburg, 199034, Russia.  
 ZMHB—Museum für Naturkunde der Humboldt Universität zu Berlin, Invalidenstrasse 43, Berlin 1040, Germany.  
 ZMUC—Zoologisk Museum, Universitetsparken 15, DK 2100, Copenhagen, Denmark.  
 ZSMC—Zoologische Staatssammlung, Münchhausenstrasse 21, D-8000 München 60, Germany.

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## SUBFAMILY LEBANOCULICOIDINAE BORKENT, 2000a: 361

### Genus LEBANOCULICOIDES Szadziewski

**LEBANOCULICOIDES** Szadziewski, 1996: 30. Type species: *Lebanoculicoides mesozoicus* Szadziewski, by original designation.

**bloudani** Choufani, El-Halabi, Azar and Nel, 2015b: 107. Syria. Lower Cretaceous.

**daheri** Choufani, Azar and Nel, 2015a: 273. Lebanon. Lower Cretaceous.

**excantabris** Pérez-de la Fuente, Delclòs, Peñalver and Arillo, 2011: 752. Spain. Lower Cretaceous.

**mesozoicus** Szadziewski, 1996: 30. Lebanon. Lower Cretaceous.

## SUBFAMILY LEPTOCONOPINAE NOË, 1907: 143

### Genus ARCHIAUSTROCONOPS Szadziewski

**ARCHIAUSTROCONOPS** Szadziewski, 1996: 34. Type species: *Archiaustroconops ceratoformis* Szadziewski, by original designation.

- alavensis** Szadziewski and Arillo, 1998: 294. Spain. Lower Cretaceous.  
**andersoni** Szadziewski, Ross and Gilka, 2015c: 557. Burma. Upper Cretaceous.  
**annae** Choufani, Azar and Nel, 2015a: 279. Lebanon. Lower Cretaceous.  
**besti** Borkent, Coram and Jarzembowski, 2013: 275. Great Britain. Lower Cretaceous.  
**bocaparvus** Borkent, 2000a: 374. Lebanon. Lower Cretaceous.  
**borkenti** Pérez-de la Fuente, Delclòs, Peñalver and Arillo, 2011: 755. Spain. Lower Cretaceous.  
**ceratoformis** Szadziewski, 1996: 34. Lebanon. Lower Cretaceous.  
**cretaceous** (Szadziewski, 1996): 36 (*Austroconops*). Lebanon. Lower Cretaceous.  
**dominiakae** Choufani, Azar and Nel, 2015a: 282. Lebanon. Lower Cretaceous.  
**gracilis** Szadziewski and Poinar, 2005: 355. Burma. Lower Cretaceous.  
**hammanensis** Choufani, Azar and Nel, 2015a: 281. Lebanon. Lower Cretaceous.  
**hamus** Borkent, 2000a: 373. Lebanon. Lower Cretaceous.  
**kotejai** Szadziewski and Poinar, 2005: 356. Burma. Lower Cretaceous.  
**szadziewskii** Borkent, 2000a: 372. Lebanon. Lower Cretaceous.

### Genus AUSTRONOPUS Wirth and Lee

**AUSTRONOPUS** Wirth and Lee, 1958: 337. Type species: *Austroconops mcmillani* Wirth and Lee, by original designation.

- annettae** Borkent, *in* Borkent and Craig 2004: 44. Australia (Western Australia).  
**asiaticus** Szadziewski, 2004: 115. Burma. Lower Cretaceous.  
**borkenti** Szadziewski and Schlüter, 1992: 78. France. Upper Cretaceous.  
**fossilis** Szadziewski, 1996: 38. Lebanon. Lower Cretaceous.  
**gladius** Borkent, 2000a: 378. Lebanon. Lower Cretaceous.  
**gondwanicus** Szadziewski, 1996: 38. Lebanon. Lower Cretaceous.  
**mcmillani** Wirth and Lee, 1958: 337. Australia (Western Australia).  
**megaspinus** Borkent, 2000a: 381. Lebanon. Lower Cretaceous.  
**perrichoti** Dominiak, Szadziewski and Nel, 2018: 232. Lower Cretaceous.  
**sibiricus** Szadziewski, 1996: 40. Russia (Krasnoyarsk Krai). Upper Cretaceous.

### Genus FOSSILEPTOCONOPS Szadziewski

**FOSSILEPTOCONOPS** Szadziewski, 1996: 46. Type species: *Fossileptoconops lebanicus* Szadziewski, by original designation.

- lebanicus** Szadziewski, 1996: 47. Lebanon. Lower Cretaceous.

### Genus JORDANOCONOPS Szadziewski

**JORDANOCONOPS** (as *Jordanocops*, misspelling) Szadziewski, 2000a: 252. Type species: *Jordanoconops weitschati* Szadziewski, by original designation.

- weitschati** Szadziewski, 2000a: 252. Jordan. Lower Cretaceous.

## Genus LEPTOCONOPS Skuse

**LEPTOCONOPS** Skuse, 1889: 288. Type species: *Leptoconops stygius* Skuse, by monotypy.  
*MYCTEROTYPUS* Noè, 1905: 114. Type species: *Mycterotypus bezzii* Noè, designation by Carter, 1921: 3.  
*PROTERSESTHES* Kieffer, 1921h: 107. Type species: *Tersesthes brasiliensis* Lutz, by original designation.  
*TERSESTHES* Townsend, 1893: 370. Type species: *Tersesthes torrens* Townsend, by original designation.  
*SCHIZOCONOPS* Kieffer, 1918a: 135. Type species: *Schizoconops indicus* Kieffer, by monotypy.

### Subgenus BRACHYCONOPS Wirth and Atchley

**BRACHYCONOPS** Wirth and Atchley, 1973: 15 (as subgenus of *Leptoconops*). Type species: *Leptoconops californiensis* Wirth and Atchley, by original designation.

**californiensis** Wirth and Atchley, 1973: 16. USA (California).

**patagoniensis** Ronderos, 1990b: 423. Argentina (Neuquén).

### Subgenus HOLOCONOPS Kieffer

**HOLOCONOPS** Kieffer, 1918a: 135. Type species: *Leptoconops kerteszi* Kieffer, by original designation.  
*MICROCONOPS* Kieffer, 1921h: 108. Type species: *Microconops vexans* Kieffer, by original designation.

**acer** Clastrier, 1973: 911. France.

**algeriensis** Clastrier, 1975b: 41. Algeria.

**altuneshanensis** Yu and Shao, in Yu 1988: 128. China (Xinjiang).

**americanus** Carter, 1921: 22 (as variety of *kerteszi* Kieffer). USA (Utah).

**amplifemoralis** Chanthawanich and Delfinado, 1967: 298. Nepal.

**andersoni** Clastrier and Wirth, 1978: 35. USA (California).

**arnaudi** Clastrier and Wirth, 1978: 29. USA (California).

**ascius** Yu and Hui, in Yu 1988: 131. China (Yunnan).

**asilomar** Clastrier and Wirth, 1978: 22. USA (California).

**atchleyi** Clastrier and Wirth, 1978: 32. USA (California).

**auster** Clastrier, 1981a: 91. South Africa.

**bassoi** Ronderos and Spinelli, 1993: 305. Chile.

**beidaiheensis** Liu and Yu, 1998: 24 (Yu *et al.* 2005a: 53). China (Hebei).

**belkini** Wirth and Atchley, 1973: 37. USA (California).

**bequaerti** (Kieffer, 1925a): 405 (*Holoconops*; as *becquaerti*). Honduras.

*hondurensis* Hoffman, 1926b: 135. Honduras.

**binangulus** Yu, 1989b: 97. China (Xinjiang).

**binisiculus** Yu and Liu, in Yu 1988: 130. China (Gansu).

**borealis** Gutsevich, 1945: 124. Russia (Chuvash Republic).

*popovii* Dzhabfarov, 1961a: 72. Azerbaijan.

**brevistylus** Mazumdar, Saha and Chaudhuri, 2010: 50. India.

**catawbae** (Boesel, 1948): 69 (*Holoconops*). USA (Ohio).

**chenfui** Yu and Xiang, in Yu 1988: 130. China (Xinjiang).

**conulus** Yu and Liu, in Liu *et al.* 1990a: 218 (as Ye and Liu, in Liu *et al.* 1990b: 13). China (Ningxia).

**dicheres** Liu and Yu, in Yu *et al.* 2005a: 62. China (Gansu).

**dissimilis** Clastrier, 1975a: 605. Chad.

**doyeni** Spinelli and Ronderos, 1993: 115. Mexico (Baja California).

**dunhuangensis** Liu and Yu, in Yu *et al.* 2005a: 63. China (Gansu).

**exspectator** Clastrier, 1975b: 39. Algeria.

**foleyi** Clastrier, 1975b: 33. Algeria.

**fortipalpus** Mazumdar, Saha and Chaudhuri, 2010: 51. India.

**foulki** Clastrier and Wirth, 1978: 38. USA (California).  
**gallicus** Clastrier, 1973: 906. France.  
**geermuensis** Liu and Yu, 1998: 24. China (Qinghai).  
**helobius** Ma and Yu, *in* Ma *et al.* 1990: 49. China (Xinjiang).  
**interruptus** (Enderlein, 1908): 460 (*Mycterotypus*). Namibia.  
**jizhang** Liu and Yu, *in* Yu *et al.* 2005a: 69. China (Ningxia).  
**kerteszi** Kieffer, 1908: 576. Egypt.  
**knowltoni** Clastrier and Wirth, 1978: 26. USA (California).  
**lacteipennis** Kieffer, 1918a: 32. Tunisia.  
**laosensis** Clastrier, 1974b: 71. Laos.  
**latibulorum** Gutsevich, 1973: 259. Kazakhstan.  
**laurae** (Weiss, 1912): 24 (*Mycterotypus*). Tunisia.  
     *mediterraneus* (Kieffer, 1921i): 264 (*Holoconops*). Algeria.  
**linleyi** Wirth and Atchley, 1973: 49. USA (Florida).  
**macfiei** Clastrier, 1975b: 28. Egypt.  
**magnaclypeus** Liu and Yu, 1998: 25. China (Xinjiang).  
**mellori** Clastrier and Boorman, 1987: 293. Bahrain.  
**menglaensis** Liu and Yu, 1998: 25 (Yu *et al.* 2005a: 71). China (Yunnan).  
**monotheca** Liu and Yu, *in* Yu *et al.* 2005a: 73. China (Xinjiang).  
**montanus** Konurbajev, 1965: 134. Kyrgyzstan.  
**nachitschevanicus** Dzhafarov, 1961c: 78. Azerbaijan.  
**nasiformus** Liu and Yu, *in* Yu *et al.* 2005a: 74. China (Ningxia).  
**nevilli** Clastrier, 1981a: 88. South Africa.  
**ningxiaensis** Liu and Yu, *in* Yu *et al.* 2005a: 75. China (Ningxia).  
**noterophilus** Yu and Liu, *in* Liu *et al.* 1990b: 15. China (Ningxia).  
**pavlovskiyi** Dzhafarov, 1961a: 74. Azerbaijan.  
**peneti** (Langeron, 1913): 282 (*Mycterotypus*, as variety of *laurae* Weiss). Tunisia.  
**pugnax** Clastrier, 1973: 908. France.  
**qinghaiensis** Liu, Zhang and Gong, 2004: 49. China (Qinghai).  
**reesi** Clastrier and Wirth, 1978: 42. USA (Utah).  
**riparins** Yu, *in* Liu *et al.* 1990b: 17 (also as *riparius*). China (Shaanxi).  
**rufiventris** (Kieffer, 1923a): 658 (*Microconops*). Algeria.  
**shangweni** Xu and Yu, 1989: 276. China (Xinjiang).  
**sublettei** Clastrier and Wirth, 1978: 36. USA (Texas).  
**tarimensis** Yu, 1982: 204 (1985: 406). China (Xinjiang).  
**tenebrostigmatus** Mazumdar, Saha and Chaudhuri, 2010: 53. India.  
**tetratheca** Liu and Yu, *in* Yu *et al.* 2005a: 83. China (Ningxia).  
**tibetensis** Lee, 1978: 115. China (Tibet).  
**transversalis** (Kieffer, 1921h): 112 (*Holoconops*). Tunisia.  
**triquetrus** Liu and Yu, *in* Liu *et al.* 1990b: 21. China (Ningxia).  
**tuotuohe** Liu and Gong, 2003: 549. China (Qinghai).  
**umbellifer** Clastrier, 1981a: 93. South Africa.  
**utriculus** Liu and Yu, 1998: 25 (Yu *et al.* 2005a: 89). China (Inner Mongolia).  
**vargasi** Clastrier and Wirth, 1978: 34. Mexico (Baja California).  
**vexans** (Kieffer, 1921h): 110 (*Microconops*). Algeria.  
**whitseli** Clastrier and Wirth, 1978: 20. USA (California).  
**xuthosceles** Chanthawanich and Delfinado, 1967: 299. Thailand.  
**yixini** Liu, 1997: 40. China (Ningxia).  
**yunhsienensis** Yu, 1963: 450. China (Hubei).  
**yunnanensis** Lee, 1978: 116. China (Yunnan).

## Subgenus LEPTOCONOPS Skuse

- bezzii** (Noè, 1905): 114 (*Mycterotypus*). Italy.  
*muganicus* Dzhafarov, 1962d: 241 (as subspecies of *bezzii* Noè; name *in* Dzhafarov, 1961a: 67 a *nomen nudum*). Azerbaijan.
- bidentatus** Gutsevich, 1960: 127. Russia (Chechen Republic).
- boreus** Kalugina, 1991: 78. Russia (Krasnoyarsk Krai). Upper Cretaceous.
- brasiliensis** (Lutz, 1913): 66 (*Tersesthes*). Brazil (Amazonas).
- bullbrookensis** Smee, 1966: 1008. Australia (Western Australia).
- bundyensis** Smee, 1966: 1007. Australia (New South Wales).
- burmiticus** Szadziewski, 2004: 116. Burma. Lower Cretaceous.
- camelorum** (Kieffer, 1921h): 111 (*Tersesthes*). Algeria.
- capensis** de Meillon and Hardy, 1953: 24. South Africa.
- carteri** Hoffman, 1926b: 133. USA (California).
- casali** Cavalieri and Chiossone, 1966: 45. Argentina (San Luis).
- caucasicus** Gutsevich, 1953: 235. Azerbaijan.
- chilensis** Forattini, 1958: 38. Chile.
- chinensis** Sun, 1968: 2. China (Fujian).
- clava** Borkent, 1997c: 4. Hungary. Upper Cretaceous.
- copiosus** Borkent, 1996: 3. USA (New Jersey). Upper Cretaceous.
- curvachelus** Borkent, 1996: 7. USA (New Jersey). Upper Cretaceous.
- daugeroni** Choufani, Azar and Nel, *in* Choufani *et al.* 2011: 286. France. Lower Cretaceous.
- demeillon** Clastrier and Nevill, 1984: 245. South Africa.
- ellenbergeri** Szadziewski, *in* Szadziewski *et al.* 2015b: 256. Burma. Lower Cretaceous.
- endialis** Smee, 1966: 1010. Australia (Northern Territory).
- flaviventris** Kieffer, 1918a: 34. Tunisia.
- freeborni** Wirth, 1952a: 115. USA (California).
- fretus** Yu and Zhan, *in* Wang *et al.* 1990: 74. China (Hainan).
- fukangensis** Chen, Ayiken and Yu, 2015: 173. China (Xinjiang).
- golanensis** Clastrier, 1981c: 31. Israel.
- grandis** Carter, 1921: 12. Australia (Western Australia).
- gravesi** Choufani, Perrichot, Azar and Nel, 2014: 35. France. Upper Cretaceous.
- halophilus** Smee, 1966: 1010. Australia (Western Australia).
- harrisoni** de Meillon and Hardy, 1953: 22. South Africa.
- hongkongensis** Yu, 2006: 36. China (Hong Kong).
- hyalinipennis** Kieffer, 1918a: 33. Tunisia.
- indicus** (Kieffer, 1918a): 135 (*Schizoconops*). India.
- irritans** (Noè, 1905): 118 (*Mycterotypus*). Italy.  
*longipalpis* (Kieffer, 1923a): 657 (*Microconops*). Algeria.  
*inopinatus* Huttel and Huttel, 1952b: 45. France.
- kinmenensis** Lien, Lin, Weng and Chin, 1996a: 32. Taiwan.
- lisbonnei** Harant and Galan, 1944: 170. France.
- longicauda** Yu, 1997: 56. China (Hubei).
- longicornis** Carter, 1921: 11. Australia (Western Australia).
- lucidus** Gutsevich, 1964: 192. Kazakhstan.
- mackerrasae** Smee, 1966: 1006. Australia (Queensland).
- melanderi** Wirth and Atchley, 1973: 27. USA (Washington).
- mesopotamiensis** (Patton, 1920): 245 (*Tersesthes*). Iraq.
- minutus** Gutsevich, 1973: 249. Turkmenistan.
- mohavensis** Wirth and Atchley, 1973: 29. USA (California).
- montigenus** Clastrier, 1981b: 123. Israel.
- myanmaricus** Szadziewski, 2004: 117. Burma. Lower Cretaceous.

**nicolayi** de Meillon, 1937b: 330. Democratic Republic of the Congo.  
**nigripes** Dzshafarov, 1961a: 68. Azerbaijan.  
**nipponensis** Tokunaga, 1937a: 262. Japan.  
*oshimaensis* Takaoka and Hayashi, 1977: 385. Japan.  
**nivalis** Smee, 1966: 1012. Australia (New South Wales).  
**noei** Clastrier and Coluzzi, 1973: 59. Italy.  
**nosopheris** Poinar, 2008: 468. Burma. Early Cretaceous.  
**obscurus** Smee, 1966: 1014. Australia (New South Wales).  
**panamensis** Ronderos and Spinelli, 1993: 308. Panama.  
**parvichelus** Chanthawanich and Delfinado, 1967: 297. Malaysia.  
**petrocchiai** Shannon and Del Ponte, 1927: 734. Argentina (Tucumán).  
**primaevus** Borkent, 1995: 30. Canada (Alberta). Upper Cretaceous.  
**rhodesiensis** Carter, 1921: 14. Zambia.  
**ricardoii** Ronderos and Spinelli, 1992: 43. Argentina (Río Negro).  
**riverinaensis** Smee, 1966: 1009. Australia (Australian Capital Territory).  
**rossi** Szadziewski, 2004: 118. Burma. Lower Cretaceous.  
**rovnensis** Sontag and Szadziewski, 2011: 780. Ukraine. Eocene.  
**siamensis** Carter, 1921: 20. Thailand.  
*leptorhynchus* Chanthawanich and Delfinado, 1967: 295. Malaysia.  
*maai* Tokunaga, 1963a: 214. Indonesia.  
**sibiricus** Szadziewski, 1996: 49. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**smeei** Wirth and Atchley, 1973: 22. New name for *longipalpis* Smee.  
*longipalpis* Smee, 1966: 1007 (preoccupied by *Leptoconops longipalpis* (Kieffer, 1923a)). Australia (Western Australia).  
**stygius** Skuse, 1889: 288. Australia (New South Wales).  
**subrossicus** Szadziewski and Poinar, 2005: 359. Burma. Lower Cretaceous.  
**succineus** Szadziewski, 1988: 233. Denmark. Eocene.  
**taiwanensis** Lien, Lin and Weng, 1998a: 39. Taiwan.  
**torrens** (Townsend, 1893): 371 (*Tersesthes*). USA (New Mexico).  
**venezuelensis** Ortiz, 1952a: 165. Venezuela.  
**wehaiensis** Yu and Xue, in Yu 1988: 132. China (Shandong).  
**woodhilli** Lee, 1948a: 334. Australia (Northern Territory).  
**zherikhini** Szadziewski and Arillo, 2003: 273. Spain. Lower Cretaceous.

#### **Subgenus MEGACONOPS Wirth and Atchley**

**MEGACONOPS** Wirth and Atchley, 1973: 18 (as subgenus of *Leptoconops*). Type species: *Leptoconops floridensis* Wirth, by original designation.

**floridensis** Wirth, 1951c: 282. USA (Florida).

#### **Subgenus PALAEOCONOPS Borkent**

**PALAEOCONOPS** Borkent, 2001: 3 (as subgenus of *Leptoconops*). Type species: *Leptoconops amplificatus* Borkent, by original designation.

**amplificatus** Borkent, 2001: 3. Lebanon. Lower Cretaceous.

**antiquus** Borkent, 2001: 6. Lebanon. Lower Cretaceous.

### Subgenus PROLEPTOCONOPS Clastrier

**PROLEPTOCONOPS** Clastrier, 1974a: 231 (as subgenus of *Leptoconops*). Type species: *Leptoconops hutsoni* Clastrier, by original designation.

- aviarum** Gutsevich, 1973: 245. Tajikistan.
- bahreinensis** Clastrier and Boorman, 1987: 297. Bahrain.
- bailangensis** Liu and Yu, 1998: 25 (Yu *et al.* 2005a: 109). China (Yunnan).
- dixi** de Meillon, 1936: 141. Namibia.
- fuscipennis** Clastrier, Rioux and Descous, 1961: 93. Chad.
- hutsoni** Clastrier, 1974a: 232. Algeria.
- turkmenicus** Molotova, 1967: 627. Turkmenistan.
- wernerii** Wirth and Atchley, 1973: 34. USA (California).

### Subgenus STYLOCONOPS Kieffer

**STYLOCONOPS** Kieffer, 1921h: 107. Type species: *Leptoconops albiventris* de Meijere, by original designation.  
**ACANTHOCONOPS** Carter, 1921: 24. Type species: *Acanthoconops spinosifrons* Carter, by original designation.

- albiventris** de Meijere, 1915: 98. Indonesia.
  - spinosipes* Kieffer, 1917a: 190. Papua New Guinea.
- hamariensis** Herzi and Sabatini, 1983: 68. Somalia.
- mooloolabaensis** (Smee, 1966): 1021 (*Styloconops*). Australia (Queensland).
- myersi** (Tonnoir, 1924): 443 (*Acanthoconops*). New Zealand.
- pseudosetosifrons** (Smee, 1966): 1023 (*Styloconops*). Australia (Northern Territory).
- setosifrons** (Smee, 1966): 1022 (*Styloconops*). Australia (Queensland).
- spinosifrons** (Carter, 1921): 24 (*Acanthoconops*). Tanzania.
  - australiensis* (Lee, 1948a): 337 (*Styloconops*). Australia (New South Wales).
  - luteigaster* (Senior-White, 1929): 1 (*Tersesthes*). India.
- yalongensis** Yu and Wang, *in* Yu 1988: 132. China (Hainan).

### Genus MINYOHELEA Borkent

**MINYOHELEA** Borkent, 1995: 68. Type species: *Minyohelea pumilis* Borkent, by original designation.  
**LEBANOCONOPS** Szadziewski, 1996: 40. Type species: *Lebanoconops lebanicus* Szadziewski, by original designation.

- bacula** Borkent, 2000a: 386. Lebanon. Lower Cretaceous.
- casca** Borkent, 1997c: 2. Austria. Lower Cretaceous.
- falcata** Borkent, 2000a: 385. Lebanon. Lower Cretaceous.
- lebanicus** (Szadziewski, 1996): 42 (*Lebanoconops*). Lebanon. Lower Cretaceous.
- minutus** (Szadziewski, 1996): 43 (*Lebanoconops*). Lebanon. Lower Cretaceous.
- pumilis** Borkent, 1995: 69. Canada (Alberta). Upper Cretaceous.
- schleei** Szadziewski, 1996: 45. Lebanon. Lower Cretaceous.
- wirthi** (Szadziewski, 1996): 44 (*Lebanoconops*). Lebanon. Lower Cretaceous.

## SUBFAMILY ATRICULICOIDINAE SZADZIEWSKI, 1999: 51

### Genus ATRICULICOIDES Remm

**ATRICULICOIDES** Remm, 1976b: 108. Type species: *Atriculicoides macrophthalmus* Remm, by original designation.



**cenomanensis** Szadziewski and Schlüter, 1992: 74. France. Upper Cretaceous.  
**ciliatus** (Borkent, 2012): 762 (*Protoculicoides*). Canada (Alberta). Upper Cretaceous.  
**dasyheleis** Szadziewski, 1996: 55. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**globosus** (Boesel, 1937): 47 (*Lasiohelea*). Canada (Manitoba). Upper Cretaceous.  
*creteus* (Boesel, 1937): 46 (*Lasiohelea*). Canada (Manitoba). Upper Cretaceous.  
**hispanicus** (Szadziewski and Arillo), in Szadziewski *et al.* 2016a: 5 (*Protoculicoides*). Spain. Lower Cretaceous.  
**incompletus** Szadziewski and Schlüter, 1992: 76. France. Upper Cretaceous.  
**macrophthalmus** Remm, 1976b: 108. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
*squamiciliatus* Remm, 1976b: 110. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**sanjusti** (Szadziewski and Arillo), in Szadziewski *et al.* 2016a: 6 (*Protoculicoides*). Spain. Lower Cretaceous.  
**sibiricus** Szadziewski, 1996: 56. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**swinhoei** (Cockerell, 1919): 243 (*Johannsenomyia*). Burma. Lower Cretaceous.  
**szadziewskii** Pérez-de la Fuente, Delclòs, Peñalver and Arillo, 2011: 758. Spain. Lower Cretaceous.  
**taimyricus** Szadziewski, 1996: 56. Russia (Krasnoyarsk Krai). Upper Cretaceous.

## SUBFAMILY FORCIPOMYIINAE LENZ, 1934: 96

### TRIBE DASYHELEINI LENZ, 1934: 96

#### Genus DASYHELEA Kieffer

**DASYHELEA** Kieffer, 1911d: 5. Type species: *Dasyhelea halophila* Kieffer, by monotypy.  
**PROKEMPIA** Kieffer, 1913d: 163, 179 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea ornaticornis* Kieffer, designation by Wirth, 1973: 358.  
**PSEUDOCULICOIDES** Malloch, 1915a: 309. Type species: *Ceratopogon mutabilis* Coquillett, by original designation.  
**TETRAHELEA** Kieffer, 1925a: 423. Type species: *Culicoides insignicornis* Kieffer, by original designation.  
**DICRYPTOSCENA** Enderlein, 1936: 51. Type species: *Dasyhelea inclusa* Kieffer (= *Ceratopogon modesta* Winnertz), by original designation.  
**SEBESSIA** Remm, 1979b: 55 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea flavopyga* Zilahi-Sebess, by original designation.  
**BORKENTIMYIA** Yu, Liu, Liu, Liu, Hao, Yan and Zhao, 2005a: 321 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea forsteri* Grogan and Wirth, by original designation.

**abdita** Yu, in Yu *et al.* 2005a: 122. China (Sichuan).  
**abhazica** Remm, 1967: 21. Georgia.  
**abonnenci** Clastrier, 1959b: 373. Senegal.  
**abronica** Yu, 2001: 160. China (Hong Kong).  
**abyenensis** Boorman and Harten, 2002: 440. Yemen.  
**actita** Yu, in Yu *et al.* 2005a: 125. Taiwan.  
**acuminata** Kieffer, 1919a: 60. Hungary.  
*polita* Edwards, 1921: 124. Great Britain.  
*verticillata* Kieffer, 1925d: 63. France, Hungary.  
*littoralis* Goetghebuer, 1934c: 289. Belgium.  
**adami** Vattier, 1964: 1160. Congo.  
**adjaniae** Gosseries, 1989: 3. New name for *acuminata* Goetghebuer.  
*acuminata* Goetghebuer, 1935d: 165 (preoccupied by *Dasyhelea acuminata* Kieffer, 1919a). Democratic Republic of the Congo.  
*goetghebueri* Wirth, 1980: 159, in Wirth *et al.* 1980 (preoccupied by *Dasyhelea goetghebueri* Kieffer, 1919a). New name for *acuminata* Goetghebuer.  
**adjecta** Mazumdar and Chaudhuri, 2009: 192. India.

**aegealitis** Spinelli and Wirth, 1984d: 589. Jamaica.  
**aeratipennis** (Skuse, 1889): 303 (*Ceratopogon*). Australia (New South Wales).  
**affinis** (Johannsen, 1932): 422 (*Tetrastoma*, as variety of *tersa* Johannsen). Indonesia.  
**afghanica** Navai, 1994: 359. Afghanistan.  
**africana** Clastrier, 1959b: 379. Senegal.  
**agrila** Yu, in Yu *et al.* 2005a: 309. China (Qinghai).  
**aithalodes** Remm, 1971: 200. Russia (Primorsky Krai).  
**albidipes** (Santos Abreu, 1918): 291 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
*intermedia* (Santos Abreu, 1918): 310 (*Culicoides*). Canary Islands (Spain).  
*guanchense* Clastrier, 1966: 702. Canary Islands (Spain).  
**albiscopula** Clastrier, 1959b: 377. Senegal.  
**albopruinosa** Goetghebuer, 1933e: 143. Democratic Republic of the Congo.  
**alboscuteolata** Clastrier, 1959c: 424. Réunion (France).  
**alboverrucosa** Remm, 1967: 17. Azerbaijan.  
**allegrae** Díaz, in Díaz *et al.* 2018: 15. Argentina.  
**alonensis** (Strobl, 1906): 396 (*Ceratopogon*). Spain.  
**alticola** Liu and Zhang, in Liu *et al.* 2002b: 257. China (Qinghai).  
**alula** Yu, in Yu *et al.* 2005a: 259. China (Yunnan).  
**ambita** Yu, in Yu *et al.* 2005a: 177. China (Zhejiang).  
**ampelis** Yu, in Yu *et al.* 2005a: 126. China (Beijing).  
**ampullariae** Macfie, 1934c: 279. Malaysia.  
**ancora** (Coquillett, 1902a): 87 (*Ceratopogon*). USA (Florida).  
**andensis** Ingram and Macfie, 1931a: 180. Argentina (Río Negro).  
**ani** Yu, in Yu and Yan 2013: 60. China (Beijing).  
**antilleana** Szadziewski and Grogan, 1998b: 257. Dominican Republic. Miocene.  
**antonii** Dominiak, in Dominiak and Alwin 2013: 134. United Arab Emirates.  
**antiqua** Palmer, 1957: 266 (as subspecies of *australis* Wirth). USA (California). Miocene.  
**apiculata** Chen, Yan and Yu, in Yu *et al.* 2006: 688. China (Hong Kong).  
**arciforceps** Tokunaga, 1940d: 129. Japan.  
*clavifulva* Tokunaga, 1940d: 135. Japan.  
**arcuotheca** Yu and Yan, 2015: 200. Canada (Ontario).  
**arenivaga** Macfie, 1943a: 151 (as variety of *inconspicua* Carter, Ingram and Macfie). Egypt.  
**arenosa** Kieffer, 1925e: 255. Algeria.  
**argentiniensis** Kieffer, 1925c: 92. Argentina (Cordoba).  
**arrhena** Wang, Guan and Yu, in Wang *et al.* 2015: 313. China (Fujian).  
**assimilis** (Johannsen, 1932): 425 (*Tetrastoma*). Indonesia.  
**atlantis** Wirth and Williams, 1957: 11. Bermuda (Great Britain).  
**atra** de Meillon and Wirth, 1989b: 213. Zimbabwe.  
**atrata** Wirth, 1952a: 164. USA (California).  
**atrifemorata** Clastrier, 1961b: 264. Senegal.  
**atrolaevis** Goetghebuer, 1933e: 144. Democratic Republic of the Congo.  
**atronotata** Macfie, 1938: 158. Solomon Islands.  
**atrostriata** Goetghebuer, 1933e: 145. Democratic Republic of the Congo.  
**aucklandensis** Sublette and Wirth, 1980: 331. New Zealand.  
**auli** Remm, 1962a: 123. Estonia.  
**aurantiaca** (Kieffer, 1911c): 342 (*Culicoides*). Seychelles.  
*mahensis* (Kieffer, 1911c): 342 (*Culicoides*, as variety of *aurantiaca* Kieffer). Seychelles.  
**aurensis** Remm, 1981: 32. New name for *biskraensis* Goetghebuer.  
*biskraensis* Goetghebuer, 1939: 59 (preoccupied by *Dasyhelea biskraensis* Kieffer, 1923a). Algeria.  
**aurosa** Yu, in Yu *et al.* 2005a: 129. China (Sichuan).  
**australis** Wirth, 1952b: 92. Chile.  
**avia** Dominiak, in Dominiak and Alwin 2013: 137. United Arab Emirates.

**awadi** Boorman and Harten, 2002: 440. Yemen.  
**azteca** Huerta and Grogan, 2006: 893. Mexico (Morelos).  
**bactriana** Remm, 1980: 104. Uzbekistan.  
**baculata** Remm, 1967: 15. Georgia.  
**bahamensis** (Johnson, 1908): 71 (*Ceratopogon*). Bahamas.  
**bajensis** Wirth, 1978: 192. Mexico (Baja California).  
**baltica** Remm, 1966: 58. Estonia.  
**bambusaoris** Yu, in Yu *et al.* 2005a: 130. China (Sichuan).  
**bamianica** Navai, 1994: 363. Afghanistan.  
**bantouensis** Yu, in Yu *et al.* 2005a: 275. China (Fujian).  
**barbaros** Yu, in Yu *et al.* 2005a: 277. China (Yunnan).  
**barbistyla** Brahma and Hazra, 2018: 351. India.  
**begueti** Kieffer, 1922g: 508. Algeria.  
     *astyla* Kieffer, 1922g: 510. Algeria.  
     *hirtipes* Kieffer, 1922g: 510 (as variety of *begueti* Kieffer, preoccupied by *Dasyhelea hirtipes* (Kieffer, 1917b)). Algeria.  
**bensoeni** Edwards, 1933a: 91. Great Britain.  
     *vernalis* Remm, 1979b: 56. Estonia.  
**bermudae** Wirth and Williams, 1957: 11. Bermuda (Great Britain).  
**biannulata** Clastrier, Rioux and Descous, 1961: 68. Chad.  
**bicolorea** Goetghebuer, 1934d: 191. Democratic Republic of the Congo.  
**bicornis** Remm, 1993: 195. Russia (Sakha Republic).  
**bicrenata** Kieffer, 1923a: 668. Algeria.  
**bifida** Zilahi-Sebess, 1936b: 44 (as variety of *fasciigera* Kieffer). Hungary.  
     *excellentis* Borkent, 1997a: 91. USA (Hawaii).  
**bilineata** Goetghebuer, 1920: 45. Belgium.  
     *insignipalpis* Kieffer, 1925d: 62 (as variety of *versicolor* Winnertz). Europe.  
     *saxicola* (Edwards, 1929a): 426 (*Tetrastoma*). Great Britain.  
     *geleiana* Zilahi-Sebess, 1930a: 11 (1931: 321). Hungary.  
     *montana* Zilahi-Sebess, 1940: 48 (as variety of *dufourii* Laboulbène). Hungary.  
     *lithotelmatica* Strenzke, in Thienemann 1950: 178. Austria.  
     *tecticola* Remmert, 1953: 334. Germany.  
     *dieuzeidei* (Vaillant, 1957): 265 (*Culicoides*). France.  
     *karelica* Glukhova and Brodskaya, 1997: 443. Russia (Republic of Karelia).  
**bilobata** Kieffer, 1915b: 65. France.  
     *luteiventris* Goetghebuer, 1934a: 90. Austria.  
     *spiralis* Remm, 1966: 60. Lithuania.  
**bipunctata** Wirth and Messersmith, 1977: 304. Seychelles.  
**bisangula** Yu and Li, in Li *et al.* 2006: 286. China (Hebei).  
**biseriata** Wirth and Beaver, 1979: 49. Malaysia.  
**biskraensis** Kieffer, 1923a: 672 (as variety of *begueti* Kieffer). Algeria.  
**bistriata** Kieffer, 1915a: 472. Germany.  
**biunguis** Kieffer, 1925a: 409. Russia (Kaliningrad Oblast).  
**biungula** Ma and Yu, in Mahe *et al.* 2018: 76. China (Xinjiang).  
**bolei** Ingram and Macfie, 1923: 54. Ghana.  
**boothi** Ingram and Macfie, 1921: 331. Nigeria.  
**borbonica** Clastrier, 1959c: 419. Réunion (France).  
**borgmeieri** Wirth and Waugh, 1976: 225. Trinidad and Tobago.  
**borkenti** Yu, in Yu *et al.* 2005a: 321. China (Sichuan).  
**brachibaos** Yu and Liu, in Yu *et al.* 2005a: 226. China (Sichuan).  
**brachystyla** Grogan, Díaz, Spinelli and Ronderos, 2017: 241. Guadeloupe (France).  
**brevicornis** Waugh and Wirth, 1976: 245. USA (New York).

**brevicosta** Waugh and Wirth, 1976: 238. USA (Virginia).  
**brevicula** Yu, in Yu *et al.* 2005a: 133. China (Fujian).  
**breviforceps** Tokunaga, 1962a: 198. Japan.  
**brevimana** (Kieffer, 1910): 187 (*Culicoides*). India.  
**brookmani** Wirth, 1952a: 152. USA (California).  
**browneae** Pierce, 1966: 87. USA (California). Miocene.  
**bullocki** Tokunaga, 1958: 75. South Korea.  
**cacaoi** Wirth and Waugh, 1976: 231. Trinidad and Tobago.  
**cactorum** Wirth and Hubert, 1960a: 642. Mexico (Baja California).  
**caelata** Yu, in Yu *et al.* 2005a: 137. China (Anhui).  
**caerulea** Yu and Hao, in Yu *et al.* 2005a: 138. China (Sichuan).  
**caesia** Remm, 1993: 193. Russia (Sakha Republic).  
     *lugensis* Brodskaya, 1995: 9. Russia (Leningrad Oblast).  
**calvescens** Macfie, 1938: 157. USA (Hawaii).  
**calycata** Remm, 1972: 74. Russia (Tuva Republic).  
**canariensis** (Santos Abreu, 1918): 293 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
     *brunnea* (Santos Abreu, 1918): 295 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
     *fenestralis* (Santos Abreu, 1918): 293 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
     *ornatigaster* (Santos Abreu, 1918): 294 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
     *hiemalis* (Santos Abreu, 1918): 314 (*Culicoides*). Canary Islands (Spain).  
     *albidigaster* (Santos Abreu, 1918): 316 (*Culicoides*, as variety of *hiemalis* Santos Abreu). Canary Islands (Spain).  
     *immaculata* (Santos Abreu, 1918): 315 (*Culicoides*, as variety of *hiemalis* Santos Abreu). Canary Islands (Spain).  
     *quinquetaeniata* Clastrier, 1966: 699. Canary Islands (Spain).  
**caribbeana** Spinelli and Wirth, 1984d: 596. Jamaica.  
**carlae** Díaz and Spinelli, in Díaz *et al.* 2014a: 2133. Argentina (Chubut).  
**carolinensis** Tokunaga, 1941a: 112. Micronesia.  
**cellulana** de Meillon and Wirth, 1983a: 353. South Africa.  
**centridorsalis** Tokunaga, 1963c: 39. Japan.  
**chambiensis** Goetghebuer, 1935d: 166. Democratic Republic of the Congo.  
**changnina** Yu and Yan, 2015: 201 (also as *changningi*). China (Sichuan).  
**chani** Wirth and Linley, 1990: 274. USA (Florida).  
**chimaira** Yu and Wang, in Yu *et al.* 2005a: 278. China (Hainan).  
**cincta** (Coquillett, 1901a): 605 (*Ceratopogon*). USA (Florida).  
     *albopicta* Ingram and Macfie, 1931a: 187. Argentina (Rio Negro).  
     *penthesileae* Macfie, 1935a: 55. Brazil (Maranhão).  
**circellata** Yu, in Yu *et al.* 2005a: 180. China (Chongqing).  
**cirrata** Yu, in Yu *et al.* 2005a: 181. China (Chongqing).  
**claviculifera** Tokunaga, 1962a: 202. Japan.  
**cogani** Wirth, 1990: 238. Aldabra (Seychelles).  
**columbiana** (Kieffer, 1917b): 304 (*Culicoides*). Colombia.  
**columna** de Meillon and Wirth, 1989b: 213. Zimbabwe.  
**communis** Kieffer, 1918a: 55. Algeria.  
**comosa** Brahma, Saha and Hazra, 2016: 239. India.  
**compta** Yu and Hao, in Yu *et al.* 2005a: 139. China (Guangxi).  
**confinis** (Johannsen, 1932): 426 (*Tetrastoma*). Indonesia.  
**conghua** Lai and Yu, in Lai *et al.* 2018: 279. China (Guangdong).  
**connexa** Yu, in Yu *et al.* 2005a: 280. China (Chongqing).  
**consuta** Yu and Zhao, in Yu *et al.* 2005a: 182. China (Yunnan).  
**contexta** Yu, in Yu *et al.* 2005a: 183. China (Sichuan).

**contigua** (Johannsen, 1932): 423 (*Tetrastroma*). Indonesia.

**corinneae** Gosseries, 1991: 42. New name for *scutellata* Meigen.  
*scutellata* (Meigen, 1830): 262 (*Ceratopogon*, preoccupied by *Ceratopogon scutellatus* Say, 1829). Europe.  
*choneta* Yu and Zou, in Yu *et al.* 2005a: 279. China (Heilongjiang).

**cornuta** Remm, 1972: 77. Russia (Altai Republic).

**correntina** Ronderos and Díaz, in Ronderos *et al.* 2004: 194. Argentina (Corrientes).

**coruscantis** Yu and Zhang, in Yu *et al.* 2005a: 141. China (Sichuan).

**crassipilosa** Tokunaga, 1956: 114. Japan.

**crassiseta** Borkent and Forster, 1986: 1285. Canada (Ontario).

**crassivena** Mazumdar and Chaudhuri, 2009: 193. India.

**cremnica** Yu and Ding, in Yu *et al.* 2005a: 299. China (Liaoning).

**croceoscutellata** Goetghebuer, 1933e: 143. Democratic Republic of the Congo.

**cuneata** Remm, 1979b: 57. Russia (Sakhalin Oblast).

**curticoma** Kieffer, 1923b: 138. Indonesia.

**curta** Yu and Yan, in Yu *et al.* 2005a: 264. China (Hainan).

**daguensis** Guo, Lai and Yu, 2018: 494. China (Tianjin municipality).

**dampfi** Kieffer, 1925b: 150. Estonia.  
*estonica* Kieffer, 1925a: 409. Estonia.  
*turfacea* Kieffer, 1925b: 151. Estonia.

**dara** Pierce, 1966: 88. USA (California). Miocene.

**dauidi** Clastrier, 1983c: 27. Seychelles.

**decempunctata** (Skuse, 1889): 301 (*Ceratopogon*). Australia (New South Wales).

**decoratissima** (Strobl, 1910): 264 (*Ceratopogon*). Austria.

**deemingi** Boorman and Harten, 2002: 441. Oman  
*labinoda* Mazumdar and Chaudhuri, 2009: 195. India.

**dehalperti** Macfie, 1937b: 76. Ethiopia.

**deiras** Yu, in Yu *et al.* 2005a: 184. China (Guangdong).

**deleasma** Yu, in Yu *et al.* 2005a: 282. China (Sichuan).

**dellapei** Díaz and Spinelli, in Díaz *et al.* 2010: 2828. Argentina (Santa Cruz).

**denticulata** Yu, in Yu *et al.* 2005a: 238. China (Gansu).

**dentiforceps** Tokunaga, 1940d: 121. Japan.

**desertorum** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 641. United Arab Emirates.

**dicrae** Yu, in Yu *et al.* 2005a: 142. China (Beijing).

**digna** Borkent, 1997a: 92. USA (Hawaii).

**dilatata** Yu, in Yu *et al.* 2005a: 143. China (Yunnan).

**dimota** Remm, 1972: 79. Russia (Tuva Republic).

**dioxyria** Hao and Yu, 2001: 12. China (Guangdong).

**divergens** de Meillon, 1959b: 22. South Africa.

**diversiloba** Yu, in Yu *et al.* 2005a: 144. China (Yunnan).

**dixa** Yu, Wu and Guo, in Sun *et al.* 2010: 247. China (Macao).

**dominiakae** Strandberg and Johanson, 2015: 9. Sweden.

**dominicana** Szadziewski and Grogan, 1998b: 258. Dominican Republic. Miocene.

**doratos** Yu, in Yu *et al.* 2005a: 310. China (Fujian).

**dujanga** Yu, in Yu *et al.* 2005a: 146. China (Sichuan).

**dunhuangensis** Yu and Liu, in Yu *et al.* 2005a: 185. China (Gansu).

**dupliforceps** Tokunaga, in Tokunaga and Murachi 1959: 264. Kiribati.

**dybasi** Tokunaga and Murachi, 1959: 291. Belau (USA).

**echinata** Liu, Yan and Liu, 1996a: 50. China (Hainan).

**echma** Yu, in Yu *et al.* 2005a: 300. China (Yunnan).

**effusa** Liu and Yu, 2001: 277. China (Gansu).

**egypti** Macfie, 1943a: 149 (as variety of *inconspicua* Carter, Ingram and Macfie). Egypt.

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

**enygros** Yu, *in* Yu *et al.* 2005a: 147. China (Fujian).  
**eodicryptoscenica** Szadziewski, 1988: 228. Poland. Eocene.  
**erema** Yu and Huang, *in* Yu *et al.* 2005a: 284. China (Hubei).  
**eremita** Remm and Nazarmukhamedov, 1969: 56. Tajikistan.  
**erici** Havelka, 1978b: 62. Austria.  
**ermeri** Remm, 1967: 17. Georgia.  
**esakii** Tokunaga, 1940a: 212. Micronesia.  
**europaea** Remm, 1962a: 122 (as subspecies of *bifurcata* Kieffer). Estonia.  
**excelsa** Yu and Deng, *in* Yu *et al.* 2005a: 148. China (Tibet).  
**falcata** de Meillon and Downes, 1986: 152. South Africa.  
**falculata** Remm, *in* Remm and Zhogolev 1968: 833. Ukraine.  
**fallax** Bose and Das Gupta, *in* Bose *et al.* 2002: 376. India.  
**fasciigera** Kieffer, 1925b: 151. Estonia.  
     *furcata* Zilahi-Sebess, 1940: 50. Hungary.  
     *nigra* Zilahi-Sebess, 1940: 50 (as variety of *furcata* Zilahi-Sebess). Hungary.  
**fenervivensis** de Meillon, 1961: 48. Madagascar.  
**ferreyrai** Díaz and Spinelli, *in* Díaz *et al.* 2011: 33. Argentina (La Rioja).  
**ferruginosa** Remm and Nazarmukhamedov, 1969: 54. Turkmenistan.  
**festiva** Wirth, 1952a: 161. USA (California).  
**filibranchia** (Lutz, 1914): 85 (*Ceratopogon*). Brazil (Rio de Janeiro).  
**filiducta** Díaz and Spinelli, *in* Díaz *et al.* 2009: 153. Argentina (Chubut).  
**flava** Carter, Ingram and Macfie, 1921b: 196. Ghana.  
**flaveola** Clastrier, Rioux and Descous, 1961: 73. Chad.  
**flavescens** Tokunaga and Murachi, 1959: 250. Marshall Islands.  
**flavibasalis** Tokunaga, 1940e: 173 (1940d: 118). Micronesia.  
**flavicauda** Macfie, 1939c: 201. Brazil (Santa Catarina).  
**flavicaudalis** Tokunaga and Murachi, 1959: 248. Micronesia.  
**flaviformis** Carter, Ingram and Macfie, 1921b: 201. Ghana.  
**flavifrons** (Guérin-Méneville, 1833): 165 (*Ceratopogon*). France.  
     *obscura* (Winnertz, 1852): 45 (*Ceratopogon*, preoccupied by *Forcipomyia obscura* (Walker, 1848)). Germany.  
     *versicolor* (Winnertz, 1852): 45 (*Ceratopogon*). Germany.  
     *dufourii* (Laboulbène, 1869): 163 (*Ceratopogon*). France.  
     *hippocastani* (Mik, 1888): 185 (*Ceratopogon*). Austria.  
     *rufithorax* Strobl, 1910: 261 (*Ceratopogon*, as variety of *versicolor* Winnertz). Croatia.  
     *brevitibialis* Goetghebuer, 1919: 72. Belgium.  
     *goetghebueri* Kieffer, 1919a: 53. Belgium.  
     *sensualis* Kieffer, 1919a: 55. Croatia, Greece.  
     *lignicola* Kieffer, 1919a: 57. Czech Republic.  
     *paludicola* Kieffer, 1925b: 152. Estonia.  
     *oppressa* Thomsen, 1935: 285. USA (New York).  
     *septuosa* Borkent, *in* Borkent and Wirth 1997: 58. New name for *obscura* Winnertz.  
**flavipicta** Ingram and Macfie, 1922: 249. Ghana.  
**flaviventris** (Goetghebuer, 1910): 96 (*Culicoides*). Belgium.  
**flavohumeralis** Goetghebuer, 1935d: 166. Democratic Republic of the Congo.  
**flavopyga** Zilahi-Sebess, 1940: 49. Hungary.  
**flavoscapularis** Goetghebuer, 1935d: 167. Democratic Republic of the Congo.  
**flavoscutellata** (Zetterstedt, 1850): 3648 (*Ceratopogon*). Norway.  
     *halobia* (Kieffer, 1924a): 12 (*Prokempia*, preoccupied by *Dasyhelea halobia* Kieffer, 1924a). Germany.  
**floricola** Kieffer, 1922g: 510 (as variety of *begueti* Kieffer). Algeria.  
**foliacea** Yu, *in* Yu *et al.* 2005a: 149. China (Beijing).  
**fontana** de Meillon and Wirth, 1981b: 533. South Africa.  
**forcepina** Ma and Yu, *in* Yu *et al.* 2005a: 243. China (Xinjiang).

**forficata** de Meillon and Wirth, 1989b: 215. Senegal.  
**forficpenis** Yu and Yan, 2015: 199. China (Xinjiang).  
**formosae** (Kieffer, 1912a): 29 (*Culicoides*). Taiwan.  
**formosana** Kieffer, 1921g: 565. Taiwan.  
     *sauteri* Tokunaga, 1940d: 127. Unnecessary new name for *formosana* Kieffer.  
**fornicata** Yu and Liu, in Yu *et al.* 2005a: 150. China (Hainan).  
**forsteri** Grogan and Wirth, 1981c: 97. Solomon Islands.  
**fossata** Yu, in Yu *et al.* 2005a: 152. China (Yunnan).  
**fosteri** Clastrier, 1983c: 28. Seychelles.  
**franzella** Goetghebuer, 1950: 3. Austria.  
     *unbedarfti* Havelka, 1978a: 177. Germany.  
**fueguina** Díaz and Spinelli, in Díaz *et al.* 2010: 2832. Argentina (Tierra del Fuego).  
**fulcillata** Yu, in Yu *et al.* 2005a: 153. China (Guangdong).  
**fulvicauda** Macfie, 1933b: 101. French Polynesia (France).  
**fulvosa** Remm, 1967: 15. Azerbaijan.  
**fumala** Tokunaga, 1940e: 176 (1940d: 117). Belau (USA).  
**fungivora** Krivosheina and Remm, 1974: 123. Russia (Primorsky Krai).  
**furcillifera** Tokunaga, in Tokunaga and Murachi 1959: 275. Micronesia.  
**furcula** de Meillon and Wirth, 1989b: 216. South Africa.  
**furva** Remm, 1967: 21. Russia (Republic of North Ossetia-Alania).  
**fusca** Carter, Ingram and Macfie, 1921b: 204. Ghana.  
**fusciformis** Carter, Ingram and Macfie, 1921b: 209. Ghana.  
**fuscipleuris** Carter, Ingram and Macfie, 1921b: 200. Ghana.  
**fusciscutellata** Carter, Ingram and Macfie, 1921b: 187. Ghana.  
**fuscocincta** Remm, 1967: 12. Azerbaijan.  
**galbiscutellata** Borkent, 1997b: 7. New name for *luteoscutellata* Carter, Ingram and Macfie.  
     *luteoscutellata* Carter, Ingram and Macfie, 1921b: 191 (preoccupied by *Dasyhelea luteoscutellata* (Santos  
     Abreu, 1918)). Ghana.  
**galea** Yu and Ma, in Yu *et al.* 2005a: 287. China (Xinjiang).  
**gargola** Díaz and Spinelli, in Díaz *et al.* 2010: 2834. Argentina (Río Negro).  
**gedanica** Szadziewski, 1988: 226. Poland. Eocene.  
**gemma** Yu, in Yu *et al.* 2005a: 190. China (Sichuan).  
**gewei** Yu, Zhang and Qiu, in Yang *et al.* 2017: 53. China (Jiangsu).  
**gigantosalphinx** de Meillon, 1937b: 371. South Africa.  
**glukhovae** Brodskaya, 1996: 193 (also as *gluchovae*). Kyrgyzstan.  
**gnopheros** Yu, in Yu *et al.* 2005a: 156. China (Hebei).  
**gongylophoda** Yu and Huang, 2006: 48. China (Macao).  
**gothlandica** Strandberg and Johanson, 2015: 12. Sweden.  
**grata** (Johannsen, 1932): 426 (*Tetrastroma*). Indonesia.  
**gressitti** Tokunaga, in Tokunaga and Murachi 1959: 251. Belau (USA).  
**grisea** (Coquillett, 1901a): 602 (*Ceratopogon*). USA (District of Columbia).  
     *subcaerulea* Thomsen, 1935: 284. USA (New York).  
**griseithorax** Goetghebuer, 1933e: 145. Democratic Republic of the Congo.  
**griseola** Wirth, 1978: 193 Mexico (Baja California).  
**grogani** Díaz and Spinelli, in Díaz *et al.* 2011: 35. Chile.  
**guadeloupensis** Delécolle and Rieb, 1994: 272. Guadeloupe (France).  
**hama** Yu, in Yu *et al.* 2005a: 244. China (Fujian).  
**hamardabani** Remm, 1972: 75. Russia (Republic of Buryatia).  
**hamata** de Meillon and Wirth, 1989b: 217. Zimbabwe.  
**hamula** Grogan, Díaz, Spinelli and Ronderos, 2017: 211. Guadeloupe (France).  
**hanoiensis** Yu, 2003a. Vietnam.  
**hawaiiensis** Macfie, 1934a: 133. USA (Hawaii).

**hei** Yu, Sun and Gong, *in* Sun *et al.* 2010: 246. China (Macao).  
**heliophila** Macfie, 1943a: 150 (as variety of *inconspicua* Carter, Ingram and Macfie). Egypt.  
**hesperos** Yu and Yan, *in* Yu *et al.* 2005a: 158. China (Tibet).  
**heurui** Kieffer, 1923b: 139. Indonesia.  
**heyuxiani** Yu, Yuan and Zeng, *in* Yu *et al.* 2006: 687. China (Hong Kong).  
**hihifoi** Clastrier and Delécolle, 1996: 311. Wallis and Futuna Islands (France).  
**hippolytae** Macfie, 1935a: 54. Brazil (Maranhão).  
**hirsuta** Yu, *in* Yu *et al.* 2005a: 159. Taiwan.  
**hirtipes** (Kieffer, 1917b): 305 (*Culicoides*). Peru.  
**hispaniolae** Szadziewski and Grogan, 1998b: 260. Dominican Republic. Miocene.  
**hitchcocki** Wirth, 1976a: 381. Tonga.  
**holosericea** (Meigen, 1804): 27 (*Ceratopogon*). Europe.  
**hondurensis** Spinelli and Wirth, 1984d: 600. Belize.  
**hongyaensis** Yu and Yan, 2015: 201. China (Sichuan).  
**horrida** Yu, *in* Yu *et al.* 2005a: 210. China (Guangdong).  
**huasteca** Huerta and Ibanez-Bernal, 1999: 499. Mexico (San Luis Potosí).  
**huertai** Grogan, Díaz, Spinelli and Ronderos, 2017: 247. Guadeloupe (France).  
**humilis** Macfie, 1938: 159. Solomon Islands.  
**hutsoni** Wirth, 1990: 240. Aldabra (Seychelles).  
**imperfecta** de Meillon and Wirth, 1989b: 217. Zimbabwe.  
**incisurata** Remm, 1962a: 114. Estonia.  
**inconspicua** Carter, Ingram and Macfie, 1921b: 191. Ghana.  
**indecora** (Kieffer, 1912a): 29 (*Culicoides*). Taiwan.  
**infula** Yu, *in* Yu *et al.* 2005a: 191. China (Yunnan).  
**ingrami** Díaz and Spinelli, *in* Díaz *et al.* 2014a: 2135. Argentina (Chubut).  
**insignicornis** (Kieffer, 1913e): 9 (*Culicoides*). Kenya.  
**insons** Mayer, 1934c: 177. Indonesia.  
**insperata** Yu and Yan, *in* Yu *et al.* 2005a: 192. China (Hainan).  
**insularis** Tokunaga, 1940a: 214. Micronesia.  
**insulicola** Tokunaga and Murachi, 1959: 307. Marshall Islands.  
**internata** Yu, *in* Yu *et al.* 2005a: 323. China (Sichuan).  
**intonsa** Debenham, 1987e: 347. Cocos (Keeling) Islands (Australia).  
**ismailiae** Macfie, 1943a: 152. Egypt.  
**jamaicensis** Spinelli and Wirth, 1984d: 602. Jamaica.  
**juanae** Grogan, Díaz, Spinelli and Ronderos, 2017: 223. Guadeloupe (France).  
**jingboi** Yu, *in* Yu *et al.* 2005a: 288. China (Guangdong).  
**johannseni** (Malloch, 1915a): 311 (*Pseudoculicoides*). USA (California).  
**jorgei** Diaz, Felipe-Bauer and Spinelli, 2017: 19. Peru.  
**joycei** de Meillon, 1936: 193. South Africa.  
**jucunda** Macfie, 1932c: 38. New Zealand.  
**judithae** Pierce, 1966: 88. USA (California). Miocene.  
**junxiana** Yu and Yan, 2015: 198. China (Hubei).  
**kanakoffi** Pierce, 1966: 89. USA (California). Miocene.  
**kibunensis** Tokunaga, 1940d: 134. Japan.  
**kitaokai** Tokunaga, 1963c: 42. Japan.  
**kodoriensis** Remm, 1993: 195. Georgia.  
**korfoensis** Remm, 1993: 193. Russia (Khabarovsk Krai).  
**kruppi** Boorman and Harten, 2002: 444. Oman.  
**kunmingensis** Zhao and Yu, 1997: 6. China (Yunnan).  
**kurensis** Remm, 1967: 14. Azerbaijan.  
      *mayeri* Spataru and Damian-Georgescu, 1970: 422. Romania.  
**kwangyangi** Nie, Yu and Bo, *in* Nie *et al.* 2016: 44 (also as *kwangyangi* Nie, Yu and Zhu). China (on ship from South Korea).



**kyotoensis** Tokunaga, 1940d: 132. Japan.  
**kyrenica** Remm, 1972: 75. Russia (Republic of Buryatia).  
**labourdonnaisi** Clastrier, 1959c: 422. Réunion (France).  
**lacustris** Ingram and Macfie, 1931a: 190. Argentina (Río Negro).  
**laeta** (Johannsen, 1932): 427 (*Tetraphora*). Indonesia.  
**lakistos** Yu and Liu, *in* Yu *et al.* 2005a: 230. China (Gansu).  
**laoensis** Yu and Yan, 2015: 202. Laos.  
**larundae** de Meillon, 1936: 195. South Africa.  
**latiforceps** Clastrier, 1983c: 29. Seychelles.  
**ledi** Remm, 1993: 190. Russia (Sakha Republic).  
**lediformis** Remm, 1993: 191. Russia (Kamchatka Krai).  
**leporis** de Meillon and Wirth, 1981c: 572. South Africa.  
**leptobranchia** Waugh and Wirth, 1976: 236. USA (Maryland).  
**leptoclada** Remm, 1967: 19. Azerbaijan.  
**libanensis** Dominiak, *in* Dominiak and Alwin 2013: 138. Lebanon.  
**lieni** Yu, *in* Yu *et al.* 2005a: 311. Taiwan.  
**lineata** (Kieffer, 1917a): 186 (*Culicoides*). Papua New Guinea.  
**linlingae** Yu and Huang, 2006: 48. China (Macao).  
**longicauda** Yu, *in* Yu *et al.* 2005a: 212. China (Chongqing).  
**longicoma** Kieffer, 1923b: 139. Indonesia.  
**longicornis** Kieffer, 1913d: 180. India.  
**longipenis** Yu, *in* Yu *et al.* 2005a: 291. China (Hubei).  
**longuana** Yu and Liu, *in* Yu *et al.* 2005a: 312. China (Sichuan).  
**longuria** Yu, *in* Yu *et al.* 2005a: 292. China (Qinghai).  
**lucida** Remm, *in* Remm and Zhogolev 1968: 831. Georgia.  
**ludingensis** Zhang and Yu, 1996: 202. China (Sichuan).  
**lugouqiaoensis** Yu and Yan, 2015: 198. China (Beijing).  
**lushanensis** Liu, Chen and Yu, 2016: 499. China (Jiangxi).  
**lutea** Remm, *in* Remm and Zhogolev 1968: 834. Ukraine.  
**luteicauda** Tokunaga, 1962a: 192. Japan.  
**luteocincta** Kieffer, 1925e: 254. Egypt.  
**luteogrisea** Wirth and Williams, 1957: 10. Bermuda (Great Britain).  
**luteola** Goetghebuer, 1934d: 191. Democratic Republic of the Congo.  
**macfiei** Díaz and Spinelli, *in* Díaz *et al.* 2014a: 2140. Argentina (Chubut).  
**macrostoma** (Kieffer, 1910): 188 (*Culicoides*). India.  
**maculata** Macfie, 1943b: 119. Bahamas.  
**magna** Mazumdar and Chaudhuri, 2009: 197. India.  
**major** (Malloch, 1915a): 311 (*Pseudoculicoides*). USA (Illinois).  
*ampla* Borkent, *in* Borkent and Wirth 1997: 51. Unnecessary new name for *major* Malloch.  
**malleola** Remm, 1962a: 119. Estonia.  
**manassi** Remm, 1980: 106. Kyrgyzstan.  
**mangshi** Yu and Yan, 2010: 201. China (Yunnan).  
**maricola** Remm, 1993: 195. Russia (Sakhalin Oblast).  
**maritima** Tokunaga, 1940d: 126. Japan.  
**matubae** de Meillon, 1937b: 375. South Africa.  
**mayor** (Strobl, 1906): 397 (*Ceratopogon*, as variety of *sericata* Winnertz). Spain.  
*aperta* Goetghebuer and Timon David, 1937: 415. France.  
*wuelkeri* Mayer, 1959: 96. Spain.  
**mcmillani** Clastrier and Wirth, 1961b: 333. Gambia.  
**mediomunda** Minaya, 1978: 79. Peru.  
**megatheca** Grogan, Díaz, Spinelli and Ronderos, 2017: 238. Guadeloupe (France).  
**meloae** Díaz and Spinelli, *in* Díaz *et al.* 2011: 37. Argentina (Río Negro).

**messersmithi** Waugh and Wirth, 1976: 241. USA (Virginia).  
**microsporea** Hao and Yu, 2001: 13. China (Guangdong).  
**mineira** Díaz, Felipe-Bauer and Spinelli, 2017: 19. Brazil (Minas Gerais).  
**minima** Kieffer, 1913d: 181. India.  
**minuscula** (Skuse, 1889): 299 (*Ceratopogon*). Australia (New South Wales).  
**minuticola** Szadziewski and Grogan, 1998b: 262. Dominican Republic. Miocene.  
**minutissima** Goetghebuer, 1933e: 142. Democratic Republic of the Congo.  
**miocaenica** Szadziewski, 1993: 651. Germany. Eocene.  
**miotheca** Yu and Deng, *in* Yu *et al.* 2005a: 245. China (Tibet).  
**mocambicana** de Meillon, 1942c: 9. Mozambique.  
**modesta** (Winnertz, 1852): 43 (*Ceratopogon*). Germany.  
     *aestiva* (Winnertz, 1852): 42 (*Ceratopogon*). Germany.  
     *longipalpis* Kieffer, 1913b: 37. Germany.  
     *inclusa* Kieffer, 1918b: 188. Czech Republic.  
     *strobli* Kieffer, 1919a: 63. Spain.  
     *pratensis* Goetghebuer, 1920: 44. Belgium.  
     *bihamata* Kieffer, 1923a: 667. Algeria.  
     *moascari* Macfie, 1943a: 153. Egypt.  
     *densipilosa* Tokunaga, 1963c: 41. Japan.  
**monosticta** (Ingram and Macfie, 1923): 60 (*Thysanognathus*). Tanzania.  
**monticola** Ingram and Macfie, 1931a: 188. Chile.  
**montivaga** (Kieffer, 1910): 188 (*Culicoides*). India.  
**montivegeta** Yu, 2000b: 163. New name for *montana* Yu and Ma.  
     *montana* Yu and Ma, 1998: 274 (preoccupied by *Dasyhelea montana* Zilahi-Sebess, 1940). China (Xinjiang).  
**morrisoni** Grogan and Wieners, 2006: 468. Bahamas.  
**morula** Yu and Xue, *in* Yu *et al.* 2005a: 247. China (Shandong).  
**multifascia** Tokunaga and Murachi, 1959: 320. Micronesia.  
**muradovi** Remm, 1980: 108. Turkmenistan.  
**mutabilis** (Coquillett, 1901a): 602 (*Ceratopogon*). USA (District of Columbia).  
**myrmedon** Kieffer, 1917a: 188. Papua New Guinea.  
**nachitai** Yu and Liu, *in* Yu *et al.* 2005a: 248. China (Qinghai).  
**nandina** Zhao and Yu, 1997: 6. China (Yunnan).  
**nauta** Dominiak, *in* Dominiak and Alwin 2013: 139. Yemen.  
**navai** Xue and Yu, 2002: 39. China (Shandong).  
**navaiae** Waugh and Wirth, 1976: 240. USA (Michigan).  
**necrophila** Spinelli and Rodriguez, 1999: 59. Argentina (Buenos Aires).  
**nelidae** Grogan, Díaz, Spinelli and Ronderos, 2017: 244. Guadeloupe (France).  
**neobifurcata** Wirth, 1976c: 15. New name for *bifurcata* Wirth.  
     *bifurcata* Wirth, 1952a: 161 (preoccupied by *Dasyhelea bifurcata* Kieffer, 1923a). USA (California).  
**neocaledoniensis** Clastrier, 1988b: 79. New Caledonia (France).  
**neoflava** Borkent and Dominiak, in this work. New name for *Dasyhelea flava* Yu.  
     *flava* Yu, *in* Yu *et al.* 2005a: 229 (preoccupied by *Dasyhelea flava* Carter, Ingram and Macfie, 1921b). China (Hubei).  
**neofusca** Borkent and Dominiak, in this work. New name for *Dasyhelea fusca* Yu.  
     *fusca* Yu, *in* Yu *et al.* 2005a: 154 (preoccupied by *Dasyhelea fusca* Carter, Ingram and Macfie, 1921b). China (Hunan).  
**nepenthicola** Wirth and Beaver, 1979: 47. Malaysia.  
**nigella** (Skuse, 1889): 300 (*Ceratopogon*). Australia (New South Wales).  
**nigeriae** Ingram and Macfie, 1921: 329. Nigeria.  
**nigricans** Carter, Ingram and Macfie, 1921b: 194. Ghana.  
**nigrina** Clastrier, Rioux and Descous, 1961: 71. Chad.  
**nigripygma** Tokunaga, *in* Tokunaga and Murachi 1959: 310. Micronesia.

**nigristigmata** Tokunaga and Murachi, 1959: 246. Marshall Islands.  
**nigritia** Li, *in Li et al.* 2015: 169. China (Sichuan).  
**nigritula** Clastrier, Rioux and Descous, 1961: 66. Chad.  
**nigrofusca** Carter, Ingram and Macfie, 1921b: 207. Ghana.  
**nigroris** Tokunaga and Murachi, 1959: 301. Micronesia.  
**nilssoni** Szadziewski, 2000b: 478. Canary Islands (Spain).  
**nitida** Yu and Liu, *in Yu et al.* 2005a: 313. China (Sichuan).  
**nitidula** (Kieffer, 1910): 189 (*Culicoides*). Burma, India.  
**noctuabunda** Remm, 1980: 109. Tajikistan.  
**norvegica** Szadziewski and Hagan, 2000: 462. Norway.  
**notata** Goetghebuer, 1920: 47. Belgium.  
     *semistriata* Goetghebuer, 1921: 176. Belgium.  
     *sziladyi* Zilahi-Sebess, 1936b: 42. Hungary.  
**nudipennis** Kieffer, 1921b: 11. Cameroon.  
**nyasae** Ingram and Macfie, 1925: 286. Malawi.  
**obscurella** Goetghebuer, 1935d: 167. Democratic Republic of the Congo.  
**occasa** Zhang and Yu, 1996: 201. China (Sichuan).  
**okinawensis** Tokunaga, 1962a: 193. Japan.  
**oliva** Li, *in Li et al.* 2015: 170. China (Sichuan).  
**omoxantha** Ingram and Macfie, 1922: 251. Nigeria.  
**ona** Díaz and Spinelli, *in Díaz et al.* 2010: 2836. Argentina (Tierra del Fuego).  
**opaca** (Kieffer, 1910): 188 (*Culicoides*). India.  
**oreocincta** Remm, 1980: 103. Kyrgyzstan.  
**oribates** Macfie, 1932c: 40. New Zealand.  
**ornata** Yu, *in Yu et al.* 2005a: 160. China (Hebei).  
**ornaticornis** Kieffer, 1913d: 180. India.  
**oxyria** Yu, Wang and Deng, *in Yu et al.* 2015b: 304. China (Yunnan).  
**pabloi** Díaz and Spinelli, *in Díaz et al.* 2011: 37. Chile.  
**pacifica** Macfie, 1933b: 99. French Polynesia (France).  
     *pallida* Macfie, 1933b: 100 (as variety of *pacifica* Macfie). French Polynesia (France).  
**pailenansis** Díaz and Spinelli, *in Díaz et al.* 2011: 40. Argentina (Río Negro).  
**paivai** (Kieffer, 1910): 193 (*Culicoides*). India.  
**palauensis** Tokunaga, 1940e: 177 (1940d: 117). Belau (USA).  
**pallens** Wirth, 1952a: 152. USA (California).  
**pallescentis** Yu and Liu, *in Yu et al.* 2005a: 215. China (Gansu).  
**pallidicola** Yu, *in Yu et al.* 2005a: 293. China (Jiangsu).  
**pallidihalter** Carter, Ingram and Macfie, 1921b: 184. Ghana.  
**pallidiscutellata** Yu, *in Yu et al.* 2005a: 161. China (Henan).  
**pallidiventris** (Goetghebuer, 1931): 211 (*Tetraphora*). Germany.  
     *olivacea* Remm, 1962a: 117. Estonia.  
**pallivittae** Tokunaga, *in Tokunaga and Murachi* 1959: 269. Micronesia.  
**palloris** Tokunaga and Murachi, 1959: 298. Mariana Islands (USA).  
**paracincta** Wirth, 1969: 576. Galápagos Islands (Ecuador).  
**paracuminata** Remm, 1980: 104. Tajikistan.  
**paragrata** Remm, 1972: 72. Russia (Republic of Buryatia).  
**parahybae** Macfie, 1940a: 74. Brazil (Paraíba).  
**parallela** Remm, 1962a: 125. Estonia.  
**parvifulva** Tokunaga, 1940d: 139. Taiwan.  
**parvinigra** Tokunaga, 1940d: 133. Taiwan.  
**parvistylata** Tokunaga and Murachi, 1959: 259. Micronesia.  
**patagonica** Ingram and Macfie, 1931a: 182. Argentina (Río Negro).  
     *chilensis* Ingram and Macfie, 1931a: 186. Chile.

**patrycjae** Grogan, Díaz, Spinelli and Ronderos, 2017: 227. Guadeloupe (France).  
**pauca** Yu and Zhan, *in* Yu *et al.* 2005a: 314. China (Hainan).  
**paulistana** Forattini and Rabello, 1957: 245. Brazil (São Paulo).  
**peculiopa** Navai, 1994: 377. Afghanistan.  
**peliliouensis** Tokunaga, 1940e: 177 (1940d: 117). Belau (USA).  
**pelletieri** Clastrier, 1959c: 426. Réunion (France).  
**penicillata** Yu and Liu, *in* Yu *et al.* 2005a: 216. China (Tibet).  
**pentalineata** Wirth and Hubert, 1960a: 644. Mexico (Baja California).  
**perfidia** (Johannsen, 1932): 424 (*Tetraphora*). Indonesia.  
**perrara** Remm, 1980: 108. Turkmenistan.  
**philotherma** Macfie, 1953: 103. Costa Rica.  
**picata** Macfie, 1932b: 494. Malawi.  
**pictiventris** (Kieffer, 1911b): 327 (*Culicoides*). India.  
**placenta** Yu and Wang, *in* Yu *et al.* 2005a: 315. China (Jiangxi).  
**platychaeta** Hardy, 1960: 185. USA (Hawaii).  
**pollex** Borkent and Forster, 1986: 1286. Bahamas.  
**pollinosa** Wirth, 1952a: 156. USA (California).  
**pritchardi** Wirth, 1952a: 163. USA (California).  
**pseudocincta** Waugh and Wirth, 1976: 225 (as *pseudocinta*). USA (New York).  
**psseudohama** Brahma and Hazra, 2018: 354. India.  
**pseudoincisurata** Waugh and Wirth, 1976: 233. USA (Georgia).  
**pseudolacustris** Díaz and Spinelli, *in* Díaz *et al.* 2014a: 2146. Argentina (Neuquén).  
**pseudopollinosa** Díaz and Ronderos, *in* Díaz *et al.* 2014b: 716. Brazil (Amazonas).  
**pulchripes** (Santos Abreu, 1918): 308 (*Culicoides*). Canary Islands (Spain).  
*tenerifensis* Clastrier, 1966: 694. Canary Islands (Spain).  
**pumila** Macfie, 1939c: 202. Brazil (Santa Catarina).  
**punctatipennis** Kieffer, 1921b: 11. Cameroon.  
**punctiformis** Goetghebuer, 1935d: 168. Democratic Republic of the Congo.  
**punctiventris** Goetghebuer, 1940: 71. Germany.  
*sericatoides* Zilahi-Sebess, 1940: 53. Hungary.  
*siccicola* Remm, *in* Remm and Zhogolev 1968: 832. Ukraine.  
**punctosa** Remm, 1993: 190. Russia (Sakhalin Oblast).  
**pusi** Yu and Yan, *in* Yan and Yu, 2008: 481. China (Shanxi).  
**pusilla** (Lutz, 1913): 65 (*Centrorhynchus*). Brazil (Rio de Janeiro).  
**pygmaea** (Williston, 1896): 278 (*Ceratopogon*). St. Vincent.  
**pyrsonota** Macfie, 1953: 104. Costa Rica.  
**qinghaiensis** Liu and Shi, *in* Liu *et al.* 2005: 32. China (Qinghai).  
**quadrifurca** Grogan, Díaz, Spinelli and Ronderos, 2017: 213. Guadeloupe (France).  
**quadrilobata** (Kieffer, 1910): 189 (*Culicoides*). India.  
**quarternihamata** Tokunaga and Murachi, 1959: 295. Micronesia.  
**quassata** Yu, *in* Yu *et al.* 2005a: 249. China (Jiangsu).  
**radialis** Edwards, 1928: 53. Western Samoa.  
**raoheensis** Zou and Yu, *in* Yu *et al.* 2005a: 218. China (Heilongjiang).  
**raripilosa** Tokunaga, 1940e: 172 (1940d: 117). Belau (USA).  
**ravida** Yu, *in* Yu *et al.* 2005a: 199. China (Sichuan).  
**retorta** Ingram and Macfie, 1921: 333. Sierra Leone.  
**revoluta** Yu and Wen, *in* Yu *et al.* 2005a: 200. China (Sichuan).  
**reynoldsi** Ingram and Macfie, 1931a: 185. Chile.  
**ricardo** Díaz and Spinelli, *in* Díaz *et al.* 2011: 41. Argentina (Río Negro).  
**robustiforceps** Tokunaga, 1962a: 187. Japan.  
**rostrosericea** Remm, 1993: 191. Russia (Sakhalin Oblast).  
**rugula** Yu and Zhang, *in* Yu *et al.* 2005a: 165. China (Sichuan).

**rusa** Macfie, 1933a: 79. French Polynesia (France).  
**ryckmani** Wirth and Hubert, 1960a: 646. USA (California).  
**ryukyuensis** Tokunaga, 1962a: 196. Japan.  
**sabroskyi** Tokunaga, *in* Tokunaga and Murachi 1959: 273. Belau (USA).  
**saetula** Yu, *in* Yu *et al.* 2005a: 318. China (Guangdong).  
**sagittifera** Tokunaga and Murachi, 1959: 292. Mariana Islands (USA).  
**salinaria** de Meillon and Wirth, 1981b: 530. South Africa.  
**salta** de Meillon and Downes, 1986: 155. South Africa.  
**saltensis** Spinelli and Wirth, 1984d: 606. Mexico (Morelos).  
**sanctaemariae** Wirth, 1952a: 162. USA (California).  
**sandrageorgei** Dominiak, *in* Dominiak and Alwin 2013: 139. Lebanon.  
**santaemarthae** (Kieffer, 1917b): 306 (*Culicoides*). Colombia.  
**scalpela** Grogan, Díaz, Spinelli and Ronderos, 2017: 219. Guadeloupe (France).  
**scalpra** Brahma and Hazra, 2018: 358. India.  
**scapularis** (Kieffer, 1910): 189 (*Culicoides*). India.  
**schizothruxi** Lee and Wirth, *in* Lee *et al.* 1989: 453. Singapore.  
**schumanni** Navai, 1994: 379. Afghanistan.  
**scissurae** Macfie, 1937a: 15. Trinidad and Tobago.  
     *koenigi* Delécolle and Rieb, 1994: 267. Guadeloupe (France).  
**scotti** (Kieffer, 1911c): 341 (*Culicoides*). Seychelles.  
**sella** Yu, *in* Yu *et al.* 2005a: 319. China (Hainan).  
**seminigra** Navai, 1994: 381. Afghanistan.  
**serrana** Díaz and Spinelli, *in* Díaz *et al.* 2014a: 2153. Argentina (Buenos Aires).  
**serristernum** Remm, 1967: 18. Georgia.  
**setigera** (Kieffer, 1910): 190 (*Culicoides*). India.  
**setoensis** Tokunaga, 1940d: 137. Japan.  
**sexlineata** Goetghebuer, 1935d: 169. Democratic Republic of the Congo.  
**seychellensis** (Kieffer, 1911c): 341 (*Culicoides*). Seychelles.  
**shannoni** Ingram and Macfie, 1931a: 183. Chile.  
**shaoshana** Yu, *in* Yu *et al.* 2005a: 304. China (Hunan).  
**shuaoensis** Yu and Yan, 2015: 202. China (Hong Kong).  
**siculla** Yu and Zhao, *in* Yu *et al.* 2005a: 201. China (Yunnan).  
**signata** Goetghebuer, 1935d: 169. Democratic Republic of the Congo.  
**signicornecula** Mazumdar and Chaudhuri, 2009: 197. India.  
**silvatica** Wang, Zhang and Yu, *in* Wang *et al.* 2015: 312. China (Fujian).  
**similaris** Remm, 1972: 77. Russia (Republic of Buryatia).  
**similinigrina** Navai, 1994: 384. Afghanistan.  
     *acuta* Brahma, Saha and Hazra, 2016: 237. India.  
**similis** Carter, Ingram and Macfie, 1921b: 189. Ghana.  
**simillima** (Johannsen, 1932): 423 (*Tetrastoma*). Indonesia.  
**simpliradialis** Tokunaga, 1940d: 127. Japan.  
**simulator** Goetghebuer, 1935d: 170. Democratic Republic of the Congo.  
**sinclairi** Borkent, 1991: 110. Galápagos Islands (Ecuador).  
**skierskae** Szadziewski, 1985a: 91. Algeria.  
**sonorensis** Wirth, 1978: 197. Mexico (Sonora).  
**soriai** Wirth and Waugh, 1976: 229. Brazil (Bahia).  
**soutini** de Meillon and Wirth, 1987a: 38. South Africa.  
**spathicerca** Wirth, 1969: 577. Galápagos Islands (Ecuador).  
**spatula** Grogan, Díaz, Spinelli and Ronderos, 2017: 216. Guadeloupe (France).  
**speciosa** Clastrier, 1983c: 34. Seychelles.  
**spiniforma** Waugh and Wirth, 1976: 243. USA (New York).  
**spinula** Yu and Kong, *in* Yu *et al.* 2005a: 296. China (Shandong).

**stackelbergi** Remm, 1993: 194. Russia (Leningrad Oblast).  
**stanislavi** Szadziewski, 1988: 230. Poland. Eocene.  
**stellata** Remm, *in* Remm and Zhogolev 1968: 831. Ukraine.  
**stemlerae** Waugh and Wirth, 1976: 233. USA (Maryland).  
**stenoceras** Palmer, 1957: 271. USA (California). Miocene.  
**sternalis** Remm, 1980: 110. Tajikistan.  
**storai** Borkent, 1997b: 14. New name for *canariensis* Storå.  
*canariensis* Storå, 1936: 36 (as variety of *flavoscutellata* Zetterstedt, preoccupied by *Dasyhelea canariensis* (Santos Abreu, 1918)). Canary Islands (Spain).  
**strigosa** Kieffer, 1922g: 514. Algeria.  
**striipennis** Tokunaga, *in* Tokunaga and Murachi 1959: 312. Micronesia.  
**suarezi** Spinelli and Ronderos, 1987: 11. Argentina (Buenos Aires).  
**subaequalis** Kieffer, 1915a: 472. Germany.  
**subcommunis** Yu, *in* Yu *et al.* 2005a: 269. China (Sichuan).  
**subehinata** Zeng, Yuan and Yu, *in* Yu *et al.* 2006: 689. China (Hong Kong).  
**subflava** Yu and Hao, *in* Yu *et al.* 2005a: 219. China (Guangdong).  
**subgrata** Tokunaga, 1961a: 180. Indonesia.  
**sublettei** Wirth, 1987: 73. USA (Texas).  
**subperfida** Tokunaga, 1940e: 174 (1940d: 117). Belau (USA).  
**subscutellata** Tokunaga, 1940e: 175 (1940d: 118). Belau (USA).  
**subtilis** Yu and Zhang, *in* Yu *et al.* 2005a: 170. China (Shanghai).  
**sudis** Yu and Qi, *in* Yu *et al.* 2005a: 250. China (Gansu).  
**suntari** Remm, 1993: 195. Russia (Sakha Republic).  
**surrecta** Yu and Shi, *in* Yu *et al.* 2005a: 252. China (Qinghai).  
**symmetria** Tokunaga, 1962a: 191. Japan.  
**taibei** Yu, *in* Yu *et al.* 2005a: 233. Taiwan.  
**taiwana** Tokunaga, 1940d: 119. Taiwan.  
**taiwaniensis** Borkent, *in* Borkent and Wirth 1997: 58. New name for *formosana* Kieffer, 1922b.  
*formosana* Kieffer, 1922b: 157 (preoccupied by *Dasyhelea formosana* Kieffer, 1921g). Taiwan.  
**tamsi** Wirth and Messersmith, 1977: 305. Seychelles.  
**taurica** Remm, *in* Remm and Zhogolev 1968: 834. Ukraine.  
**tehuelche** Díaz and Spinelli, *in* Díaz *et al.* 2014a: 2160. Argentina (Santa Cruz).  
**tenebrosa** (Coquillett, 1905): 64 (*Ceratopogon*). USA (California).  
**tenerrima** Goetghebuer, 1935d: 170. Democratic Republic of the Congo.  
**tenuipalpis** Yu, *in* Yu *et al.* 2005a: 320. China (Hubei).  
**ternipenis** Yu and Yan, *in* Yu *et al.* 2005a: 305. China (Hainan).  
**tersa** (Johannsen, 1932): 421 (*Tetrastoma*). Indonesia.  
**tessicola** Remm, 1972: 74. Russia (Tuva Republic).  
**thalestris** Macfie, 1935a: 55. Brazil (Maranhão).  
**theobromatis** Wirth and Derron, 1976: 232. Sao Tomé and Príncipe.  
**thienemanni** Spataru and Damian-Georgescu, 1970: 425 (as *thienemanni*). Romania.  
**thomasi** Grogan, Díaz, Spinelli and Ronderos, 2017: 231. Guadeloupe (France).  
**thompsoni** de Meillon, 1936: 202. South Africa.  
**thomsenae** Wirth, 1952a: 160. USA (California).  
**tianshana** Yu and Ma, 1998: 273. China (Xinjiang).  
**tibestiensis** Clastrier, Rioux and Descous, 1961: 61. Chad.  
**townesi** Tokunaga and Murachi, 1959: 267. Marshall Islands.  
**transvaalensis** de Meillon, 1959a: 335. South Africa.  
**traveræ** Thomsen, 1935: 285. USA (New York).  
**triaina** Yu, *in* Yu *et al.* 2005a: 255. China (Ningxia).  
**triancyra** Yang, He and Yu, *in* Yang *et al.* 2017: 53. China (Jiangsu).  
**trigonata** Mayer, 1934c: 181. Indonesia.

**tristyla** Wirth, 1952a: 165. USA (California).  
**tropica** Clastrier, 1959b: 369. Senegal.  
**truncata** Tokunaga and Murachi, 1959: 297. Belau (USA).  
**tshatkalensis** Remm, 1980: 106. Kyrgyzstan.  
**tuberculata** Remm, 1980: 109. Tajikistan.  
**tugelae** de Meillon, 1936: 197. South Africa.  
**turanicola** Remm and Nazarmukhamedov, 1969: 56. Kazakhstan.  
*serrata* Navai, 1994: 383. Afghanistan.  
**turnbowi** Grogan, Díaz, Spinelli and Ronderos, 2017: 249. Guadeloupe (France).  
**turficola** Kieffer, 1925b: 152. Estonia.  
*grenieri* Clastrier, 1966: 703. Canary Islands (Spain).  
*malibui* Yu, 2008: 165. France.  
**tymicola** Remm, 1993: 194. Russia (Sakhalin Oblast).  
**uncinata** Deng and Yu, *in* Yu *et al.* 2005a: 256. China (Tibet).  
**undosternum** Remm, 1972: 77. Russia (Altai Republic).  
**unguistyla** Remm, 1972: 79. Russia (Sakha Republic).  
**unicolor** Remm, 1962a: 119. Estonia.  
**upsilon** de Meillon and Wirth, 1987a: 39. South Africa.  
**velutina** Remm, 1993: 193. Russia (Sakha Republic).  
**vidua** Yu, *in* Yu *et al.* 2005a: 171. China (Sichuan).  
**villosipes** (Kieffer, 1917b): 305 (*Culicoides*). Paraguay.  
**viridans** Forattini and Rabello, 1957: 247. Brazil (Rio de Janeiro).  
**vittula** Tokunaga, *in* Tokunaga and Murachi 1959: 271. Guam (USA).  
**waldiae** Macfie, 1937b: 77. Ethiopia.  
**wanlina** Yu and Li, *in* Yu *et al.* 2005a: 325. China (Sichuan).  
**waughi** Grogan, Díaz, Spinelli and Ronderos, 2017: 228. Guadeloupe (France).  
**williamsi** Wirth and Waugh, 1976: 228. Trinidad and Tobago.  
**winderi** Wirth and Waugh, 1976: 233. Brazil (Bahia).  
**wirthi** Clastrier, 1974c: 135. New name for *insignicornis* Clastrier, Rioux and Descous.  
*insignicornis* Clastrier, Rioux and Descous, 1961: 76 (preoccupied by *Dasyhelea insignicornis* (Kieffer, 1913e)). Chad.  
**wirthicola** Szadziewski, 1985a: 94. Pakistan.  
**wumazhaotiani** Liu, Chen and Yu, 2016: 500. China (Jiangxi).  
**wushi** Ysmar and Yu, 2003: 52 (Yu and Ma, *in* Yu *et al.* 2005a: 202). China (Xinjiang).  
**xichangensis** Yu, *in* Yu *et al.* 2005a: 235. China (Sichuan).  
**yamana** Díaz and Spinelli, *in* Díaz *et al.* 2014a: 2164. Argentina (Tierra del Fuego).  
**yoshimurai** Tokunaga, 1940d: 124. Japan.  
**yunga** Díaz, *in* Díaz *et al.* 2018: 11. Argentina.  
**zonalis** Yu and Yang, *in* Yu *et al.* 2005a: 298. China (Inner Mongolia).

### *Nomina dubia*

**abdominalis** (Santos Abreu, 1918): 303 (*Culicoides*). Canary Islands (Spain).  
**abreui** (Kieffer, 1921e): 7 (*Culicoides*). New name for *flaviventris* Santos Abreu.  
*flaviventris* (Santos Abreu, 1918): 292 (*Culicoides*, as variety of *versicolor* Winnertz) (preoccupied by *Dasyhelea flaviventris* (Goetghebuer, 1910): 96 (*Culicoides*). Canary Islands (Spain).  
**albohalterata** (Santos Abreu, 1918): 299 (*Culicoides*, as variety of *sericata* Winnertz). Canary Islands (Spain).  
**algarum** Kieffer, 1924a: 21. Germany.  
**bifurcata** Kieffer, 1923a: 669. Algeria.  
**coarctata** Kieffer, 1914a: 231. Switzerland.  
**curtiradialis** Tokunaga, 1940d: 130. Japan, Taiwan.  
**curtivitta** Tokunaga, 1940d: 124. Japan.

**diplosis** Kieffer, 1914a: 232. Germany.  
**distalis** Kieffer, 1918a: 94. Turkey.  
**egens** (Winnertz, 1852): 43 (*Ceratopogon*). Germany.  
**erythrogaster** (Santos Abreu, 1918): 307 (*Culicoides*). Canary Islands (Spain).  
**eximia** (Santos Abreu, 1918): 312 (*Culicoides*). Canary Islands (Spain).  
**flavimana** (Santos Abreu, 1918): 292 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
**flaviscapula** Kieffer, 1918a: 93. Turkey.  
**fratercula** (Santos Abreu, 1918): 305 (*Culicoides*). Canary Islands (Spain).  
**georgei** Huttel and Huttel, 1954: 39. France.  
**halobia** Kieffer, 1924a: 20. Germany.  
**halophila** Kieffer, 1911d: 5 (1913c: 255). Croatia.  
**heracleae** Kieffer, 1919a: 59. Greece.  
**homocera** Kieffer, 1919a: 56. Croatia.  
**longituba** Kieffer, 1922g: 511. Algeria.  
**luteipalpis** (Santos Abreu, 1918): 292 (*Culicoides*, as variety of *versicolor* Winnertz). Canary Islands (Spain).  
**luteoscutellata** (Santos Abreu, 1918): 300 (*Culicoides*, as variety of *sericata* Winnertz). Canary Islands (Spain).  
**monilicornis** Kieffer, 1923a: 671. Algeria.  
**neglecta** (Winnertz, 1852): 46 (*Ceratopogon*). Germany.  
**parcepilosa** Kieffer, 1923a: 670. Algeria.  
**parva** Borkent, in Borkent and Wirth 1997: 57. New name for *minuscula* Zilahi-Sebess.  
*minuscula* Zilahi-Sebess, 1940: 51. New name for *minima* Zilahi-Sebess.  
*minima* Zilahi-Sebess, 1936b: 41. Hungary  
**saprophila** Kieffer, 1925a: 410. Germany.  
**scutellaris** Kieffer, 1918a: 93. Turkey.  
**sericata** (Winnertz, 1852): 34 (*Ceratopogon*). Germany.  
**szegedensis** Zilahi-Sebess, 1940: 53. Hungary.  
**tarsalis** Kieffer, 1919a: 62. Hungary.  
**tigalatensis** (Santos Abreu, 1918): 303 (*Culicoides*, as variety of *scutellata* Meigen). Canary Islands (Spain).  
**trifasciata** Kieffer, 1918a: 92. Turkey.  
**varicornis** (Santos Abreu, 1918): 288 (*Culicoides*). Canary Islands (Spain).  
**verdieri** Huttel and Huttel, 1951: 103. France.  
**vittata** Tokunaga, 1940d: 127. Japan.  
**vittulae** Tokunaga, 1940d: 120. Japan.  
**zavreli** Kieffer, 1918b: 188. Czech Republic.

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### Genus ATRICHOPOGON Kieffer

**ATRICHOPOGON** Kieffer, 1906a: 53 (as subgenus of *Ceratopogon*). Type species: *Ceratopogon exilis* Coquillett (= *Ceratopogon levis* Coquillett), designation by Coquillett, 1910: 512.  
**KEMPPIA** Kieffer, 1913d: 162, 179 (as subgenus of *Dasyhelea*). Type species: *Dasyhelea calcuttensis* Kieffer, designation by Wirth, 1952a: 117.  
**GYMNOHELEA** Kieffer, 1921h: 115. Type species: *Kempia longiserrus* Kieffer, designation by Wirth, 1973: 348.  
**DOLICHOHELEA** Edwards, 1929b: 8. Type species: *Dolichohelea polita* Edwards, by monotypy.  
**LOPHOMYIDIUM** Cordero, 1929: 94. Type species: *Lophomyidium uruguayense* Cordero, by original designation.  
**PSILOKEMPPIA** Enderlein, 1936: 49. Type species: *Kempia appendiculata* Goetghebuer, by monotypy.  
**MELOEHELEA** Wirth, 1956b: 16 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon meloesugans* Kieffer.  
**PSAMMOPOGON** Remm, 1979b: 57 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon trifasciata* Kieffer (= *Atrichopogon flavolineatus* Strobl), by original designation.



*ROSTROPOGON* Remm, 1979b: 57 (as subgenus of *Atrichopogon*). Type species: *Ceratopogon rostratus* Win-  
nertz, by original designation.  
*IMPENSUKEMPIA* Yu, in Liu *et al.* 2001a: 47 (as subgenus of *Atrichopogon*). Type species: *Atrichopogon impen-  
sus*, by original designation.  
*BESSAMYIA* Yu, Liu, Liu, Liu, Hao, Yan and Zhao, 2006: 355 (as subgenus of *Atrichopogon*). Type species: *At-  
richopogon bessa* Yu and Yan, by original designation.

**abrasus** Edwards, 1928: 52. Western Samoa.  
**abyssiniae** Kieffer, 1918a: 44. Ethiopia.  
**acanthocolpus** Ingram and Macfie, 1922: 260. Nigeria.  
**acosmetus** Ingram and Macfie, 1922: 263. Ghana.  
**adamsoni** Macfie, 1937a: 4. Trinidad and Tobago.  
**aereum** Yu and Yan, in Yu *et al.* 2005a: 357. China (Sichuan).  
**aethiops** (Goetghebuer, 1920): 33 (*Kempia*). Belgium.  
**africanus** Ingram and Macfie, 1921: 334. Ghana.  
**akizukii** Tokunaga, 1940b: 274 (as *akisukii*). Russia (Sakhalin Oblast).  
**alainus** Remm, 1980: 110. Kyrgyzstan.  
**albinensis** Ingram and Macfie, 1931a: 228. Argentina (Buenos Aires).  
**albiscapulus** Kieffer, 1918a: 42. Algeria.  
    *bilineatus* Kieffer, 1922g: 498. Algeria.  
**alticola** (Kieffer, 1911b): 323 (*Forcipomyia*). India.  
**altivolans** Macfie, 1949: 113. Mexico (Chiapas).  
**alveolatus** Nielsen, 1951: 26. Denmark.  
**anemotis** Kieffer, 1913e: 7. Kenya.  
**annulifemoratus** Tokunaga, 1959: 190. Papua New Guinea.  
**appendiculatus** (Goetghebuer, 1920): 37 (*Kempia*). Belgium.  
    *armativentris* (Kieffer, 1923a): 673 (*Kempia*). Algeria.  
    *adjacens* (Kieffer, 1924b): 401 (*Kempia*, as variety of *appendiculatus*). France.  
**aquilonarius** Yu and Yan, in Yu *et al.* 2005a: 379. China (Heilongjiang).  
**arabicus** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 637. United Arab Emirates.  
**archboldi** Wirth, 1994a: 27. USA (Florida).  
**arciforceps** Tokunaga, 1941a: 110. Micronesia.  
**arcticus** (Coquillett, 1900): 396 (*Ceratopogon*). USA (Alaska).  
**argus** Kieffer, 1916a: 86. Taiwan.  
**argutus** Liu, Yan and Liu, 1996a: 23. China (Hainan).  
**aridus** Spinelli and Marino, in Spinelli *et al.* 2006: 304. Argentina (Mendoza).  
**armaticaudalis** Tokunaga and Murachi, 1959: 131. Micronesia.  
**armatilabrum** Clastrier, 1987b: 211. New Caledonia (France).  
**arti** Spinelli, Marino and Huerta, 2015a: 14. Colombia.  
**assuetus** Macfie, 1934c: 185 (1934d: 212). Malaysia.  
**aterrimus** Kieffer, 1913d: 178. India.  
**atratus** Kieffer, 1917a: 184. Australia (New South Wales).  
**atricollis** (Goetghebuer, 1935d): 163 (*Kempia*). Democratic Republic of the Congo.  
**atriscapulus** Kieffer, 1918a: 45. Tunisia.  
**atromaculatus** Goetghebuer, 1933b: 111. Russia (Primorsky Krai).  
**atroscutellatus** Edwards, 1928: 53. Western Samoa.  
**atroxipes** Bose and Das Gupta, in Bose *et al.* 2003: 261. India.  
**attentus** Johannsen, 1932: 416. Indonesia.  
**asuturus** Borkent and Picado, 2004: 29. Costa Rica.  
**auricoma** Kieffer, 1917b: 300. Colombia.  
**australis** Clastrier, 1987b: 200. New Caledonia (France).  
**badiensis** Clastrier, 1959b: 354. Senegal.

**bai** Remm, 1980: 114. Turkmenistan.  
**bakeri** Macfie, 1939a: 88. Uganda.  
**balseiroi** Spinelli, 1982: 206. Argentina (Buenos Aires).  
**bangqiensis** Yan, Zhang and Yu, 1995: 100. China (Tibet).  
**barbatus** Borkent and Picado, 2004: 23. Costa Rica.  
**bargaensis** Remm, 1972: 70. Russia (Zabaykalsky Krai).  
**baripenis** Yu and Yan, *in* Yu *et al.* 2005a: 365. China (Sichuan).  
**beccus** Borkent and Picado, 2004: 31. Costa Rica.  
**bellicosus** Debenham, 1973: 74. Papua New Guinea.  
**bessa** Yu and Yan, *in* Yu *et al.* 2005a: 355. China (Hainan).  
**biangulus** Yan, Zhang and Yu, 1995: 96. China (Tibet).  
**bicolor** Wirth and Ratanaworabhan, 1993: 328. Malaysia.  
**bicuspis** Borkent and Picado, 2004: 9. Costa Rica.  
**bidaculus** Yu and Yan, *in* Liu 2001a: 124. China (Hainan).  
**bifasciatus** Kieffer, 1917a: 181. Papua New Guinea.  
**bifidus** Ewen, *in* Ewen and Saunders 1958: 694. Brazil (Rio de Janeiro).  
**binipenis** Yu and Yan, *in* Liu 2001a: 53. China (Sichuan).  
**biroi** Kieffer, 1917a: 182. Papua New Guinea.  
**bisetosus** (Goetghebuer, 1933e): 137 (*Kempia*). Democratic Republic of the Congo.  
**boharti** Tokunaga, 1962a: 159. Japan.  
**borkenti** Wirth, 1994a: 25. Canada (British Columbia).  
**brasiliensis** Macfie, 1939c: 184. Brazil (Santa Catarina).  
**brenthus** Liu and Yu, *in* Chen *et al.* 2012: 35. China (Jiangxi).  
**brevicellula** Kieffer, 1921b: 8. Cameroon.  
**brevicercus** Yan and Yu, 2000: 402 (*in* Liu 2001a: 21). China (Guangdong).  
**brevicornis** Tokunaga, *in* Tokunaga and Murachi 1959: 138. Belau (USA).  
**brevifurca** Goetghebuer, 1948b: 10. Democratic Republic of the Congo.  
**brevipalpalis** Remm, 1993: 198. Russia (Sakhalin Oblast).  
*nanopalpis* Borkent, *in* Borkent and Wirth 1997: 26. Unnecessary new name for *brevipalpalis* Remm (as *brevipalpis*).  
**brevipalpis** Macfie, 1944b: 298. Trinidad and Tobago.  
**brevipenis** Yu and Yan, *in* Liu 2001a: 67. China (Guangxi).  
**breviserrus** (Kieffer, 1924b): 400 (*Kempia*). France.  
**brevistilus** Kieffer, 1913d: 178. India.  
**briani** de Meillon, 1961: 45. Madagascar.  
**brunnescens** Statz, 1944: 141. Germany. Oligocene.  
**brunnicellula** Clastrier, 1959b: 366. Senegal.  
**brunnipes** (Meigen, 1804): 29 (*Ceratopogon*). Europe.  
*longinervis* Kieffer, 1919a: 28 (as variety of *orbicularis* Kieffer). Romania, Slovak Republic.  
*semiensis* Remm, 1972: 68. Russia (Altai Republic).  
**bullus** Remm, 1980: 114. Turkmenistan.  
**calcuttensis** (Kieffer, 1913d): 181 (*Dasyhelea*). India.  
**callipotami** Macfie, 1924: 65. Egypt.  
**capistratus** Yu and Yan, *in* Liu 2001a: 126. China (Guangxi).  
**caribbeanus** Ewen, *in* Ewen and Saunders 1958: 683. Trinidad and Tobago.  
**carinatus** Wirth and Ratanaworabhan, 1992: 271. Malaysia.  
**carnatus** Borkent and Picado, 2004: 13. Costa Rica.  
**carpintero** Marino and Spinelli, 2004c: 157. Argentina (Formosa).  
**casali** Cavalieri and Chiossone, 1973: 153. Argentina (Misiones).  
**catinus** Yan and Yu, *in* Liu 2001a: 69. China (Hubei).  
**cavus** Felipe-Bauer, *in* Felipe-Bauer *et al.* 2012: 45. Brazil (Rio de Janeiro).  
**celibatus** Ingram and Macfie, 1923: 48. South Africa.

**celsus** Yu and Yan, *in* Yu *et al.* 2005a: 368. China (Hubei).  
**characopodus** (Speiser, 1910): 749 (*Helea*). Tanzania.  
**chazeaui** Clastrier, 1987b: 199. New Caledonia (France).  
**chilensis** Ingram and Macfie, 1931a: 175. Argentina (Río Negro).  
**chrysosphaerotus** Ingram and Macfie, 1921: 337. Ghana.  
**chuanxiensis** Yu and Yan, *in* Liu 2001a: 71. China (Sichuan).  
**circatheca** Bose and Das Gupta, *in* Bose *et al.* 2003: 262. India.  
**clarusaliger** Bose and Das Gupta, *in* Bose *et al.* 2003: 264. India.  
**clastrieri** Spinelli and Marino, 2007: 204. Argentina (Misiones).  
**clavator** Debenham, 1973: 73. Papua New Guinea.  
**clavifuscus** Tokunaga, 1940b: 275. Japan.  
**colossus** Borkent and Picado, 2004: 10. Costa Rica.  
**columbianus** Kieffer, 1917b: 303. Colombia.  
**coma** Song, Wang and Yu, 2013: 444. China (Anhui).  
**comatus** Bose and Das Gupta, *in* Bose *et al.* 2003: 266. India.  
**comechingon** Spinelli and Marino, *in* Spinelli *et al.* 2006: 306. Argentina (Córdoba).  
**conglomeratus** Kieffer, 1921b: 8. Cameroon.  
**conspicuus** Clastrier, Rioux and Descous, 1961: 54. Chad.  
**coracinus** Kieffer, 1917a: 184. Australia (New South Wales).  
**corpulentus** Ewen, *in* Ewen and Saunders 1958: 681. Canada (British Columbia).  
**costalis** Macfie, 1939c: 179. Brazil (Santa Catarina).  
**costaricae** Macfie, 1953: 98. Costa Rica.  
**costatus** Yu and Yan, *in* Liu 2001a: 28. China (Hebei).  
**crinitus** Ewen, *in* Ewen and Saunders 1958: 717. Canada (British Columbia).  
**crispantis** Liu, Yan and Liu, 1996a: 24. China (Hainan).  
**cristatus** Hao and Yu, 1998: 133. China (Guangxi).  
**cryptogamus** Macfie, 1939c: 182. Brazil (Santa Catarina).  
**curtipalpis** (Kieffer, 1923b): 136 (*Kempia*). Indonesia.  
**dactylus** Felipe-Bauer, *in* Felipe-Bauer *et al.* 2012: 40. Brazil (Rio de Janeiro).  
**daleyae** Giles and Wirth, 1984: 210. Vietnam.  
**dehiscentis** Yu and Yan, *in* Liu 2001a: 77. China (Jilin).  
**dekeyseri** Clastrier, 1959b: 357. Senegal.  
**delpontei** Cavalieri and Chiossone, 1972: 121. Argentina (Santa Fe).  
**densiplumus** Kieffer, 1918a: 41. Tunisia.  
**depilis** Macfie, 1939c: 178. Brazil (Santa Catarina).  
**deyrupi** Wirth, 1994a: 26. USA (Florida).  
**diandrous** Yu and Yan, 2010: 200. China (Yunnan).  
**didymothecae** Macfie, 1953: 99. Costa Rica.  
**dilutus** Johannsen, 1932: 417. Indonesia.  
**discors** Macfie, 1934c: 189. Malaysia.  
**distinctus** Kieffer, 1918a: 43. South Africa.  
**dominicanus** Szadziewski and Grogan, 1998b: 264. Dominican Republic. Miocene.  
**domizii** Spinelli, 1982: 201. Argentina (Buenos Aires).  
**dorsalis** Tokunaga, 1940b: 273. Japan.  
**downesi** Wirth, 1980a: 129. USA (West Virginia).  
**dubius** Nielsen, 1951: 25. Denmark.  
**echinatus** Yu and Yan, *in* Yu *et al.* 2005a: 360. China (Sichuan).  
**echinodes** Macfie, 1939c: 194. Brazil (Santa Catarina).  
**edentatus** Remm, 1972: 67. Russia (Altai Republic).  
**edwardsi** Macfie, 1934c: 184 (1934d: 208). Malaysia.  
**elektrophaeus** Ingram and Macfie, 1921: 335. Ghana.  
**emeiensis** Deng, Liao and Yu, *in* Deng *et al.* 2011: 115. China (Sichuan).

**endemicus** Spinelli and Marino, *in* Spinelli *et al.* 2006: 307. Argentina (Río Negro).  
**eocenicus** Szadziowski, 1988: 223. Poland. Eocene.  
**epicautae** Wirth, 1956b: 21. USA (Arizona).  
**epixanthopygus** Yu and Yan, *in* Yu *et al.* 2005a: 369. China (Hunan).  
**eucnemus** Macfie, 1939c: 185. Brazil (Santa Catarina).  
**exiletergitus** Yu and Yan, *in* Yu *et al.* 2005a: 393. China (Yunnan).  
**eximiunguis** Bose and Das Gupta, *in* Bose *et al.* 2003: 267. India.  
**ezoensis** Tokunaga, 1940b: 268. Japan.  
**falcatus** Boesel, 1973: 214. USA (Michigan).  
**falcis** de Meillon and Wirth, 1981c: 571. South Africa.  
**farri** Wirth, 1956b: 22. USA (Massachusetts).  
**femoralis** Tokunaga, 1940b: 264. Japan.  
**fenestriscutum** Tokunaga and Murachi, 1959: 125. Micronesia.  
**ferenudus** Bose and Das Gupta, *in* Bose *et al.* 2003: 269. India.  
**fiebrigi** Kieffer, 1917b: 302. Paraguay.  
**fitzroyi** Macfie, 1932c: 34. New Zealand.  
**flabellis** Bose and Das Gupta, *in* Bose *et al.* 2003: 269. India.  
**flavenicruris** Tokunaga and Murachi, 1959: 135. Micronesia.  
**flavens** Tokunaga, 1940b: 266. Japan.  
**flaveolus** Zilahi-Sebess, 1936a: 201, 204. Poland.  
**flavicaudae** Macfie, 1939c: 181. Brazil (Santa Catarina).  
*pilosior* Macfie, 1939c: 182 (as variety of *flavicaudae* Macfie). Brazil (Santa Catarina).  
**flaviceps** Kieffer, 1912a: 28. Taiwan.  
*mendax* Kieffer, 1922b: 156 (as variety of *flaviceps* Kieffer). Taiwan.  
**flavidus** Kieffer, 1921g: 562. Philippines.  
**flavipalpis** Kieffer, 1913d: 175. India.  
**flavipes** Lutz, 1914: 90. Brazil (Rio de Janeiro).  
**flaviplumus** Remm, 1993: 197. Russia (Sakhalin Oblast).  
**flaviscapus** Remm, 1971: 194. Russia (Primorsky Krai).  
**flaviscutellum** Tokunaga, 1940b: 277. Japan.  
**flavitarisatus** (Becker, 1903): 74 (*Ceratopogon*). Egypt.  
**flavitergum** Tokunaga, 1959: 187. Papua New Guinea.  
**flavolineatus** (Strobl, 1880): 52 (*Ceratopogon*). Austria.  
*trifasciatus* Kieffer, 1918a: 90. Turkey, Greece, Hungary, Slovak Republic, Romania.  
**flavus** Ewen, *in* Ewen and Saunders 1958: 697. Canada (Saskatchewan).  
**flumineus** Macfie, 1935a: 52. Brazil (Maranhão).  
**forcipatus** (Winnertz, 1852): 30 (*Ceratopogon*). Germany.  
*silesiacus* Kieffer, 1919a: 30. Poland.  
*hamifer* (Goetghebuer, 1920): 38 (*Kempia*). Belgium.  
**fulvipes** Remm, 1972: 71. Turkmenistan.  
**fulviscutellaris** Tokunaga, 1959: 192. Papua New Guinea.  
**fulvus** Macfie, 1934c: 186. Malaysia.  
**fusciscutellum** Wirth and Ratanaworabhan, 1993: 324. Malaysia.  
**fuscus** (Coquillett, 1901a): 605 (*Ceratopogon*). USA (New Jersey).  
*polydactylus* Nielsen, 1951: 27. Denmark.  
**fuscus** (Meigen, 1804): 28 (*Ceratopogon*). Europe.  
*fuscipes* (Zetterstedt, 1850): 3644 (*Ceratopogon*). Denmark.  
*fossicola* Kieffer, 1922c: 234. Germany.  
**fusinervis** (Malloch, 1915a): 308 (*Ceratopogon*). USA (Illinois).  
**gamboai** Borkent and Picado, 2004: 26. Costa Rica.  
**geminus** Boesel, 1973: 211. USA (Ohio).  
**ghashmi** Boorman and Harten, 2002: 434. Yemen.

**gillipaludosus** Remm, 1993: 198. Armenia.  
**gilvus** (Coquillett, 1905): 62 (*Ceratopogon*). USA (Florida).  
**glaber** Macfie, 1935a: 50. Brazil (Maranhão).  
**glabricollis** (Waltl, 1837) : 279 (*Ceratopogon*). Germany.  
**globosus** Kieffer, 1918a: 45. Ethiopia.  
**globulifer** Macfie, 1939c: 191. Brazil (Santa Catarina).  
**glukhovae** Huerta, 2008: 73. Mexico (Chiapas).  
**gordoni** Macfie, 1938: 164. Trinidad and Tobago.  
     *fimbriatus* Macfie, 1939c: 194 (as variety of *gordoni* Macfie). Brazil (Santa Catarina).  
**gracilis** Hao and Yu, 1998: 134 (*in* Liu 2001a: 80). China (Guangxi).  
**granditergitus** Borkent and Picado, 2004: 27. Costa Rica.  
**granditibialis** Borkent and Picado, 2004: 20. Costa Rica.  
**grandis** Bose and Das Gupta, *in* Bose *et al.* 2003: 269. India.  
**gressitti** Tokunaga, *in* Tokunaga and Murachi 1959: 137. Micronesia.  
**greyi** Macfie, 1932c: 35. New Zealand.  
**griseolus** (Zetterstedt, 1855): 4865 (*Ceratopogon*). Sweden.  
     *majusculus* Remm, 1961b: 920. Estonia.  
**grogani** Huerta and Dzul, 2012: 24. Mexico (Oaxaca).  
**guianensis** Macfie, 1940b: 184. Guyana.  
**guttatus** Yan and Yu, 2000: 403 (*in* Liu 2001a: 24). China (Hubei).  
**haemorrhoidalis** Kieffer, 1921g: 560. Taiwan.  
**haesitans** (Kieffer, 1922c): 234 (*Gymnohelea*). Germany.  
**harpagonum** Macfie, 1934c: 184 (1934d: 208). Malaysia.  
**harrisi** Macfie, 1938: 163. Trinidad and Tobago.  
**helles** de Meillon and Wirth, 1983a: 350. South Africa.  
**hesperius** Ingram and Macfie, 1922: 266. Ghana.  
**hexastichus** Nielsen, 1951: 27. Denmark.  
**hilaris** Bose and Das Gupta, *in* Bose *et al.* 2003: 271. India.  
**hirsutipennis** Ingram and Macfie, 1923: 49. South Africa.  
     *helion* de Meillon, 1936: 177. South Africa.  
**hirtidorsum** Remm, 1961b: 922. Estonia.  
**hispaniae** Havelka, 1979: 58. Spain.  
**hobsoni** Macfie, 1932c: 32. New Zealand.  
**homoius** Ingram and Macfie, 1921: 338. Ghana.  
     *alfierii* Kieffer, 1925e: 249. Egypt.  
**homofacies** Spinelli, *in* Spinelli *et al.* 1989: 734. Argentina (Buenos Aires).  
**horni** Kieffer, 1925a: 408. Sri Lanka.  
**horos** Yan and Yu, *in* Yu *et al.* 2005a: 428. China (Xinjiang).  
**hortensis** Sahuquillo and Gil Collado, 1982a: 305 (as subspecies of *minutus* Meigen). Spain.  
**hukengicus** Yu, Huang and Yang, *in* Huang *et al.* 2009: 365. China (Fujian).  
**humicolus** Ewen, *in* Ewen and Saunders 1958: 679. Canada (Saskatchewan).  
**hystricoides** Debenham, 1973: 71. Papua New Guinea.  
**ilonae** Gosseries, 1989: 2. New name for *pilosipennis* Tokunaga.  
     *pilosipennis* Tokunaga, 1940b: 276 (preoccupied by *Forcipomyia pilosipennis* (Kieffer, 1919a)). Japan.  
**impensus** Yu and Yan, *in* Liu 2001a: 50. China (Tibet).  
**inacayali** Spinelli and Marino, *in* Spinelli *et al.* 2006: 309. Argentina (Chubut).  
**inconspicuus** Ewen, *in* Ewen and Saunders 1958: 706. Canada (Saskatchewan).  
**incultus** Ewen, *in* Ewen and Saunders 1958: 699. Costa Rica.  
**indianus** (Kieffer, 1910): 185 (*Ceratopogon*). India.  
     *rivicola* (Kieffer, 1911b): 324 (*Forcipomyia*). India.  
**infamis** Bose and Das Gupta, *in* Bose *et al.* 2003: 273. India.  
**infuscus** Goetghebuer, 1929: 232. Belgium.

**insignipalpis** Macfie, 1940a: 73. Brazil (Rio Grande do Sul).  
**insigniunguis** Clastrier, 1987b: 198. New Caledonia (France).  
**insigniventris** Macfie, 1935a: 51. Brazil (Maranhão).  
**insolens** Bose and Das Gupta, *in* Bose *et al.* 2003: 274. India.  
**insolitipes** Bose and Das Gupta, *in* Bose *et al.* 2003: 273. India.  
**insularis** Kieffer, 1921g: 561. Taiwan.  
     *citrinipes* Kieffer, 1922b: 154. Taiwan.  
**intertextus** Yu and Yan, *in* Yu *et al.* 2005a: 443. China (Hubei).  
**isolatus** Liu, Yan and Liu, 1996a: 24. China (Hainan).  
**jacobsoni** (de Meijere, 1907): 212 (*Ceratopogon*). Indonesia.  
     *flavellus* Kieffer, 1913d: 177. India.  
     *immaculatus* Kieffer, 1917a: 181. Papua New Guinea.  
     *cavernarum* Edwards, 1924: 107. India.  
     *rarus* Johannsen, 1946: 188. Guam (USA).  
**jamnbacki** Wirth, 1994a: 24. USA (New York).  
**japonicus** Tokunaga, 1940b: 272. Japan.  
**javieri** Spinelli, Marino and Huerta, 2015a: 35. St. Vincent.  
**jejunus** Macfie, 1934c: 184 (1934d: 211). Malaysia.  
**jianfengensis** Liu and Yan, *in* Liu 2001a: 86. China (Hainan).  
**jubacaudalis** Yu and Yan, *in* Yu *et al.* 2005a: 445. China (Gansu).  
**kagiensis** Tokunaga, 1940b: 270. Taiwan.  
**kangnani** Yan, Zhang and Yu, 1995: 99. China (Hainan).  
**kelainosoma** Ingram and Macfie, 1922: 261. Ghana.  
**kribiensis** Kieffer, 1921b: 10. Cameroon.  
**kyotoensis** Tokunaga, 1940b: 275. Japan.  
**lacajae** Macfie, 1953: 100. Costa Rica.  
**lacustris** Clastrier, 1987b: 203. New Caledonia (France).  
**ladislavi** Tóthová, *in* Tóthová *et al.* 2009: 50. Canada (Quebec).  
**lamellamarsipos** Yu and Yan, *in* Yu *et al.* 2005a: 345. China (Tibet).  
**lampronotus** (Kieffer, 1911c): 335 (*Ceratopogon*). Seychelles.  
**largipenis** Yan, Zhang and Yu, 1995: 98. China (Tibet).  
**lassus** Yan, Zhang and Yu, 1995: 97. China (Tibet).  
**latipygus** Vaillant, 1957: 270. Algeria.  
**lazoensis** Remm, 1971: 197. Russia (Primorsky Krai).  
**levis** (Coquillett, 1901a): 604 (*Ceratopogon*). USA (Maryland).  
     *exilis* (Coquillett, 1902a): 86 (*Ceratopogon*). USA (District of Columbia).  
**lindneri** Wirth, 1964: 2. Tanzania.  
**lituratus** (Williston, 1896): 281 (*Ceratopogon*). St. Vincent.  
**lobatus** Borkent and Picado, 2004: 14. Costa Rica.  
**longicalcar** Remm, 1961b: 925. Estonia.  
**longicalcaris** Tokunaga, 1959: 182. Papua New Guinea.  
**longicornis** Ewen, *in* Ewen and Saunders 1958: 700. Costa Rica.  
**longicostus** Clastrier, 1959b: 360. Senegal.  
**longipalpis** (Kieffer, 1923b): 135 (*Kempia*). Indonesia.  
**longirostris** Spinelli, Marino and Huerta, 2015a: 38. Grenada.  
**longitergitus** Yan and Yu, *in* Liu *et al.* 2001a: 26. China (Guizhou).  
**lucorum** (Meigen, 1818): 72 (*Ceratopogon*). Europe.  
     *sylvaticus* (Winnertz, 1852): 29 (*Ceratopogon*). Germany.  
     *setosipennis* (Kieffer, 1911d): 3 (*Forcipomyia*). Germany.  
     *bidentatus* Kieffer, 1924b: 399 (as variety of *winnertzi* Goetghebuer). France.  
     *seminitidus* Goetghebuer, 1947: 229. Belgium.  
**ludingensis** Yu and Yan, *in* Liu *et al.* 2001a: 90. China (Sichuan).

**luteicollis** (Becker, 1903): 74 (*Ceratopogon*). Egypt.  
*flavoscutellatus* (Becker, 1908): 74 (*Ceratopogon*, preoccupied by *Dasyhelea flavoscutellata* (Zetterstedt, 1850)). Canary Islands (Spain).  
*aegyptius* Kieffer, 1925e: 250. Egypt.  
*phrixus* de Meillon, 1943: 105. South Africa.  
*sanani* Boorman and Harten, 2002: 434. Yemen.

**luteipes** Goetghebuer, 1933e: 140. Democratic Republic of the Congo.

**lutescens** Clastrier, Rioux and Descous, 1961: 59. Chad.

**lyratus** Yu and Yan, in Yu *et al.* 2005a: 448. China (Yunnan).

**macrodentatum** Marino, Tóthová and Spinelli, 2011: 62. Argentina (Neuquén).

**maculatus** (Lundström, 1910): 35 (*Ceratopogon*, as variety of *minutus* Meigen). Finland.  
*avastensis* Remm, 1959: 688. Estonia.  
*hamulatus* Remm, 1971: 197. Russia (Primorsky Krai).

**maculipennis** Clastrier, 1968: 89. French Guiana (France).

**maculosus** Ewen, in Ewen and Saunders 1958: 689. Canada (Saskatchewan).

**magnus** Borkent and Picado, 2004: 16. Costa Rica.

**marginipilus** Tokunaga, 1940b: 267. Japan.

**mastersi** (Skuse, 1889): 297 (*Ceratopogon*). Australia (New South Wales).

**matilei** Clastrier, 1987b: 204. New Caledonia (France).

**medicrinis** Yu and Yan, in Yu *et al.* 2005a: 449. China (Heilongjiang).

**megalothecus** Remm, 1971: 197. Russia (Primorsky Krai).

**melanimus** Ingram and Macfie, 1923: 50. South Africa.

**melanoticus** Macfie, 1934c: 187 (as variety of *subfuscus* Macfie). Malaysia.

**melinois** (Speiser, 1910): 751 (*Helea*, as *melinoessa*). Tanzania.

**meloesugans** Kieffer, 1922g: 495. Algeria.

**mendozae** Ingram and Macfie, 1931a: 229. Argentina (Mendoza).

**mexicanus** Huerta, 2001: 373. Mexico (Chiapas).

**minimus** Kieffer, 1916a: 87. Taiwan.

**minutalatus** Bose and Das Gupta, in Bose *et al.* 2003: 275. India.

**minutus** (Meigen, 1830): 263 (*Ceratopogon*). Europe.  
*fortiserrus* Kieffer, 1924b: 398. France.  
*turficola* Kieffer, 1925b: 149. Estonia.  
*parviforceps* Tokunaga, 1940b: 267. Russia (Sakhalin Oblast).

**miripalpis** Kieffer, 1924b: 397. France.

**modestus** Bose and Das Gupta, in Bose *et al.* 2003: 275. India.

**monomorphicus** Marino, Tóthová and Spinelli, 2011: 65. Argentina (Río Negro).

**monticola** Tokunaga, 1940b: 271. Taiwan.

**montigenum** Yu and Yan, in Liu *et al.* 2001a: 92. China (Tibet).

**montivagus** (Kieffer, 1911b): 322 (*Forcipomyia*). India.

**montium** Storå, 1936: 34. Canary Islands (Spain).

**muelleri** (Müller, 1905): 224 (*Ceratopogon*). Poland.  
*muelleri* (Kieffer, 1906b): 336 (*Ceratopogon*, preoccupied by *Atrichopogon muelleri* (Müller, 1905)). Germany.  
*cornutus* Nielsen, 1951: 25. Denmark.  
*globularis* Mayer, 1934d: 214 (as variety of *trifasciatus* Kieffer). Sweden.

**multidens** Bose and Das Gupta, in Bose *et al.* 2003: 277. India.

**multiplex** Bose and Das Gupta, in Bose *et al.* 2003: 279. India.

**multispinosa** Bose and Das Gupta, in Bose *et al.* 2003: 280. India.

**myrmedon** Kieffer, 1922b: 155. Taiwan.  
*quadrispinosus* Remm, 1993: 196. Russia (Sakhalin Oblast).  
*pectinacaudalis* Yu and Yan, in Yu *et al.* 2005a: 457. China (Heilongjiang).

**nahuelbutensis** Spinelli, Marino and Huerta, 2015a: 41. Chile.

**nanus** Macfie, 1940b: 184. Guyana.  
**natalensis** Ingram and Macfie, 1923: 52. South Africa.  
**natans** Kieffer, 1922g: 496. Algeria.  
**nebulosus** Macfie, 1939c: 192. Brazil (Santa Catarina).  
**nemestrinus** (Santos Abreu, 1918): 257 (*Helea*). Canary Islands (Spain).  
     *albidipes* (Santos Abreu, 1918): 259 (*Helea*, as variety of *nemestrina* Santos Abreu). Canary Islands (Spain).  
     *distinctus* (Santos Abreu, 1918): 260 (*Helea*, as variety of *nemestrina* Santos Abreu). Canary Islands (Spain).  
     *flavicans* (Santos Abreu, 1918): 259 (*Helea*, as variety of *nemestrina* Santos Abreu). Canary Islands (Spain).  
     *flavihalteratus* (Santos Abreu, 1918): 259 (*Helea*, as variety of *nemestrina* Santos Abreu). Canary Islands (Spain).  
     *fulviventris* (Santos Abreu, 1918): 260 (*Helea*, as variety of *nemestrina* Santos Abreu). Canary Islands (Spain).  
**neocaledoniensis** Clastrier, 1987b: 205. New Caledonia (France).  
**nielamuensis** Yu and Yan, in Liu *et al.* 2001a: 130. China (Tibet).  
**nigeriae** Clastrier and Wirth, 1961a: 200. Nigeria.  
**nigribasalis** Tokunaga, 1959: 180. Papua New Guinea.  
**nigripes** Macfie, 1934c: 188. Malaysia.  
**nigritellus** Yu and Yan, in Yu *et al.* 2005a: 406. China (Sichuan).  
**nigrithoracius** Tokunaga, 1959: 188. Papua New Guinea.  
**nigrithorax** Clastrier, 1987b: 207. New Caledonia (France).  
**nigrofuscus** Remm, 1980: 115. Kyrgyzstan.  
**nigromicans** Goetghebuer, 1935d: 162. Democratic Republic of the Congo.  
**nilicola** Kieffer, 1921b: 9. South Sudan.  
**niloticus** Kieffer, 1921b: 9 (as variety of *conglomeratus* Kieffer). South Sudan.  
**nilsoni** de Meillon and Wirth, 1989a: 88. Madagascar.  
**novaeteutoniae** Macfie, 1939c: 189. Brazil (Santa Catarina).  
**novaguinensis** Tokunaga, 1959: 202. Indonesia.  
**nubeculosus** Macfie, 1949: 113. Mexico (Chiapas).  
**nudus** Zilahi-Sebess, 1940: 38. Hungary.  
**nukini** Felipe-Bauer, 2018: 258. Brazil (Acre).  
**obesus** Goetghebuer, 1948b: 11. Democratic Republic of the Congo.  
**obfuscatus** Ingram and Macfie, 1931a: 173. Argentina (Río Negro).  
**obnubilis** Ingram and Macfie, 1931a: 175. Argentina (Río Negro).  
     *assimilis* Ingram and Macfie, 1931a: 176. Argentina (Neuquén).  
**obscuripes** Macfie, 1933a: 77. French Polynesia (France).  
**obscurus** Ewen, in Ewen and Saunders 1958: 685. Puerto Rico (USA).  
**occidentalis** Wirth, 1952a: 120. USA (California).  
**ochrosoma** (Ingram and Macfie, 1921): 340 (*Kempia*). Ghana.  
**ocumare** (Ortiz, 1952b): 254 (*Monohelea*). Venezuela.  
**oedemerarum** Storå, 1939: 16. Finland.  
**okinawensis** Tokunaga, 1962a: 165. Japan.  
**ollicula** Yan and Yu, in Liu *et al.* 2001a: 41. China (Sichuan).  
**orbicularis** Kieffer, 1919a: 28. Romania.  
**orbitus** Yu and Yan, in Yu *et al.* 2005a: 370. China (Guizhou).  
**origenus** Kieffer, 1913d: 176. India.  
**oriphilus** (Kieffer, 1911b): 324 (*Forcipomyia*). India.  
**ornatipennis** Clastrier, 1987a: 271. French Guiana (France).  
**ornatithorax** Clastrier, 1987b: 208. New Caledonia (France).  
**ornativentris** Clastrier, 1959b: 363. Senegal.  
**oviformis** Liu, Yan and Liu, 1996a: 24. China (Hainan).  
**pachito** Huerta and Dzul, 2012: 22. Mexico (Guerrero).  
**pachycnemus** Macfie, 1953: 101. Costa Rica.  
**pacificus** Clastrier, 1987b: 210. New Caledonia (France).



**pallidicillus** Yu and Zou, 1988: 85. China (Yunnan).  
**pallidipedis** Tokunaga, 1959: 194. Papua New Guinea.  
**pallidipes** Kieffer, 1917b: 301. Paraguay.  
**palmatus** Tokunaga, 1962a: 160. Japan.  
*sentus* Yu and Qi, in Liu *et al.* 1990a: 219 (also as *snetus* and *sentns*). China (Gansu).  
**palpalis** Macfie, 1939c: 196. Brazil (Santa Catarina).  
**palus** Bose and Das Gupta, in Bose *et al.* 2003: 282. India.  
**parroti** Clastrier, 1956: 510. Algeria.  
**parvulus** Kieffer, 1919a: 25. Ukraine.  
**pastinaca** Yu, in Yu *et al.* 2005a: 362. China (Tibet).  
**paulus** Remm, 1961b: 928. New name for *nanus* Remm.  
*nanus* Remm, 1959: 686 (preoccupied by *Atrichopogon nanus* Macfie, 1940b). Estonia.  
**pavidus** (Winnertz, 1852): 33 (*Ceratopogon*). Germany.  
*pollinivorus* Downes, 1955: 442. Great Britain.  
**pecteniventris** Borkent, in Borkent and Wirth 1997: 27. New name for *armativentris* Kieffer.  
*armativentris* (Kieffer, 1923b): 137 (*Kempia*, preoccupied by *Atrichopogon armativentris* (Kieffer, 1923a)).  
Indonesia.  
**pectinatus** Macfie, 1939c: 195. Brazil (Santa Catarina).  
**peculiaris** Bose and Das Gupta, in Bose *et al.* 2003: 284. India.  
**pedipalens** Yan and Yu, 1999: 100. China (Yunnan).  
**penicillatus** Delécolle and Rieb, 1994: 274. Guadeloupe (France).  
**peregrinus** (Johannsen, 1908): 266 (*Ceratopogon*). USA (New York).  
**perfuscus** Ingram and Macfie, 1921: 337. Ghana.  
**perplexus** (Kieffer, 1913d): 182 (*Dasyhelea*). India.  
**peruvianus** Kieffer, 1917b: 302. Peru.  
**petrosus** Remm, 1980: 111. Kyrgyzstan.  
**phusunensis** Remm, 1971: 192. Russia (Primorsky Krai).  
**piceiventris** Kieffer, 1917b: 301. Paraguay.  
**picipes** Goetghebuer, 1935d: 163. Democratic Republic of the Congo.  
**pictipennis** Clastrier, 1979: 30. French Guiana (France).  
**pileolus** Yu and Yan, in Liu *et al.* 2001a: 38. China (Yunnan).  
**planetus** Yu and Liu, 1995: 47. China (Sichuan).  
**planusunguis** Bose and Das Gupta, in Bose *et al.* 2003: 285. India.  
**poguei** Clastrier, 1987b: 201. New Caledonia (France).  
**politus** (Edwards, 1929b): 9 (*Dolichohelea*). Philippines.  
**pruinus** Kieffer, 1921g: 560. Taiwan.  
**psilopterus** Kieffer, 1919a: 26. Hungary, Croatia, Greece.  
**pterygospinous** Yu and Yan, in Liu *et al.* 2001a: 138. China (Guangxi).  
**pudicus** Johannsen, 1932: 418. Indonesia.  
**pullatus** Macfie, 1933b: 95. French Polynesia (France).  
**pusillus** (Kieffer, 1921b): 6 (*Kempia*). Cameroon.  
**quadrisetosus** Goetghebuer, 1933e: 141. Democratic Republic of the Congo.  
**quartibrunneus** Borkent and Picado, 2004: 30. Costa Rica.  
**quasicomatus** Bose and Das Gupta, in Bose *et al.* 2003: 285. India.  
**quateriharpagonum** Tokunaga, 1959: 198. Indonesia.  
**qudratepenis** Yu and Yan, in Yu *et al.* 2005a: 411. China (Yunnan).  
**raripilipennis** Tokunaga and Murachi, 1959: 123. Belau (USA).  
**redactus** Borkent and Picado, 2004: 32. Costa Rica.  
**remigatus** Ewen, in Ewen and Saunders 1958: 687. Brazil (Rio de Janeiro).  
**rhiphidus** Yu and Yan, in Yu *et al.* 2005a: 459. China (Hainan).  
**rhynchops** (Schiner, 1868): 26 (*Ceratopogon*). Australia (New South Wales).  
**rictus** Yu and Yan, in Yu *et al.* 2005a: 338. China (Henan).

**rivalis** Yu and Yan, *in* Liu *et al.* 2001a: 99. China (Sichuan).

**rostratus** (Winnertz, 1852): 31 (*Ceratopogon*). Poland.  
*transversalis* Kieffer, 1918a: 91. Turkey, Hungary, Slovak Republic, Romania, Italy.  
*ventralis* Kieffer, 1918a: 91. Turkey, Hungary, Ukraine.  
*homopterus* Kieffer, 1919a: 29 (as variety of *transversalis* Kieffer). Hungary, Turkey.  
*coracellus* Kieffer, 1919a: 30 (as variety of *ventralis* Kieffer). Hungary, Poland, Ukraine, Greece.  
*nigriventris* Kieffer, 1919a: 30 (as variety of *ventralis* Kieffer). Slovak Republic.  
*putredinis* Kieffer, 1922c: 233. Germany.

**rotundus** Liu, Yan and Liu, 1996a: 25. China (Hainan).

**ruber** Kieffer, 1916a: 86. Taiwan.  
*formosanus* Kieffer, 1918a: 89. Taiwan.

**rubidus** Macfie, 1933b: 97. French Polynesia (France).

**rufiventris** Kieffer, 1917a: 184 (as variety of *atratus* Kieffer). Australia (New South Wales).

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

**ryukyuensis** Tokunaga, 1962a: 164. Japan.

**sachalinensis** Remm, 1993: 198. Russia (Sakhalin Oblast).

**salisburyensis** de Meillon, 1959a: 337. Zimbabwe.

**sallami** Boorman and Harten, 2002: 433. Yemen.

**sanctaclarae** Macfie, 1949: 114. Mexico (Chiapas).

**sanctilaurentii** Kieffer, 1917b: 303. Paraguay.

**saundersi** Ewen, *in* Ewen and Saunders 1958: 691. Puerto Rico (USA).

**schizonyx** Giles and Wirth, 1982b: 825. Sri Lanka.

**scutatis** Yu and Yan, *in* Liu *et al.* 2001a: 56. China (Hainan).

**scutellaris** Goetghebuer, 1933e: 140. Democratic Republic of the Congo.

**sebessi** Remm, 1981: 32. New name for *biroi* Zilahi-Sebess.  
*biroi* Zilahi-Sebess, 1941: 83 (preoccupied by *Atrichopogon biroi* Kieffer, 1917a). Tunisia.

**semipilosus** (Kieffer, 1912c): 5 (*Forcipomyia*). Sri Lanka.

**sequax** (Williston, 1896): 282 (*Ceratopogon*). St. Vincent.

**sergioi** Spinelli, Marino and Huerta, 2015a: 54. Mexico (Mexico/Morelos).

**sessilis** Kieffer, 1917a: 183. Papua New Guinea.

**setosicubitus** Clastrier, 1987b: 210. New Caledonia (France).

**setosilateralis** Borkent and Picado, 2004: 33. Costa Rica.

**setosus** Kieffer, 1919c: 193. New name for *setosipennis* Kieffer, 1913d.  
*setosipennis* Kieffer, 1913d: 178 (preoccupied by *Atrichopogon setosipennis* (Kieffer, 1911d)). India.

**seudoobfuscatus** Spinelli, 1982: 208. Argentina (Buenos Aires).

**shawadaua** Felipe-Bauer, 2018: 258. Brazil (Acre).

**shortlandi** Macfie, 1932c: 33. New Zealand.

**sichotensis** Remm, 1971: 195. Russia (Primorsky Krai).

**similis** Spinelli and Marino, *in* Spinelli *et al.* 2006: 316. Argentina (Chubut).

**simplex** Bose and Das Gupta, *in* Bose *et al.* 2003: 287. India.

**simplicifurcatus** Tokunaga, 1959: 201. Indonesia.

**sinuosus** Wirth and Ratanaworabhan, 1992: 272. Malaysia.

**snyderi** Tokunaga, *in* Tokunaga and Murachi 1959: 117. Japan.

**solivagus** Yu and Yan, *in* Yu *et al.* 2005a: 373. China (Yunnan).

**sordidus** Bose and Das Gupta, *in* Bose *et al.* 2003: 288. India.

**spadix** Bose and Das Gupta, *in* Bose *et al.* 2003: 289. India.

**spartos** Yan and Yu, *in* Liu *et al.* 2001a: 45. China (Guangxi).

**speculiger** Nielsen, 1951: 25. Denmark.

**sphagnalis** (Kieffer, 1925a): 408 (1927: 59) (*Kempia*). Estonia.

**spinicaudalis** Tokunaga, *in* Tokunaga and Murachi 1959: 129. Belau (USA).

**spinosus** Borkent and Picado, 2004: 12. Costa Rica.

**spurius** Kieffer, 1913d: 177. India.

**stannusi** Ingram and Macfie, 1924c: 181. Ghana.  
**subcomatus** Bose and Das Gupta, *in* Bose *et al.* 2003: 289. India.  
**subfuscus** Macfie, 1934c: 187. Malaysia.  
**sublimatus** Kieffer, 1913d: 176. India.  
**subtenuiatus** Yu and Yan, *in* Liu *et al.* 2001a: 142. China (Yunnan).  
**suburbanus** Liu, Yan and Liu, 1996a: 25. China (Hainan).  
**sulfuratus** Debenham, 1989: 229. New name for *flaveolum* Tokunaga.  
*flaveolum* Tokunaga, 1959: 185 (preoccupied by *Atrichopogon flaveolus* Zilahi-Sebess, 1936a). Papua New Guinea.  
**sumatrae** Macfie, 1934c: 185 (1934d: 212). Malaysia.  
**taeniatus** Macfie, 1939c: 186. Brazil (Santa Catarina).  
**taizi** Boorman and Harten, 2002: 433. Yemen.  
*wirthi* Delécolle and Braverman, 1997: 101 (emended from *wirthorum*) (preoccupied by *Atrichopogon wirthi* Chan and Linley, 1988). Israel.  
*shaubensis* Boorman and Harten, 2002: 434. Yemen.  
**talarum** Spinelli, 1982: 204. Argentina (Buenos Aires).  
**tapantiensis** Borkent and Picado, 2004: 34. Costa Rica.  
**tatricus** Remm, 1981: 32. New name for *montivagus* Kieffer.  
*montivagus* Kieffer, 1919a: 25 (preoccupied by *Atrichopogon montivagus* (Kieffer, 1911b)). Slovak Republic.  
**tegmental** Liu, Yan and Liu, 1996a: 25. China (Hainan).  
**tenuiatus** Tokunaga, 1959: 200. Papua New Guinea.  
**tenuidentis** Liu, Yan and Liu, 1996a: 26. China (Hainan).  
**tenuipalpis** Liu, Yan and Liu, 1996a: 26. China (Hainan).  
**tenuistylus** Bose and Das Gupta, *in* Bose *et al.* 2003: 289. India.  
**tetramischus** Yu and Liu, 1995: 48. China (Chongqing).  
**thersites** (Williston, 1896): 280 (*Ceratopogon*). St. Vincent.  
**thienemanni** Kieffer, 1921a: 54. Germany.  
*nitens* Kieffer, 1921a: 54 (as variety of *thienemanni* Kieffer). Germany.  
**tirzae** Borkent and Picado, 2004: 28. Costa Rica.  
**titanus** Boesel, 1973: 213. USA (Ohio).  
**transiens** (Walker, 1848): 25 (*Ceratopogon*). Canada (Ontario).  
**transversus** Wirth, 1952a: 124. USA (California).  
**trichopus** (Thomson, 1868): 444 (*Ceratopogon*). China (province unknown).  
**trichotomma** (Kieffer, 1911c): 332 (*Ceratopogon*). Seychelles.  
**tricleaves** Liu, Yan and Liu, 1996a: 27. China (Hainan).  
**tridentistylus** Tokunaga, 1959: 184. Papua New Guinea.  
**trinidadensis** Macfie, 1937a: 5. Trinidad and Tobago.  
**tritomus** Kieffer, 1919a: 24. Hungary.  
**tropicus** Kieffer, 1913e: 8. Kenya.  
**tuberculatus** Ewen, *in* Ewen and Saunders 1958: 709. Trinidad and Tobago.  
**turneri** Ingram and Macfie, 1923: 53. South Africa.  
**tutatus** Yu and Yan, *in* Yu *et al.* 2005a: 419. China (Hubei).  
**udus** Yu and Yan, *in* Yu *et al.* 2005a: 420. China (Hainan).  
**umbratilis** Macfie, 1935a: 51. Brazil (Maranhão).  
**umbrosus** Macfie, 1933b: 97. French Polynesia (France).  
**unguis** Tokunaga, 1962a: 162. Japan.  
**unilineatus** Remm, 1967: 10. Azerbaijan.  
**urbicola** (Kieffer, 1911b): 325 (*Forcipomyia*). India.  
**uruguayense** (Cordero, 1929): 95 (*Lophomyidium*). Uruguay.  
**utricularis** Macfie, 1953: 102. Costa Rica.  
**varius** Yu and Yan, *in* Liu *et al.* 2001a: 58. China (Sichuan).

**vastus** Bose and Das Gupta, *in* Bose *et al.* 2003: 293. India.  
**vepres** Debenham, 1973: 73. Australia (Queensland).  
**verax** Bose and Das Gupta, *in* Bose *et al.* 2003: 295. India.  
**vesiculosus** Macfie, 1934c: 184 (1934d: 209). Malaysia.  
**vestitipennis** Kieffer, 1917a: 183. Papua New Guinea.  
**victoriae** de Meillon, 1942a: 96. Zimbabwe.  
**vittatus** Tokunaga, 1959: 196. Papua New Guinea.  
**volaticus** Yan and Yu, *in* Yu *et al.* 2005a: 431. China (Gansu).  
**wallisensis** Clastrier and Delécolle, 1996: 291. Wallis and Futuna Islands (France).  
**warmkei** Wirth, 1956c: 243. Puerto Rico (USA).  
**websteri** (Coquillett, 1901a): 603 (*Ceratopogon*). USA (Louisiana).  
**winnertzi** Goetghebuer, 1922: 51. Belgium.  
     *torgnyensis* Goetghebuer, 1949: 2. Belgium.  
**wirthi** Chan and Linley, 1988: 189. USA (Florida).  
**woodfordi** Macfie, 1938: 162. Trinidad and Tobago.  
**woodruffi** Spinelli, Marino and Huerta, 2015a: 58. Dominican Republic.  
**wuyi** Huang, Wang and Yu, *in* Wang *et al.* 2013: 195. China (Fujian).  
**wuyishanicus** Yu and Huang, *in* Huang *et al.* 2009: 366. China (Fujian).  
**xanthoaspidium** Carter, Ingram and Macfie, 1921a: 322. Ghana.  
**xanthophilus** (Kieffer, 1911b): 326 (*Forcipomyia*). India.  
**xanthopus** Kieffer, 1913d: 175. India.  
**xanthopygus** Tokunaga, 1962a: 161. Japan.  
**xylochus** Yu and Yan, *in* Yu *et al.* 2005a: 422. China (Sichuan).  
**yamabukiensis** Clastrier, 1987c: 426. Democratic Republic of the Congo.  
**yolancae** Borkent and Picado, 2004: 24. Costa Rica.  
**yongxinensis** Yan and Yu, *in* Liu *et al.* 2001a: 117. China (Jiangxi).  
**yoshimurai** Tokunaga, 1940b: 272. Japan.  
**zhangmuensis** Yu and Yan, *in* Liu *et al.* 2001a: 109. China (Tibet).

#### *Nomina dubia*

**atribarbus** Kieffer, 1922c: 232. Germany.  
**cretensis** Kieffer, 1919a: 28 (as variety of *orbicularis* Kieffer). Greece.  
**isis** Kieffer, 1925e: 252. Egypt.  
**longiserrus** (Kieffer, 1921a): 53 (*Kempia*). Poland.  
**maritimus** Tokunaga, 1940b: 270. Japan.  
**melancholicus** (Meigen, 1838): 18 (*Ceratopogon*). Europe.  
**osiris** Kieffer, 1925e: 250. Egypt.  
**postremus** (Santos Abreu, 1918): 269 (*Helea*). Canary Islands (Spain).  
**rufescens** Kieffer, 1921g: 563. Taiwan.  
**serrulatus** Kieffer, 1924b: 399. France.  
**singularis** (Kieffer, 1921a): 52 (*Kempia*). Poland.  
**spiniventris** Tokunaga, 1940b: 273. Japan.  
**vicinus** (Santos Abreu, 1918): 262 (*Helea*). Canary Islands (Spain).

#### **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, 1829a: 52 (1829b: 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.

*DIDYMOPHLEPS* Weyenbergh, 1883: 108. Type species: *Didymophleps hortorum* Weyenbergh, by monotypy.

**New synonym.**

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

*ASPINUS* Hong, 1981: 52. Type species: *Aspinus orientalis* Hong, 1981, by original designation (preoccupied by *Aspinus* Brandorff, 1973).

*AMBERASPINUS* Evenhuis, 1994: 260 (new name for *Aspinus* Hong). Type species: *Aspinus orientalis* Hong, 1981, automatic.

**Subgenus ATOPOMYIA Yu and Liu**

**ATOPOMYIA** Yu and Liu, 2000a: 48 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia atopia* Yu and Liu, by original designation.

**atopia** Yu and Liu, 2000a: 49. China (Jiangxi).

**idaeus** Yu and Liu, 2000a: 50. China (Tibet).

**Subgenus BALIOHELEA Yu and Liu**

**BALIOHELEA** Yu and Liu, 2006: 476 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia martinus* Yu and Liu, by original designation.

**martina** Yu and Liu, *in* Yu *et al.* 2005a: 476. China (Jiangsu).

**Subgenus BASSOFORCIPOMYIA Debenham**

**BASSOFORCIPOMYIA** Debenham, 1987b: 172 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia centurio* Debenham, by original designation.

**centurio** Debenham, 1987b: 173. Australia (Tasmania).

**inca** Debenham, 1987b: 175. Australia (New South Wales).

**Subgenus BLANTONIA Wirth and Dow**

**BLANTONIA** Wirth and Dow, 1971: 289 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia caribbea* Wirth and Dow, by original designation.

**caribbea** Wirth and Dow, 1971: 291. Jamaica.

**testudo** Debenham, 1987a: 64. Australia (Queensland).

**Subgenus CALOFORCIPOMYIA Saunders**

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

**annulipes** Tokunaga, 1940c: 72. Japan.

**apicalis** Goetghebuer, 1935d: 148. Democratic Republic of the Congo.

*trimaculata* Goetghebuer, 1935d: 160. Democratic Republic of the Congo.

*rutshuruensis* Goetghebuer, 1948b: 7. Democratic Republic of the Congo.

**auripes** Ingram and Macfie, 1924b: 560. Ghana.

**caerulea** Saunders, 1957: 681. Brazil (Rio de Janeiro).

**campanula** de Meillon and Downes, 1986: 142. South Africa.  
**coloratus** Liu and Yu, *in* Liu *et al.* 2001b: 19. China (Tibet).  
**confragosus** Liu and Yu, *in* Liu *et al.* 2001b: 21. China (Tibet).  
**copanensis** Utmar and Wirth, 1976: 129. Honduras.  
**eukosma** Macfie, 1939c: 148. Brazil (Santa Catarina).  
**furcifera** Macfie, 1940e: 920. Brazil (Santa Catarina).  
**gibba** Debenham, 1987b: 180. Australia (Queensland).  
**glauca** Macfie, 1934b: 144. Great Britain.  
     *monilis* Goetghebuer, 1934c: 287. Russia (Leningrad Oblast).  
     *diversipes* Goetghebuer, 1936: 319. Belgium.  
     *splendida* Wirth, 1951d: 315. USA (Virginia).  
**hatoensis** Utmar and Wirth, 1976: 131. Panama.  
**hermosa** Utmar and Wirth, 1976: 117. Brazil (Pará).  
**illimis** Liu and Yu, *in* Liu *et al.* 2001b: 23. China (Tibet).  
**lemuria** de Meillon, 1961: 43. Zimbabwe.  
**longipalpis** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 8. India.  
**longipenis** Yu and Liu, *in* Liu *et al.* 2017a: 79. China (Jiangxi).  
**maculipes** (Goetghebuer, 1933e): 135 (*Lasiohelea*). Democratic Republic of the Congo.  
**neocaledoniensis** Clastrier and Delécolle, 1991: 183. New Caledonia (France).  
**nigrescens** Macfie, 1939c: 156. Brazil (Santa Catarina).  
**paraglauca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 9. India.  
**pennaticauda** Debenham, 1987b: 183. Papua New Guinea.  
**quasiglauca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 9. India.  
**quokkae** Debenham, 1987b: 179. Australia (Western Australia).  
**remigera** Utmar and Wirth, 1976: 121. Colombia.  
**sabalitensis** Utmar and Wirth, 1976: 127. Costa Rica.  
**scitula** Goetghebuer, 1935d: 159. Democratic Republic of the Congo.  
**semiglauca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 10. India.  
**squamianulipes** Tokunaga and Murachi, 1959: 194. Belau (USA).  
**subglauca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 10. India.  
**swezeyi** Edwards, 1928: 50. American Samoa (USA).  
**takahashii** Tokunaga, 1940c: 88. Taiwan.  
**varicolor** Saunders, 1957: 683. Brazil (Rio de Janeiro).  
**viridis** Clastrier and Delécolle, 1991: 179. New Caledonia (France).

#### Subgenus COLLESSOHELEA Debenham

**COLLESSOHELEA** Debenham, 1987a: 60 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia yungurara* Debenham, by original designation.

**manzhuangensis** Liu and Yu, *in* Liu *et al.* 2001b: 26. China (Yunnan).  
**yungurara** Debenham, 1987a: 61. Australia (Queensland).

#### Subgenus DYCEA Debenham

**DYCEA** Debenham, 1987d: 666 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia vespa* Debenham, by original designation.

**capax** Debenham, 1987d: 670. Australia (New South Wales).  
**circinate** Liu and Yu, *in* Liu *et al.* 2001b: 28. China (Tibet).  
**edgari** Tokunaga and Murachi, 1959: 154. Micronesia.  
**hamoni** de Meillon, 1959a: 329. Burkina Faso.  
**hikosanensis** Tokunaga, 1940c: 81. Japan.

**improbiserra** Debenham, 1987d: 667. Papua New Guinea.  
**madeira** Clastrier, 1991b: 261. Madeira (Portugal).  
**pachyparamera** Clastrier and Delécolle, 1991: 187. New Caledonia (France).  
**pallens** Han, Long, Lv, Cao, Liang, Wang and Yu, 2015: 617. China (Sichuan).  
**transversalis** Clastrier and Delécolle, 1991: 190. New Caledonia (France).  
**vespa** Debenham, 1987d: 668. Australia (New South Wales).

### Subgenus EUPROJOANNISIA Brèthes

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

**EUFORCIPOMYIA** Malloch, 1915b: 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.

**aequalis** (Skuse, 1889): 294 (*Ceratopogon*). Australia (New South Wales).

**aenigma** de Meillon and Downes, 1986: 146. South Africa.

**alacris** (Winnertz, 1852): 25 (*Ceratopogon*). Germany.

**amiantos** Yu and Song, 2008: 794. China (Anhui).

**antipodum** (Hudson, 1892): 45 (*Ceratopogon*). New Zealand.

*novaezelandiae* Kieffer, 1922a: 145. New Zealand.

**appendicular** Liu, Yan and Liu, 1996a: 18. China (Hainan).

**arcis** de Meillon and Downes, 1986: 143. South Africa.

**astyla** Tokunaga, 1940c: 92. Japan.

**asymmetrica** Remm, 1980: 118. Kazakhstan.

**avocadonis** de Meillon and Wirth, 1979b: 188. South Africa.

**bahelea** Liu and Yu, in Liu *et al.* 2001b: 39. China (Xinjiang).

**balteatus** Liu and Yu, in Liu *et al.* 2001b: 40. China (Chongqing).

**bellerophon** Debenham and Wirth, 1984: 869. Australia (Queensland).

**berendti** Szadziewski, 1988: 209. Baltic region. Eocene.

**bibaana** Huerta and Spinelli, 2017: 190. Mexico (Oaxaca).

**bituberculifera** Tokunaga, in Tokunaga and Murachi 1959: 188. Belau (USA).

**blantoni** Soria and Bystrak, 1975: 3. Brazil (Bahia).

**borealis** Remm, 1966: 54. Lithuania.

**breviforceps** Tokunaga, 1940c: 98. Japan.

**bromeliae** Saunders, 1957: 665. Brazil (Rio de Janeiro).

**bureschi** (Zilahi-Sebess, 1934): 153 (*Lasiohelea*). Bulgaria.

**calamistrata** Debenham and Wirth, 1984: 862. Australia (Queensland).

**calcarata** (Coquillett, 1905): 64 (*Ceratopogon*). Mexico (Tabasco).

**canadensis** Bystrak and Wirth, 1978: 19. Canada (Saskatchewan).

**centrosus** Liu and Yu, in Liu *et al.* 2001b: 44. China (Guangxi).

**chongmingensis** Liu and Yu, in Liu *et al.* 2001b: 46. China (Shanghai).

**claudus** Liu and Yu, in Liu *et al.* 2001b: 48. China (Gansu).

**coronacella** Han and Hou, in Han *et al.* 2017: 108. China (Shaanxi).

**deformis** Liu and Yu, in Liu *et al.* 2001b: 50. China (Jiangxi).

**deucalionis** Debenham and Wirth, 1984: 875. Australia (New South Wales).

**dolichopodida** Chan and Linley, 1989: 253. USA (Florida).

**dowi** Bystrak and Wirth, 1978: 21. USA (Florida).

**dycei** Debenham and Wirth, 1984: 871. Australia (New South Wales).

**esteparia** Marino and Spinelli, 2001b: 12. Argentina (Chubut).

**exemliforma** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 12. India.  
**falcifera** Saunders, 1959: 39. Trinidad and Tobago.  
**fermetitillans** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 12. India.  
**flavencruris** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 13. India.  
**formosana** Kieffer, 1916a: 83. Taiwan.  
**fuscalcarata** Bystrak and Wirth, 1978: 23. USA (Florida).  
**fuscimana** (Kieffer, 1921g): 559 (*Ceratopogon*). Taiwan.  
     *pennielongata* Chan and LeRoux, 1971b: 733. Singapore.  
**galeata** Debenham and Wirth, 1984: 878. Australia (Queensland).  
**grandiclara** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 14. India.  
**hardyi** Wirth and Howarth, 1982: 130. USA (Hawaii).  
**henningseni** Szadziewski, 1988: 211. Denmark. Eocene.  
**iaculum** Debenham and Wirth, 1984: 883. Papua New Guinea.  
**ignobilis** Liu and Yu, in Liu *et al.* 2001b: 51. China (Sichuan).  
**indoctacruris** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 14. India.  
**kaneohe** Wirth and Howarth, 1982: 141. USA (Hawaii).  
**karnyi** Edwards, 1923a: 183. Indonesia.  
**kyotoensis** Tokunaga, 1940c: 99. Japan.  
**largus** Liu and Yu, in Liu *et al.* 2001b: 53. China (Tibet).  
**lingnanensis** Liu and Yu, in Liu *et al.* 1999b: 309. China (Guangxi).  
**lokki** Remm, 1993: 199. Russia (Sakhalin Oblast).  
**longicalcar** Kieffer, 1912c: 4. Sri Lanka.  
**longispina** Saunders, 1957: 669. Brazil (Rio de Janeiro).  
**lota** (Williston, 1896): 282 (*Ceratopogon*). St. Vincent.  
**marsalae** (Vattier and Adam, 1966a): 305 (*Lasiohelea*). Gabon.  
**mesasiatica** Remm, 1980: 118. Tajikistan.  
**minor** Liu, Yan and Liu, 1996a: 18. China (Hainan).  
**miocaenica** Szadziewski, 1993: 647. Germany. Eocene.  
**mortuifolii** Saunders, 1959: 35. Trinidad and Tobago.  
**mucronis** Liu and Yu, in Liu *et al.* 2001b: 59. China (Sichuan).  
**nitens** (Santos Abreu, 1918): 260 (*Helea*). Canary Islands (Spain).  
     *soranus* de Meillon, 1943: 103. South Africa.  
**navaiae** Bystrak and Wirth, 1978: 31. USA (Florida).  
**palasunitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 15. India.  
**palikuensis** Hardy, 1960: 175. USA (Hawaii).  
**palusithecra** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 16. India.  
**palustris** (Meigen, 1804): 28 (*Ceratopogon*). Germany.  
     *hirtipennis* (Malloch, 1915b): 313 (*Euforcipomyia*). USA (Illinois).  
     *turfacea* Kieffer, 1925b: 148. Estonia.  
**perflavida** Remm, 1971: 186. Russia (Primorsky Krai).  
**phlebotomoides** Bangerter, 1933: 252. Switzerland.  
     *subsaltans* Remm, 1961a: 189. Estonia.  
**pholeter** Wirth and Howarth, 1982: 139. USA (Hawaii).  
**picturatus** Liu and Yu, in Liu *et al.* 2001b: 65. China (Yunnan).  
**piriformis** (Meunier, 1904a): 228 (1904b: 239) (*Ceratopogon*). Baltic region. Eocene.  
**pipiens** Liu, Yan and Liu, 1996a: 18. China (Hainan).  
**platensis** (Brèthes, 1914): 156 (*Euprojoannisia*). Argentina (Buenos Aires).  
     *galliarrii* Marino and Spinelli, 1999: 5. Argentina (Misiones).  
**propenavaiae** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 16. India.  
**pseudocalcarata** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 17. India.  
**psilonota** (Kieffer, 1911c): 337 (*Ceratopogon*). Seychelles.  
     *aplnota* (Kieffer, 1911c): 337 (*Ceratopogon*). Seychelles.  
     *seychelleana* (Kieffer, 1911c): 338 (*Ceratopogon*). Seychelles.



*fulvithorax* (Kieffer, 1911c): 338 (*Ceratopogon*, as variety of *seychelleana* Kieffer). Seychelles.  
*indecora* Kieffer, 1914b: 269. South Africa.  
*litoralis* Santos Abreu, 1918: 277. Canary Islands (Spain).  
*ingrami* Carter, 1919: 290. Ghana.  
*egypti* Macfie, 1924: 61. Egypt.  
*hathor* Kieffer, 1925e: 247. Egypt.  
*conogensis* Goetghebuer, 1933e: 132 (also as *congolensis*). Democratic Republic of the Congo.  
*flavipilosella* Goetghebuer, 1933e: 130 (also as *flavopilosella*, p. 135). Democratic Republic of the Congo.  
*lulengaensis* Goetghebuer, 1935d: 155. Democratic Republic of the Congo.  
*superata* Goetghebuer, 1935d: 160. Democratic Republic of the Congo.  
*griseipluma* Goetghebuer, 1935d: 154. Democratic Republic of the Congo.  
*griseolella* Goetghebuer, 1948b: 7. Democratic Republic of the Congo.  
**quasiingrami** Macfie, 1939c: 164. Brazil (Santa Catarina).  
**ratis** Liu and Yu, in Liu *et al.* 2001b: 71. China (Sichuan).  
**sagittaria** Debenham and Wirth, 1984: 880. Australia (Queensland).  
**saltivaga** (Skuse, 1889): 295 (*Ceratopogon*). Australia (New South Wales).  
**sauteri** Kieffer, 1912a: 27. Taiwan.  
*clara* Chan and LeRoux, 1971b: 729. Singapore.  
**separatim** Liu, Yan and Liu, 1996a: 21. China (Hainan).  
**setigera** Saunders, 1959: 38. Trinidad and Tobago.  
**setosicrus** (Kieffer, 1906c): 357 (*Ceratopogon*). Argentina (Neuquén).  
**simulans** Johannsen, 1932: 411. Indonesia.  
**sonora** Wirth, 1952a: 145 (as variety of *calcarata* Coquillett). USA (California).  
**spatulifera** Saunders, 1957: 667. Brazil (São Paulo).  
**subcalcarata** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 17. India.  
**subingrami** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 18. India.  
**subnitida** (Skuse, 1889): 299 (*Ceratopogon*). Australia (New South Wales).  
**subunitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 19. India.  
**titillans** (Winnertz, 1852): 27 (*Ceratopogon*). Germany.  
*divaricata* (Winnertz, 1852): 25 (*Ceratopogon*). Germany.  
*maricarmenae* Sahuquillo and Gil Collado, 1982a: 303. Spain.  
**tonicus** Liu and Yu, in Liu *et al.* 2001b: 74. China (Hubei).  
**tsacasi** Clastrier, 1983c: 38. Seychelles.  
**tuberculosa** Szadziewski, 1993: 648. Germany. Eocene.  
**unica** Bystrak and Wirth, 1978: 44. USA (Florida).  
**vandiemeni** Debenham and Wirth, 1984: 864. Australia (Tasmania).  
**vernocheti** (Clastrier, 1959c): 439 (*Lasiohelea*). Réunion (France).  
**wansoni** de Meillon, 1939a: 9. Democratic Republic of the Congo.  
**wirthi** Saunders, 1957: 663. USA (California).  
**wirthiana** Szadziewski, 1983a: 374. Algeria.  
**yapensis** Tokunaga and Murachi, 1959: 185. Micronesia.  
**yoshimurai** Tokunaga, 1940c: 91. Japan.

#### Subgenus FORCIPOHELEA Clastrier and Delécolle

**FORCIPOHELEA** Clastrier and Delécolle, 1991: 195 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia tillierorum* Clastrier and Delécolle, by original designation.

**tillierorum** Clastrier and Delécolle, 1991: 197. New Caledonia (France).

## Subgenus FORCIPOMYIA Meigen

- abyssiniae** (Kieffer, 1918a): 40 (*Ceratopogon*). Ethiopia.
- adjecta** Tokunaga, 1959: 284. Indonesia.
- akizukii** Tokunaga, 1940c: 71. Russia (Sakhalin Oblast).
- alamatae** Macfie, 1937b: 73. Ethiopia.
- alatauensis** Remm, 1980: 123. Kazakhstan.
- albiradialis** Tokunaga, 1940c: 75. Japan.
- albonotata** (Kieffer, 1910): 185 (*Ceratopogon*). India.
- albopunctata** (Skuse, 1889): 293 (*Ceratopogon*). Australia (New South Wales).
- albosignata** (Kieffer, 1910): 184 (*Ceratopogon*). Burma.
- alboostyla** Remm, 1979b: 58. Estonia.
- allocera** Rieth, 1915: 438. New name for *heterocera* Kieffer.  
*heterocera* Kieffer, 1914a: 234 (preoccupied by *Forcipomyia heterocera* Kieffer, 1913d). Germany.  
*allocera* Kieffer, in Thienemann and Kieffer 1916: 491 (preoccupied by *Forcipomyia allocera* Rieth, 1915).  
New name for *heterocera* Kieffer.
- altaica** Remm, 1972: 62. Russia (Altai Republic).
- annandalei** Edwards, 1932a: 177. India.
- antrosus** Liu and Yu, in Liu *et al.* 2001b: 85. China (Yunnan).
- appendicular** Liu, Yan and Liu, 1996a: 18. China (Hainan).
- aquatica** Kieffer, 1922c: 230. Germany.
- arcigera** Kieffer, 1922b: 150. Taiwan.
- argenteola** Macfie, 1939c: 146. Brazil (Santa Catarina).
- armandi** Harant, Huttel and Huttel, 1952: 13. Italy.
- armativentris** Clastrier, 1960c: 518. Congo.
- armendarizi** Sahuquillo and Gil Collado, 1982b: 744. Spain
- ashantii** Ingram and Macfie, 1924b: 589. Ghana.  
*rufula* Goetghebuer, 1935d: 159. Democratic Republic of the Congo.
- asticta** Kieffer, 1913d: 172 (as variety of *albosignata* Kieffer). India.
- atricella** Debenham, 1987c: 304. Australia (New South Wales).
- aurea** Malloch, 1915a: 318. USA (Illinois).
- auronitens** (Kieffer, 1910): 183 (*Ceratopogon*). Burma.
- bessa** Liu and Yu, in Liu *et al.* 2001b: 86. China (Yunnan).
- biannulata** Ingram and Macfie, 1924b: 557. Ghana, Nigeria, Malawi.  
*quatuorguttata* Goetghebuer, 1935d: 158 (also misspelled as *quadriguttata*). Democratic Republic of the Congo.  
*bicolorata* Goetghebuer, 1935d: 150. Democratic Republic of the Congo.  
*marginella* Goetghebuer, 1935d: 156. Democratic Republic of the Congo.  
*nigricosta* Goetghebuer, 1935d: 158. Democratic Republic of the Congo.  
*pallidula* Goetghebuer, 1948b: 6. Democratic Republic of the Congo.  
*abonnenci* Clastrier, 1959b: 340. Senegal.
- bikanni** Chan and LeRoux, 1971b: 735. Singapore.
- binigrimaculata** Tokunaga, 1940c: 68. Japan.
- bipunctata** (Linnaeus, 1767): 978 (*Tipula*). Europe.  
*trichoptera* (Meigen, 1804): 31 (*Ceratopogon*). Germany.  
*geniculata* (Guérin-Méneville, 1833): 164 (*Ceratopogon*). France.  
*palmensis* Santos Abreu, 1918: 285. Canary Islands (Spain).  
*squamaticrus* (Kieffer, 1919a): 9 (*Ceratopogon*). Belgium, Serbia-Montenegro, Croatia.  
*tenuisquama* Kieffer, 1924b: 393. France.  
*laguncula* Kieffer, 1925d: 27. Hungary.  
*flavipubens* Goetghebuer, 1927b: 93. Belgium.
- bipunctatapropinqua** Chan and LeRoux, 1971b: 740. Canada (Quebec).
- bitensis** Kieffer, 1924b: 394. France.

**brachytoma** Kieffer, 1922b: 149. Taiwan.

**braueri** (Wasmann, 1893): 277 (*Ceratopogon*). Austria, Switzerland.

**brevipalpis** Liu and Yu, *in* Liu *et al.* 2001b: 92. China (Hainan).

**brevipedicillata** (Kieffer, 1901b): 217 (*Ceratopogon*). France.

**brevipennis** (Macquart, 1826): 179 (*Ceratopogon*). France.  
*lateralis* (Bouché, 1834): 23 (*Ceratopogon*). Europe.  
*specularis* (Coquillett, 1901a): 601. USA (Pennsylvania).  
*disticta* (Kieffer, 1919a): 16 (*Ceratopogon*). Hungary, Slovak Republic, Croatia, Romania.  
*hirtidorsum* (Kieffer, 1919a): 18 (*Ceratopogon*). Ukraine.  
*nigrimana* (Kieffer, 1919a): 19 (*Ceratopogon*). Lithuania.  
*bifilis* Kieffer, 1922c: 231. Germany.  
*subnigra* Tokunaga, 1940c: 88. Japan.

**bystraki** Grogan and Wirth, 1975c: 466. USA (Virginia).

**calatheae** Wirth, 1982a: 573. Dominica.

**caliginosella** Wirth, 1974: 5. New name for *caliginosa* Ingram and Macfie.  
*caliginosa* Ingram and Macfie, 1931a: 167 (preoccupied by *Forcipomyia caliginosa* (Ingram and Macfie, 1924a)). Argentina (Rio Negro).

**castanea** (Walker, 1848): 26 (*Ceratopogon*). Sierra Leone.  
*incomptifeminiba* (Austen, 1912): 107 (*Ceratopogon*). Ghana.  
*risbeci* Séguy, 1946: 9. Senegal.

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

**cattleyarum** Harant and Galan, 1942b: 56. France.

**cavatus** Liu and Yan, *in* Liu *et al.* 1999b: 311 (Liu and Yu, *in* Liu *et al.* 2001b: 92). China (Sichuan).

**charon** Debenham, 1987c: 276. Australia (Western Australia).

**chilensis** (Philippi, 1865): 601 (*Ceratopogon*). Chile.

**chrysothrix** (Kieffer, 1921g): 558 (*Ceratopogon*). Taiwan, Philippines.

**ciliata** (Winnertz, 1852): 21 (*Ceratopogon*). Germany.  
*brunnipes* (Perris, 1847): 556 (*Ceratopogon*, preoccupied by *Atrichopogon brunnipes* (Meigen, 1804)). France.  
*perrisi* (Kieffer, 1901a): 147 (*Ceratopogon*). New name for *brunnipes* Perris.  
*boleti* (Kieffer, 1901a): 157 (*Ceratopogon*). France.  
*turfosa* Kieffer, 1925b: 146. Estonia.  
*canicularis* Goetghebuer, 1948a: 36. Belgium.  
*zlatensis* Damian-Georgescu, 1972: 18. Romania.

**ciliola** Liu and Yu, *in* Liu *et al.* 2001b: 96. China (Tibet).

**cilipes** (Coquillett, 1900): 397 (*Ceratopogon*). USA (Alaska).

**cirrhosa** Clastrier, Rioux and Descous, 1961: 50. Chad.

**claggi** Tokunaga, *in* Tokunaga and Murachi 1959: 150. Guam (USA).

**collyricus** Liu, Yan and Liu, 1996a: 19. China (Hainan).

**concolor** Malloch, 1915a: 319 (as variety of *pergandei* Coquillett). USA (Illinois).

**confluens** Kieffer, 1913d: 170. India.

**conigera** Kieffer, 1913d: 168. India.

**contraria** Debenham, 1987c: 307. Australia (New South Wales).

**conturbatus** Liu and Yu, *in* Liu *et al.* 2001b: 100. China (Guangxi).

**cooki** Macfie, 1932c: 28. New Zealand.

**corinneae** Gosseries, 1989: 3. New name for *vexans* de Meijere.  
*vexans* (de Meijere, 1909): 198 (*Ceratopogon*, preoccupied by *Culicoides vexans* (Staeger, 1839)). Indonesia.

**corticis** Kieffer, 1911d: 2. Germany.

**costata** (Zetterstedt, 1838): 815 (*Ceratopogon*). Sweden.  
*picea* (Winnertz, 1852): 21 (*Ceratopogon*). Germany.  
*latipalpis* (Kieffer, 1901a): 159 (*Ceratopogon*). France.  
*meinerti* Rieth, 1915: 434. Denmark. Kieffer, 1915c: 281.

*corticicola* (Kieffer, 1919a): 14 (*Ceratopogon*). Germany.  
*turficola* Kieffer, 1925b: 147. Russia (Kaliningrad Oblast).  
**crassipalpis** Debenham, 1987c: 303. Australia (New South Wales).  
**crassipes** (Winnertz, 1852): 22 (*Ceratopogon*). Germany.  
**creesi** de Meillon, Meiswinkel and Wirth, 1982: 123. South Africa.  
**cubicularis** Kieffer, 1911b: 320. India.  
**curtus** Liu and Yu, *in* Liu *et al.* 2001b: 103. China (Hubei).  
**dacica** Damian-Georgescu, 1972: 17. Romania.  
**danica** Rieth, 1915: 403. Denmark. Kieffer, 1915c: 280.  
**daxingensis** Liu and Yu, *in* Liu *et al.* 2001b: 105. China (Beijing).  
**decipiens** (Kieffer, 1910): 182 (*Ceratopogon*). India.  
**declivis** Debenham, 1987c: 295. Australia (New South Wales).  
**desertensis** Wirth and Hubert, 1960a: 639. USA (California).  
**despecta** Kieffer, 1922b: 152. Taiwan.  
**desurvillei** Macfie, 1932c: 28. New Zealand.  
**dichromata** Remm, *in* Remm and Zhogolev 1968: 826. Ukraine.  
**dirina** Liu and Yu, *in* Liu *et al.* 2001b: 106. China (Tibet).  
**dissimilis** Clastrier and Delécolle, 1991: 200. New Caledonia (France).  
**distapalpis** Liu and Yu, *in* Liu *et al.* 2001b: 108. China (Sichuan).  
**dividus** Liu and Yu, *in* Liu *et al.* 2001b: 110. China (Tibet).  
**donatoi** Marino and Spinelli, 2008: 790. Paraguay.  
**duplipenis** Han, *in* Han *et al.* 2015: 616. China (Sichuan).  
**edwardsiana** Wirth, 1974: 5. New name for *edwardsi* Ingram and Macfie.  
*edwardsi* Ingram and Macfie, 1931a: 160 (preoccupied by *Forcipomyia edwardsi* (Saunders, 1925)).  
 Argentina (Río Negro).  
**elegans** de Meillon and Wirth, 1987a: 36. South Africa.  
**elegantula** Malloch, 1915b: 311. USA (Illinois).  
**ensifera** Macfie, 1934c: 182. Malaysia.  
**eobreviflagellata** Szadziewski, 1988: 220. Poland. Eocene.  
**eocostata** Szadziewski, 1988: 202. Poland. Eocene.  
**episcopa** Debenham, 1987c: 291. Australia (New South Wales).  
**euzierei** Harant and Galan, 1943: 122. France.  
**excellans** Johannsen, 1932: 413. Indonesia.  
**fangchengensis** Liu and Yu, *in* Liu *et al.* 2001b: 111. China (Guangxi).  
**fasciata** Tokunaga, 1940c: 78. Japan.  
**fascilatipes** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 21. India.  
**fascicauda** Tokunaga, 1940c: 62 (1940e: 167). Micronesia.  
**fascicornis** Tokunaga, 1962a: 171. Japan.  
**fengjiensis** Yu, Chen and He, *in* Yu *et al.* 2007b: 487. China (Hong Kong).  
**fidelis** Krivosheina, 1968: 586. Russia (Tula Oblast).  
**filicauda** Remm, 1993: 200. Russia (Tomsk Oblast).  
**fimbriata** (Coquillett, 1901a): 601 (*Ceratopogon*). USA (District of Columbia).  
**flava** (Williston, 1896): 280 (*Ceratopogon*). St. Vincent.  
**flaviceps** Kieffer, 1913d: 173 (as variety of *macrothrix* Kieffer). India.  
**flavicoxis** Goetghebuer, 1935d: 152. Democratic Republic of the Congo.  
*wittei* Goetghebuer, 1948b: 5. Democratic Republic of the Congo.  
**flavipectoralis** Tokunaga, 1959: 280. Papua New Guinea.  
**flavominima** Remm, 1971: 184. Russia (Primorsky Krai).  
**formicaria** (Kieffer, *in* Kieffer and Thienemann 1908): 2 (*Ceratopogon*). France.  
**frigidus** Liu and Yu, *in* Liu *et al.* 2001b: 114. China (Jilin).  
**fulvipes** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 22. India.  
**fulvotibialis** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 22. India.

**furfura** de Meillon and Wirth, 1989b: 205. Zimbabwe.  
**fusca** (Philippi, 1865): 630 (*Tetrastoma*). Chile.  
     *patagonica* Ingram and Macfie, 1931a: 165. Argentina (Río Negro).  
**fusciforceps** (Kieffer, 1918a): 38 (*Ceratopogon*). Guinea.  
**fusciparamera** Szadziewski and Grogan, 1998b: 266. Dominican Republic. Miocene.  
**gedanicola** Szadziewski, 1988: 200. Poland. Eocene.  
**geniflava** Tokunaga, 1959: 278. Papua New Guinea.  
**genualis** (Loew, 1866): 128 (*Ceratopogon*). Cuba.  
     *propinqua* (Williston, 1896): 279 (*Ceratopogon*). St. Vincent.  
     *raleighi* Macfie, 1938: 160. Trinidad and Tobago.  
**globofuscitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 23. India.  
**gloriosa** Liu and Yu, in Liu *et al.* 2001b: 117. China (Heilongjiang).  
**grimaldii** Szadziewski and Grogan, 1998b: 268. Dominican Republic. Miocene.  
**guamensis** Tokunaga and Murachi, 1959: 166. Guam (USA).  
**guangdongensis** Liu and Yu, in Liu *et al.* 2001b: 119. China (Guangdong).  
**guilleaumei** Goetghebuer, 1935b: 413. Belgium.  
**guttata** de Meillon and Wirth, 1989b: 204. Zimbabwe.  
**harpegonata** Wirth and Soria, 1975: 19. Puerto Rico (USA).  
**heilongjiangensis** Liu and Yu, in Liu *et al.* 2001b: 121. China (Heilongjiang).  
**herbaceus** Liu and Yu, in Liu *et al.* 2001b: 123. China (Xinjiang).  
**heterocera** Kieffer, 1913d: 173. India.  
**himalayae** Kieffer, 1911b: 320. India.  
**hirsuta** Ingram and Macfie, 1924b: 577. Ghana.  
**hirtula** (Zetterstedt, 1838): 815 (*Chironomus*). Sweden.  
     *simulata* Walley, 1932: 165. Canada (Ontario).  
     *paradoxa* Krivosheina, 1968: 588. Russia (Arkhangelsk Oblast).  
**holofuscicruris** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 24. India.  
**hongdouensis** Yu, Liu and Chen, in Liu *et al.* 2013: 60. China (Jiangxi).  
**hurdi** Wirth, 1952a: 143. USA (California).  
**hutteli** Arnold and Jarry, 1956: 136. France.  
**hybrida** Remm, 1980: 122. Tajikistan.  
**hydratus** Liu, Yan and Liu, 1996a: 19. China (Hainan).  
**hygrophila** Kieffer, 1925b: 147. Estonia.  
     *sphagnicola* Kieffer, 1925b: 148. Estonia.  
     *occidentalis* Wirth, 1952a: 141. USA (California).  
**imparitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 24. India.  
**ingenua** Macfie, 1934c: 180. Malaysia.  
**intrudens** Liu, Yan and Liu, 1996a: 19. China (Hainan).  
**ishikariensis** Yamashita, Kitamura and Nakamura, 1957: 91. Japan.  
**ishizuchiensis** (Udaka, 1959): 18 (*Lasiohelea*). Japan.  
**kaltenbachi** (Winnertz, 1852): 19 (*Ceratopogon*). Germany.  
**kilemae** Kieffer, 1913e: 4. Kenya.  
**kisantuensis** Goetghebuer, 1933e: 134. Democratic Republic of the Congo.  
**kribiensis** (Kieffer, 1921b): 6 (*Ceratopogon*). Cameroon.  
**krzeminskii** Szadziewski, 1988: 217. Poland. Eocene.  
**kulickae** Szadziewski, 1988: 219. Poland. Eocene.  
**lagonigera** Kieffer, 1922b: 151. Taiwan.  
**lanceolata** Macfie, 1934c: 178 (1934d: 205). Malaysia.  
**laxus** Liu and Yu, in Liu *et al.* 2001b: 129. China (Heilongjiang).  
**lepida** (Winnertz, 1852): 23 (*Ceratopogon*). Germany.  
**lepidopa** (Kieffer, 1917a): 179 (*Ceratopogon*). Papua New Guinea.  
**leptolepis** Krivosheina and Remm, 1974: 116. Russia (Primorsky Krai).

**letabana** de Meillon, Meiswinkel and Wirth, 1982: 125. South Africa.  
**leucochaeta** (Kieffer, 1921b): 5 (*Ceratopogon*). Cameroon.  
**lignicola** (Brunetti, 1912): 445 (*Ceratopogon*). India.  
**lochmocola** Zou and Yu, 1991: 57. China (Heilongjiang).  
**longiconus** Liu and Yu, in Liu *et al.* 2001b: 132. China (Tibet).  
**longiseta** Yu and Liu, 1999: 246 (Liu and Yu, in Liu *et al.* 2001b: 134). China (Sichuan).  
**longisetosa** Krivosheina and Remm, 1974: 118. Russia (Primorsky Krai).  
*helvetica* Delécolle and Schiegg, 1999b: 389. Switzerland.  
**lugubris** (Zetterstedt, 1855): 4863 (*Ceratopogon*). Sweden.  
**lurida** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 25. India.  
**luteofulvous** Liu and Yu, in Liu *et al.* 2001b: 136. China (Sichuan).  
**lyneborgi** Szadziewski, 1988: 196. Denmark. Eocene.  
**macronyx** Goetghebuer, 1933e: 131. Democratic Republic of the Congo.  
*longiventris* Goetghebuer, 1935d: 155. Democratic Republic of the Congo.  
*stanleyi* Macfie, 1939a: 86. Uganda.  
**macrorhyncha** (Kieffer, 1910): 183 (*Ceratopogon*). India.  
**macrothrix** Kieffer, 1911b: 325. India.  
**macswaini** Wirth, 1952a: 130. USA (California).  
**maculipennis** Tokunaga, 1940c: 64. Japan.  
**maculosa** Yu, Wang and Yu, in Yu *et al.* 2015c: 499. China (Yunnan).  
**magnasacculus** Liu and Yu, in Liu *et al.* 2001b: 138. China (Tibet).  
**magnipunctata** Tokunaga, 1940c: 90. Japan.  
**makanensis** Hou, in Duan *et al.* 2019: 1615. China (Guizhou).  
**manchuriensis** Tokunaga, 1941b: 90. China (Heilongjiang).  
**marini** Spinelli and Dippolito, 1995: 155. Venezuela.  
**maura** (Kieffer, 1918a): 37 (*Ceratopogon*). Mozambique.  
**mcmillani** Clastrier and Wirth, 1961a: 191. Nigeria.  
**melanchroa** Ingram and Macfie, 1924b: 591. Nigeria.  
**minithea** Marino and Spinelli, 2001a: 111. Chile.  
**minor** Liu, Yan and Liu, 1996a: 18. China (Hainan).  
**mira** Johannsen, 1932: 410. Indonesia.  
**miricornis** Kieffer, 1916a: 81. Taiwan.  
**monticola** Kieffer, 1913d: 171. India.  
**monticolonia** Tokunaga, 1966b: 284. Afghanistan.  
**multipecta** Ingram and Macfie, 1931a: 157. Argentina (Río Negro).  
**murphyi** Clastrier and Wirth, 1961a: 194. Gambia.  
**muzoni** Marino and Spinelli, 2004a: 150. Argentina (Río Negro).  
**myrmecophila** (Egger, 1863): 1109 (*Ceratopogon*). Austria.  
**neobrevipalpis** Borkent and Dominiak, in this work. New name for *Forcipomyia brevipalpis* Saha, Das Gupta, Gangopadhyay and Mukherjee.  
*brevipalpis* Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 20 (preoccupied by *Forcipomyia brevipalpis* Liu and Yu). India.  
**nigeriensis** Ingram and Macfie, 1924b: 592. Nigeria.  
**nigra** (Winnertz, 1852): 17 (*Ceratopogon*). Germany.  
*sphagnorum* Kieffer, 1925b: 149. Estonia.  
**nigrans** Remm, 1962b: 188. Estonia.  
**nigricoxis** Goetghebuer, 1935d: 158. Democratic Republic of the Congo.  
*elongata* Goetghebuer, 1935d: 152 (preoccupied by *Forcipomyia elongata* (Kieffer, 1901a)). Democratic Republic of the Congo.  
*thripsiformis* Goetghebuer, 1935d: 161. Democratic Republic of the Congo.  
*lugardi* Macfie, 1939a: 85. Uganda.  
*kibatiensis* Goetghebuer, 1948b: 5. Democratic Republic of the Congo.

*elongatula* Goetghebuer, 1948b: 6. New name for *elongata* Goetghebuer.  
*atripes* Goetghebuer, 1948b: 8. Democratic Republic of the Congo.  
*africana* Goetghebuer, 1948b: 8. Democratic Republic of the Congo.  
**nigrita** Deng, Wang and Yu, *in* Yu *et al.* 2015a: 510. China (Sichuan).  
**nigrotibialis** Ingram and Macfie, 1924b: 571. Ghana.  
**nilotica** (Kieffer, 1921b): 3 (*Lepidohelea*). South Sudan.  
**noctivaga** Kieffer, 1912c: 3. Sri Lanka.  
**notata** Macfie, 1939a: 84. Uganda.  
**nuncupata** Macfie, 1949: 110. Mexico (Chiapas).  
**obscura** (Walker, 1848): 26 (*Ceratopogon*). Canada (Ontario).  
**orientalis** Kieffer, 1923b: 135. Indonesia.  
**ornaticrus** Kieffer, 1912c: 1. Sri Lanka.  
**ornatipennis** Macfie, 1939c: 151. Brazil (Santa Catarina).  
**ornatipes** (Kieffer, 1918a): 88 (*Ceratopogon*). Sri Lanka.  
**paenealbiradialis** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 26. India.  
**palpipotens** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 26. India.  
**pallida** (Winnertz, 1852): 15 (*Ceratopogon*). Germany.  
**pallidipes** Santos Abreu, 1918: 276 (as variety of *bipunctata* Linnaeus). Canary Islands (Spain).  
*rustica* (Kieffer, 1919a): 19 (*Ceratopogon*). Hungary, Croatia.  
*cataneii* Kieffer, 1923a: 662. Algeria.  
**pallidistyla** Krivosheina and Remm, 1974: 121. Russia (Primorsky Krai).  
**palmarum** Debenham, 1987c: 299. Papua New Guinea.  
**parasecuris** Paul, Harsha and Mazumdar, 2014b: 171. India.  
**parda** Debenham, 1987c: 295. Australia (New South Wales).  
**parva** (Walker, 1848): 26 (*Ceratopogon*). Canada (Ontario).  
**parvicellula** Ingram and Macfie, 1931b: 195. New Zealand.  
**peradeniyae** Dessart, 1963: 186. New name for *calcarata* Kieffer.  
*calcarata* Kieffer, 1912c: 3 (preoccupied by *Forcipomyia calcarata* (Coquillett, 1905)). Sri Lanka.  
*calcarhelea* Wirth, 1973: 352. New name for *calcarata* Kieffer.  
**pergandei** (Coquillett, 1901a): 602 (*Ceratopogon*). USA (District of Columbia).  
**persa** Liu and Yu, *in* Liu *et al.* 2001b: 139. China (Beijing).  
**pictiscutaris** Tokunaga, 1959: 270. Papua New Guinea.  
**pictoni** Macfie, 1938: 161. Trinidad and Tobago.  
**pilosa** (Coquillett, 1902a): 87 (*Ceratopogon*). USA (District of Columbia).  
**pinamarensis** Spinelli, 1983a: 121. Argentina (Buenos Aires).  
**pingxiangensis** Liu and Yu, *in* Liu *et al.* 2001b: 141 (also as *pinxiangensis*). China (Guangxi).  
**pinicola** Bystrak and Messersmith, 1980: 109. USA (Maryland).  
**piroskyi** Cavalieri, 1961b: 172. Argentina (Tierra del Fuego).  
**poulaineae** Ingram and Macfie, 1931a: 227. Argentina (Buenos Aires).  
**praealtus** Liu and Yu, *in* Liu *et al.* 2001b: 143. China (Beijing).  
**pretoriana** (Kieffer, 1918a): 39 (*Ceratopogon*). South Africa.  
**pseudomicrohelea** Szadziewski, 1988: 205. Baltic region. Eocene.  
**pseudonigra** Delécolle and Schiegg, 1999b: 381. Switzerland.  
**pseudobipunctata** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 27. India.  
**psychasta** Kieffer, 1913d: 170. India.  
**puhtuensis** Remm, 1979b: 58. Estonia.  
**pulchrithorax** Edwards, *in* Saunders 1924: 209. Great Britain.  
**pulla** de Meillon and Wirth, 1981b: 527. South Africa.  
**pulluspadicruris** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 27. India.  
**punctatipennis** Kieffer, 1924b: 394 (as variety of *braueri* Wasmann). France.  
**punctipes** Edwards, 1928: 49. Western Samoa.  
**punctumalbum** (Kieffer, 1917a): 178 (*Ceratopogon*). Papua New Guinea.

**quadriflava** Tokunaga, 1959: 272. Papua New Guinea.  
**quasialbiradialis** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 28. India.  
**quatei** Wirth, 1952a: 142. USA (California).  
**quechua** Marino and Spinelli, 2002: 312. Argentina (Salta).  
**qufuensis** Liu and Yu, in Liu *et al.* 2001b: 146. China (Shandong).  
**radicicola** Edwards, in Saunders 1924: 208. Great Britain.  
*padi* Remm, 1979b: 59. Estonia.  
**radiifera** (Kieffer, 1918a): 35 (*Ceratopogon*). South Africa.  
**recussus** Liu and Yu, in Liu *et al.* 2001b: 148. China (Xinjiang).  
**regula** (Winnertz, 1852): 16 (*Ceratopogon*). Germany.  
*metatarsis* Tokunaga, 1940c: 69. Japan.  
*longimaculata* Tokunaga, 1940c: 85. Japan.  
**repandus** Liu and Yu, in Liu *et al.* 2001b: 149. China (Sichuan).  
**resinicola** (Kieffer, 1901a): 159 (*Ceratopogon*). France.  
**rioplatensis** Marino and Spinelli, 2002: 314. Argentina (Buenos Aires).  
**rufescens** (Kieffer, 1918a): 40 (*Ceratopogon*). Tunisia.  
**ruralis** Liu and Yu, in Liu *et al.* 2001b: 151. China (Tibet).  
**sahariensis** Kieffer, 1923a: 663. Algeria.  
*armaticrus* Kieffer, 1923a: 661. Algeria.  
*tuzeti* Huttel and Huttel, 1952c: 178. France.  
*acanthophora* Remm, in Havelka 1976a: 227. Kyrgyzstan.  
*onusta* Remm, 1980: 122. Kazakhstan.  
**salmi** (de Meijere, 1909): 197 (*Ceratopogon*). Indonesia.  
**sanguinolenta** Kieffer, 1925a: 407. Germany.  
**securis** Chan and LeRoux, 1971b: 751. Singapore.  
**semirustica** Remm, in Remm and Zhogolev 1968: 828. Ukraine.  
**sensillata** Clastrier, 1983c: 44. Seychelles.  
**sexannulata** Clastrier, 1983c: 45. Seychelles.  
**sexvittata** Wirth, 1956c: 248. Costa Rica.  
**sihlwaldensis** Delécolle and Schiegg, 1999b: 385. Switzerland.  
**siverekensis** Szadziowski and Alwin, in Alwin-Kownacka *et al.* 2016a: 364. Turkey.  
**skusei** Debenham, 1987c: 279. Australia (New South Wales).  
**somuncurensis** Marino and Spinelli, 2001a: 116. Argentina (Río Negro).  
**spatuligera** Macfie, 1949: 111. Mexico (Chiapas).  
**sphagnophila** Kieffer, 1925a: 406. Russia (Kaliningrad Oblast).  
*solonensis* Wirth, 1951d: 315. USA (Virginia).  
*oreophila* Remm, 1972: 63 (as *oreophilia*). Russia (Altai Republic).  
**spiculata** Sinha, Mazumdar and Chaudhuri, 2003c: 75. India.  
**spinuliforceps** Tokunaga, 1959: 275. Papua New Guinea.  
**squamigera** Kieffer, in Thienemann and Kieffer 1916: 491. Sweden.  
*apricans* (Kieffer, 1919a): 19 (*Ceratopogon*). Slovak Republic.  
**squamipes** (Coquillett, 1902a): 88 (*Ceratopogon*). USA (New Mexico).  
*brumalis* (Long, 1902): 3 (*Ceratopogon*). USA (Texas).  
**squamitibia** Lutz, 1914: 88. Brazil (Santa Catarina).  
*soriai* Wirth, 1991b: 168. Brazil (Bahia).  
**squamitibialis** Tokunaga, 1959: 269. Papua New Guinea.  
**stenammatis** (Long, 1902): 10 (*Ceratopogon*). USA (Connecticut).  
**striaticornis** (Kieffer, 1918a): 36 (*Ceratopogon*). Algeria.  
*nigerrima* Goetghebuer, 1933e: 131. Democratic Republic of the Congo.  
*iphias* de Meillon, 1936: 169. South Africa.  
**suberis** Clastrier, 1956: 496. Algeria.  
*flavirustica* Remm, in Remm and Zhogolev 1968: 827. Ukraine.



**subfrigidus** Liu and Yu, *in Liu et al.* 2001b: 154. China (Tibet).  
**subgedanicola** Szadziewski, 1993: 645. Germany. Eocene.  
**subpallida** Tokunaga, 1962a: 181. Japan.  
**subruralis** Liu and Yu, *in Liu et al.* 2001b: 156. China (Henan).  
**subtilis** Johannsen, 1932: 412. Indonesia.  
**subulipenis** Sinha, Mazumdar and Chaudhuri, 2003c: 77. India.  
**sudanensis** Macfie, 1947b: 70. Sudan.  
**supplex** Debenham, 1987c: 297. Australia (Queensland).  
**surculus** Liu and Yu, *in Liu et al.* 2001b: 157. China (Tibet).  
**swezeyana** Tokunaga and Murachi, 1959: 145. Guam (USA).  
**swezeyanaadfinis** Chan and LeRoux, 1971b: 747. Singapore.  
**tangae** Kieffer, 1913e: 6. Tanzania.  
**tapleyi** Ingram and Macfie, 1931b: 196. New Zealand.  
**taragui** Marino, Spinelli and Cazorla, 2002: 17. New name for *guarani* Marino and Spinelli.  
*guarani* Marino and Spinelli, 1999: 448 (preoccupied by *Forcipomyia guarani* Ronderos and Spinelli, 1999).  
 Argentina (Corrientes).  
**tauffliebi** Clastrier, 1960c: 515. Congo.  
**tavetae** Kieffer, 1913e: 6. Kenya.  
**tenuis** (Winnertz, 1852): 25 (*Ceratopogon*). Germany.  
**tenuisquamipes** Wirth, 1952b: 89. Chile.  
**tetraclada** Kieffer, 1912c: 2. Sri Lanka.  
**texana** (Long, 1902): 10 (*Ceratopogon*). USA (Texas).  
**theobromae** Kieffer, 1912c: 3. Sri Lanka.  
**tienshanica** Remm, 1980: 120. Kazakhstan.  
**tigripes** Ingram and Macfie, 1924b: 580. Ghana.  
**tortor** Debenham, 1987c: 286. Australia (New South Wales).  
**tortula** Liu and Yu, *in Liu et al.* 2001b: 160. China (Tibet).  
**townesi** Wirth, 1952a: 137. USA (California).  
**townsendi** Knab, 1915: 111. Peru.  
**trigonata** Johannsen, 1932: 412. Indonesia.  
**trilineata** Goetghebuer, 1934a: 90. Russia (Voronezh Oblast), Austria.  
**trinotata** Kieffer, 1913d: 169. India.  
**tristicta** Kieffer, 1913d: 169. India.  
**turanorustica** Remm, 1980: 118. Uzbekistan.  
**turbinata** (Meunier, 1904a): 227 (1904b: 238) (*Ceratopogon*). Baltic region. Eocene.  
**uncula** (Meunier, 1904a): 227 (1904b: 238) (*Ceratopogon*). Baltic region. Eocene.  
**unculiformis** Szadziewski, 1993: 646. Germany. Eocene.  
**unimaculata** Sinha, Mazumdar and Chaudhuri, 2003c: 78. India.  
**uramaensis** Spinelli and Dippolito, 1995: 156. Venezuela.  
**urbana** Goetghebuer, 1937: 273. Belgium.  
**utae** Knab, 1915: 109. Peru.  
**variicrus** Kieffer, 1913d: 172 (as variety of *albosignata* Kieffer). India.  
**venetiana** (Kieffer, 1919a): 12 (*Ceratopogon*). Italy.  
**ventralis** Borkent, *in* Borkent and Wirth 1997: 38. New name for *abdominalis* Tokunaga.  
*abdominalis* Tokunaga, 1940c: 87 (preoccupied by *Forcipomyia abdominalis* (Santos Abreu, 1918)). Japan.  
**vesicula** de Meillon and Wirth, 1983a: 350. South Africa.  
**vexillaria** Debenham, 1987c: 291. Australia (New South Wales).  
**villiersi** Clastrier, 1972a: 98. Congo.  
**wahgi** Debenham, 1987c: 285. Papua New Guinea.  
**waldemari** Szadziewski, 1983a: 370. Algeria.  
**waldenia** de Meillon, 1940: 464. South Africa.  
**wheeleri** (Long, 1902): 12 (*Ceratopogon*). USA (Texas).

**wygodzinskyi** Cavalieri, 1961a: 17. Argentina (Tierra del Fuego).  
*delpontei* Cavalieri, 1961b: 169. Argentina (Tierra del Fuego).  
**yamana** Marino and Spinelli, 2001a: 118. Chile.  
**yamauchii** Tokunaga, 1940c: 84. Japan.  
**youngi** Wirth, 1982a: 579. Panama.  
**zhangmuensis** Liu and Yu, *in* Liu *et al.* 2001b: 162. China (Tibet).  
**zhongshanensis** Liu and Yu, *in* Liu *et al.* 2001b: 164. China (Guangdong).  
**zonogaster** Ingram and Macfie, 1931a: 168. Chile.

#### **Subgenus GAMPSOHELEA Yu and Liu**

**GAMPSOHELEA** Yu and Liu, *in* Yu *et al.* 2005a: 584 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia dentapenis* Yu and Liu, by original designation.

**charis** Yu and Ke, *in* Ke *et al.* 2010: 256. China (Tibet).  
**dentapenis** Yu and Liu, *in* Yu *et al.* 2005a: 584. China (Tibet).

#### **Subgenus HERAKLEOHELEA Debenham**

**HERAKLEOHELEA** Debenham, 1987a: 97 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia grallator* Debenham, by original designation.

**grallator** Debenham, 1987a: 97. Australia (New South Wales).

#### **Subgenus IXODEHELEA Yu and Liu**

**IXODEHELEA** Yu and Liu, *in* Yu *et al.* 2005a: 586 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia ambiguous* Yu and Liu, by original designation.

**ambigua** Yu and Liu, *in* Yu *et al.* 2005a: 586. China (Guangdong).

#### **Subgenus JAPYGAHELEA Yu and Liu**

**JAPYGAHELEA** Yu and Liu, *in* Yu *et al.* 2005a: 588 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia pinnatus* Yu and Liu, by original designation.

**pinnata** Yu and Liu, *in* Yu *et al.* 2005a: 588. China (Yunnan).

#### **Subgenus KATTANGOMYIA Debenham**

**KATTANGOMYIA** Debenham, 1987a: 98 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia taura* Debenham, by original designation.

**orbis** Debenham, 1987a: 102. Australia (New South Wales).  
**taura** Debenham, 1987a: 101. Australia (New South Wales).

#### **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, 1921h: 115. Type species: *Atrichopogon pilosipennis* Kieffer (= *Ceratopogon velox* Winternert), 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.

- abdita** (Yu, *in* Yu *et al.* 2005a): 694 (*Lasiohelea*). China (Sichuan). **New combination.**
- agas** (Rondani, 1875): 462 (*Ceratopogon*). Malaysia.
- aiyuræ** Debenham, 1983: 29. Papua New Guinea.
- alia** (Yu and Yan, 2007): 45 (*Lasiohelea*). Malaysia. **New combination.**
- americana** Szadziewski and Grogan, 1998b: 270. Dominican Republic. Miocene.
- anabaenæ** Chan and Saunders, 1965: 528. Singapore.  
*guangxiensis* (Lee, 1975): 435 (*Lasiohelea*). China (Guangxi).  
*aeschrodenta* (Yu and Liu, 1981): 61 (*Lasiohelea*). China (Sichuan).
- angyria** (Yu and Wirth, 1997): 21 (*Lasiohelea*). Malaysia.
- anitæ** Huerta and Ibanez-Bernal, 1996: 350. Mexico (Chiapas).
- ancoriformis** Tokunaga, *in* Tokunaga and Murachi 1959: 226. Micronesia.
- anthropophila** (Harant, Huttel and Huttel, 1951): 468 (*Parapterobosca*). Ivory Coast.
- aræa** (Yu and Wirth, 1997): 23 (*Lasiohelea*). Malaysia.
- attenuata** Saunders, 1964: 469. Costa Rica.
- baltea** Boorman, 1990: 128. Oman.
- bambusa** (Liu and Yu, 1996b): 50 (*Lasiohelea*). China (Sichuan).
- bernicla** (Yu and Wirth, 1997): 24 (*Lasiohelea*). Malaysia.
- bidenta** (Yu and Wirth, 1997): 26 (*Lasiohelea*). Malaysia.
- bifidipenis** (Yu and Wirth, 1997): 27 (*Lasiohelea*). Malaysia.
- binifoliaceus** (Yu and Wirth, 1997): 29 (*Lasiohelea*). Malaysia.
- bispica** (Yu and Wirth, 1997): 30 (*Lasiohelea*). Malaysia.
- bladapida** (Yu and Yan, 2007): 46 (*Lasiohelea*). Malaysia. **New combination.**
- bonasa** (Yu and Wirth, 1997): 31 (*Lasiohelea*). Malaysia.
- boophila** Lien, 1991: 85. Taiwan.
- borneoensis** (Yu and Wirth, 1997): 32 (*Lasiohelea*). Malaysia.
- breviprobosca** (Yu, *in* Yu *et al.* 2005a): 748 (*Lasiohelea*). China (Guangdong). **New combination.**
- brevisicæ** Debenham, 1983: 26. Australia (New South Wales).
- brevitarsata** (Ingram and Macfie, 1924a): 385 (*Lasiohelea*). Ghana.
- cacaophila** Ronderos and Spinelli, 1999: 152. Venezuela.
- caelomacula** (Liu, Yan and Liu, 1996a): 10 (*Lasiohelea*). China (Hainan). **New combination.**
- caesariata** Debenham, 1983: 8. Australia (Queensland).
- caledonica** Clastrier and Delécolle, 1993: 132. New Caledonia (France).
- carolinensis** (Tokunaga, 1940a): 208 (*Lasiohelea*). Micronesia.
- chiengmai** (Yu and Wirth, 1997): 35 (*Lasiohelea*). Thailand.
- citowitschi** Debenham, 1983: 17. Australia (Queensland).
- collessi** (Yu and Wirth, 1997): 36 (*Lasiohelea*). Malaysia.
- collicola** Lien, 1989: 43. Taiwan.
- colum** Debenham, 1983: 7. Papua New Guinea.
- cornuta** Saunders, 1964: 464. Costa Rica.
- crocea** Debenham, 1983: 15. Papua New Guinea.
- cubitalis** (Kieffer, 1918a): 88 (*Ceratopogon*). Singapore.
- cuculli** Debenham, 1983: 34. Australia (Queensland).
- curvopenis** (Wang, Chen and Yu, *in* Wang *et al.* 2011b): 275 (*Lasiohelea*). China (Hainan). **New combination.**
- cymodocea** (Yu and Nie, *in* Nie *et al.* 2003): 240 (*Lasiohelea*). China (on ship from Davao, Philippines). **New combination.**
- dandongensis** (Ding and Yu, 1990): 53 (*Lasiohelea*). China (Liaoning).
- danxianensis** (Yu and Liu, 1982a): 25 (Yu and Liu 1982b: 306; Yu 1982: 203) (*Lasiohelea*). China (Hainan).
- daiani** (Wang, Huang and Yu, *in* Wang *et al.* 2013): 195 (*Lasiohelea*). China (Fujian). **New combination.**

**diaoluensis** (Yu and Liu, 1982a): 26 (Yu and Liu 1982b: 306; Yu 1982: 203) (*Lasiohelea*). China (Hainan).

**dirus** (Liu, Yan and Liu, 1996a): 11 (*Lasiohelea*). China (Hainan).

**divergena** (Yu and Wen, in Yu and Liu 1982a): 28 (*Lasiohelea*). China (Sichuan).

**emeishana** (Yu and Liu, 1982a): 31 (Yu and Liu 1982b: 300) (*Lasiohelea*). China (Sichuan).

**eminenta** (Yu, in Yu *et al.* 2005a): 761 (*Lasiohelea*). China (Henan). **New combination.**

**fairfaxensis** Wirth, 1951d: 317. USA (Virginia).

**fenestrarum** Debenham, 1983: 25. Australia (New South Wales).

**fengyani** (Yu, in Yu *et al.* 2005a): 710 (*Lasiohelea*). China (Sichuan). **New combination.**

**ficula** (Yu and Wirth, 1997): 41 (*Lasiohelea*). Malaysia.

**flaveola** Clastrier and Delécolle, 1993: 136. New Caledonia (France).

**flavescens** Saunders, 1964: 471. Philippines.

**forficula** (Yu and Wirth, 1997): 44 (*Lasiohelea*). Malaysia.

**gracilidenta** (Yu, in Yu *et al.* 2005a): 762 (*Lasiohelea*). China (Yunnan). **New combination.**

**gramencola** Lien, 1991: 90. Taiwan.

**gripha** Borkent, in Borkent and Wirth 1997: 39. New name for *paradoxa* Yu and Liu.  
*paradoxa* (Yu and Liu, 1990): 16 (*Lasiohelea*, preoccupied by *Forcipomyia paradoxa* Krivosheina, 1968).  
 China (Jilin).

**guarani** Ronderos and Spinelli, 1999: 153. Paraguay.

**habros** (Liu, Chen and Yu, in Chen *et al.* 2012): 34 (*Lasiohelea*). China (Jiangxi). **New combination.**

**hainana** (Liu, Yan and Liu, 1996a): 12 (*Lasiohelea*). China (Hainan).

**hicksae** Debenham, 1983: 30. Australia (Queensland).

**homaliae** Lien, 1991: 90. Taiwan.

**hortensis** (Yu and Liu, 1981): 62 (*Lasiohelea*). China (Chongqing).

**hualuensis** Lien, 1989: 49. Taiwan.

**humilavolita** (Yu and Liu, 1982a): 34 (Yu and Liu 1982b: 302) (*Lasiohelea*). China (Guizhou).

**hunjiangensis** Qu and Ye, 1995b: 228. China (Jilin).

**hygroecia** (Yu, Liang and Chen, in Chen *et al.* 2007): 171 (*Lasiohelea*). China (Hong Kong). **New combination.**

**incomposita** Debenham, 1983: 20. Papua New Guinea.

**infans** Debenham, 1983: 28. Australia (Queensland).

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

**interceda** (Yu, in Yu *et al.* 2005a): 717 (*Lasiohelea*). China (Fujian). **New combination.**

**intermedia** Saunders, 1964: 468. Costa Rica.

**jinileei** (Yu, in Yu *et al.* 2005a): 718 (*Lasiohelea*). China (Guizhou). **New combination.**

**kamilaroi** Debenham, 1983: 29. Australia (New South Wales).

**koba** (Yu, in Yu *et al.* 2005a): 719 (*Lasiohelea*). China (Hainan). **New combination.**

**labidentis** (Yu and Liu, 1982a): 37 (Yu and Zhang 1982: 187) (*Lasiohelea*). China (Sichuan).

**lanyuensis** Lien, 1989: 54. Taiwan.

**latifolia** (Yu and Wirth, 1997): 48 (*Lasiohelea*). Malaysia.

**latiunguis** Clastrier, 1983c: 47. Seychelles.

**lefanui** Carter, 1916: 131. Ghana.  
*atratura* Goetghebuer, 1935d: 149. Democratic Republic of the Congo.  
*atrosetosa* Goetghebuer, 1935d: 149. Democratic Republic of the Congo.  
*squamipes* (Ingram and Macfie, 1924a): 385 (*Lasiohelea*, as variety of *lefanui* Carter, preoccupied by  
*Forcipomyia squamipes* (Coquillett, 1902a)). Probably Tanzania.

**lepta** (Yu and Wirth, 1997): 51 (*Lasiohelea*). Malaysia.

**liubaensis** (Yu, Liu and Yan, in Yu *et al.* 2013): 375 (*Lasiohelea*). China (Shaanxi). **New combination.**

**longicornis** (Tokunaga, 1940d): 103 (*Lasiohelea*). Japan.  
*ussurica* Remm, 1971: 190. Russia (Primorsky Krai).

**longineura** Saunders, 1964: 470. Philippines.

**longipalpula** (Yu and Wirth, 1997): 54 (*Lasiohelea*). Malaysia.

**lui** (Liu, Yan and Liu, 1996a): 14 (*Lasiohelea*). China (Hainan).

**lushana** (Yu and Liu, 1982a): 38 (Yu and Wang 1982: 19; Yu 1982: 203) (*Lasiohelea*). China (Jiangxi).

**luzona** (Yu and Wirth, 1997): 56 (*Lasiohelea*). Philippines.  
**magnispinosa** Clastrier and Delécolle, 1993: 137. New Caledonia (France).  
**mahensis** (Kieffer, 1911c): 339 (*Ceratopogon*). Seychelles.  
**manasi** Maheshwari, 2003: 72. India.  
**matautuensis** Clastrier and Delécolle, 1996: 304. Wallis and Futuna Islands (France).  
**matsumurai** Kitaoka, 1994: 3. Japan.  
**megadentis** Lien, 1989: 57. Taiwan.  
**mengi** (Yu and Liu, in Liu and Yu, 1996): 52 (*Lasiohelea*). China (Tibet).  
**ministra** Debenham, 1983: 32. Australia (Northern Territory).  
**mixta** (Yu and Liu, 1982a): 40 (Yu and Liu 1982b: 301) (*Lasiohelea*). China (Yunnan).  
**montana** de Meillon and Downes, 1986: 147. South Africa.  
**mopsa** de Meillon and Hardy, 1954: 71. South Africa.  
**moriokensis** Kitaoka, 1994: 1. Japan.  
**multidentata** Ronderos and Spinelli, 1999: 153. Brazil (Bahia).  
**multidentis** (Yu, in Yu *et al.* 2005a): 727 (*Lasiohelea*). China (Hainan). **New combination.**  
**multisensora** (Yu, in Yu *et al.* 2005a): 773 (*Lasiohelea*). China (Yunnan). **New combination.**  
**multispina** (He, 1989): 28 (He and Yu, 1990): 62 (*Lasiohelea*). China (Zhejiang).  
**nanjingensis** (Yu and Liu, 1982a): 41 (Yu and Wang 1982: 20) (*Lasiohelea*). China (Jiangsu).  
**nema** Debenham, 1983: 19. Australia (Queensland).  
**nemerosa** (Yu, in Yu *et al.* 2005a): 778 (*Lasiohelea*). China (Yunnan). **New combination.**  
**neotokunagai** Szadziewski and Borkent, 2003: 255. New name for *tokunaga* Yu and Wirth.  
*tokunaga* (Yu and Wirth, 1997): 77 (*Lasiohelea*, preoccupied by *Forcipomyia tokunagai* (Oka and Asahina, 1948)). Malaysia.  
**neowirthei** Szadziewski and Borkent, 2003: 255. New name for *wirthei* Yu and Wirth.  
*wirthei* (Yu and Wirth, 1997): 80 (preoccupied by *Forcipomyia wirthei* Saunders, 1957). Malaysia.  
**nepala** (Yu, 2000a): 12 (*Lasiohelea*, misspelled as *nepaia*). Nepal.  
**nhulunbuyensis** Debenham, 1983: 32. Australia (Northern Territory).  
**nigeriae** (Ingram and Macfie, 1924a): 382 (*Lasiohelea*). Nigeria.  
*dewulfi* (Goetghebuer, 1933e): 136 (*Lasiohelea*). Democratic Republic of the Congo.  
**nipponica** (Tokunaga, 1940d): 102 (*Lasiohelea*). Japan.  
**oreita** (Liu and Yu, 1996b): 51 (*Lasiohelea*). China (Yunnan).  
**ostiola** (Yu and Wirth, 1997): 60 (*Lasiohelea*). Philippines.  
**othneia** (Wang, Tan and Yu, in Wang *et al.* 2011b): 275 (*Lasiohelea*). China (Hainan). **New combination.**  
**oxypenis** (Yu and Wirth, 1997): 62 (*Lasiohelea*). Malaysia.  
**oxyria** (Yu and Liu, in Yu *et al.* 1985): 72 (*Lasiohelea*). China (Sichuan).  
**paenedentula** Debenham, 1983: 16. Australia (Queensland).  
**parenthesis** Debenham, 1983: 24. Australia (Queensland).  
**paucidentis** Lien, 1991: 98. Taiwan.  
**parvitas** (Liu and Yu, 1996b): 49 (*Lasiohelea*). China (Sichuan).  
**pensiledentia** (Yu and Wirth, 1997): 63 (*Lasiohelea*). Malaysia.  
**perae** Debenham, 1983: 23. Solomon Islands.  
**perangusta** (Goetghebuer, 1935d): 168 (*Dasyhelea*). Democratic Republic of the Congo.  
**peregrinator** Debenham, 1983: 12. Australia (Queensland).  
**phototropia** (Yu and Liu, 1982a): 45 (Yu and Zhang 1982: 189) (*Lasiohelea*). China (Sichuan).  
**plumosa** Debenham, 1983: 9. Papua New Guinea.  
**propria** Chan and LeRoux, 1970: 272. Malaysia.  
**pungobovis** (Yu and Liu, 1982a): 48 (*Lasiohelea*). China (Sichuan).  
**putea** Debenham, 1983: 14. Australia (Queensland).  
**quadrangula** (Yu and Yan, 2007): 45 (*Lasiohelea*). Malaysia. **New combination.**  
**quasicornuta** Saunders, 1964: 467. Costa Rica.  
**quinquedentis** (Yu and Zhou, in Yu 1988): 128 (*Lasiohelea*). China (Yunnan).  
**rastraria** Debenham, 1983: 10. Australia (Northern Territory).

**relicta** (Yu and Wen, *in* Yu and Liu 1982a): 50 (*Lasiohelea*). China (Sichuan).  
**rhamphis** (Yu and Wirth, 1997): 67 (*Lasiohelea*). Malaysia.  
**richardlanei** Clastrier, 1983c: 50. Seychelles.  
**ripa** (Yu and Liu, 2000b): 125 (*Lasiohelea*). China (Hainan).  
**russelli** Debenham, 1983: 11. Australia (Queensland).  
**saltensis** (Cavalieri, 1962): 360 (*Lasiohelea*). Argentina (Salta).  
**saxicola** Lien, 1991: 98. Taiwan.  
**serridentata** Debenham, 1983: 18. Solomon Islands.  
**sibirica** (Buyanova, 1962): 43 (*Lasiohelea*). Russia (Krasnoyarsk Krai).  
**sirycta** (Yu and Liu, 2000b): 126 (*Lasiohelea*). China (Hainan).  
**spinipenis** Tokunaga, *in* Tokunaga and Murachi 1959: 227. Belau (USA).  
**squamitarsata** (Clastrier, 1959b): 351 (*Lasiohelea*). Senegal.  
**stellaris** (Yu and Wirth, 1997): 68 (*Lasiohelea*). Malaysia.  
**stimulans** (de Meijere, 1909): 197 (*Ceratopogon*). Indonesia.  
**stylifer** (Lutz, 1913): 63 (*Centrorhynchus*). Brazil (Minas Gerais).  
**succinea** Szadziewski, 1988: 194. Poland. Eocene.  
**taipei** Lien, 1991: 102. Taiwan.  
**taiwana** (Shiraki, 1913): 291 (*Ceratopogon*). Taiwan.  
     *notialis* (Yu and Liu, 1982a): 43 (*Lasiohelea*). China (Fujian).  
**tambunana** (Yu and Wirth, 1997): 73 (*Lasiohelea*). Malaysia.  
**taoyuanensis** Lien, 1989: 72. Taiwan.  
**tawauensis** (Yu and Wirth, 1997): 74 (*Lasiohelea*). Malaysia.  
**tenuidentis** (Yu and Wirth, 1997): 75 (*Lasiohelea*). Malaysia.  
**thabinana** de Meillon, 1959b: 6. South Africa.  
**thiensis** Clastrier and Delécolle, 1993: 139. New Caledonia (France).  
**thyesta** (Yu, Chen and He, *in* Chen *et al.* 2007): 172 (*Lasiohelea*). China (Hong Kong). **New combination.**  
**tianmushana** (Yu & Yang, *in* Yang and Yu, 2017): 327 (*Lasiohelea*). China (Zhejiang). **New combination.**  
**tibetana** (Yu, *in* Yu *et al.* 2005a): 738 (*Lasiohelea*). China (Tibet). **New combination.**  
**townsvillensis** (Taylor, 1918): 169 (*Culicoides*). Australia (Queensland).  
**tunchanga** (Wang and Yu, *in* Wang *et al.* 2011b): 274 (*Lasiohelea*). China (Hainan). **New combination.**  
**turgepeda** (Yu and Liu, 1982a): 52 (Yu and Liu 1982b: 304) (*Lasiohelea*). China (Guangdong).  
**uncusidentis** (Liu, Yan and Liu, 1996a): 16 (*Lasiohelea*). China (Hainan).  
**uncusipenis** (Yu and Liu, 1982a): 52 (Yu and Zhang 1982: 187) (*Lasiohelea*). China (Sichuan).  
**uncuspromissa** Chan and LeRoux, 1970: 276. Singapore.  
**velox** (Winnertz, 1852): 28 (*Ceratopogon*). Germany.  
     *halterata* (Winnertz, 1852): 28 (*Ceratopogon*). Germany.  
     *nitens* (Kieffer, 1919a): 20 (*Ceratopogon*, preoccupied by *Forcipomyia nitens* (Santos Abreu, 1918)).  
         Hungary.  
     *pilosipennis* (Kieffer, 1919a): 23 (*Atrichopogon*). Hungary, Slovak Republic.  
     *hungarica* (Kieffer, 1921d): 298 (*Ceratopogon*). New name for *nitens* Kieffer.  
     *decrescens* Kieffer, 1924b: 391. France.  
     *silesiae* (Kieffer, 1925d): 49 (*Lasiohelea*). Hungary.  
     *montschadskyi* (Dzhafarov, 1962c): 196 (*Lasiohelea*). Azerbaijan.  
     *cultella* (Yu and Xiang, *in* Yu 1988): 127 (*Lasiohelea*, as *Lasoihelea*). China (Xinjiang).  
**virgula** (Yu and Wen, *in* Yu *et al.* 1985): 73 (*Lasiohelea*). China (Sichuan).  
**wanjungensis** Lien, 1989: 72. Taiwan.  
**whitcombei** Boorman, 1990: 126. Oman.  
**woodruffi** Szadziewski and Grogan, 1998b: 272. Dominican Republic. Miocene.  
**wulai** Lien, 1991: 109. Taiwan.  
**wuyiensis** (Shen and Yu, 1990): 66 (*Lasiohelea*). China (Fujian).  
**wuzhishana** (Wang, Qi and Yu, *in* Wang *et al.* 2011b): 274 (*Lasiohelea*). China (Hainan). **New combination.**  
**yui** (Liu, Yan and Liu, 1996a): 13 (*Lasiohelea*). China (Hainan).

**zhenbaodaoensis** (Yu and Liu, 1987): 83 (*Lasiohelea*). China (Heilongjiang).  
**zonaphalla** (Yu and Liu, 1982a): 53 (Yu and Liu 1982b): 305 (*Lasiohelea*). China (Zhejiang).

### Subgenus LEPIDOHELEA Kieffer

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

**abercrombyi** Macfie, 1938: 161. Trinidad and Tobago.  
**acinacium** Debenham, 1987c: 329. Australia (New South Wales).  
**acinacis** Wirth and Spinelli, 1993b: 615. USA (Maryland).  
**adversari** Debenham, 1987c: 321. Australia (Queensland).  
**anguliforceps** Tokunaga, 1940c: 94. Japan.  
**annulatipes** Macfie, 1939c: 154. Brazil (Santa Catarina).  
**antilleana** Szadziewski and Grogan, 1998b: 274. Dominican Republic. Miocene.  
**articulatus** Ma and Yan, *in Ma et al.* 2000: 15. China (Anhui).  
**bahiensis** Wirth and Spinelli, 1993a: 113. Brazil (Bahia).  
**basendjiorum** Dessart, 1962: 140. Democratic Republic of the Congo.  
**basifemoralis** Wirth and Spinelli, 1993a: 113. Jamaica.  
**beckae** Wirth, 1976b: 82. USA (Florida).  
**bicolor** Lutz, 1914: 89. Brazil (Rio de Janeiro).  
*discoloripes* Macfie, 1939c: 159. Brazil (Santa Catarina).  
**bifida** Wirth and Spinelli, 1993a: 115. Jamaica.  
**bifurcifera** Tokunaga, 1959: 281. Papua New Guinea.  
**brasilensis** Macfie, 1939c: 153. Brazil (Santa Catarina).  
**bullata** Debenham, 1987c: 315. Australia (Capital Territory).  
**cacaoi** Dessart, 1963: 186. New name for *theobromae* Dessart.  
*theobromae* Dessart, 1961: 367 (preoccupied by *Forcipomyia theobromae* Kieffer, 1912c). Democratic Republic of the Congo.  
**calotricha** Kieffer, 1911b: 322. India.  
**cerbera** Debenham, 1987c: 335. Australia (New South Wales).  
**christiansoni** Wirth and Hubert, 1960a: 640. USA (California).  
**chrysolopha** (Kieffer, 1911c): 333 (*Ceratopogon*). Seychelles.  
*grata* Goetghebuer, 1935d: 153 (preoccupied by *Forcipomyia grata* Macfie, 1934c). Democratic Republic of the Congo.  
*guttatella* Goetghebuer, 1935d: 146 (also as *guttatula*). Democratic Republic of the Congo.  
*annulator* Goetghebuer, 1948b: 6. New name for *grata* Goetghebuer.  
**chrysosuccinea** Szadziewski and Grogan, 1998b: 274. Dominican Republic. Miocene.  
**cochisei** Wirth and Spinelli, 1993b: 618. USA (Arizona).  
**convexipenis** Wirth and Spinelli, 1993a: 116. Colombia.  
**davidi** Debenham, 1987c: 330. Australia (New South Wales).  
**demeter** Debenham, 1987c: 319. Australia (Victoria).  
**domibicolor** Szadziewski and Grogan, 1998b: 276. Dominican Republic. Miocene.  
**dubia** Macfie, 1939c: 162. Brazil (Santa Catarina).  
**dubiamima** Wirth and Spinelli, 1993b: 620. USA (Maryland).  
**eadsi** Wirth and Spinelli, 1993b: 622. USA (Texas).  
**edmistoni** Wirth and Spinelli, 1993b: 624. USA (Maryland).  
 **euthystyla** Wirth and Spinelli, 1993a: 117. Colombia.  
**flavifemoris** Macfie, 1940d: 24. Guyana.  
**grata** Macfie, 1934c: 178 (1934d: 203). Malaysia.  
**gravesi** Wirth and Spinelli, 1993a: 119. USA (North Carolina).  
**hastata** de Meillon and Wirth, 1981c: 565. South Africa.  
**herediae** Wirth and Spinelli, 1993a: 119. Costa Rica.

**hobbsi** Wirth and Spinelli, 1993a: 121. Dominica.  
**ikinae** de Meillon, Meiswinkel and Wirth, 1982: 127. South Africa.  
**ivani** Hochman, Marino and Spinelli, 2017: 812. Ecuador.  
**kuanoskeles** Macfie, 1939c: 150. Brazil (Santa Catarina).  
**lacrimatorii** Macfie, 1939c: 161. Brazil (Santa Catarina).  
**lagoenae** Debenham, 1987c: 327. Australia (New South Wales).  
**lepidosuccinea** Szadziowski and Grogan, 1998b: 278. Dominican Republic. Miocene.  
**luteigenua** Wirth and Spinelli, 1992: 353. Costa Rica.  
**maculatus** Liu, Yan and Liu, 1996a: 20. China (Hainan).  
**maculosicrura** Tokunaga, 1959: 265. Papua New Guinea.  
**manis** Debenham, 1987c: 344. Papua New Guinea.  
**matilei** Clastrier and Delécolle, 1991: 203. New Caledonia (France).  
**medipala** Debenham, 1987c: 320. Australia (New South Wales).  
**paenulata** Debenham, 1987c: 334. Australia (Western Australia).  
**palliscuta** Tokunaga, 1959: 259. Papua New Guinea.  
**pampoikila** Ingram and Macfie, 1924b: 570. Ghana.  
**parvicrater** Debenham, 1987c: 336. Australia (Capital Territory).  
**pectinis** Liu and Yu, *in* Liu *et al.* 2001b: 172. China (Heilongjiang).  
**pictisquamipennis** Tokunaga, 1959: 260. Papua New Guinea.  
**pricei** Wirth and Spinelli, 1993b: 627. USA (Texas).  
**pulcherrima** Santos Abreu, 1918: 272. Canary Islands (Spain).  
*formosae* (Kieffer, 1922b): 153 (*Lepidohelea*). Taiwan.  
*lepidota* Ingram and Macfie, 1924b: 566. Ghana.  
*ornatipes* (Kieffer, 1921b): 1 (*Lepidohelea*, preoccupied by *Forcipomyia ornatipes* (Kieffer, 1918a)).  
 Cameroon.  
*variegata* Goetghebuer, 1933e: 133. Democratic Republic of the Congo.  
*marsafae* Ghonaim, Ibrahim and Ali, 2001: 42. Egypt.  
**qinlingensis** Han, Li and Hou, 2015: 759. China (Shaanxi).  
**qionghaiensis** Liu and Yu, *in* Liu *et al.* 2001b: 177 (as *qionghainensis*). China (Sichuan).  
**quiqueremis** Debenham, 1987c: 341. Papua New Guinea.  
**randensis** de Meillon, 1931: 335. South Africa.  
**randensoides** Dessart, 1961: 364. Democratic Republic of the Congo.  
**roseae** de Meillon, Meiswinkel and Wirth, 1982: 129. South Africa.  
**scurra** Debenham, 1987c: 340. Australia (Queensland).  
**semihamata** Debenham, 1987c: 339. Australia (New South Wales).  
**seminole** Wirth, 1976b: 81. USA (Florida).  
**semota** Debenham, 1987c: 328. Australia (Queensland).  
**solutus** Liu and Yu, *in* Liu *et al.* 2001b: 179. China (Hainan).  
**squamithorax** Clastrier, 1972b: 170. French Guiana (France).  
**statirae** de Meillon, 1936: 165. South Africa.  
**tibialis** Remm, 1961a: 188. Estonia.  
**tortuosa** Debenham, 1987c: 322. Australia (New South Wales).  
**unifascicornis** Tokunaga, 1959: 263. Papua New Guinea.  
**unitheca** Tokunaga, *in* Tokunaga and Murachi 1959: 183. Belau (USA).  
**usingeri** Wirth and Spinelli, 1993b: 627. USA (California).  
**varipennis** Wirth and Williams, 1957: 8. Bermuda (Great Britain).  
**venusta** Ingram and Macfie, 1924b: 569. Ghana.  
**weemsi** Wirth and Spinelli, 1993a: 123. USA (Florida).  
**wernerii** Wirth and Spinelli, 1993b: 632. Mexico (Sonora).  
**winderi** Wirth, 1991b: 171. Brazil (Bahia).  
**xichangensis** Liu and Yu, *in* Liu *et al.* 2001b: 181. China (Sichuan).



### Subgenus **METAFORCIPOMYIA** Saunders

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

- aidae** Hochman, Marino and Spinelli, 2017: 813. Ecuador.  
**albipluma** Spinelli, Marino and Borkent, 2012a: 27. Costa Rica.  
**anniae** Spinelli, Marino and Borkent, 2012a: 11. Costa Rica.  
**atenasensis** Spinelli, Marino and Borkent, 2012a: 13. Costa Rica.  
**campana** Debenham, 1987b: 193. Australia (New South Wales).  
**cerifera** Saunders, 1957: 685. Brazil (Rio de Janeiro).  
**colona** Debenham, 1987b: 191. Australia (Capital Territory).  
**crepidinis** Debenham, 1987b: 196. Australia (Western Australia).  
**darwinii** Marino and Spinelli, 2003: 24. Chile.  
**defatigatus** Liu and Yu, *in* Liu *et al.* 2001b: 183. China (Tibet).  
**fehrerorum** Grogan and Sigrist, 2007: 531. USA (Maryland).  
**furculae** Debenham, 1987b: 190. Papua New Guinea.  
**germinata** Spinelli, Marino and Borkent, 2012a: 29. Costa Rica.  
**grandiseta** Spinelli, Marino and Borkent, 2012a: 16. Costa Rica.  
**heroni** Spinelli, Marino and Borkent, 2012a: 31. Costa Rica.  
**hesiones** de Meillon, 1936: 167. South Africa.  
**longiflagellata** Spinelli, Marino and Borkent, 2012a: 18. Costa Rica.  
**macroseta** Spinelli, Marino and Borkent, 2012a: 20. Costa Rica.  
**maculosa** Ingram and Macfie, 1931a: 159. Argentina (Río Negro).  
**mapuche** Marino and Spinelli, 2003: 26. Argentina (Neuquén).  
**morenoi** Marino and Spinelli, 2003: 26. Argentina (Neuquén).  
**novaguineae** Tokunaga, 1959: 289. Papua New Guinea.  
**osaensis** Spinelli, Marino and Borkent, 2012a: 15. Costa Rica.  
**pluvialis** Malloch, 1923: 5. USA (Maryland).  
**pseudocerifera** Spinelli, Marino and Borkent, 2012a: 21. Costa Rica.  
**rivalis** Spinelli, Marino and Borkent, 2012a: 7. Costa Rica.  
**ronderosae** Spinelli, Marino and Borkent, 2012a: 33. Costa Rica.  
**rupicola** Debenham, 1987b: 194. Australia (New South Wales).  
**rursa** Spinelli, Marino and Borkent, 2012a: 24. Costa Rica.  
**stewarti** de Meillon and Downes, 1986: 149. South Africa.  
**stigmatipennis** Tokunaga, 1959: 268. Papua New Guinea.  
**tomaculorum** Debenham, 1987b: 188. Australia (New South Wales).  
**totus** Liu and Yu, *in* Liu *et al.* 2001b: 185. China (Tibet).  
**tricotae** Clastrier and Delécolle, 1991: 209. New Caledonia (France).  
**truncata** Spinelli, Marino and Borkent, 2012a: 9. Costa Rica.  
**williamsi** Marino and Spinelli, 1999: 5. Argentina (Buenos Aires).

### Subgenus **MICROHELEA** Kieffer

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

- abbaekiefferi** Debenham, 1987d: 656. Papua New Guinea.  
**absita** Yin, Tian and Yu, 2013: 49. China (Xinjiang).  
**alleni** Clastrier and Wirth, 1995: 117. Costa Rica.

**almus** Liu and Yu, *in* Liu *et al.* 2001b: 190. China (Yunnan).  
**amazonica** Wirth, 1971b: 241. Brazil (Amazonas).  
**ambientis** Liu and Yu, *in* Liu *et al.* 2001b: 192. China (Ningxia).  
**amieuensis** Clastrier and Delécolle, 1993: 149. New Caledonia (France).  
**angustipalpis** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 30. India.  
**antioquiae** Clastrier and Wirth, 1995: 142. Colombia.  
**arnhemi** Debenham, 1987d: 652. Australia (Northern Territory).  
**asquamata** Clastrier and Delécolle, 1993: 142. New Caledonia (France).  
**australiensis** (Kieffer, 1917a): 178 (*Ceratopogon*). Papua New Guinea.  
**beatulus** Liu and Yu, *in* Liu *et al.* 2001b: 193. China (Tibet).  
**belemensis** Clastrier and Wirth, 1995: 140. Brazil (Pará).  
**bispinula** Liu and Yu, 1997: 26. China (Tibet).  
**borkenti** Szadziewski and Alwin, *in* Alwin-Kownacka *et al.* 2016a: 367. United Arab Emirates.  
**brasilliana** Clastrier and Wirth, 1995: 116. Peru.  
**breelandi** Clastrier and Wirth, 1995: 114. Panama.  
**brevilabellata** Clastrier and Wirth, 1995: 136. French Guiana (France).  
**broadheadi** Clastrier and Wirth, 1995: 129. Panama.  
**callithorax** (Kieffer, 1911c): 335 (*Ceratopogon*, as variety of *lasionota* Kieffer). Seychelles.  
**castneri** Clastrier and Wirth, 1995: 111. Peru.  
**catarina** Clastrier and Wirth, 1995: 131. Brazil (Santa Catarina).  
**coheni** Clastrier and Wirth, 1995: 132. Ecuador.  
**colombiana** Clastrier and Wirth, 1995: 102. Colombia.  
**cristata** Clastrier and Wirth, 1995: 135. Brazil (Santa Catarina).  
**cylindripalpis** Clastrier and Delécolle, 1993: 147. New Caledonia (France).  
**clypedus** Liu and Yu, *in* Liu *et al.* 2017a: 78. China (Jiangxi).  
**desutterae** Clastrier and Wirth, 1995: 100. French Guiana (France).  
**donskoffi** Clastrier and Wirth, 1995: 125. French Guiana (France).  
**dunklei** Clastrier and Wirth, 1995: 130. Peru.  
**eriophora** (Williston, 1896): 279 (*Ceratopogon*). St. Vincent.  
**esakiana** Tokunaga, 1940a: 206. Micronesia.  
**felippebauerae** Clastrier and Wirth, 1995: 122. Peru.  
**flavitibialis** Tokunaga and Murachi, 1959: 170. Micronesia.  
**foliaceus** Liu and Yu, *in* Liu *et al.* 2001b: 199. China (Gansu).  
**folipenis** Liu and Yu, 1997: 24. China (Tibet).  
**franklini** Clastrier and Wirth, 1995: 141. Costa Rica.  
**fuliginata** Clastrier, 1983c: 54. Seychelles.  
**fuliginosa** (Meigen, 1818): 86 (*Ceratopogon*). Germany.  
*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 (Oaxaca).  
*coquilletti* (Kieffer, 1917b): 297 (*Ceratopogon*). USA (New York).  
*tropica* (Kieffer, 1917b): 297 (*Ceratopogon*). Costa Rica.  
*obscura* Santos Abreu, 1918: 276 (as variety of *bipunctata* Linnaeus, preoccupied by *Forcipomyia obscura* (Walker, 1848)). Canary Islands (Spain).  
*alboclavata* (Kieffer, 1919a): 12 (*Ceratopogon*, also as *asticta*). Slovak Republic.  
*canaliculata* (Goetghebuer, 1920): 110 (*Ceratopogon*). Belgium.  
*nilotheres* Macfie, 1924: 62. Egypt.  
*ornaticrus* Ingram and Macfie, 1924b: 577 (as variety of *inornatipennis* Carter, Ingram and Macfie;

preoccupied by *Forcipomyia ornaticrus* Kieffer, 1912c). Ghana.  
*atripennis* Goetghebuer, 1935d: 149. Democratic Republic of the Congo.  
*auripila* Goetghebuer, 1935d: 150. Democratic Republic of the Congo.  
*curtimana* Goetghebuer, 1935d: 151. Democratic Republic of the Congo.  
*grisescens* Goetghebuer, 1935d: 154. Democratic Republic of the Congo.  
*vicina* Goetghebuer, 1935d: 161. Democratic Republic of the Congo.  
*longiradialis* Tokunaga, 1940c: 66. Japan.  
*takagii* Tokunaga, 1941b: 90. China (Heilongjiang).  
*wansoni* (Harant and Baur, 1946): 141 (*Lasiohelea*, preoccupied by *Forcipomyia wansoni* de Meillon, 1939a).  
 Democratic Republic of the Congo.  
*brookmani* Wirth, 1952a: 140. USA (California).  
*santosi* Remm, 1981: 32. New name for *obscura* Santos Abreu.  
**galapagensis** (Coquillett, 1901b): 372 (*Ceratopogon*). Galápagos Islands (Ecuador).  
**galbiventris** Borkent, in Borkent and Wirth 1997: 43. New name for *flaviventris* Kieffer.  
*flaviventris* (Kieffer, 1917a): 179 (*Ceratopogon*, preoccupied by *Palpomyia flaviventris* (Czerny and Strobl, 1909)). Papua New Guinea.  
**globularis** Edwards, 1928: 48. Western Samoa.  
**gracilalitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 31. India.  
**grandcolasi** Clastrier and Wirth, 1995: 112. French Guiana (France).  
**gressitti** Tokunaga and Murachi, 1959: 152. Belau (USA).  
**guyana** Clastrier and Wirth, 1995: 124. French Guiana (France).  
**inflatipalpis** Clastrier and Delécolle, 1993: 153. New Caledonia (France).  
**insignipalpis** Macfie, 1949: 109. Mexico (Chiapas).  
**insulae** Clastrier and Delécolle, 1993: 151. New Caledonia (France).  
**intonsa** Chan and LeRoux, 1971b: 743. Singapore.  
**iquitosensis** Clastrier and Wirth, 1995: 139. Peru.  
**ixodoides** (Fiebrig-Gertz, 1928): 290 (*Ceratopogon*). Paraguay.  
**kawensis** Clastrier and Wirth, 1995: 120. French Guiana (France).  
**lasionota** (Kieffer, 1911c): 334 (*Ceratopogon*). Seychelles.  
**lignaria** Debenham, 1987d: 655. Australia (Queensland).  
**longurius** Liu and Yu, 1997: 19. China (Sichuan).  
**luteisquamosa** Wirth, 1972: 575. Brazil (Santa Catarina).  
**mayeri** Forattini and Lane, 1955: 4. New name for *crudelis* Mayer.  
*crudelis* (Mayer, 1937b): 233 (*Phasmidohelea*, preoccupied by *Forcipomyia crudelis* (Karsch, 1886)). Costa Rica.  
**menzeli** Clastrier and Wirth, 1995: 106. Ecuador.  
**microtoma** (Kieffer, 1917b): 299. Paraguay.  
**minisquamosa** Wirth, 1972: 570. Belize.  
**moorei** Clastrier and Wirth, 1995: 133. Brazil (Santa Catarina).  
**neotropica** Clastrier and Wirth, 1995: 126. Peru.  
**nibleyi** Tokunaga, 1962a: 178. Japan.  
**nigrimaxillata** Clastrier and Wirth, 1995: 118. Peru.  
**notothena** Liu and Yu, 1997: 22. China (Guangdong).  
**novaeteutoniae** Clastrier and Wirth, 1995: 107. Brazil (Santa Catarina).  
**nudifascipes** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 32. India.  
**obesa** Costa Lima, 1928: 85. Brazil (Amazonas).  
**ocrearum** Debenham, 1987d: 664. Papua New Guinea.  
**ornata** Tokunaga, 1940c: 61 (1940e: 166). Belau (USA).  
**ovatitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 33. India.  
**paenefuliginosa** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 33. India.  
**paulista** Falaschi, Albertoni and Fusari, 2014: 381. Brazil (São Paulo).  
**penultimata** Wirth, 1972: 573. Brazil (Santa Catarina).

**perpusillus** Liu and Yu, *in* Liu *et al.* 2001b: 209. China (Sichuan).  
**peruviana** Clastrier and Wirth, 1995: 123. Peru.  
**phototropisma** Liu and Yu, *in* Liu *et al.* 2001b: 211. China (Tibet).  
**pinjiensis** Liu and Yu, *in* Liu *et al.* 2001b: 213. China (Ningxia).  
**plaumanni** Clastrier and Wirth, 1995: 127. Brazil (Santa Catarina).  
**proximornata** Debenham, 1987d: 657. Papua New Guinea.  
**qionghongensis** Liu, Yan and Liu, *in* Yu *et al.* 2005a: 624. New name for *flava* Liu, Yan and Liu.  
*flava* Liu, Yan and Liu, 1996a: 20 (preoccupied by *Forcipomyia flava* (Williston, 1896)). China (Hainan).  
**raposoensis** Clastrier and Wirth, 1995: 144. Colombia.  
**rettenmeyerorum** Clastrier and Wirth, 1995: 104. Panama.  
**serrulifimbria** Tokunaga, 1959: 283. Papua New Guinea.  
**similis** Liu and Yu, 1997: 20. China (Sichuan).  
**similitheca** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 34. India.  
**squamosa** Lutz, 1914: 87. Brazil (Rio de Janeiro).  
**stelechos** Debenham, 1987d: 649. Australia (Queensland).  
**subspadicifascia** Tokunaga and Murachi, 1959: 167. Micronesia.  
**tegula** Liu and Yu, 1997: 27. China (Heilongjiang).  
**tenuifascicruris** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 35. India.  
**tettigonaris** Wirth and Castner, 1990: 159. Peru.  
**thomasi** Clastrier and Wirth, 1995: 115. Brazil (Pará).  
**tiwaka** Clastrier and Delécolle, 1993: 144. New Caledonia (France).  
**tuthilli** Tokunaga, *in* Tokunaga and Murachi 1959: 174. Marshall Islands.  
**valleensis** Clastrier and Wirth, 1995: 145. Colombia.  
**vernoni** Clastrier and Wirth, 1995: 138. Colombia.  
**wagneri** (Séguy, 1941): 85 (*Phasmidohelea*). Brazil (Rio de Janeiro).  
**walschaertsi** Gosseries, 1989: 3. New name for *monilis* Tokunaga.  
*monilis* Tokunaga, 1962a: 179 (preoccupied by *Forcipomyia monilis* (Goetghebuer, 1934c)). Japan.  
**weihaiensis** Xue and Yu, 1998: 317. China (Shandong).  
**willisi** Debenham, 1987d: 661. Australia (New South Wales).  
**willistoni** Wirth, 1971b: 242. Puerto Rico (USA).  
**wuxiensis** Liu and Yu, *in* Liu *et al.* 2001b: 222. China (Jiangsu).

#### Subgenus NICOTHOHELEA Liu, Tang and Hao

**NICOTHOHELEA** Liu, Tang and Hao, 2002a: 230 (as subgenus of *Forcipomyia*) (Yu and Liu, *in* Yu *et al.* 2005a: 633, as *Nicothohelea*). Type species: *Forcipomyia delenificus* Liu, Tang and Hao, by original designation.

**delenifica** Liu, Tang and Hao, 2002a: 231 (Yu *et al.* 2005a: 633). China (Jiangxi).

#### Subgenus OREINOHELEA Yu and Liu

**OREINOHELEA** Yu and Liu, *in* Yu *et al.* 2005a: 635 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia lenis* Liu and Yu, by original designation.

**lenis** Liu and Yu, *in* Yu *et al.* 2005a: 635. China (Chongqing).

#### Subgenus PANHELEA Remm

**PANHELEA** Remm, 1980: 117 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia pontica* Remm (= *Ceratopogon brevicubitus* Goetghebuer), by original designation.

**aristolochiae** (Rondani, 1860): 134 (*Ceratopogon*). Italy.

*brevicubita* (Goetghebuer, 1920): 27 (*Ceratopogon*). Belgium.  
*pontica* Remm, in Remm and Zhogolev 1968: 831. Ukraine.  
*hissarica* Remm, 1980: 117. Tajikistan.

### Subgenus **PEDILOHELEA** de Meillon and Wirth

**PEDILOHELEA** de Meillon and Wirth, 1980: 9 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia clastri-eri* Dessart, by original designation.

**aitkeni** de Meillon and Wirth, 1980: 12. Brazil (Pará).  
**archboldi** de Meillon and Wirth, 1980: 13. Dominica.  
**australis** Clastrier and Delécolle, 1991: 212. New Caledonia (France).  
**bilancea** Liu and Yu, in Yu *et al.* 2005a: 637. China (Tibet).  
**brinchangensis** de Meillon and Wirth, 1980: 14. Malaysia.  
**brincki** de Meillon, 1959a: 328. South Africa.  
**clastrieri** Dessart, 1963: 183. New name for *brevitarsata* Clastrier.  
*brevitarsata* (Clastrier, 1959b): 345 (*Lepidohelea*, preoccupied by *Forcipomyia brevitarsata* (Ingram and Macfie, 1924)). Senegal.  
**draconis** de Meillon and Wirth, 1980: 17. South Africa.  
**eremita** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 638. United Arab Emirates.  
**eshowensis** de Meillon, 1937b: 361. South Africa.  
**forcipis** de Meillon and Wirth, 1980: 18. Malaysia.  
**hailaerensis** Liu and Yu, in Yu *et al.* 2005a: 639. China (Inner Mongolia).  
**haroldi** de Meillon and Wirth, 1989b: 208. South Africa.  
**proavia** Debenham, 1987d: 642. Australia (Capital Territory).  
**raposoi** de Meillon and Wirth, 1980: 21. Colombia.  
**spangleri** de Meillon and Wirth, 1980: 21. Guatemala.  
**spilmani** de Meillon and Wirth, 1980: 22. Dominica.  
**tasmani** Macfie, 1932c: 27. New Zealand.

### Subgenus **PHYTOHELEA** Remm

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

**alocasiae** Tokunaga, 1961b: 120. Papua New Guinea.  
**antiguensis** Saunders, 1957: 700. Antigua.  
**bacoti** (Ingram and Macfie, 1923): 55 (*Apelma*). Sierra Leone.  
*natalia* (de Meillon, 1936): 158 (*Lasiohelea*). South Africa.  
**belkini** de Meillon and Wirth, 1979e: 198. New Zealand.  
**bilobata** Marino, in Marino *et al.* 2013: 819. Argentina (Corrientes).  
**brevis** (Johannsen, 1927c): 205 (*Apelma*). USA (Hawaii).  
**bromelicola** (Lutz, 1914): 84 (*Ceratopogon*). Brazil (Rio de Janeiro).  
**caribbeana** Saunders, 1957: 696. Trinidad and Tobago.  
**comis** Johannsen, 1932: 409. Indonesia.  
**dominicana** de Meillon and Wirth, 1979e: 195. Dominica.  
**edwardsi** (Saunders, 1925): 260 (*Apelma*). Brazil (Rio de Janeiro).  
**eophytoheleana** Szadziewski, 1988: 215. Baltic region. Eocene.  
**fijiensis** (Macfie, 1945): 1 (*Apelma*). Fiji.  
**forfices** Debenham, 1987a: 114. Australia (Queensland).  
**grandis** Chan and LeRoux, 1971b: 758. Singapore.  
**hamaticauda** Tokunaga, in Tokunaga and Murachi 1959: 212. Belau (USA).

**jocosa** Saunders, 1957: 701. Trinidad and Tobago.  
**mahamutius** Liu and Yu, *in* Liu *et al.* 2001b: 225. New name for *jocosus* Yu and Maha.  
*jocosus* Yu and Maha, 1998: 205 (preoccupied by *Forcipomyia jocosa* Saunders, 1957). China (Fujian).  
**keilini** (Saunders, 1925): 265 (*Apelma*). Brazil (Pernambuco).  
**magna** (Saunders, 1925): 266 (*Apelma*). Brazil (Pernambuco).  
**marksae** Tokunaga, 1961b: 117. Papua New Guinea.  
**musae** Clastrier and Delécolle, 1994: 51. French Guiana (France).  
**nicopina** Chan and LeRoux, 1971b: 754. Singapore.  
**oligarthra** Saunders, 1957: 698. Puerto Rico (USA).  
**onustagalea** Yu, 2000b: 163. New name for *onustus* Yu and Liu.  
*onustus* Yu and Liu, 1999: 247 (preoccupied by *Forcipomyia onusta* Remm, 1980). China (Hainan).  
**sabroskyi** Tokunaga, *in* Tokunaga and Murachi 1959: 211. Belau (USA).  
**tzaneensis** de Meillon and Wirth, 1979e: 184. South Africa.

### Subgenus PTEROBOSCA Macfie

*PTEROBOSCA* Macfie, 1932a: 266. Unavailable name; proposed after 1930 without type species designation.  
**PTEROBOSCA** Macfie, 1940f: 16. Type species: *Ceratopogon aeschnosuga* de Meijere, by original designation.

**adhesipes** (Macfie, 1932a): 270 (*Pterobosca*). Indonesia.  
**aerobates** (Macfie, 1936a): 64 (*Pterobosca*). India.  
**aeschnosuga** (de Meijere, 1923): 137 (*Ceratopogon*). Indonesia.  
**ariel** (Macfie, 1932a): 275 (*Pterobosca*). Indonesia.  
**asahinai** Tokunaga, 1962a: 188. Japan.  
**chrysopipennis** Wirth, 1966: 29. New name for *chrysopae* Tokunaga.  
*chrysopae* Tokunaga, *in* Tokunaga and Murachi 1959: 235 (preoccupied by *Forcipomyia chrysopae* Mayer, 1934b). Belau (USA).  
**crinume** (Tokunaga, 1932): 1 (*Dasyhelea*). Japan.  
**esakii** (Tokunaga, 1940a): 210 (*Pterobosca*). Mariana Islands (USA).  
*esakia* Tokunaga, *in* Tokunaga and Murachi 1959: 234. Unnecessary new name for *esakii*.  
**farri** Wirth, 1966: 29. Jamaica.  
**feminae** (Tokunaga, 1940c): 100 (1940e: 168) (*Pterobosca*). Belau (USA).  
**fidens** (Macfie, 1936b): 228 (*Pterobosca*). China (Hainan).  
**fusicornis** (Coquillett, 1905): 63 (*Ceratopogon*). USA (Florida).  
*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).  
**hutsoni** Wirth and Ratanaworabhan, 1976: 242. Aldabra (Seychelles).  
**incubans** (Macfie, 1937c): 111 (*Pterobosca*). Belize.  
**lairdi** (Wirth, 1956a): 363 (*Pterobosca*). Solomon Islands.  
**latipes** (Macfie, 1936b): 227 (*Pterobosca*). China (Hainan).  
**mollipes** (Macfie, 1932a): 272 (*Pterobosca*). Liberia.  
**neodebenhamae** Szadziewski and Borkent, 2003: 256. New name for *debenhamae* Cranston.  
*debenhamae* Cranston, *in* Orr and Cranston 1997: 1850 (preoccupied by *Forcipomyia debenhamae* Clastrier and Delécolle, 1991). Brunei.  
**odonatiphila** (Macfie, 1932a): 274 (*Pterobosca*). Indonesia.  
**ogatai** Tokunaga, 1961c: 3. New Caledonia (France).  
**paludis** (Macfie, 1936a): 63 (*Pterobosca*). Great Britain.  
**pinheyi** Clastrier and Legrand, 1984: 173. Mauritius.  
**tokunagai** (Oka and Asahina, 1948): 107 (*Pterobosca*). Japan.

### Subgenus RHINOHELEA de Meillon and Wirth

**RHINOHELEA** de Meillon and Wirth, 1979d: 881 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia briani* de Meillon and Wirth, by original designation.

**briani** de Meillon and Wirth, 1979d: 882. South Africa.

**khoisana** de Meillon and Wirth, 1979d: 885. South Africa.

### Subgenus RHYNCHOFORCIPOMYIA Wirth and Dow

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

**brachyrhyncha** Wirth and Dow, 1972: 867. Colombia.

**cylindrica** Wirth and Dow, 1972: 865. El Salvador.

**dorsalis** Wirth and Dow, 1972: 870. Mexico (Sinaloa).

**flavisimplexa** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 35. India.

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

**messersmithi** Wirth and Dow, 1972: 864. El Salvador.

**puracensis** Wirth and Dow, 1972: 867. Colombia.

**zeteki** Wirth and Dow, 1972: 870. Panama.

### Subgenus SALIOHELEA Wirth and Ratanaworabhan

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

**boudinoti** Clastrier and Delécolle, 1991: 216. New Caledonia (France).

**brevicosta** (Clastrier, 1960c): 520 (*Lasiohelea*). Congo.

**calleida** Yu, in Yu *et al.* 2005a: 648. New name for *claris* Yu (as *clarus*).

*claris* Yu, 2001: 159 (preoccupied by *Forcipomyia clara* Chan and LeRoux, 1971b). China (Hong Kong).

**cicuta** Yu, in Yu and Song 2008: 795. New name for *ciliata* Liu and Yu.

*ciliata* Liu and Yu, in Yu *et al.* 2005a: 646 (preoccupied by *Forcipomyia ciliata* (Winnertz, 1852)). China (Tibet).

**deminuta** Tokunaga and Murachi, 1959: 219. Micronesia.

**digita** Spinelli, Marino and Borkent, 2012a: 42. Costa Rica.

**infrensi** Liu and Yu, in Yu *et al.* 2005a: 649. China (Tibet).

**isolata** Liu and Yu, in Yu *et al.* 2005a: 650. China (Sichuan).

**leei** Wirth and Ratanaworabhan, 1978: 498. Colombia.

**pechumani** Bystrak and Wirth, 1978: 34. USA (New York).

**perrara** Liu and Yu, in Yu *et al.* 2005a: 651. China (Sichuan).

**rima** Yu and Xue, in Yu *et al.* 2005a: 652. China (Tibet).

**stami** Wirth and Ratanaworabhan, 1978: 502. Democratic Republic of the Congo.

### Subgenus SCHINEROMYIA Debenham

**SCHINEROMYIA** Debenham, 1987a: 67 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia gandangara* Debenham, by original designation.

**gandangara** Debenham, 1987a: 67. Australia (New South Wales).

## Subgenus SCHIZOFORCIPOMYIA Chan and LeRoux

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

- anna** de Meillon, 1959a: 331. South Africa.  
**borbonica** Clastrier, 1959c: 436. Réunion (France).  
    *penniornata* Tokunaga and Murachi, 1959: 163. Guam (USA).  
    *fuscimaculata* Hardy, 1960: 170. USA (Hawaii).  
    *stabilis* Sen and Das Gupta, 1968: 95. India.  
    *petersoni* Chan and LeRoux, 1971a: 272. Singapore.  
**chazeau** Clastrier and Delécolle, 1991: 222. New Caledonia (France).  
**cinctipes** (Coquillett, 1905): 64 (*Ceratopogon*). USA (Florida).  
**clavula** Debenham, 1987d: 639. Australia (New South Wales).  
**harpa** Spinelli and Borkent, 2004b: 3. Costa Rica.  
**lecordeurorum** de Meillon, Meiswinkel and Wirth, 1982: 132. South Africa.  
**lydiae** Clastrier and Delécolle, 1991: 219. New Caledonia (France).  
**monoceros** Debenham, 1987d: 634. Australia (New South Wales).  
**rudebecki** de Meillon, 1959a: 330. South Africa.  
**tinia** Krivosheina, 1968: 583. Russia (Vologda Oblast).  
**warreni** de Meillon and Wirth, 1981b: 528. South Africa.  
**yirrkala** Debenham, 1987d: 636. Australia (Northern Territory).

## Subgenus SYNTHYRIDOMYIA Saunders

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

- acidicola** (Tokunaga, 1937b): 455 (*Lasiohelea*). Japan.  
    *minuta* Goetghebuer, 1947: 228 (preoccupied by *Forcipomyia minuta* (Tokunaga, 1940d)). Belgium.  
    *colemani* Wirth, 1952a: 146. USA (California).  
**aibihui** Yin, Tian and Yu, 2013: 50. China (Xinjiang).  
**ansericolli** Debenham, 1987a: 59. Australia (Northern Territory).  
**bucera** Debenham, 1987a: 55. Australia (Queensland).  
**caestuum** Debenham, 1987a: 53. Australia (Queensland).  
**contigoa** Liu and Yu, in Yu *et al.* 2005a: 655. China (Hubei).  
**corsoni** Macfie, 1926: 355. Tanzania.  
**exigua** Ingram and Macfie, 1924b: 587. Ghana.  
**flexoductithea** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 37. India.  
**floridensis** Dow and Wirth, 1972: 195. USA (Florida).  
**hengqinensis** Yu, Sun and Li, in Sun *et al.* 2009: 105. China (Guangdong).  
**hylecoeta** Yu and Xu, 2000: 449. China (Heilongjiang).  
**knockensis** Goetghebuer, 1938: 375. Belgium.  
    *bequaerti* Goetghebuer, 1942: 1. Belgium.  
    *abludens* Remm, in Remm and Zhogolev 1968: 830. Ukraine.  
**margaritae** Szadziewski, 1983a: 377. Algeria.  
**mendica** Liu and Yu, in Yu *et al.* 2005a: 659. China (Zhejiang).  
**murina** (Winnertz, 1852): 26 (*Ceratopogon*). Europe.  
    *abdominalis* (Santos Abreu, 1918): 265 (*Helea*, as variety of *murina* Winnertz). Canary Islands (Spain).  
    *aurosparsum* (Kieffer, 1919a): 65 (*Apelma*). Hungary.  
    *sulfurea* Kieffer, 1923a: 664. Algeria.  
    *hirtipalpis* Kieffer, 1924b: 392. France.



*sate* Kieffer, 1925e: 245. Egypt.  
*longitarsis* Tokunaga, 1940c: 92 (preoccupied by *Forcipomyia longitarsis* (Malloch, 1915b)). Taiwan.  
*moascari* Macfie, 1943a: 147. Egypt.  
*attonsa* Goetghebuer, 1950: 1. Belgium.  
*tokunagai* Wirth, 1973: 356 (preoccupied by *Forcipomyia tokunagai* (Oka and Asahina, 1948)). New name for *longitarsis* Tokunaga.  
*submurina* Remm, 1980: 115 (as *sibmurina*, as subspecies of *murina* Winnertz). Russia (Sakha Republic).  
*calchaqui* Spinelli and Marino, 1997: 188. Argentina (Salta).  
*soibelzoni* Marino and Spinelli, 2001c: 14. Argentina (Río Negro).  
**nanshengwei** Yu, Liang and Su, *in* Yu *et al.* 2007b: 487. China (Hong Kong).  
**operimenti** Debenham, 1987a: 58. Australia (Queensland).  
**oryx** Debenham, 1987a: 54. Australia (Northern Territory).  
**sanctaeclarae** Wirth, 1952b: 90. Chile.  
**tenuiforceps** Macfie, 1939c: 167. Brazil (Santa Catarina).  
**tertiaricola** Szadziewski and Grogan, 1998b: 281. Dominican Republic. Miocene.  
**tympanista** Debenham, 1987a: 56. Australia (Queensland).  
**unituberculata** Tokunaga, *in* Tokunaga and Murachi 1959: 197. Belau (USA).  
**xiangshanensis** Yu, Liu and Chen, *in* Liu *et al.* 2009: 522. China (Beijing).  
**yuani** Yu, Su and Chen, *in* Yu *et al.* 2007b: 487. China (Hong Kong).

### Subgenus THYRIDOMYIA Saunders

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

**angelicae** Tokunaga, 1940c: 97. Japan.  
**biskraensis** Kieffer, 1923a: 665 (as variety of *seneveti* Kieffer). Algeria.  
     *sergenti* Clastrier, 1956: 502. Algeria.  
     *imeretica* Remm, 1967: 5. Georgia.  
**historyma** Yu and Ke, *in* Ke *et al.* 2010: 255. China (Tibet).  
**blascoi** Delécolle and Rieb, 1993: 112. Spain.  
**carolinea** Tokunaga, *in* Tokunaga and Murachi 1959: 214. Belau (USA).  
**cineornata** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 38. India.  
**colombiae** Wirth, 1970: 435. Colombia.  
**concinna** Liu and Yu, *in* Yu *et al.* 2005a: 663. China (Chongqing).  
**falcinella** (Kieffer, 1911c): 338 (*Ceratopogon*). Seychelles.  
**fererugosa** Saha, Das Gupta, Gangopadhyay and Mukherjee, 2009: 38. India.  
**frutetorum** (Winnertz, 1852): 29 (*Ceratopogon*). Germany.  
     *seneveti* Kieffer, 1922g: 500. Algeria.  
     *aethiopiae* Ingram and Macfie, 1924b: 582. Ghana.  
     *dasyptera* Goetghebuer, 1934b: 214 (*Dasyhelea*). Israel.  
     *japonica* (Tokunaga, 1937a): 267 (*Lasiohelea*). Japan.  
     *aspinosa* Saunders, 1957: 692. Canada (Saskatchewan).  
**frutetosuccinea** Szadziewski and Grogan, 1998b: 280. Dominican Republic. Miocene.  
**gokwe** de Meillon and Wirth, 1989b: 209. Zimbabwe.  
**gossympina** Chan and LeRoux, 1970: 286. Singapore.  
**hamata** Tokunaga, *in* Tokunaga and Murachi 1959: 207. Belau (USA).  
**hoplia** Liu and Yu, *in* Yu *et al.* 2005a: 666. China (Sichuan).  
**inconspicua** (Ingram and Macfie, 1924a): 391 (*Lasiohelea*). Ghana.  
**ishigakii** Tokunaga, 1962a: 182. Japan.  
**jamaicensis** Wirth, 1970: 436. Jamaica.  
**jipajapae** Wirth, 1970: 437. Panama.

- johannseni** Thomsen, 1935: 286. USA (New York).
- kii** (Tokunaga, 1940d): 107 (*Lasiohelea*). Japan.
- kitasirakawae** Tokunaga, 1940c: 94. Japan, Taiwan.
- litoraurea** (Ingram and Macfie, 1924a): 389 (*Lasiohelea*). Ghana.  
*minutissima* Remm, 1961a: 192. Estonia.
- masaakii** Debenham, 1989: 235. New name for *esakii* Tokunaga.  
*esakii* (Tokunaga, 1940e): 169 (1940d: 101) (*Lasiohelea*, preoccupied by *Forcipomyia esakii* (Tokunaga, 1940a)). Belau (USA).
- mercuratus** Liu, Yan and Liu, 1996a: 21 (as *mercuratas*). China (Hainan).
- minima** (Tokunaga, 1940d): 104 (*Lasiohelea*). Japan.
- minuta** (Tokunaga, 1940d): 106 (*Lasiohelea*). Japan.
- monilicornis** (Coquillett, 1905): 63 (*Ceratopogon*). Canada (British Columbia).  
*hirta* (Lundström, 1910): 34 (*Ceratopogon*). Finland.  
*microcera* (Kieffer, 1919a): 54 (*Dasyhelea*). Slovak Republic.  
*palustris* (Saunders, 1925): 269 (*Thyridomyia*, preoccupied by *Forcipomyia palustris* (Meigen, 1804)). Great Britain.  
*curticornis* Goetghebuer, 1933c: 354. Belgium.  
*curticornis* Goetghebuer, 1949: 1 (preoccupied by *Forcipomyia curticornis* Goetghebuer, 1933c). Belgium.  
*kabashae* de Meillon, 1959a: 333. Democratic Republic of the Congo.
- neomonticola** Borkent, in Borkent and Wirth 1997: 48. New name for *monticola* Tokunaga.  
*monticola* (Tokunaga, 1937a): 270 (*Lasiohelea*, preoccupied by *Forcipomyia monticola* Kieffer, 1913d). Japan.
- nana** (Macfie, 1939c): 171 (*Lasiohelea*). Brazil (Santa Catarina).
- neooxyria** Borkent and Dominiak, in this work. New name for *Forcipomyia oxyria* Yu, Ke and Li.  
*oxyria* Yu, Ke and Li, in Sun *et al.* 2009: 105 (preoccupied by *Forcipomyia oxyria* (Yu and Liu, in Yu *et al.* 1985) (*Lasiohelea*)). China (Guangdong).
- nodosa** Saunders, 1959: 43. Costa Rica.
- nudocula** (Tokunaga, 1937a): 269 (*Lasiohelea*). Japan.
- riojana** Spinelli and Marino, 1997: 188. Argentina (La Rioja).
- rugosa** Chan and LeRoux, 1970: 280. Canada (Quebec).  
*murinoides* Remm, 1971: 188. Estonia.
- sinuosa** Dow and Wirth, 1972: 189. Mexico (Sinaloa).
- skiaphila** (Clastrier, 1960c): 522 (*Lasiohelea*). Congo.
- tenuichela** Dow and Wirth, 1972: 191. USA (California).
- tugelensis** de Meillon, 1959a: 333. South Africa.
- univesicula** Macfie, 1939c: 170. Brazil (Santa Catarina).
- ursuli** Remm, 1972: 66. Russia (Altai Republic).
- vertexcava** Chan and LeRoux, 1970: 282. Singapore.
- watshami** de Meillon and Wirth, 1989b: 210. Zimbabwe.
- xiphoidea** Liu and Yu, in Yu *et al.* 2005a: 675. China (Sichuan).
- yaana** Liu and Yu, in Yu *et al.* 2005a: 676. China (Sichuan).

### Subgenus TRICHOHELEA Goetghebuer

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

**aliena** Debenham, 1987a: 83. Australia (New South Wales).  
**araneivora** Clastrier and Legrand, 1991: 155. Guinea.  
**austrina** Macfie, 1932c: 29. New Zealand.  
**basiflava** Tokunaga, *in* Tokunaga and Murachi 1959: 202. Micronesia.  
**baueri** Wirth, 1956a: 361. USA (Arizona).  
**bifidicola** Szadziewski, 1993: 649. Germany. Eocene.  
**blanda** Yu and Liu, *in* Yu *et al.* 2005a: 678. China (Tibet).  
**caliginosa** (Ingram and Macfie, 1924a): 386 (*Lasiohelea*). Ghana.  
**castania** Liu and Yu, *in* Yu *et al.* 2005a: 680. China (Sichuan).  
**chaetoptera** Remm, 1962b: 188. Estonia.  
**chirurgia** Debenham, 1987a: 87. Australia (New South Wales).  
**cliens** Debenham, 1987a: 76. Papua New Guinea.  
**collinsi** Lane, 1977: 308. Ethiopia.  
**consortis** de Meillon and Wirth, 1989b: 212. South Africa.  
**crinita** Saunders, 1964: 474. Canada (Saskatchewan).  
**danaisi** (Floch and Abonnenc, 1949): 2 (1950a: 72) (*Lasiohelea*). Venezuela.  
**debenhamae** Clastrier and Delécolle, 1991: 228. New name for *arcis* Debenham.  
*arcis* Debenham, 1987a: 91 (preoccupied by *Forcipomyia arcis* de Meillon and Downes, 1986). Australia (Northern Territory).  
**eotrichoheleana** Szadziewski, 1988: 213. Baltic region. Eocene.  
**eques** (Johannsen, 1908): 266 (*Ceratopogon*). USA (New York).  
*chrysopae* Mayer, 1934b: 259. Germany.  
*chrysopivora* (Tokunaga, 1939b): 371 (*Lasiohelea*). Japan.  
**equitans** (Edwards, 1933c): 251 (*Lasiohelea*). Malaysia.  
**ferrea** Debenham, 1987a: 76. Australia (Queensland).  
**geometrica** (Clastrier, 1959c): 437 (*Lasiohelea*). Réunion (France).  
**goniognatha** Wirth and Messersmith, 1971: 20. Mexico (Sonora).  
**imparidentes** Debenham, 1987a: 77. Fiji.  
**insignicornis** (Macfie, 1947a): 29 (*Lasiohelea*). Uganda.  
**insignis** (Skuse, 1889): 298 (*Ceratopogon*). Australia (New South Wales).  
*sydneyensis* (Skuse, 1889): 302 (*Ceratopogon*). Australia (New South Wales).  
**intrepida** Macfie, 1936b: 228. Peru.  
**kuscheli** Sublette and Wirth, 1980: 330. New Zealand.  
**leptognatha** Wirth and Messersmith, 1971: 21. USA (Kansas).  
**limnetis** Ingram and Macfie, 1931a: 169. Argentina (Neuquén).  
*shannoni* (Ingram and Macfie, 1931a): 171 (*Lasiohelea*). Argentina (Neuquén).  
**lunata** Debenham, 1987a: 90. Australia (New South Wales).  
**lushanensis** Yu and Liu, *in* Yu *et al.* 2005a: 681. China (Jiangxi).  
**macheti** Clastrier and Legrand, 1990: 168. French Guiana (France).  
**mcateei** Wirth, 1956a: 359. USA (Maryland).  
*saundersi* Chan, *in* Chan and LeRoux 1965: 87. Canada (Quebec).  
**mexicana** Wirth, 1956a: 361. Mexico (San Luis Potosi).  
**monoplectron** Lane, 1977: 306. Tanzania.  
**okadai** (Tokunaga, 1939b): 370 (*Lasiohelea*). Russia (Sakhalin Oblast).  
**opilionivora** (Lane, 1947c): 159 (*Lasiohelea*). Brazil (São Paulo).  
**pacifica** (Macfie, 1933a): 75 (*Lasiohelea*). French Polynesia (France).  
**papuensis** Lane and Cotman, 1986: 617. Papua New Guinea.  
**pectinunguis** (de Meijere, 1923): 138 (*Ceratopogon*). Indonesia.  
**pennambula** (Macfie, 1932a): 279 (*Lasiohelea*). Indonesia.  
**quateriungula** Tokunaga, 1959: 293. Indonesia.  
**roubaudi** Clastrier and Delécolle, 1997: 379. French Guiana (France).  
**samoensis** (Edwards, 1928): 51 (*Lasiohelea*). Western Samoa.

**sayhuequei** Marino and Spinelli, 2004b: 2257. Argentina (Chubut).  
**scorpio** Debenham, 1987a: 88. Australia (New South Wales).  
**sector** Debenham, 1987: 83. Australia (New South Wales).  
**simulataris** Liu and Yu, *in* Yu *et al.* 2005a: 684. China (Chongqing).  
**subauronitens** Tokunaga, 1940c: 96. Japan.  
**succinicola** Szadziewski, 1993: 650. Germany. Eocene.  
**tehuelche** Marino and Spinelli, 2004b: 2260. Argentina (Santa Cruz).  
**tipulivora** Macfie, 1936b: 229. Indonesia.  
**tonnoiri** (Goetghebuer, 1920): 39 (*Trichohelea*). Belgium.  
     *auronitens* (Kieffer, 1919a): 65 (*Apelma*, preoccupied by *Forcipomyia auronitens* (Kieffer, 1910)). Slovak Republic.  
     *papilionivora* Edwards, 1923b: 23. Great Britain.  
     *umbellicola* Remm, 1971: 189. Russia (Primorsky Krai).  
**trinidadensis** Saunders, 1964: 476. Trinidad and Tobago.  
**tripeda** Liu and Yu, *in* Yu *et al.* 2005a: 685. China (Heilongjiang).  
**tsutsumii** Tokunaga, 1960b: 76. Japan.  
**tumula** Debenham, 1987a: 92. Australia (New South Wales).  
**veroensis** Wirth and Messersmith, 1971: 24. USA (Florida).  
**wudangensis** Yu and Liu, *in* Yu *et al.* 2005a: 687. China (Hubei).

#### Subgenus TRITHICOMYIA Yu and Song

**TRITHICOMYIA** Yu and Song, 2008: 793 (as subgenus of *Forcipomyia*). Type species: *Trithicomomyia huainanensis* Yu and Song, by original designation.

**huainanensis** Yu and Song, 2008: 793. China (Anhui).

#### Subgenus TYPHONOMYIA Debenham

**TYPHONOMYIA** Debenham, 1987a: 93 (as subgenus of *Forcipomyia*). Type species: *Forcipomyia anachoreta* Debenham, by original designation.

**anachoreta** Debenham, 1987a: 94. Australia (New South Wales).

#### Subgenus WARMKEA Saunders

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

**aeria** Saunders, 1957: 675. Puerto Rico (USA).

**albiacis** Debenham, 1987b: 170. Australia (Queensland).

**brunnea** de Meillon and Downes, 1986: 151. South Africa.

**distinctiscuta** Tokunaga, 1962a: 173. Japan.

**fishi** Wirth and Soria, 1980: 145. USA (Florida).

**galindoi** Wirth and Soria, 1980: 146. Panama.

**kaufmannae** Wirth and Derron, 1976: 230. Sao Tomé and Príncipe.

**lesliei** Wirth, 1974: 12. New name for *bicolor* Saunders.

*bicolor* Saunders, 1957: 672 (preoccupied by *Forcipomyia bicolor* Lutz, 1914). Puerto Rico (USA).

**louriei** (Macfie, 1935a): 49 (*Lasiohelea*). Brazil (Maranhão).

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

**malayae** Saunders, 1957: 678. Malaysia.

**samyda** Yu and Liu, *in* Yu *et al.* 2005a: 690. China (Heilongjiang).

**spinosa** Saunders, 1957: 676. Puerto Rico (USA).  
**terrestris** Saunders, 1964: 479. Trinidad and Tobago.  
**tuberculata** Saunders, 1957: 677. Trinidad and Tobago.

### Species of FORCIPOMYIA unplaced to subgenus

**haiheensis** Lai, Guo and Yu, *in* Guo *et al.* 2018: 495. China (Tianjin municipality).  
**longitarsis** (Malloch, 1915b): 314 (*Euforcipomyia*). USA (Illinois).  
**nobilis** Yu, *in* Yu and Song 2008: 795. New name for *notata* Yu and Liu.  
*notata* Yu and Liu, *in* Yu *et al.* 2005a: 691 (preoccupied by *Forcipomyia notata* Macfie, 1939a). China (Hubei).  
**nadicola** Szadziewski, *in* Szadziewski and Sontag 2013: 60. Russia (Sakhalin Oblast). Paleocene.  
**orientalis** Hong, 1981: 6, 53 (*Aspinus*). China (Liaoning). Eocene.  
**reburra** Borkent, *in* Borkent and Wirth 1997: 50. New name for *villosa* Macfie.  
*villosa* (Macfie, 1934c): 183 (*Lasiohelea*, preoccupied by *Forcipomyia villosa* (Zetterstedt, 1850)). Malaysia.  
**vittata** Tokunaga, 1940c: 71. Japan.

### *Nomina dubia*

**antrijovis** (Kieffer, 1919a): 15 (*Ceratopogon*). Greece.  
**ambigua** (Meigen, 1804): 32 (*Ceratopogon*). Europe.  
**coprophila** Kieffer, 1914a: 233. Germany.  
**atomaria** Tokunaga, 1940c: 93. Japan.  
**brachypetiolata** Vimmer, 1928: 58. Israel.  
**coarctata** (Kieffer, 1901a): 161 (*Ceratopogon*). Romania.  
**elongata** (Kieffer, 1901a): 160 (*Ceratopogon*). Romania.  
**flavicincta** Santos Abreu, 1918: 282. Canary Islands (Spain).  
**flavomaculata** Vimmer, 1928: 58. Israel.  
**freyi** Storå, 1936: 32. Canary Islands (Spain).  
**fulvescens** Santos Abreu, 1918: 284. Canary Islands (Spain).  
**funebri** (Meigen, 1830): 262 (*Ceratopogon*). Europe.  
**haranti** (Huttel and Huttel, 1952a): 31 (*Monohelea*). France.  
**hortorum** (Weyenbergh, 1883): 110. Argentina. New combination.  
**imaculata** Vimmer, 1928: 58. Israel.  
**laboulbeni** (Perris, 1870): 138 (*Ceratopogon*). France.  
**nilicola** (Kieffer, 1925e): 253 (*Apelma*). Egypt.  
**niligena** (Kieffer, 1921b): 4 (*Ceratopogon*). South Sudan.  
**ochracea** Vimmer, 1928: 58. Israel.  
**picheyrei** Harant and Galan, 1942a: 135. Algeria.  
**praecincta** Santos Abreu, 1918: 279. Canary Islands (Spain).  
**saltans** (Winnertz, 1852): 27 (*Ceratopogon*). Germany.  
**scapularis** Goetghebuer, 1933c: 353. Belgium.  
**tetrasticta** (Kieffer, 1919a): 11 (*Ceratopogon*). Hungary.  
**thienemanni** Kieffer, 1912b: 103. Germany.  
**urnigera** Kieffer, 1925e: 247. Egypt.

## SUBFAMILY CERATOPOGONINAE NEWMAN, 1834: 388

TRIBE CULICOIDINI KIEFFER, 1911d: 1, 1911b: 319

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

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

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

**DEVALQUIA** Choufani and Nel, 2013: 75. Type species: *Devalquia brisaci* Choufani and Nel, 2013, by original designation.

### Subgenus AMOSSOVIA Glukhova

**AMOSSOVIA** Glukhova, 1989: 226 (as subgenus of *Culicoides*). Type species: *Culicoides dendrophilus* Amosova, by original designation.

**arboricola** Root and Hoffman, 1937: 166. USA (Maryland).

**beckae** Wirth and Blanton, 1967: 213. USA (Florida).

**californiensis** Wirth and Blanton, 1967: 215. USA (California).

**cochisensis** Wirth and Blanton, 1967: 216. USA (Arizona).

**dendrophilus** Amosova, 1957: 240. Russia (Primorsky Krai).

*reesi* Bullock and Akiyama, 1959: 24. Japan.

**elemae** Pappas and Pappas, 1989: 228. USA (Nebraska).

**flukei** Jones, 1956: 30. USA (Wisconsin).

**guttipennis** (Coquillett, 1901a): 603 (*Ceratopogon*). USA (Ohio).

**oklahomensis** Khalaf, 1952b: 355 (as subspecies of *villosipennis* Root and Hoffman). USA (Oklahoma).

**ousairani** Khalaf, 1952b: 354. USA (Oklahoma).

**pecosensis** Wirth, 1955: 358. USA (Texas).

**villosipennis** Root and Hoffman, 1937: 165. USA (Maryland).

### Subgenus ANILOMYIA Vargas

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

**ameliae** Browne, 1980: 543. Colombia.

**chaverrii** Spinelli and Borkent, 2004a: 373. Costa Rica.

**chrysonotus** Wirth and Blanton, 1956b: 226. Panama.

**covagarciai** Ortiz, 1950b: 457. Venezuela.

*beebei* Fox, 1952: 366. Venezuela.

**decor** (Williston, 1896): 281 (*Ceratopogon*). St. Vincent.

**dominicanus** Wirth and Blanton, 1970d: 146. Dominica.

**efferus** Fox, 1952: 365. Peru.

**farri** Wirth and Blanton, 1970d: 148. Jamaica.

**hayesi** Matta, 1967: 75. Honduras.

**inermis** Spinelli, Santamaría, Cabrera, Ronderos and Suárez, 2009a: 84. Colombia.  
**lutealaris** Wirth and Blanton, 1956b: 225. Panama.  
**marshi** Wirth and Blanton, 1956b: 220. Panama.  
**metagonatus** Wirth and Blanton, 1956b: 221. Panama.  
**monicae** Spinelli and Borkent, 2004a: 372. Costa Rica.  
**nigrifemur** Spinelli, Santamaría, Cabrera, Ronderos and Suárez, 2009a: 85. Colombia.  
**nigrigenus** Wirth and Blanton, 1956b: 222. Panama.  
**popayanensis** Wirth and Lee, 1967: 10. Colombia.  
**pseudodecor** Spinelli and Huerta, 2015: 818. Mexico (Morelos).  
**rostratus** Wirth and Blanton, 1956b: 218. Panama.  
**trapidoi** Wirth and Barreto, 1978: 554. Colombia.

### Subgenus AVARITIA Fox

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

**abchazicus** Dzhabfarov, 1964: 263. Georgia.  
**actoni** Smith, 1929: 255 (1932: 180). India.  
    *okumensis* Arnaud, 1956a: 119. Japan.  
    *imperceptus* Das Gupta, 1962a: 538. India.  
**alachua** Jamnback and Wirth, 1963: 187. USA (Florida).  
**albifascia** Tokunaga, 1937a: 319. Taiwan.  
**alticola** Kieffer, 1913e: 11. Tanzania.  
**andicola** Wirth and Lee, 1967: 5. Colombia.  
**annandalei** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 125. India.  
**asiana** Bellis, in Bellis *et al.* 2015: 29. New name for *asiatica* Bellis.  
    *asiatica* Bellis, in Bellis *et al.* 2014: 407 (preoccupied by *Culicoides asiaticus* Gutsevich and Smatov, 1966).  
    Japan.  
**autumnalis** Sen and Das Gupta, 1959a: 628. India.  
**bolitinos** Meiswinkel, 1989: 30. South Africa.  
**boophagus** Macfie, 1937c: 116. Malaysia.  
**boydi** Wirth and Mullens, 1992: 1006. USA (California).  
**brevipalpis** Delfinado, 1961: 654. Philippines.  
**brevitarsis** Kieffer, 1917a: 187. Australia.  
    *robertsi* Lee and Reye, 1953: 386. Australia (Queensland).  
    *radicitus* Delfinado, 1961: 657. Philippines.  
    *superfulvus* Das Gupta, 1962b: 253. India.  
**brosseti** Vattier and Adam, 1966a: 297. Gabon.  
**bubalus** Delfinado, 1961: 658. Philippines.  
**candolfii** Delécolle, Paupy, Rahola and Mathieu, 2013: 514. Gabon.  
**certus** Das Gupta, 1962a: 537. India.  
**chiopterus** (Meigen, 1830): 263 (*Ceratopogon*). Europe.  
    *amoenus* (Winnertz, 1852): 35 (*Ceratopogon*). Germany.  
    *dobyi* Callot and Kremer, 1969a: 610. France.  
**comparis** Liu and Yu, in Yu *et al.* 2005a: 917. China (Tibet).  
**conaensis** Liu and Yu, 1990b: 19. China (Tibet).  
**dasyops** Clastrier, 1958b: 217. Senegal.  
**definitus** Sen and Das Gupta, 1959a: 622. India.  
**dentiformis** McDonald and Lu, 1972: 403. Taiwan.  
**dewulfi** Goetghebuer, 1936: 320. Belgium.  
    *pseudochiopterus* Downes and Kettle, 1952: 67. Great Britain.

**dikhros** Tokunaga, 1962b: 507. Papua New Guinea.  
**dubitatus** Kremer, Rebholtz-Hirtzel and Delécolle, 1976: 233. Angola.  
**dumdumi** Sen and Das Gupta, 1959a: 628. India.  
**elongatus** Chu and Liu, 1978: 83. China (Yunnan).  
**fenggangensis** Liu and Hou, in Chang *et al.* 2017: 128. China (Guizhou).  
**filicinus** Gornostaeva and Gachegova, 1972: 522. Russia (Tuva Republic).  
**flavipunctatus** Kitaoka, 1975: 199. Japan.  
**fragmentum** Tokunaga, 1962b: 507. Papua New Guinea.  
**fulvus** Sen and Das Gupta, 1959a: 628. India.  
**gaponus** Yu, 1982: 202. China (Hainan).  
**glabripennis** Goetghebuer, 1935d: 171 (1948b: 12). New name for *nudipennis* Goetghebuer.  
*nudipennis* Goetghebuer, 1933e: 146 (preoccupied by *Culicoides nudipennis* Kieffer, 1922g). Democratic Republic of the Congo.  
*septemmaculatus* Goetghebuer, 1935d: 175. Democratic Republic of the Congo.  
*spinifer* Khamala and Kettle, 1971: 51. Kenya.  
**glushchenkoae** Glukhova, 1989: 200. Russia (Primorsky Krai)  
**gornostaevae** Mirzaeva, 1984a: 371. Russia (Krasnoyarsk Krai).  
**grahamii** Austen, 1909: 280. Ghana.  
*habereri* Becker, 1909: 289. Cameroon.  
*hostilissimus* (Pittaluga, 1911a): 29 (1911b: 69; 1912: 597) (*Oecacta*). Guinea.  
*kivuensis* Goetghebuer, 1935d: 173. Democratic Republic of the Congo.  
*trichopis* de Meillon, 1937b: 328. Democratic Republic of the Congo.  
**gulbenkiani** Caeiro, 1959: 155. South Africa.  
**hasegawai** Kanasugi and Kitaoka, 2001: 228. Japan.  
**hayakawai** Kitaoka, 1984: 301. Japan.  
**hermani** Spinelli and Borkent, 2004a: 363. Panama.  
**himalayae** Kieffer, 1911b: 326. India.  
**hirtulus** (Coquillett, 1900): 396 (*Ceratopogon*). USA (Alaska).  
**holcus** Lee, 1980: 85. China (Yunnan).  
**huambensis** Caeiro, 1961: 179 (also as *huambensis*). Angola.  
**hui** Wirth and Hubert, 1961: 16. Taiwan.  
**imicola** Kieffer, 1913e: 11. Kenya.  
*pallidipennis* Carter, Ingram and Macfie, 1920: 265. Ghana.  
*iraqensis* Khalaf, 1957b: 343. Iraq.  
*minutus* Sen and Das Gupta, 1959a: 622. India.  
*pseudoturgidus* Das Gupta, 1962a: 537. India.  
**impusilloides** Spinelli and Wirth, 1984a: 178. Brazil (Santa Catarina).  
**incertus** Yu and Zhang, in Yu 1988: 136. China (Tibet).  
**inexploratus** Sen and Das Gupta, 1959a: 628. India.  
**insignipennis** Macfie, 1937d: 469. Malaysia.  
**iphthimus** Zhou and Lee, 1984b: 295. China (Chongqing).  
**jacobsoni** Macfie, 1934d: 215. Indonesia.  
*buckleyi* Macfie, 1937c: 117. Malaysia.  
*kitaokai* Tokunaga, 1955: 6. Japan.  
*unisetiferus* Tokunaga, 1959: 236. Papua New Guinea.  
**juddi** Cochrane, 1973: 316. USA (New York).  
**kanagai** Khamala and Kettle, 1971: 49. Kenya.  
**kibatiensis** Goetghebuer, 1935d: 172. Democratic Republic of the Congo.  
*volatilis* Goetghebuer, 1935d: 176. Democratic Republic of the Congo.  
**lengi** Yu and Liu, 1990: 10. China (Guangdong).  
**liweiae** Liang, Fu and Liu, 2012: 234. China (Heilongjiang).  
**longirostris** Qu and Wang, 1994: 486. China (Tibet).



**loxodontis** Meiswinkel, 1992: 147. South Africa.  
**mamaensis** Lee, 1979a: 101. China (Tibet).  
**minimus** Wirth and Hubert, 1989: 251. Malaysia.  
**miombo** Meiswinkel, 1991: 161. Malawi.  
**molestior** Kieffer, 1911e: 514. New name for *molestus* Kieffer.  
*molestus* Kieffer, 1910: 192 (preoccupied by *Culicoides molestus* (Skuse, 1889)). India.  
*iniquus* Sen and Das Gupta, 1958b: 163 (1959a: 620; 1959b: 65). New name for *molestus* Kieffer.  
**montanus** Shakirzjanova, 1962: 258. Kazakhstan.  
**motoensis** Lee, 1978: 75 (1979a: 102). China (Tibet).  
**nielamensis** Liu and Deng, 2000: 246. China (Tibet).  
**nigritus** Fei and Lee, 1984b: 345. China (Inner Mongolia).  
**nudipalpis** Delfinado, 1961: 655. Philippines.  
**nujiangensis** Liu, 1990: 59. China (Yunnan).  
**nupurius** Kanasugi and Kitaoka, 2001: 227. Japan.  
**obscurus** Tokunaga and Murachi, 1959: 347. Belau (USA).  
*pungens* de Meijere, 1909: 200 (preoccupied by *Culicoides pungens* (Kieffer, 1901a)). Indonesia.  
**obsoletus** (Meigen, 1818): 76 (*Ceratopogon*). Europe.  
*varius* (Winnertz, 1852): 35 (*Ceratopogon*). Germany.  
*yezoensis* (Matsumura, 1911): 60 (*Ceratopogon*). Russia (Sakhalin Oblast).  
*lacteinervis* Kieffer, 1919a: 47. Slovak Republic, Ukraine.  
*rivicola* Kieffer, 1921a: 56. Germany.  
*clavatus* Kieffer, 1921a: 56. Germany.  
*heterocerus* Kieffer, 1921a: 57. Germany.  
*pegobius* Kieffer, 1922c: 235. Germany.  
*kabyliensis* Kieffer, 1922g: 505. Algeria.  
*concitus* Kieffer, 1922e: 71. Germany.  
*intermedius* Okada, 1941: 22 (as variety of *obsoletus* Meigen, preoccupied by *Dasyhelea intermedia* (Santos Abreu, 1918)). Japan.  
*shintrensis* Cambournac, 1956: 591. Portugal.  
*seimi* Shevchenko, 1967: 173. Ukraine.  
**odiosus** Kieffer, 1910: 192. India.  
**orientalis** Macfie, 1932b: 490. Malaysia.  
*nayabazari* Das Gupta, 1963: 35. India.  
**orjuelai** Wirth and Lee, 1967: 6. Colombia.  
**palauensis** Tokunaga, in Tokunaga and Murachi 1959: 348. Belau (USA).  
**pastus** Kitaoka, 1980: 11. Japan.  
**pechumani** Cochrane, 1974: 133. USA (New York).  
**pelius** Liu and Yu, 1990b: 23. China (Tibet).  
**pseudopallidipennis** Clastrier, 1958b: 197. Senegal.  
**puracensis** Wirth and Lee, 1967: 7. Colombia.  
**pusilloides** Wirth and Blanton, 1955a: 104. Panama.  
**pusillus** Lutz, 1913: 52. Brazil (Rio de Janeiro).  
**qionghaiensis** Yu and Liu, 1990: 4. China (Sichuan).  
**ruiliensis** Lee, 1980: 86. China (Yunnan).  
**sanguisuga** (Coquillett, 1901a): 604 (*Ceratopogon*). USA (Maryland).  
**scoticus** Downes and Kettle, 1952: 65. Great Britain.  
**sikkimensis** Das Gupta, 1963: 35. India.  
**sinanoensis** Tokunaga, 1937a: 331. Japan.  
*obsoletiformis* Amosova, 1957: 233. Russia (Primorsky Krai).  
**sousadiasi** Caeiro, 1961: 309. Angola.  
**suarezi** Rodriguez and Wirth, 1986: 313. Colombia.  
**suiyangensis** Hou, Han, Lv and Jiang, 2014: 98. China (Guizhou).

**suzukii** Kitaoka, 1973: 212. Japan.  
**tainanus** Kieffer, 1916b: 114. Taiwan.  
*maculatus* (Shiraki, 1913): 294 (*Ceratopogon*, preoccupied by *Atrichopogon maculatus* (Lundström, 1910)). Taiwan.  
*kii* Tokunaga, 1937a: 284. Japan.  
*sigaensis* Tokunaga, 1937a: 322. Japan.  
*kyotoensis* Tokunaga, 1937a: 329. Japan.  
*suborientalis* Tokunaga, 1951: 106. Indonesia.  
**tibetensis** Chu, 1977: 102. China (Tibet).  
**tororoensis** Khamala and Kettle, 1971: 48. Uganda.  
**trifasciellus** Goetghebuer, 1935d: 175. Democratic Republic of the Congo.  
**trimaculatus** McDonald and Lu, 1972: 415. Taiwan.  
**tuttifrutti** Meiswinkel and Linton 2003: 42. South Africa.  
**wadai** Kitaoka, 1980: 14. Japan.  
**wandashanensis** Wang and Liu, 1999: 328. China (Heilongjiang).  
**yamii** Lien, Lin and Weng, 1998b: 57. Taiwan.  
**yuchihensis** Lien, Lin and Weng, 1998b: 58. Taiwan.

### Subgenus BELTRANMYIA Vargas

**BELTRANMYIA** Vargas, 1953: 34 (as subgenus of *Culicoides*). Type species: *Culicoides crepuscularis* Malloch, by original designation.

**alaskensis** Wirth, 1951a: 84. USA (Alaska).  
**bermudensis** Williams, 1956: 298. Bermuda (Great Britain).  
**chagyabensis** Lee, 1982: 169. China (Tibet).  
**charadraeus** Arnaud, 1956a: 97. Japan.  
**chengduensis** Zhou and Lee, 1984a: 222. China (Sichuan).  
**circumscriptus** Kieffer, 1918a: 49. Tunisia.  
*nadayanus* Kieffer, 1918a: 95. Turkey.  
*edwardsi* Goetghebuer, 1921: 177. Belgium.  
*algarum* Kieffer, 1924a: 18. Germany.  
*salicola* Kieffer, 1924b: 405. Norway.  
*pictidorsum* Kieffer, 1924b: 406 (as variety of *salicola* Kieffer). Norway.  
*albonotatus* Vimmer, 1932: 133 (preoccupied by *Culicoides albonotatus* Kieffer, 1918a). Israel.  
*albosignatus* Vimmer, 1932: 135. Israel.  
*polymaculatus* Vimmer, 1932: 135. Israel.  
*pulcher* Zilahi-Sebess, 1934: 155 (misspelled as *pulscher*). Bulgaria.  
*kirovabadicus* Dzhafarov, 1964: 228. Azerbaijan.  
*matsuensis* Lien, Weng and Lin, 1996b: 20 (valid subspecies of *circumscriptus*). Taiwan.  
*meridionalis* Xue, Liu and Yu, 2003: 112 (valid subspecies of *circumscriptus*). China (syntypes from numerous southeastern provinces).  
**corniculus** Liu and Qu, 1981: 419. China (Yunnan).  
*apiculatus* Yu and Zhang, in Yu 1988: 134. China (Yunnan).  
**crepuscularis** Malloch, 1915a: 303. USA (Illinois).  
**cyancus** Liao, Wang and Yu, 2015: 52. China (Sichuan).  
**desertorum** Gutsevich, 1959: 675. Turkmenistan.  
*pictus* Khalaf, 1961: 455. Iraq.  
*brevifrontis* Smatov and Isimbekov, 1971: 62. Kazakhstan.  
*oxianus* Smatov, in Smatov and Kravets 1976: 282. Kazakhstan.  
**donggangensis** Liu, Zhou and Wu, 2007: 211. China (Liaoning).  
**duodenarius** Kieffer, 1922b: 157. Taiwan.  
**gluchovae** Mirzaeva, 1974: 27. Russia (Republic of Buryatia).

**halonostictus** Wirth and Hubert, 1989: 431. Thailand.  
**hollensis** (Melander and Brues, 1903): 13 (*Ceratopogon*). USA (Massachusetts).  
*canithorax* Hoffman, 1925: 284. USA (Georgia).  
**homochrous** Remm, in Remm and Zhogolev 1968: 835. Ukraine.  
**hongxingensis** Yang and Liu, in Yang *et al.* 2016: 47. China (Heilongjiang).  
**huayingensis** Zhou and Lee, 1984b: 293. China (Sichuan).  
**japonicus** Arnaud, 1956a: 106. Japan.  
*litoreus* Amosova, 1957: 241. Russia (Primorsky Krai).  
**knowltoni** Beck, 1956: 136. USA (Florida).  
**koreensis** Arnaud, 1956a: 109. South Korea.  
*palustris* Amosova, 1957: 243. Russia (Primorsky Krai).  
**liubaensis** Liu and Wu, 2005: 448. China (Shaanxi).  
**luobeiensis** Liang and Liu, in Liang *et al.* 2014: 553. China (Heilongjiang).  
**manchuriensis** Tokunaga, 1941b: 98. China (Heilongjiang).  
*setiger* Goetghebuer, 1938: 379 (preoccupied by *Dasyhelea setigera* (Kieffer, 1910)). Belgium.  
*goetghebueri* Arnaud, 1956b: 94. New name for *setiger* Goetghebuer.  
*machardy* Campbell and Pelham-Clinton, 1960: 235. Great Britain.  
*ochraceimaculatus* Shevchenko, 1970b: 8. Ukraine.  
*ochraceipennis* Shevchenko, 1970b: 9. Ukraine.  
*mesostigma* Remm, 1971: 201. Russia (Primorsky Krai).  
*vistulensis* Skierska, 1973: 289. Poland.  
**mississippiensis** Hoffman, 1926a: 158. USA (Mississippi).  
**multifidous** Liu and Yu, in Yu *et al.* 2005a: 1241. China (Heilongjiang).  
**musajevi** Dzhafarov, 1961c: 75. Azerbaijan.  
**navaiae** Lane, 1983: 534. Saudi Arabia.  
**nivosus** de Meillon, 1937b: 341. South Africa.  
**pallidulus** Yu, 1991: 52. New name for *obscuratus* Ding and Yu.  
*obscuratus* Ding and Yu, 1990: 54 (preoccupied by *Culicoides obscuratus* Statz, 1944). China (Liaoning).  
**pseudosalinarius** Chu, 1981: 309. China (Shandong).  
**pulchellus** Liu and Zhao, 1998: 12. China (Jiangxi).  
**qabdoensis** Lee, 1979a: 103. China (Tibet).  
**salinarius** Kieffer, 1914a: 236. Germany.  
*halobius* Kieffer, 1914a: 237. Germany.  
*meinerti* Kieffer, 1915c: 284. Denmark.  
*punctatidorsum* Kieffer, 1924a: 17. Germany.  
**shanghaiensis** Qu, Cao and Liu, 2010: 322. China (Shanghai).  
**shenyangensis** Wen, Cao and Liu, 2017: 476. China (Liaoning).  
**sibiricus** Mirzaeva, 1964: 218. Russia (Tomsk Oblast).  
**sphagnumensis** Williams, 1955: 269. USA (Michigan).  
*laticola* Arnaud, 1956a: 110 (as *laciocola*). Japan.  
*carjalaensis* Glukhova, 1957: 249. Russia (Republic of Karelia).  
**stellaris** Yu and Liu, 1990: 6. China (Chongqing).  
**subarakawae** Yu and Zou, in Hao *et al.* 1990: 41. China (Guangxi).  
**subcircumscriptus** Yu, 1982: 202. China (Liaoning).  
**superflutheca** Yu and Li, in Yu *et al.* 1986: 210. China (Sichuan).  
**suspectus** Zhou and Lee, 1984b: 294. China (Sichuan).  
**tessellatus** Yu, 1982: 202. China (Liaoning).  
**toyamaruae** Arnaud, 1956a: 133. Japan.  
**wisconsinensis** Jones, 1956: 32. USA (Wisconsin).  
**wushenensis** Lee (as Li), 1974: 353. China (Inner Mongolia).  
**xunkeensis** Yang, Li and Liu, 2011: 154. China (Heilongjiang).  
**yigongensis** Liu and Deng, 2010: 578. China (Tibet).

### Subgenus COTOCRIPUS Brèthes

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

**bambusicola** Lutz, 1913: 62. Brazil (Rio de Janeiro).

*bahiensis* Barbosa, 1947: 11. Brazil (Bahia).

**caridei** (Brèthes, 1912): 452 (*Cotocripus*). Argentina (Buenos Aires).

*setifer* (Lutz, 1913): 64 (*Centrorhynchus*). Brazil (Rio Grande do Sul).

**gabrieli** Spinelli, Santamaría, Cabrera, Ronderos and Suárez, 2009a: 82. Colombia.

**irwini** Spinelli and Wirth, 1984a: 180. Chile.

**patagoniensis** Ronderos and Spinelli, 1997: 34. Argentina (Chubut).

**raposoensis** Wirth and Barreto, 1978: 561. Colombia.

### Subgenus CULICOIDES Latreille

**SILVICOLA** Mirzaeva and Isaev, 1990: 98 (as subgenus of *Culicoides*). Type species: *Culicoides grisescens* Edwards, by original designation.

**almeidae** Cambournac, 1970b: 251. Portugal.

**angkaensis** Kitaoka, Takaoka and Choochote, 2005: 285. Thailand.

**aomoriensis** Kitaoka, 1991: 289. Japan.

**aterinervis** Tokunaga, 1937a: 312. Japan.

**boyi** Nielsen, Kristensen and Pape, 2015: 3. Denmark.

**brucei** Austen, 1909: 282. Uganda.

*pseudopulicaris* Goetghebuer, 1935d: 173. Democratic Republic of the Congo.

*hirtius* de Meillon and Lavoipierre, 1944: 58. South Africa.

**bysta** Sarvašová and Mathieu, in Sarvašová *et al.* 2017: 5. Slovak Republic.

**choochotei** Kitaoka and Takaoka, in Kitaoka *et al.* 2005: 287. Thailand.

**cockerellii** (Coquillett, 1901a): 603 (*Ceratopogon*). USA (Colorado).

**cryptipulicaris** Talavera, Muñoz-Muñoz, Verdún and Pagés, 2017: 181. Spain.

**danzhouensis** Liu and Liang, in Liu *et al.* 2019: 439. China (Hainan).

**delta** Edwards, in Edwards *et al.* 1939: 48. Great Britain.

*lupicaris* Downes and Kettle, 1952: 76. Great Britain.

**dubius** Arnaud, 1956a: 100. Japan.

**elutus** Macfie, 1948: 75. Mexico (Chiapas).

**enpingensis** Wu and Liu, in Wu *et al.* 2018: 287. China (Guangdong).

**fagineus** Edwards, in Edwards *et al.* 1939: 147. Great Britain.

**flavipulicaris** Dzhafarov, 1964: 238. Azerbaijan.

**flavus** Gornostaeva, 1980: 81 (as subspecies of *grisescens* Edwards). Russia (Republic of Khakassia).

*flavisomum* Mirzaeva, 1984b: 67. Russia (Republic of Buryatia).

*anadyriensis* Mirzaeva, 1984b: 70. Russia (Chukotka Autonomous Okrug).

**fortinensis** Spinelli and Huerta, 2015: 812. Mexico (Veracruz).

**freeborni** Wirth and Blanton, 1969b: 217. USA (California).

**frohnei** Wirth and Blanton, 1969b: 219. USA (Alaska).

**gregsoni** Wirth and Blanton, 1969b: 222. Canada (British Columbia).

**grisescens** Edwards, in Edwards *et al.* 1939: 146. Great Britain.

*remmi* Damian-Georgescu, 1972: 16. Romania.

*arschanicus* Mirzaeva, 1984b: 69. Russia (Republic of Buryatia).

**hondurensis** Spinelli and Borkent, 2004a: 369. Honduras.

**hulinensis** Liu and Yu, 1996a: 135 (Liu *et al.* 1999a: 341). China (Heilongjiang).

**impunctatus** Goetghebuer, 1920: 55. Belgium.

*minor* Tokunaga, 1941b: 97 (as variety of *impunctatus* Goetghebuer). China (Heilongjiang).

**kalix** Nielsen, Kristensen and Pape, 2015: 9. Sweden.  
**kelinensis** Lee, 1978: 58 (1979a: 99). China (Tibet).  
**kirinensis** Lee, 1976: 47. China (Jilin).  
**lahontan** Wirth and Blanton, 1969b: 223. USA (California).  
**lanyuensis** Kitaoka and Tanaka, 1985: 39. Taiwan.  
**lungchiensis** Chen and Tsai, 1962: 397 (as subspecies of *peregrinus* Kieffer). China (Fujian).  
*megaforticeps* Kitaoka, 1973: 212. Japan.  
**lushuiensis** Liu and Feng, in Feng, *et al.* 2018: 629. China (Hunnan).  
**luteovenus** Root and Hoffman, 1937: 156. Mexico (Mexico City).  
**magnus** Colaco, 1946: 219, 237 (as variety of *hirtius* de Meillon and Lavoipierre). South Africa.  
**mathisi** Giles and Wirth, 1983: 36. Sri Lanka.  
**mcdonaldi** Wirth and Hubert, 1989: 224. New name for *monticola* McDonald and Lu.  
*monticola* McDonald and Lu, 1972: 413 (as subspecies of *pulicaris* Linnaeus, preoccupied by *Culicoides monticola* Wirth and Lee, 1967). Taiwan.  
**neofagineus** Wirth and Blanton, 1969b: 227. USA (Arizona).  
**neomontanus** Wirth, 1976c: 15. New name for *montanus* Wirth and Blanton.  
*montanus* Wirth and Blanton, 1969b: 225 (preoccupied by *Culicoides montanus* Shakirzjanova, 1962). USA (Utah).  
**neopulicaris** Wirth, 1955: 355. USA (Texas).  
**newsteadi** Austen, 1921: 113. Israel.  
*biclavatus* Kieffer, 1924a: 14. Germany.  
*halophilus* Kieffer, 1924b: 404. Norway.  
*edwardsi* Goetghebuer, 1933f: 46 (as variety of *pulicaris* Linnaeus, preoccupied by *Culicoides edwardsi* Goetghebuer, 1921). Europe.  
*edwardsianus* Goetghebuer, 1933d: 367 (as variety of *pulicaris* Linnaeus). Great Britain.  
**nipponensis** Tokunaga, 1955: 4. Japan.  
**padusae** Mirzaeva, 1989: 87 (1990: 90). Russia (Republic of Buryatia).  
**papilliger** Borkent, in Borkent and Wirth 1997: 78. New name for *papillatus* Kitaoka and Shinonaga.  
*papillatus* Kitaoka and Shinonaga, 1989: 26 (preoccupied by *Culicoides papillatus* Khamala and Kettle, 1971). Pakistan.  
**paradoxalis** Ramilo and Delécolle, in Ramilo *et al.* 2013: 244. France.  
**paraimpunctatus** Borkent, 1995: 60. New name for *canadensis* Wirth and Blanton.  
*canadensis* Wirth and Blanton, 1969b: 211 (preoccupied by *Culicoides canadensis* (Boesel, 1937)). USA (Minnesota).  
**pulicaris** (Linnaeus, 1758): 603 (*Culex*). Europe.  
*setosinervis* Kieffer, 1913a: 8. Germany.  
*pullatus* Kieffer, 1915a: 474. Germany.  
*stephensi* Carter, 1916: 135. Egypt.  
*cinerellus* Kieffer, 1919a: 40. Ukraine.  
*quinquepunctatus* Goetghebuer, 1921: 177. Belgium.  
*flaviplumus* Kieffer, 1924a: 19. Germany.  
*sawamotoi* Kono and Takahasi, 1940: 75. Russia (Sakhalin Oblast).  
**punctatus** (Meigen, 1804): 29 (*Ceratopogon*). Europe.  
*punctatus* Latreille, 1809: 252 (preoccupied by *Culicoides punctatus* (Meigen, 1804)). France.  
*ocellaris* Kieffer, 1921d: 276 (as variety of *pulicaris* Linnaeus). Latvia.  
*kasachstanicus* Shakirzjanova, 1963: 63 (as subspecies of *pulicaris* Linnaeus). Kazakhstan.  
**putianensis** Lee, 1988: 96. China (Fujian).  
**quasipulicaris** Talavera, Muñoz-Muñoz, Verdún and Pagés, 2017: 184. Spain.  
**qufuensis** Xue and Yu, in Xue *et al.* 1992: 52. China (Shandong).  
**quqiaoensis** Chen, in Lee 1988: 99. China (Fujian).  
**rulfoi** Spinelli and Huerta, 2015: 816. Mexico (Michoacán).  
**saltonensis** Wirth, 1952a: 173 (as subspecies of *cockerellii* Coquillett). USA (California).

**selandicus** Nielsen, Kristensen and Pape, 2015: 6. Denmark.  
**sellersi** Boorman and Dipeolu, 1979: 55. Nigeria.  
**sierrensis** Wirth and Blanton, 1969b: 232. USA (California).  
**sommermanae** Wirth and Blanton, 1969b: 234. USA (Alaska).  
**sordidellus** (Zetterstedt, 1838): 820 (*Ceratopogon*). Greenland (Denmark).  
**subfagineus** Delécolle and Ortega, 1998: 285. Spain.  
**subpunctatus** Liu and Yu, 1996a: 137 (Liu *et al.* 1999a: 341). China (Xinjiang).  
**tahemanensis** Liu and Ma, 2001: 199. China (Xinjiang).  
**tayulingensis** Chen, 1988: 153. Taiwan.  
**tienshiangensis** Chen, 1988: 153. Taiwan.  
**tristriatulus** Hoffman, 1925: 294 (as variety of *cockerellii* Coquillett). USA (California).  
**yukonensis** Hoffman, 1925: 291. Canada (Yukon Territory).  
**yunanensis** Chu and Liu, 1978: 81. China (Yunnan).

### Subgenus **DIPHAOMYIA** Vargas

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

**baueri** Hoffman, 1925: 297. USA (Maryland).  
**bergi** Cochrane, 1973: 311. USA (New York).  
**blantoni** Vargas and Wirth, 1955: 33. Mexico (Tamaulipas).  
**defoliarti** Atchley and Wirth, 1979: 527. USA (Arizona).  
**edeni** Wirth and Blanton, 1974a: 23. USA (Florida).  
**erikae** Atchley and Wirth, 1979: 532. USA (New Mexico).  
**evansi** Wirth and Blanton, 1959: 342. Panama.  
**footei** Wirth and Jones, 1956: 162. USA (Virginia).  
**freitasi** Wirth and Blanton, 1973: 434. Brazil (Pará).  
**haematopotus** Malloch, 1915a: 302. USA (Illinois).  
**inyoensis** Wirth and Blanton, 1969a: 565. USA (California).  
**iriartei** Fox, 1952: 368. Venezuela.  
*vargasi* Wirth and Blanton, 1953a: 74. Panama.  
**jurbergi** Felipe-Bauer, in Felipe-Bauer *et al.* 2005: 51. Peru.  
**lisicarruni** Moncada, Carrasquilla and Spinelli, 2010: 978. Colombia.  
**marinkellei** Wirth and Lee, 1967: 13. Colombia.  
**mckeeveri** Brickle and Hagan, 1999: 39. Belize.  
**minasensis** Felipe-Bauer, 1987: 147. Brazil (Minas Gerais).  
**mirsaе** Ortiz, 1953a: 801. Venezuela.  
**mukerjii** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 125. India.  
**peculiaris** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 127. India.  
**ronderosae** Spinelli and Borkent, 2004a: 377. Costa Rica.  
**soleamaculatus** Nandi and Mazumdar, 2014a: 468. India.  
**tarapaca** Spinelli and Wirth, 1984a: 184. Chile.

### Subgenus **DRYMODESMYIA** Vargas

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

**arizonensis** Wirth and Hubert, 1960a: 655. USA (Arizona).  
**bakeri** Vargas, 1954: 27. Mexico (Mexico City).  
**borinqueni** Fox and Hoffman, 1944: 110. Puerto Rico (USA).

**bredini** Wirth and Blanton, 1970b: 41. Dominica.  
**butleri** Wirth and Hubert, 1960a: 650. USA (Arizona).  
**byersi** Atchley, 1967: 983. USA (New Mexico).  
**cacticola** Wirth and Hubert, 1960a: 653. USA (California).  
**chacoensis** Spinelli and Wirth, 1984a: 174. Argentina (Salta).  
**copiosus** Root and Hoffman, 1937: 171. Mexico (Mexico City).  
**haitiensis** Delécolle, Raccurt and Rebholtz, 1986: 108. Haiti.  
**hinmani** Khalaf, 1952b: 353. USA (Oklahoma).  
**hitchcocki** Spinelli and Wirth, 1984a: 176. Peru.  
**insolatus** Wirth and Hubert, 1960a: 654. Mexico (Baja California).  
**jamaicensis** Edwards, 1922: 165 (as variety of *loughnani* Edwards). Jamaica.  
**jonesi** Wirth and Hubert, 1960a: 650. USA (Texas).  
**loughnani** Edwards, 1922: 165. Jamaica.  
**panamensis** Barbosa, 1947: 22. Panama.  
     *alambicorum* Macfie, 1948: 81. Mexico (Chiapas).  
**pilosus** Wirth and Blanton, 1959: 332. Panama.  
**poikilonotus** Macfie, 1948: 82. Mexico (Chiapas).  
     *cacozelus* Macfie, 1948: 85. Mexico (Chiapas).  
     *hertigi* Wirth and Blanton, 1953b: 229. Panama.  
**ryckmani** Wirth and Hubert, 1960a: 656. USA (California).  
**saltaensis** Spinelli and Wirth, 1984a: 183. Argentina (Salta).  
**sitiens** Wirth and Hubert, 1960a: 652. USA (California).  
**torridus** Wirth and Hubert, 1960a: 654. Mexico (Baja California).  
**uruguayensis** Ronderos, 1990a: 117. Uruguay.  
**wirthomyia** Vargas, 1953b: 227. Mexico (Guerrero).

#### Subgenus FASTUS Liu

**FASTUS** Liu, in Yu *et al.* 2005a: 1196 (as subgenus of *Culicoides*). Type species: *Culicoides alpigenus* Yu and Liu, by original designation.

**alpigenus** Yu and Liu, in Yu *et al.* 2005a: 1197. China (Tibet).  
**changbaiensis** Qu and Ye, 1995a: 95. China (Jilin).  
**dispersus** Gutsevich and Smatov, 1966: 76. Kazakhstan.  
**erairai** Kono and Takahasi, 1940: 70. Japan.  
**haerbalingensis** Liu and Wang, in Liu *et al.* 2010a: 63. China (Jilin).  
**huochengensis** Ma and Yu, in Ma *et al.* 1990: 47. China (Tibet).  
**kangdingensis** Yu and Liu, in Yu *et al.* 2005a: 1204. China (Sichuan).  
**mingshanensis** Zhou and Liu, 2015: 63. China (Heilongjiang).  
**pingtanensis** Yu, 1982: 202. China (Fujian).  
**subchangbaiensis** Liu and Ren, in Liu *et al.* 2010a: 64. China (Jilin).  
**taipingshanensis** Liu and Guo, 2009: 50. China (Shandong).  
**zyzzamaculatus** Yu, 1982: 202. China (Hainan).

#### Subgenus GLAPHIROMYIA Vargas

**GLAPHIROMYIA** Vargas, 1960: 41 (as subgenus of *Culicoides*). Type species: *Culicoides scopus* Root and Hoffman, by original designation.

**dampfi** Root and Hoffman, 1937: 169. Mexico (Mexico City).  
**parascopus** Wirth and Blanton, 1978: 238. Mexico (Michoacan).  
**scopus** Root and Hoffman, 1937: 170. Mexico (Mexico City).

### Subgenus GROGANOMYIA Szadziewski and Dominiak

**GROGANOMYIA** Szadziewski and Dominiak, 2019: 536 (as subgenus of *Culicoides*). Type species: *Culicoides cameroni* Campbell and Pelham-Clinton, by original designation.

**cameroni** Campbell and Pelham-Clinton, 1960: 222. Great Britain.

### Subgenus HAEMOPHORUCTUS Macfie

**HAEMOPHORUCTUS** Macfie, 1925: 349. Type species: *Haemophoructus maculipennis* Macfie, by monotypy.

**boormani** Giles and Wirth, 1985: 365. Malaysia.

**calcaratus** Wirth and Hubert, 1989: 157. Malaysia.

**gemellus** Macfie, 1934c: 192. Malaysia.

**gentilis** Macfie, 1934c: 191. Malaysia.

**gentiloides** Kitaoka and Tanaka, 1985: 41. Taiwan.

**gymnopterus** Edwards, 1926b: 247. Malaysia.

**hoffmanioides** Wirth and Hubert, 1989: 173. Malaysia.

**kinari** Howarth, 1985: 44. Laos.

**kisangkini** Howarth, 1985: 47. Laos.

**maculipennis** (Macfie, 1925): 349 (*Haemophoructus*). Singapore.

**mellipes** Wirth and Hubert, 1989: 179. Malaysia.

**nitens** Edwards, 1933c: 252. Malaysia.

**nyakini** Howarth, 1985: 49. Laos.

**rariradialis** Das Gupta, 1963: 34. India.

**tawauensis** Wirth and Hubert, 1989: 161. Malaysia.

**unicus** Delfinado, 1961: 665. Philippines.

### Subgenus HAEMATOMYIDIUM Goeldi

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

**annuliductus** Wirth, in Vitale *et al.* 1981: 150. Panama.

**aragaoi** Tavares and Luna Dias, 1980: 393. Brazil (Rio de Janeiro).

**austroparaensis** Spinelli, in Spinelli *et al.* 2005: 141. Argentina (Corrientes).

**bayano** Wirth, in Vitale *et al.* 1981: 152. Panama.

**crucifer** Clastrier, 1968: 85. French Guiana (France).

**darlingtonae** Wirth and Blanton, 1971a: 39. Trinidad and Tobago.

**debilipalpis** Lutz, 1913: 60. Brazil (São Paulo).

*khalafi* Beck, 1957: 104. USA (Florida).

*ichesi* Ronderos and Spinelli, 1995b: 77. Argentina (Misiones).

**denisae** Clastrier, 1971: 290. French Guiana (France).

**diversus** Felipe-Bauer, in Felipe-Bauer *et al.* 2003: 1052. Peru.

**dureti** Ronderos and Spinelli, 1995a: 59. Paraguay.

**eadsii** Wirth and Blanton, 1971a: 37. USA (Texas).

**eldridgei** Wirth and Barreto, 1978: 561. Colombia.

**equatoriensis** Barbosa, 1952: 13 (1953: 14) (as variety of *debilipalpis* Lutz). Ecuador.

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

**filiductus** Wirth, in Vitale *et al.* 1981: 155. Panama.

**flinti** Wirth, 1982b: 251. Argentina (Entre Ríos).

**germanus** Macfie, 1940d: 27. Guyana.



**ginesi** Ortiz, 1951c: 586. Venezuela.  
**glabrior** Macfie, 1940d: 27 (as variety of *debilipalpis* Lutz). Guyana.  
*grahambelli* Forattini, 1956b: 35. Panama.  
**hoffmani** Fox, 1946a: 251. Trinidad and Tobago.  
**horticola** Lutz, 1913: 61. Brazil (São Paulo).  
*bachmanni* Spinelli, in Spinelli *et al.* 2005: 146. Argentina (Misiones).  
**imitator** Ortiz, 1953b: 808. Venezuela.  
**insinuatus** Ortiz and León, 1955: 577. Ecuador.  
**jurutiensis** Trindade and Felipe-Bauer, 2011a: 61. Brazil (Pará).  
**kampa** Felipe-Bauer, Veras and Castellon, in Felipe-Bauer *et al.* 2000a: 35. Brazil (Acre).  
**kettlei** Breidenbaugh and Mullens, 1999: 150. USA (California).  
**lahillei** (Iches, 1906): 264 (*Ceratopogon*). Argentina (Chaco).  
**limonensis** Ortiz and León, 1955: 576. Ecuador.  
**martyrius** Trindade and Felipe-Bauer, 2011a: 62. Brazil (Pará).  
**neoparaensis** Tavares and Souza, 1978: 621. Brazil (Rio de Janeiro).  
**pampaensis** Spinelli and Wirth, 1984a: 182. Argentina (La Pampa).  
**paraensis** (Goeldi, 1905): 137 (*Haematomyidium*). Brazil (Pará).  
*undecimpunctatus* Kieffer, 1917b: 307. Argentina (Tucumán).  
**peruvianus** Felipe-Bauer, in Felipe-Bauer *et al.* 2003: 1054. Peru.  
**quasiparaensis** Clastrier, 1971: 286. French Guiana (France).  
**rachoui** Tavares and Souza, 1978: 622. Brazil (Rio de Janeiro).  
**spurius** Wirth and Blanton, 1959: 433. Panama.  
**totatangae** Wirth and Blanton, 1973: 447. Brazil (Pará).  
**torreyae** Wirth and Blanton, 1971c: 73. USA (Florida).  
**youngi** Wirth and Barreto, 1978: 562. Colombia.

#### Subgenus **HOFFMANIA** Fox

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

**aitkeni** Wirth and Blanton, 1968a: 214. Trinidad and Tobago.  
**andrewsi** Causey, 1938: 410. Thailand.  
**annettae** Spinelli and Borkent, 2004a: 365. Costa Rica.  
**antioquiensis** Spinelli, Santamaría, Cabrera, Ronderos and Suárez, 2009a: 82. Colombia.  
**baniwa** Felipe-Bauer, in Felipe-Bauer *et al.* 2009: 852. Brazil (Amazonas).  
**batesi** Wirth and Blanton, 1973: 426. Brazil (Pará).  
*sanmartini* Wirth and Barreto, 1978: 553. Colombia.  
**bawanglingensis** Yu, Wang and Chen, in Wang *et al.* 2012b: 283. China (Hainan).  
**biestroi** Spinelli and Ronderos, 1991: 86. Argentina (Corrientes).  
**bimaculatus** Floch and Abonnenc, 1942b: 3. French Guiana (France).  
**brasilianum** Forattini, 1956a: 81. Brazil (São Paulo).  
**brinchangensis** Wirth and Hubert, 1989: 190. Malaysia.  
**brownei** Spinelli, in Spinelli *et al.* 1993: 24. Colombia.  
**calchaqui** Spinelli and Veggiani Aybar, in Spinelli *et al.* 2013b: 586. Argentina (Tucumán).  
**cameronensis** Kitaoka, 1983: 94. Malaysia.  
**carpophilus** Wirth and Hubert, 1989: 196. Malaysia.  
**charruus** Spinelli and Martinez, 1992: 176. Uruguay.  
**cheahi** Kitaoka, 1983: 92. Malaysia.  
**contubernalis** Ortiz and León, 1955: 574 (as variety of *rozeboomi* Barbosa). Ecuador.  
**couthoi** Barreto, 1944: 96. Brazil (São Paulo).  
**dauidi** Spinelli, in Spinelli *et al.* 1993: 30. Colombia.

**diabolicus** Hoffman, 1925: 294. Panama.  
**diffusus** Spinelli, in Spinelli *et al.* 1993: 34. Brazil (Espírito Santo).  
**divisus** Wirth and Hubert, 1989: 198. Malaysia.  
**effusus** Delfinado, 1961: 658. Philippines.  
**fernandoi** Tavares and Sousa, 1979: 611. Brazil (Rio de Janeiro).  
**ferreyrai** Ronderos and Spinelli, 1995a: 61. Argentina (Misiones).  
**filariferus** Hoffman, 1939: 172. Mexico (Chiapas).  
**flavivenulus** Costa Lima, 1937a: 418. Brazil (Rio de Janeiro).  
**foxi** Ortiz, 1950c: 461. Puerto Rico (USA).  
**franklini** Spinelli, in Spinelli *et al.* 1993: 45. Panama.  
**fusipalpis** Wirth and Blanton, 1973: 435. Brazil (Pará).  
**guttatus** (Coquillett, 1904c): 35 (*Ceratopogon*). Brazil (São Paulo).  
**heliconiae** Fox and Hoffman, 1944: 108. Venezuela.  
     *rozeboomi* Barbosa, 1947: 26. Trinidad and Tobago.  
**hirtipennis** Delfinado, 1961: 662. Philippines.  
**hylas** Macfie, 1940d: 26. Guyana.  
**ignacioi** Forattini, 1957: 215. Brazil (São Paulo).  
     *saintjusti* Tavares and Ruiz, 1980: 27. Brazil (Rio de Janeiro).  
**indianus** Macfie, 1932b: 488. India.  
     *cylindratus* Kitaoka, 1980: 16. Japan.  
**innoxius** Sen and Das Gupta, 1959a: 626. India.  
**insignis** Lutz, 1913: 51. Brazil (Bahia, Rio de Janeiro).  
     *inamollae* Fox and Hoffman, 1944: 110. Puerto Rico (USA).  
     *painteri* Fox, 1946a: 257. Honduras.  
**isoregalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 28. India.  
**jimmiensis** Tokunaga, 1959: 229. Papua New Guinea.  
**kinabaluensis** Wirth and Hubert, 1989: 211. Indonesia.  
**klossi** Edwards, 1933c: 252. Malaysia.  
**lansangensis** Howarth, 1985: 58. Laos.  
**liui** Wirth and Hubert, 1961: 20. Taiwan.  
**lutzi** Costa Lima, 1937a: 419. Brazil (Pará).  
**malayae** Macfie, 1937d: 471. Malaysia.  
**maruim** Lutz, 1913: 48. Brazil (Rio de Janeiro).  
     *recifei* Barbosa, 1947: 25. Brazil (Pernambuco).  
**neoregalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 29. India.  
**novaguineanus** Tokunaga, 1959: 223. Indonesia.  
**ocumarensis** Ortiz, 1950b: 455. Venezuela.  
**orestes** Wirth and Hubert, 1989: 222. Malaysia.  
**palpalis** Macfie, 1948: 78. Mexico (Chiapas).  
**parabubalus** Wirth and Hubert, 1989: 224. Malaysia.  
**paraignacioi** Spinelli, in Spinelli *et al.* 1993: 66. Colombia.  
**paraliui** Das Gupta, 1962a: 538. India.  
**paramalayae** Wirth and Hubert, 1989: 226. Malaysia.  
**paramaruim** Wirth and Blanton, 1973: 443. Brazil (Pará).  
**pararegalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 28. India.  
**parauapebensis** Trindade and Felipe-Bauer, 2011b: 42. Brazil (Pará).  
**peregrinus** Kieffer, 1910: 191. India.  
     *judicandus* Bezzi, 1916: 8 (1917: 108). Philippines.  
     *esmoneti* Salm, 1917b: 136. Indonesia.  
     *philippinensis* Kieffer, 1921g: 564. Philippines.  
     *assamensis* Smith and Swaminath, 1932: 183 (as variety of *peregrinus* Kieffer). India.  
     *quadratus* Tokunaga, 1951: 108. Indonesia.

**perijaensis** Perruolo, 2006b: 27. Venezuela.  
**pikongkoi** Howarth, 1985: 51. Laos.  
**plaumanni** Spinelli, in Spinelli *et al.* 1993: 69. Argentina (Chaco).  
**polypori** Wirth and Blanton, 1968a: 212. Panama.  
**pseudodiabolicus** Fox, 1946a: 256. Trinidad and Tobago.  
**pseudoheliconiae** Felipe-Bauer, in Felipe-Bauer *et al.* 2008a: 260. Peru.  
**pseudoregalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 30. India.  
**quasiregalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 30. India.  
**recurvus** Delfinado, 1961: 663. Philippines.  
**regalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 31. India.  
**ruizi** Forattini, 1954a: 189. Brazil (Goiás).  
**spiculae** Howarth, 1985: 53. Laos.  
**subregalis** Majumdar and Das Gupta, in Majumdar *et al.* 1997: 31. India.  
**sumatrae** Macfie, 1934c: 190 (1934d: 215). Malaysia.  
     *amamiensis* Tokunaga, 1937a: 325. Japan.  
     *kagiensis* Tokunaga, 1937a: 327. Taiwan.  
     *ohmorii* Takahashi, 1958: 113 (as subspecies of *amamiensis* Tokunaga). Japan.  
     *assimilis* Delfinado, 1961: 660. Philippines.  
**tenuifasciatus** Wirth and Hubert, 1989: 243. Malaysia.  
**tidwelli** Spinelli, in Spinelli *et al.* 1993: 74. Colombia.  
**travassosi** Forattini, 1957: 198. Brazil (Pará).  
**trimaculipennis** Wirth and Hubert, 1989: 245. Malaysia.  
**trinidadensis** Hoffman, 1925: 286. Trinidad and Tobago.  
     *oliveri* Fox and Hoffman, 1944: 108. Haiti.  
     *wokei* Barbosa, 1947: 28 (preoccupied by *Culicoides wokei* Fox, 1947). Panama.  
     *diminutus* Barbosa, 1951: 163. New name for *wokei* Barbosa.  
**venustus** Hoffman, 1925: 290. USA (Maryland).  
**verecundus** Macfie, 1948: 76. Mexico (Chiapas).  
**xanifer** Wirth and Blanton, 1968a: 210. Panama.

### Subgenus JILINOCOIDES Chu

**JILINOCOIDES** Chu, 1983: 28 (as subgenus of *Culicoides*). Type species: *Culicoides dunhuaensis* Chu, by original designation.

**dunhuaensis** Chu, 1983: 28. China (Jilin).  
**guangxiensis** Liu and Hao, 2003: 139. China (Guangxi).  
**mihunensis** Chu, 1983: 29. China (Jilin).  
**minimaporus** Liu and Yu, in Yu *et al.* 2005a: 890. China (Tibet).  
**mohanensis** Liu, in Liu *et al.* 2017b: 48. China (Yunnan).

### 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.  
     *amazonius* Macfie, 1935a: 52. Brazil (Pará).  
**willistoni** Wirth and Blanton, 1953c: 116. Panama.

### Subgenus MARKSOMYIA Bellis and Dyce

**MARKSOMYIA** Bellis and Dyce, 2011: 36 (as subgenus of *Culicoides*). Type species: *Culicoides marksi* Lee and Reye, by original designation.

- dycei** Lee and Reye, 1953: 390. Australia (New South Wales).
- kayi** Bellis and Dyce, 2011: 46. Australia (Western Australia).
- marksi** Lee and Reye, 1953: 392. Australia (New South Wales).
- parvimaculatus** Lee and Reye, 1953: 391. Australia (New South Wales).
- pseudostigmatus** Tokunaga, 1959: 234. Indonesia.
- zentae** Bellis and Dyce, 2011: 44. Australia (Queensland).

### Subgenus MATAEMYIA Vargas

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

- albuquerquei** Wirth and Blanton, 1973: 424. Brazil (Pará).
- aldomari** Felipe-Bauer and Trindade, in Felipe-Bauer *et al.* 2013: 56. Brazil (Pará).
- avilaensis** Ortiz and Mirsa, 1951: 593. Venezuela.
- azureus** Wirth and Blanton, 1959: 377. Panama.
- barthi** Tavares and Souza, 1978: 619. Brazil (Rio de Janeiro).
- bricenoi** Ortiz, 1951a: 445. Venezuela.
- cuiabai** Wirth, 1982b: 250. Brazil (Mato Grosso).
- dalessandroi** Wirth and Barreto, 1978: 556. Colombia.
- daviesi** Wirth and Blanton, 1968b: 251. Guyana.
- dicourus** Wirth and Blanton, 1955b: 123. Panama.
- discrepans** Ortiz and Mirsa, 1951: 595. Venezuela.
- felippebaueri** Spinelli, in Spinelli *et al.* 2007: 660. Brazil (Amazonas).
- huaynacapaci** Felipe-Bauer, in Felipe-Bauer *et al.* 2008b: 308. Peru.
- lenti** Tavares and Luna Dias, 1980: 396. Brazil (Rio de Janeiro).
- macieli** Tavares and Ruiz, 1980: 29. Brazil (Rio de Janeiro).
- mojingaensis** Wirth and Blanton, 1953b: 232. Panama.
- sherlocki** Felipe-Bauer and Trindade, in Felipe-Bauer *et al.* 2013: 56. Brazil (Pará).
- volcanensis** Wirth and Blanton, 1959: 389. Panama.
- wallacei** Wirth and Blanton, 1973: 449. Brazil (Pará).

### Subgenus MEIJEREHELEA Wirth and Hubert

**MEIJEREHELEA** Wirth and Hubert, 1961: 23 (as subgenus of *Culicoides*). Type species: *Ceratopogon guttifer* de Meijere, by original designation.

- arakawae** (Arakawa, 1910): 411 (*Ceratopogon*, as *arakanae*, misspelling). Japan.
  - sugimotoi* Shiraki, 1913: 286. Taiwan.
  - alboguttatus* Kieffer, 1921g: 563. Taiwan.
  - shimai* (Sasaki, 1928): 687 (*Ceratopogon*). Japan.
  - daleki* Smith and Swaminath, 1932: 185. India.
  - micropunctatus* Tokunaga, 1951: 105. Indonesia.
  - niigataensis* Takahashi, 1958: 115 (as variety of *arakawae* Arakawa). Japan.
- distinctipennis** Austen, 1912: 101. Nigeria.
  - multiguttatus* (Goetghebuer, 1935d): 156 (*Forcipomyia*). Democratic Republic of the Congo.
- guttifer** (de Meijere, 1907): 209 (*Ceratopogon*). Indonesia.
- hegneri** Causey, 1938: 402. Thailand.

- hildae** Cornet and Nevill, 1979: 179. South Africa.
- histrion** Johannsen, 1946: 190 (as variety of *guttifer* de Meijere). Guam (USA).  
*mackayensis* Lee and Reye, 1953: 383. Australia (Queensland).
- isechnoensis** Glick, 1990: 108. Kenya.
- leucostictus** Kieffer, 1911c: 340. Seychelles.  
*praetermissus* Carter, Ingram and Macfie, 1920: 240. Ghana.  
*egypti* Macfie, 1924: 66 (as variety of *distinctipennis* Austen). Egypt.  
*pharao* Kieffer, 1925e: 259. Egypt.
- magnithecalis** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 124. India.
- prolixipalpis** Wirth and Hubert, 1989: 426. Malaysia.
- pyncostictus** Ingram and Macfie, 1925: 284. Malawi.  
*alexis* de Meillon, 1936: 147. South Africa.  
*meeserellus* de Meillon, 1936: 151. South Africa.  
*hysipyles* de Meillon, 1936: 156. South Africa.

### Subgenus MONOCULICOIDES Khalaf

- MONOCULICOIDES** Khalaf, 1954: 39 (as subgenus of *Culicoides*). Type species: *Ceratopogon nubeculosus* Meigen, by original designation.
- STIGMOCULICOIDES** Isaev, 1988: 15 (as subgenus of *Culicoides*). Type species: *Culicoides stigma* (Meigen), by original designation.
- aihuiensis** Wu, Jiao and Liu, 2019: 96. China (Heilongjiang).
- combinotheca** Yu and Liu, in Yu *et al.* 1986: 211. China (Sichuan).
- cornutus** de Meillon, 1937b: 332. South Africa.
- digitalis** Remm, 1973: 178. Mongolia.
- erkaensis** Yu and Yang, in Yu 1988: 135. China (Inner Mongolia).
- expallens** Remm, 1973: 176. Mongolia.
- grandensis** Grogan and Phillips, 2008: 197. USA (Utah).
- heiheensis** Li, Zhang and Liu, 2011: 363. China (Heilongjiang).
- helveticus** Callot, Kremer and Dedit, 1962a: 164. Switzerland.
- homotomus** Kieffer, 1922b: 158. Taiwan.  
*osakensis* Iwata, 1935: 7. Japan.  
*denmeadi* Causey, 1938: 403. Thailand.
- longicollis** Glukhova, 1971: 507. Ukraine.
- longlinensis** Yu, 1982: 202. China (Guangxi).  
*paradoxus* Yu and Liu, 1990: 2. China (Jiangxi).
- nanpingensis** Yu and Song, in Yu *et al.* 1986: 209. China (Sichuan).
- nubeculosus** (Meigen, 1830): 263 (*Ceratopogon*). Europe.  
*puncticollis* Goetghebuer, 1912: 205 (preoccupied by *Culicoides puncticollis* (Becker, 1903)). Belgium.  
*punctaticollis* Goetghebuer, 1920: 56. New name for *puncticollis* Goetghebuer.
- occidentalis** Wirth and Jones, 1957: 21 (as subspecies of *variipennis*). USA (California).
- parroti** Kieffer, 1922g: 502. Algeria.
- puncticollis** (Becker, 1903): 75 (*Ceratopogon*). Egypt.  
*algecirensis* (Strobl, 1900): 170 (*Ceratopogon*, as form of *pulicaris* Linnaeus). Spain. Name suppressed by ICZN Opinion 1643.  
*impressus* Kieffer, 1918a: 47. Tunisia.  
*distigma* Kieffer, 1922g: 502. Algeria.  
*donatieni* Kieffer, 1922g: 504. Algeria.  
*sciniphes* Kieffer, 1925e: 261. Egypt.  
*bipunctatus* Vimmer, 1932: 133. Israel.  
*griseovittatus* Vimmer, 1932: 133. Israel.

- tripunctatus* Vimmer, 1932: 137. Israel.  
*flavitaris* Vimmer, 1932: 137. Israel.  
*wenigi* Vimmer, 1932: 138. Israel.  
*luteosignatus* Vimmer, 1932: 140. Israel.  
*vavrai* Vimmer, 1932: 140. Israel.
- riethi** Kieffer, 1914a: 237. Germany.  
*cordatus* Kieffer, 1921h: 114 (1921d: 275). Latvia.  
*crassiforceps* Kieffer, 1924a: 15. Germany.  
*gigas* Root and Hoffman, 1937: 172. Canada (Saskatchewan).
- shemanchuki** Grogan and Lysyk, 2015: 3. Canada (Alberta).
- sonorensis** Wirth and Jones, 1957: 18 (as subspecies of *variipennis* Coquillett). USA (Arizona).  
*albertensis* Wirth and Jones, 1957: 17 (as subspecies of *variipennis* Coquillett). Canada (Alberta).  
*australis* Wirth and Jones, 1957: 15 (as subspecies of *variipennis* Coquillett). USA (Louisiana).
- stigma** (Meigen, 1818): 73 (*Ceratopogon*). Europe.  
*kiefferi* Goetghebuer, 1910: 96. Belgium.  
*cordiformitarsis* Carter, 1916: 134. Egypt.  
*unimaculatus* Goetghebuer, 1920: 57. Unnecessary new name for *kiefferi* Goetghebuer.  
*stigmoides* Callot, Kremer and Dedit, 1962a: 166. France.
- taonanensis** Ren, Wang and Liu, 2006: 388. China (Jilin).
- variipennis** (Coquillett, 1901a): 602 (*Ceratopogon*). USA (Virginia).
- xinghaiensis** Yu, 1982: 202. China (Qinghai).

#### Subgenus NULLICELLA Lee

**NULLICELLA** Lee, 1982: 165 (as subgenus of *Culicoides*). Type species: *Culicoides lasaensis* Lee, (by original designation).

**lasaensis** Lee, 1978: 63 (1979a: 100). China (Tibet).

#### Subgenus OECACTA Poey

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

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

**absitus** Liu and Yu, 1990b: 20. China (Tibet).

**alahialinus** Barbosa, 1952: 11 (1953: 12). Ecuador.

**alatavicus** Gutsevich and Smatov, in Smatov and Isimbekov 1971: 61. New name for *fuscus* Gutsevich and Smatov.

*fuscus* Gutsevich and Smatov, 1966: 71 (preoccupied by *Culicoides fuscus* Goetghebuer, 1952). Kazakhstan.

**albicans** (Winnertz, 1852): 41 (*Ceratopogon*). Germany.

**alexandrae** Dzhafarov, 1962a: 211. Azerbaijan.

**alishanensis** Chen, 1988: 151. Taiwan.

**altaicus** Remm, 1972: 80. Russia (Altai Republic).

**amossovae** Remm, 1971: 205. Russia (Primorsky Krai).

**arboreus** Gutsevich, 1952: 90. Russia (Primorsky Krai).

**arnaudi** Hubert and Wirth, 1961: 238. Japan.

**asiaticus** Gutsevich and Smatov, 1966: 75. Kazakhstan.

**azerbajdzhanicus** Dzhafarov, 1962a: 211. Azerbaijan.

**balikunensis** Liu and Ma, 2011: 888. China (Xinjiang).

**barbosai** Wirth and Blanton, 1956a: 161. Panama.

**besscus** Liu and Yu, 1990a: 15. China (Heilongjiang).

**beybienkoi** Dzhafarov, 1962b: 183. Azerbaijan.

**bipalus** Yu, 1991: 52. New name for *biclavatus* Deng and Yu.  
*biclavatus* Deng and Yu, in Zhang *et al.* 1990: 27 (preoccupied by *Culicoides biclavatus* Kieffer, 1924a). China (Tibet).

**brunnicans** Edwards, in Edwards *et al.* 1939: 43. Great Britain.

**caliginosus** Goetghebuer, 1952: 2. Belgium.

**cancer** Hogue and Wirth, 1968: 2. Costa Rica.

**capillosus** Borkent, in Borkent and Wirth 1997: 64. New name for *hirtus* Xue and Yu.  
*hirtus* Xue and Yu, in Zhang *et al.* 1990: 30 (preoccupied by *Culicoides hirtus* de Meillon and Lavoipierre, 1944). China (Tibet).

**cassideus** Zhang and Yu, in Zhang *et al.* 1990: 27. China (Tibet).

**causeyi** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 127. India.

**cheni** Kitaoka and Tanaka, 1985: 43. Taiwan.

**chitinosus** Gutsevich and Smatov, 1966: 67. Kazakhstan.

**claggi** Tokunaga, in Tokunaga and Murachi 1959: 338. Japan (Bonin Islands).

**clintoni** Boorman, 1984: 164. Great Britain.

**continualis** Qu and Liu, 1982: 102. China (Yunnan).

**corsicus** Kremer, Leberre and Beaucournu-Saguez, 1971: 655. France.

**crassipilosus** Tokunaga, 1937a: 276. Japan.  
*balius* Arnaud, 1956a: 96. Japan.

**derisor** Callot and Kremer, 1965: 330. France.

**desyotoculus** Liu and Zhao, 1998: 10. China (Sichuan).

**dingriensis** Yu and Liu, in Yu *et al.* 2005a: 1056. China (Tibet).

**distinctipalpis** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 128. India.

**dukinensis** Mirzaeva, 1985: 98. Russia (Khabarovsk Krai).

**dzhafarovi** Remm, 1967: 25. Azerbaijan.  
*dzhafarovi* Callot, Kremer, Molet and Bach, 1968b: 95. France.

**firuzae** Dzhafarov, 1958: 245. Azerbaijan.

**fluvaitilis** Xiang and Yu, in Ma *et al.* 1990: 47. China (Xinjiang).

**fukienensis** Chen and Tsai, 1962: 395. China (Fujian).

**fukudai** Wada, 1990: 56. Japan.

**furcillatus** Callot, Kremer and Paradis, 1962b: 771. France.

**furens** (Poey, 1853): 238 (*Oecacta*). Cuba.  
*maculithorax* (Williston, 1896): 277 (*Ceratopogon*). St. Vincent.  
*dovei* Hall, 1932: 88. USA (Georgia).  
*birabeni* Cavalieri, 1966: 59. Venezuela.

**furensoides** Williams, 1955: 271. USA (Michigan).  
*dickei* Jones, 1956: 28. USA (Wisconsin).

**gorgasi** Wirth and Blanton, 1953b: 232. Panama.

**gracilipes** Vaillant, 1954: 227. France.

**gutsevichi** Sen and Das Gupta, 1958b: 163 (1959b: 65). New name for *orientalis* Gutsevich.  
*orientalis* Gutsevich, 1952: 92 (preoccupied by *Culicoides orientalis* Macfie, 1932b). Russia (Khabarovsk Krai).  
*bisulcatus* Gutsevich, 1959: 681. New name for *orientalis* Gutsevich.

**hainanensis** Lee, 1975: 433. China (Hainan).

**hanae** Braverman, Delécolle and Kremer, 1983: 678. Egypt.

**heilongjiangensis** Liu and Ren, in Liu *et al.* 2011c: 574. China (Heilongjiang).

**hengduanshanensis** Lee, 1984: 88. China (Yunnan).

**hokkaidoensis** Kitaoka, 1984: 303. Japan.

**horridus** Yu and Deng, in Yu 1988: 135. China (Tibet).

**iliensis** Gutsevich and Smatov, 1966: 68. Kazakhstan.

**insularis** Kitaoka, 1980: 18. Japan.

**inthanonensis** Kitaoka, Takaoka and Choochote, 2005: 288. Thailand.  
**jiulongensis** Liu and Wang, *in* Liu *et al.* 2011b: 170. China (Sichuan).  
**kaifongensis** Yu, 1982: 202. China (Henan).  
**karagiensis** Smatov and Aldabergenov, 1973: 24. Kazakhstan.  
**karakumensis** Gutsevich and Molotova, *in* Gutsevich 1973: 180. Turkmenistan.  
**kirgizicus** Glukhova, 1973: 111. Kyrgyzstan.  
**kohistanensis** Kitaoka and Shinonaga, 1989: 29. Pakistan.  
**komarovi** Mirzaeva, 1985: 99. Russia (Primorsky Krai).  
**komiensis** McDonald, Bolinguit and Lu, 1973: 641. Japan.  
**konglinensis** Yu and Kong, *in* Xue *et al.* 1992: 52. China (Shandong).  
**kugitangi** Ataev, 1976: 79. Turkmenistan.  
**kyushuensis** Wada, 1986: 146. Japan.  
**laimargus** Zhou and Lee, 1984a: 221. China (Sichuan).  
**lenae** Glushchenko and Mirzaeva, 1970: 37. Russia (Irkutsk Oblast).  
**lieni** Chen, 1979: 99. Taiwan.  
**lingshuiensis** Lee, 1975: 434. China (Hainan).  
**lini** Kitaoka and Tanaka, 1985: 46. Taiwan.  
**liukueiensis** Kitaoka and Tanaka, 1985: 47. Taiwan.  
**longipennis** Khalaf, 1957b: 348. Iraq.  
     *flavisimilis* Dzhafarov, 1964: 291. Azerbaijan.  
**lulianchengi** Chen, 1988: 152. Taiwan.  
**marcleti** Callot, Kremer and Basset, 1968a: 271. Algeria.  
**marginus** Chu, 1984: 24. New name for *marginalis* Chu and Liu.  
     *marginalis* Chu and Liu, 1978: 84 (preoccupied by *Culicoides marginalis* Lee and Reye, 1963). China (Yunnan).  
**margipictus** Qu and Wang, 1994: 487. China (Tibet).  
**menghaiensis** Lee, 1980: 87. China (Yunnan).  
**mengyuanensis** Liu and Dong, 2016: 580. China (Yunnan).  
**miharai** Kinoshita, 1918: 156. South Korea.  
**molotovae** Glukhova and Braverman, 1999: 309. Turkmenistan.  
**mongolensis** Yao, 1964: 287. China (Inner Mongolia).  
     *transcaspius* Molotova, 1966: 654. Turkmenistan.  
**morisitai** Tokunaga, 1940d: 149. China (Hebei).  
     *mihensis* Arnaud, 1956a: 115. Japan.  
     *nagahanai* Tokunaga, 1956: 119. Japan.  
**nagarzensis** Lee, 1978: 77 (1979a: 98). China (Tibet).  
**nankanensis** Lien, Weng and Lin, 1996b: 21. Taiwan.  
**nasuensis** Kitaoka, 1984: 303. Japan.  
**nibleyi** Hubert and Wirth, 1961: 237. Japan.  
**nukabirensis** Wada, 1979: 204. Japan.  
**nunomemoguri** Kitaoka, 1980: 18. Japan.  
**okazawai** Wada, 1990: 60. Japan.  
**omogensis** Arnaud, 1956a: 119. Japan.  
**orescius** Yu and Liu, *in* Yu *et al.* 2005a: 1170. China (Shanxi).  
**pakistanensis** Kitaoka and Shinonaga, 1989: 30. Pakistan.  
**pallidus** Khalaf, 1957b: 338. Iraq.  
     *stackelbergi* Dzhafarov, 1962a: 210. Azerbaijan.  
**pamiricus** Zhogolev, 1973: 185. Tajikistan.  
**paradisionensis** Boorman, 1988: 156. Greece.  
**pentamaculatus** Smatov, *in* Smatov and Kravets 1976: 283. Kazakhstan.  
**petronius** Liu and Yu, *in* Yu *et al.* 2005a: 1091. China (Tibet).  
**pictimargo** Tokunaga and Shogaki, 1953: 286. Japan.



**picturatus** Kremer and Deduit, 1961: 701. France.  
**qianshanensis** Fei, 1982: 105. China (Liaoning).  
**qinghaiensis** Fei and Lee, 1984a: 182. China (Qinghai).  
**qinglongensis** Liu, *in* Liu, 2017c: 377. China (Guizhou).  
**raoheensis** Ren and Liu, *in* Ren *et al.* 2016: 376. China (Heilongjiang).  
**ritzei** Dzhafarov, 1964: 346. Georgia.  
**sacrilegus** Xue and Yu, 1991: 53. China (Shandong).  
**saevanicus** Dzhafarov, 1960b: 94. Armenia.  
**sahariensis** Kieffer, 1923a: 678. Algeria.  
     *baghdadensis* Khalaf, 1957b: 341 (as subspecies of *similis* Carter, Ingram and Macfie). Iraq.  
     *coluzzii* Callot, Kremer and Bailly-Choumara, 1970: 710. Tunisia.  
**sajanicus** Mirzaeva, 1971: 35. Russia (Republic of Buryatia).  
**saninensis** Tokunaga, 1956: 116. Japan.  
     *epactius* Arnaud, 1956a: 102. Japan.  
     *litus* Arnaud, 1956a: 111. Japan.  
**santonicus** Callot, Kremer, Rault and Bach, 1966: 514. France.  
**semimaculatus** Clastrier, 1958a: 55. Algeria.  
     *karajevi* Dzhafarov, 1961c: 77. Azerbaijan.  
**sensillatus** Mirzaeva, 1971: 33. Russia (Tyumen Oblast).  
     *kuraiensis* Remm, 1972: 82. Russia (Altai Republic).  
**sergenti** Kieffer, 1921h: 113. Algeria.  
     *citrinellus* Kieffer, 1923a: 674. Algeria.  
     *mosulensis* Khalaf, 1957b: 339. Iraq.  
     *turkmenicus* Gutsevich, 1959: 678. Turkmenistan.  
**shandongensis** Zhao and Liu, 2012: 324. China (Shandong).  
**sogdianus** Gutsevich, 1966: 673. Uzbekistan.  
**spinoverbosus** Qu and Wang, 1994: 488. China (Tibet).  
**stellifer** (Coquillett, 1901a): 604 (*Ceratopogon*). USA (District of Columbia).  
**stupulosus** Yu and Zhang, *in* Deng *et al.* 1990: 35. China (Tibet).  
**subgriseus** Dzhafarov, 1964: 249. Azerbaijan.  
**sublatifrontis** Smatov and Isimbekov, 1971: 61. Kazakhstan.  
**sublini** Liu and Dong, 2016: 581. China (Tibet).  
**subsylvarum** Remm, 1981: 32. Russia (Primorsky Krai).  
**tadzhikistanicus** Zhogolev, 1969: 114. Tajikistan.  
**taiwanensis** Kitaoka and Tanaka, 1985: 44. Taiwan.  
**talgariensis** Gutsevich and Smatov, 1966: 74. Kazakhstan.  
**tatebae** Kitaoka, 1991: 291. Japan.  
**tbilisicus** Dzhafarov, 1964: 309. Georgia.  
     *dendriticus* Boorman, 1976: 102. Great Britain.  
**tentorius** Austen, 1921: 110. Israel.  
**tianmushaensis** Chu, 1981: 310. China (Zhejiang).  
**tiaratus** Liu and Zhao, *in* Yu *et al.* 2005a: 1109. China (Yunnan).  
**tohokuensis** Okada, 1941: 16. Japan.  
**tokunagai** Arnaud, 1956a: 132. Japan.  
**toshiokai** Kitaoka, 1975: 194. Japan.  
**trivittatus** Vimmer, 1932: 136. Israel.  
     *subneglectus* Vimmer, 1932: 139. Israel.  
     *bulbostylus* Khalaf, 1961: 463. Iraq.  
**truncorum** Edwards, *in* Edwards *et al.* 1939: 41. Great Britain.  
     *sylvarum* Callot and Kremer, 1961b: 389. France.  
**tsutaensis** Wada, 1990: 65. Japan.  
**tuamsombooni** Kitaoka, Takaoka and Choochote, 2005: 290. Thailand.

- tunkinensis** Mirzaeva, 1985: 97. Russia (Republic of Buryatia).
- turanicus** Gutsevich and Smatov, *in* Smatov and Isimbekov 1971: 61. New name for *kasachstanicus* Gutsevich and Smatov.  
*kasachstanicus* Gutsevich and Smatov, 1966: 70 (preoccupied by *Culicoides kasachstanicus* Shakirzjanova, 1963). Kazakhstan.
- undentaris** Liu, 2002: 191. China (Heilongjiang).
- variifrons** Glukhova and Ivanov, *in* Ivanov and Glukhova 1967: 810. Russia (Primorsky Krai).
- verbosus** Tokunaga, 1937a: 303. Taiwan.
- vexans** (Staeger, 1839): 593 (*Ceratopogon*). Denmark.  
*pungens* (Kieffer, 1901a): 163 (*Palpomyia*). France.  
*perpungens* Kieffer, 1919a: 33. Unnecessary new name for *pungens* Kieffer.  
*ajbassovi* Shakirzjanova, 1962: 254. Kazakhstan.
- wuyiensis** Chen, 1981: 93 (1982: 129). China (Fujian).
- xinjiangensis** Chu, Qian and Ma, 1982: 107. China (Xinjiang).
- xinpingensis** Qu and Liu, 1982: 101. China (Yunnan).
- yadongensis** Chu, 1984: 24. New name for *spinulosus* Chu.  
*spinulosus* Chu, 1977: 100 (preoccupied by *Culicoides spinulosus* Khamala and Kettle, 1971). China (Tibet).
- yemenensis** Boorman, 1989: 211. Yemen.
- yui** Liu and Hao, *in* Yu *et al.* 2005a: 1117. China (Xinjiang).
- zhiyingi** Yu and Liu, 1990: 8. China (Tibet).
- zhuhaiensis** Yu and Hao, *in* Yu *et al.* 1988: 137. China (Guangdong).

#### Subgenus PONTOCULICOIDES Remm

- PONTOCULICOIDES** Remm, *in* Remm and Zhogolev 1968: 840 (as subgenus of *Culicoides*). Type species: *Culicoides tauricus* Gutsevich, by original designation.
- CALLOTIA** Vargas and Kremer, 1972: 242 (as subgenus of *Culicoides*). Type species: *Culicoides saevus* Kieffer, by original designation.
- catharinae** Kremer, Delécolle and Braverman, 1991: 151. Egypt.
- denisoni** Boorman, 1988: 152. Greece.
- engubandei** de Meillon, 1937b: 337. South Africa.
- ibericus** Dzhafarov, 1963: 54 (1964: 355). Russia (Chechen Republic).
- kamrupi** Sen and Das Gupta, 1958b: 163 (1959a: 617; 1959b: 65). New name for *albipennis* Smith and Swaminath.  
*albipennis* Smith and Swaminath, 1932: 184 (preoccupied by *Culicoides albipennis* Kieffer, 1919a). India.
- mirzaevae** Glukhova and Khabirov, 1977: 50 (as *mirzaevi*). Tajikistan.
- saevus** Kieffer, 1922g: 506. Algeria.  
*puncticeps* Goetghebuer, 1934a: 91. Austria.  
*drenskii* Zilahi-Sebess, 1934: 154. Bulgaria.  
*micromaculithorax* Khalaf, 1957b: 340. Iraq.
- salebrosus** Liu and Shi, *in* Liu *et al.* 2003: 360. China (Qinghai).
- sejfadinei** Dzhafarov, 1958: 247. Azerbaijan.  
*flavidus* Dzhafarov, 1959: 470. Azerbaijan.
- slovacus** Országh, 1969: 1. Slovak Republic.
- subsejfadinei** Liu, Wang and Hao, 1999: 201. China (Yunnan).
- tauricus** Gutsevich, 1959: 677. Ukraine.
- vespertinus** Yu and Ma, *in* Ma *et al.* 1990: 48. China (Xinjiang).
- zhongningensis** Yu, 1982: 201 (1981: 31). China (Ningxia).

### Subgenus PSYCHOPHAENA Philippi

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

**lacustris** Ronderos, 1990a: 116. Argentina (Río Negro).

**venezuelensis** Ortiz and Mirsa, 1950: 137. Venezuela.

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

*ortizi* Fox, 1952: 366. Venezuela.

### Subgenus REMMIA Glukhova

**REMMIA** Glukhova, 1977: 116 (as subgenus of *Culicoides*). Type species: *Ceratopogon schultzei* Enderlein, by original designation.

**enderleini** Cornet and Brunhes, 1994: 157. Senegal.

**kingi** Austen, 1912: 104. Sudan.

*nilotes* Kieffer, 1925e: 257. Egypt.

**neoschultzei** Boorman and Meiswinkel, in Boorman 1989: 192. Oman.

**nevilli** Cornet and Brunhes, 1994: 158. Senegal.

**oxystoma** Kieffer, 1910: 193. India.

*kiefferi* Patton, 1913: 336 (preoccupied by *Culicoides kiefferi* Goetghebuer, 1910). India.

*mesopotamiensis* Patton, 1920: 246. Iraq.

*pattoni* Kieffer, 1921e: 7. New name for *kiefferi* Patton.

*housei* Causey, 1938: 407. Thailand.

*punctigerus* Tokunaga, 1951: 101. Indonesia.

*alatus* Das Gupta and Ghosh, 1956b: 162. India.

**rhizophorensis** Khamala and Kettle, 1971: 77. Kenya.

**schultzei** (Enderlein, 1908): 459 (*Ceratopogon*). Namibia.

*irroratus* Goetghebuer, 1948b: 12. Democratic Republic of the Congo.

**subschultzei** Cornet and Brunhes, 1994: 158. South Africa.

### Subgenus SELFIA Khalaf

**SELFIA** Khalaf, 1954: 38 (as subgenus of *Culicoides*). Type species: *Culicoides hieroglyphicus* Malloch, by original designation.

**brookmani** Wirth, 1952a: 179. USA (California).

**denningi** Foote and Pratt, 1954: 20. Canada (Saskatchewan).

**hieroglyphicus** Malloch, 1915a: 297. USA (Arizona).

**jacksoni** Atchley, 1970: 258. USA (New Mexico).

**jamesi** Fox, 1946b: 244. USA (Montana).

**moabensis** Phillips, 2015: 843. USA (Utah).

**multipunctatus** Malloch, 1915a: 296. USA (Illinois).

**tenuistylus** Wirth, 1952a: 178. USA (California).

## Subgenus SENSICULICOIDES Shevchenko

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

**alazanicus** Dzhafarov, 1961b: 75. Azerbaijan.

*musilator* Kremer and Callot, 1961: 693. France.

**atripennis** Shevchenko, 1972: 77. Ukraine.

**begueti** Clastrier, 1957: 432. Algeria.

**cataneii** Clastrier, 1957: 438. Algeria.

**caucoliberensis** Callot, Kremer, Rioux and Descous, 1967a: 827. France.

**clastrieri** Callot, Kremer and Deduit, 1962a: 156. France.

**comosioculatus** Tokunaga, 1956: 121. Japan.

*chaetophthalmus* Amosova, 1957: 237. Russia (Primorsky Krai).

*caucasicus* Sergejev, 1959: 203 (as subspecies of *chaetophthalmus* Amosova). Russia (Krasnodar Krai).

*setosus* Gutsevich, 1960: 106. Ukraine.

**duddingstoni** Kettle and Lawson, 1955: 42. Great Britain.

**festivipennis** Kieffer, 1914a: 235. Germany.

*odibilis* Austen, 1921: 114. Israel.

*winnertzi* Edwards, 1926a: 406. Germany.

**gejgelensis** Dzhafarov, 1964: 282. Azerbaijan.

**griseidorsum** Kieffer, 1918a: 46. Algeria.

**haranti** Rioux, Descous and Pech, 1959: 432. France.

**heliophilus** Edwards, 1921: 124. Great Britain.

*latifrontis* Shakirzjanova, 1962: 256. Kazakhstan.

*kobachidzei* Dzhafarov, 1964: 348. Georgia.

**heteroclitus** Kremer and Callot, in Callot and Kremer 1965: 333 (Callot and Kremer, 1966: 941). France.

**indistinctus** Khalaf, 1961: 461. Iraq.

**jumineri** Callot and Kremer, 1969b: 1112. Tunisia.

**jurensis** Callot, Kremer and Deduit, 1962a: 160. France.

**kibunensis** Tokunaga, 1937a: 298. Japan.

*cubitalis* Edwards, in Edwards *et al.* 1939: 40. Great Britain.

*ponkikiri* Kono and Takahasi, 1940: 74. Japan.

*sitinohensis* Okada, 1941: 18. Japan.

**kolymbiensis** Boorman, 1988: 154. Greece.

**kurensis** Dzhafarov, in Gutsevich 1960: 100. Azerbaijan.

**langeroni** Kieffer, 1921i: 262. Tunisia.

**malevillei** Kremer and Coluzzi, 1971: 415. Italy.

**maritimus** Kieffer, 1924a: 16. Germany.

*submaritimus* Dzhafarov, 1962a: 206. Azerbaijan.

**odiatus** Austen, 1921: 112. Israel.

*niger* Dzhafarov, 1960a: 1183 (as variety of *pallidicornis* Kieffer, preoccupied by *Culicoides niger* Root and Hoffman, 1937). Azerbaijan.

*lailae* Khalaf, 1961: 458. Iraq.

*kurektschaicus* Dzhafarov, 1962a: 209. Azerbaijan.

*conicus* Remm, in Remm and Zhogolev 1968: 839. Ukraine.

**pictipennis** (Staeger, 1839): 594 (*Ceratopogon*). Denmark.

*arcuatus* (Winnertz, 1852): 39 (*Ceratopogon*). Germany.

*guttularis* Kieffer, 1919a: 45. Hungary.

*achkamalicus* Dzhafarov, 1964: 251. Azerbaijan.

*luganicus* Shevchenko, 1972: 75. Ukraine.

**poperinghensis** Goetghebuer, 1953: 127. Belgium.

- pseudoheliophilus** Callot and Kremer, 1961a: 682. France.  
*albihalteratus* Goetghebuer, 1935b: 414 (as variety of *neglectus* Winnertz, preoccupied by *Dasyhelea albohalteratus* (Santos Abreu, 1918)). Belgium.
- pseudopallidus** Khalaf, 1961: 466. Iraq.
- shaklawensis** Khalaf, 1957b: 345. Iraq.  
*caspius* Gutsevich, 1959: 676. Russia (Chechen Republic).
- simulator** Edwards, in Edwards *et al.* 1939: 40. Great Britain.
- stanicicus** Shevchenko, 1970a: 84. Ukraine.
- stepicola** Remm, in Remm and Zhogolev 1968: 838. Ukraine.  
*markevitschi* Shevchenko, 1969: 47. Ukraine.  
*aquilinus* Smatov and Kravets, 1976: 284. Kazakhstan.
- univittatus** Vimmer, 1932: 139. Israel  
*agathensis* Callot, Kremer and Rioux, 1963: 121. France.
- ustinovi** Shevchenko, 1962: 673. Ukraine.
- vidourlensis** Callot, Kremer, Molet and Bach, 1968a: 99. France.
- zhogolevi** Remm, in Remm and Zhogolev 1968: 836. Ukraine.

### Subgenus SILVATICULICOIDES Glukhova

**SILVATICULICOIDES** Glukhova, 1977: 117 (as subgenus of *Culicoides*). Type species: *Ceratopogon fascipennis* Staeger, by original designation.

- achrayi** Kettle and Lawson, 1955: 37. Great Britain.
- biguttatus** (Coquillett, 1901a): 604 (*Ceratopogon*). USA (District of Columbia).
- burylovae** Glukhova and Khabirov, 1977: 52 (as *burylovi*). Tajikistan.
- fascipennis** (Staeger, 1839): 594 (*Ceratopogon*). Denmark.  
*distictus* Kieffer, in Thienemann and Kieffer, 1916: 492. Sweden.  
*turficola* Kieffer, 1925b: 155. Estonia.
- fengxiangensis** Liang, Liu and Zhang, 2019: 314. China (Heilongjiang).
- loisae** Jamnback, 1965: 77. USA (New York).
- mulrennani** Beck, 1957: 103. USA (Florida).
- ostroushkoae** Glukhova, 1989: 220. Ukraine.
- spinosus** Root and Hoffman, 1937: 172. USA (Maryland).
- subfasciipennis** Kieffer, 1919a: 44. Hungary.  
*analisis* Kieffer, 1925d: 81 (as variety of *subfasciipennis* Kieffer, preoccupied by *Culicoides analisis* Santos Abreu, 1918). Belgium.
- sublettei** Atchley, 1967: 997. USA (New Mexico).
- usingeri** Wirth, 1952a: 192. USA (California).
- vetustus** Breidenbaugh and Mullens, 1999: 156. USA (California).

### Subgenus SINOCOIDES Chu

**SINOCOIDES** Chu, 1983: 26 (as subgenus of *Culicoides*). Type species: *Culicoides hamiensis* Chu, Qian and Ma, by original designation.

- anthropophygas** Yu and Liu, in Yu *et al.* 2005a: 892. China (Sichuan).
- hamiensis** Chu, Qian and Ma, 1982: 109. China (Xinjiang).
- jinghongensis** Wu and Liu, 2018: 291. China (Yunnan).
- kongmiaoensis** Liu and Zhou, 2006: 468. China (Shandong).
- malipoensis** Liu and Ren, in Liu *et al.* 2011a: 258. China (Yunnan).
- multifarious** Liu, Gong and Zhang, in Liu *et al.* 2003: 359. China (Gansu).
- nanniwanensis** Liu and Wang, in Liu *et al.* 2011a: 258. China (Shaanxi).

**opertus** Liu and Yu, 1990a: 15. China (Heilongjiang).  
**pungobovis** Liu, Yan and Liu, 1996a: 35. China (Hainan).

### Subgenus SYNHELEA Kieffer

SYNHELEA Kieffer, 1925a: 423. Type species: *Culicoides tropicalis* Kieffer, designation by Wirth *et al.* 1980: 160.

**accraensis** Carter, Ingram and Macfie, 1920: 241. Ghana.

**albopunctatus** Clastrier, 1960a: 84. Congo.

**arabiensis** Boorman, 1989: 173. Oman.

**bedfordi** Ingram and Macfie, 1923: 57. South Africa.

**camicasi** Cornet and Chateau, 1971: 160. Senegal.

**congolensis** Clastrier, 1960a: 98. Congo.

**corneti** Kremer, 1972: 92. Angola.

**dispar** Clastrier, 1959a: 175. Senegal.

**dutoiti** de Meillon, 1943: 100. South Africa.

*vagus* Cornet and Chateau, 1971: 156. Senegal.

**expectator** Clastrier, 1959a: 177. Senegal.

**gambiae** Clastrier and Wirth, 1961b: 308. Gambia.

**grenieri** Vattier and Adam, 1966b: 723. Congo.

**karenensis** Glick, 1990: 162. Kenya.

**kobae** Cornet and Chateau, 1971: 148. Senegal.

**micheli** Cornet and Chateau, 1971: 164. Senegal.

**moucheti** Cornet and Kremer, 1970: 266. Chad.

**olyslageri** Kremer and Nevill, 1972: 467. South Africa.

**papillatus** Khamala and Kettle, 1971: 84. Kenya.

**parvulus** Khamala and Kettle, 1971: 62. Kenya.

**pellucidus** Khamala and Kettle, 1971: 62. Tanzania.

**perettii** Cornet and Chateau, 1971: 145. Senegal.

**pretoriensis** Kremer and Nevill, 1972: 464. South Africa.

**pseudosimilis** Saha, Brahma and Hazra, 2017: 414. India.

**radiomaculatus** Khamala and Kettle, 1971: 85. Kenya.

**ravus** de Meillon, 1936: 151. South Africa.

*tokwensis* de Meillon, 1942a: 97. Zimbabwe.

*fuscicaudae* Macfie, 1947b: 75. Sudan.

*subravus* Cornet and Chateau, 1971: 167. Senegal.

**similis** Carter, Ingram and Macfie, 1920: 255. Ghana.

**spinulosus** Khamala and Kettle, 1971: 87. Uganda.

**stercorarius** Khamala and Kettle, 1971: 60. Uganda.

**tauffliebi** Clastrier, 1960a: 96. Congo.

**translucens** Khamala and Kettle, 1971: 83. Tanzania.

**tropicalis** Kieffer, 1913e: 10. Kenya.

*babrius* de Meillon, 1943: 112. Zimbabwe.

**vicinus** Clastrier, 1960a: 104. New name for *intermedius* Clastrier.

*intermedius* Clastrier, 1959a: 173 (preoccupied by *Dasyhelea intermedia* (Santos Abreu, 1918)). Senegal.

## Subgenus TRITHECOIDES Wirth and Hubert

TRITHECOIDES Wirth and Hubert, 1959: 2 (as subgenus of *Culicoides*). Type species: *Culicoides flaviscutatus* Wirth and Hubert, by original designation.

- acanthostomus** Wirth and Hubert, 1989: 92. Malaysia.  
**albibasis** Wirth and Hubert, 1959: 31. Malaysia.  
**allantothecus** Wirth and Hubert, 1989: 121. Malaysia.  
**anophelis** Edwards, 1922: 161. Malaysia and India.  
**baisasi** Wirth and Hubert, 1959: 12. Philippines.  
**barnetti** Wirth and Hubert, 1959: 32. Malaysia.  
**concatervans** Liu and Yu, *in* Yu *et al.* 2005a: 826. China (Tibet).  
**culiciphagus** Wirth and Hubert, 1959: 11. Solomon Islands.  
**cylindripalpis** Wirth and Hubert, 1989: 98. Malaysia.  
**dungunensis** Wirth and Hubert, 1989: 125. Malaysia.  
**elbeli** Wirth and Hubert, 1959: 27. Malaysia.  
**flavescens** Macfie, 1937c: 114 (as variety of *anophelis* Edwards). Malaysia.  
    *subflavescens* Wirth and Hubert, 1959: 14. Indonesia.  
**flavidorsum** Shevchenko and Lisetsky, 1969: 1413. Russia (Primorsky Krai).  
**flaviscutatus** Wirth and Hubert, 1959: 34. Indonesia.  
**flaviscutellaris** Wirth and Hubert, 1989: 132. Malaysia.  
**flavitibialis** Kitaoka and Tanaka, 1985: 42. Taiwan.  
    *neopalpifer* Lee, 1988: 87 (as *neopalpifer* Chen). Taiwan, China (Tibet).  
**forcepifinis** Nandi, Mazumdar and Chaudhuri, 2015: 65. India.  
**fordae** Lee, 1988: 53 (as *fordae* Wirth and Hubert). Taiwan.  
    *fordae* Wirth and Hubert, 1989: 133 (preoccupied by *Culicoides fordae* Lee, 1988). Malaysia.  
**fulvithorax** (Austen, 1912): 105 (*Johannseniella*). Kenya.  
    *citrinus* Kieffer, 1921b: 15. Cameroon.  
    *ruficollis* Goetghebuer, 1935d: 174. Democratic Republic of the Congo.  
**gewertzi** Causey, 1938: 409. Thailand.  
**gouldi** Wirth and Hubert, 1989: 139. Malaysia.  
**hinnoi** Howarth, 1985: 33. Laos.  
**huberti** Howarth, 1985: 35. Laos.  
**humeralis** Okada, 1941: 20. Japan.  
**inciderus** Nandi, Mazumdar and Chaudhuri, 2015: 67. India.  
**inornatithorax** Das Gupta, 1963: 36. India.  
**insolens** Choudhuri and Das Gupta, *in* Choudhuri *et al.* 1986: 54. India.  
**jianfenglingensis** Liu, 1995: 9. China (Hainan).  
**laoensis** Howarth, 1985: 37. Laos.  
**longicercus** Kitaoka, 1980: 19. Japan.  
**longiporus** Chu and Liu, 1978: 86. China (Yunnan).  
    *triallantionis* Howarth, 1985: 42. Laos.  
**luteolus** Wirth and Hubert, 1989: 100. Malaysia.  
**macfie** Causey, 1938: 411. Thailand.  
**maculitibialis** Lien, Weng and Lin, 1997: 171. Taiwan.  
**manhauensis** Yu, 1982: 202. China (Yunnan).  
**manikumari** Wirth and Hubert, 1989: 103. Malaysia.  
**matsuzawai** Tokunaga, 1950: 64. Japan.  
**menglaensis** Chu and Liu, 1978: 88. China (Yunnan).  
**monocylichnus** Yu and Liu, *in* Yu *et al.* 2005a: 851. China (Guangxi).  
**nampui** Howarth, 1985: 28. Laos.  
**nyungnoi** Howarth, 1985: 24. Laos.

**ochrothorax** Carter, 1919: 298. Ghana.  
**paksongi** Howarth, 1985: 25. Laos.  
**palpifer** Das Gupta and Ghosh, 1956a: 122. India.  
**parabarnetti** Wirth and Hubert, 1989: 146. Malaysia.  
**paraflavescens** Wirth and Hubert, 1959: 15. Sri Lanka.  
**parahumeralis** Wirth and Hubert, 1989: 110. Malaysia.  
**parararipalpis** Das Gupta, 1963: 41. India.  
**pendleburyi** Wirth and Hubert, 1989: 85. Malaysia.  
**phasmatus** Liu and Yu, 1997: 120. China (Henan).  
**qianweiensis** Yu, 1982: 202. China (Sichuan).  
**raripalpis** Smith, 1929: 256 (1932: 181). India.  
**rugulithecus** Wirth and Hubert, 1989: 113. Malaysia.  
**sarawakensis** Wirth and Hubert, 1959: 28. Malaysia.  
**subpalpifer** Lee, 1988: 104 (as *subpalpifer* Wirth and Hubert). Taiwan.  
*subpalpifer* Wirth and Hubert, 1989: 115 (preoccupied by *Culicoides subpalpifer* Lee, 1988). Malaysia.  
**tamada** Howarth, 1985: 39. Laos.  
**tenuipalpis** Wirth and Hubert, 1959: 16. Taiwan.  
**tonmai** Howarth, 1985: 30. Laos.  
**tympanus** Nandi, Mazumdar and Chaudhuri, 2015: 70. India.  
**variatus** Liu, Yan and Liu, 1996a: 36. China (Hainan).  
**zhangmensis** Deng and Yu, *in* Deng *et al.* 1990: 35. China (Tibet).

#### Subgenus TOKUNAGAHELEA Dyce and Meiswinkel

**TOKUNAGAHELEA** Dyce and Meiswinkel, 1995: 131 (as subgenus of *Culicoides*). Type species: *Culicoides mikros* Dyce and Meiswinkel, by original designation.

**geocheloneoides** Dyce and Meiswinkel, 1995: 140. Indonesia.  
**mikros** Dyce and Meiswinkel, 1995: 136. Papua New Guinea.  
**pygmaeus** Tokunaga, 1963b: 139. Indonesia.

#### Subgenus WIRTHOMYIA Vargas

**WIRTHOMYIA** Vargas, 1973: 112 (as subgenus of *Culicoides*). Type-species *Culicoides segnis* Campbell and Pelham-Clinton, by original designation.

**bottimeri** Wirth, 1955: 356. USA (Texas).  
*multidentatus* Atchley and Wirth, 1975: 1421. USA (California).  
**faghihi** Navai, 1971: 199. Iran.  
**minutissimus** (Zetterstedt, 1855): 4860 (*Ceratopogon*). Sweden.  
*albihalter* Kieffer, 1919a: 37 (1921f: 785). Germany.  
*bychowskyi* Dzhafarov, 1964: 344. Azerbaijan.  
*tugaicus* Dzhafarov, 1960a: 1183. Azerbaijan.  
**reconditus** Campbell and Pelham-Clinton, 1960: 227. Great Britain.  
**segnis** Campbell and Pelham-Clinton, 1960: 232. Great Britain.  
**shahgudiani** Navai, 1973: 201. Iran.  
**stilobezzioides** Foote and Pratt, 1954: 33. USA (New York).

#### Subgenus unplaced, *acotylus* species group

**acotylus** Lutz, 1913: 69. Brazil (Mato Grosso).  
*panamericanus* Fox, 1947: 90. Mexico (Mexico City).  
**atripalpis** Wirth and Blanton, 1973: 325. Brazil (Pará).



**carsiomelas** Wirth and Blanton, 1955a: 100. Panama.  
**teretipalpis** Wirth and Barreto, 1978: 557. Colombia.

**Subgenus unplaced, *albovenosus* species group**

**albovenosus** Khamala and Kettle, 1971: 53. Uganda.  
*neoangolensis* Kremer, 1972: 83. Angola.  
**angolensis** Caeiro, 1961: 289. Angola.

**Subgenus unplaced, *antennalis* species group**

**antennalis** Lee and Reye, 1953: 386. Australia (New South Wales).  
**gladysae** Kettle, Elson and Dyce, 1976: 173. Australia (Queensland).  
**mykutowyczi** Lee and Reye, 1963: 359. Australia (New South Wales).  
**tripallidus** Tokunaga, 1959: 220. Papua New Guinea.

**Subgenus unplaced, *bancrofti* species group**

**bancrofti** Lee and Reye, 1953: 387. Australia (New South Wales).  
**hornsbyensis** Lee and Reye, 1963: 361. Australia (New South Wales).

**Subgenus unplaced, *carpenteri* species group**

**belemensis** Wirth and Blanton, 1973: 427. Brazil (Pará).  
**camposi** Ortiz and León, 1955: 569. Ecuador.  
*fairchildi* Wirth and Blanton, 1955a: 102. Panama.  
**carpenteri** Wirth and Blanton, 1953a: 72. Panama.

**Subgenus unplaced, *clavipalpis* species group**

**arenicola** Howarth, 1985: 79. Laos.  
**bunrooensis** Lee and Reye, 1955: 238. Australia (Queensland).  
**clavipalpis** Mukerji, 1931: 1052. India.  
*candidus* Sen and Das Gupta, 1959a: 620. India.  
**distinctus** Sen and Das Gupta, 1959a: 618. India.  
**esakii** Esaki, 1939: 234. Micronesia.  
*esakii* Tokunaga, 1940a: 217. Micronesia.  
**flavimaculinotalis** Tokunaga, 1940e: 180 (1940d: 142). Micronesia.  
**huffi** Causey, 1938: 406. Thailand.  
**hyalinus** Tokunaga, 1962b: 472. Papua New Guinea.  
**inflatipalpis** Tokunaga, 1963b: 125. Papua New Guinea.  
**insulanus** Macfie, 1933a: 77. French Polynesia (France).  
**marginalis** Lee and Reye, 1963: 354. Australia (New South Wales).  
**monothecalis** Tokunaga, 1962b: 509. Papua New Guinea.  
**notatus** Delfinado, 1961: 648. Philippines.  
*papuae* Tokunaga, 1962b: 481. Papua New Guinea.  
**parviscriptus** Tokunaga, 1959: 213. Papua New Guinea.  
**perornatus** Delfinado, 1961: 651. Philippines.  
*multinotatae* Tokunaga, 1962b: 475. Papua New Guinea.  
**platiradius** Tokunaga, 1963b: 128. Papua New Guinea.  
**schramae** Giles, Wirth and Messersmith, 1981: 539. Sri Lanka.  
*roswelli* Giles and Wirth, 1983: 38. Sri Lanka.  
**yoshimurai** Tokunaga, 1941a: 114. Micronesia.

### Subgenus unplaced, *coronalis* species group

**coronalis** Lee and Reye, 1955: 234. Australia (Queensland).

### Subgenus unplaced, *costalis* species group

**bodemensis** Clastrier and Delécolle, 1996: 302. Indonesia.

**chazeaui** Clastrier and Delécolle, 1996: 300. Wallis and Futuna Islands (France).

**costalis** Tokunaga, 1963b: 132. Papua New Guinea.

**novairelandi** Tokunaga, 1962b: 512. Papua New Guinea.

**polynesiae** Wirth and Arnaud, 1969: 518. American Samoa (USA).

### Subgenus unplaced, *daedalus* species group

**antefurcatus** Wirth and Blanton, 1959: 315. Panama.

**beaveri** Wirth and Barreto, 1978: 557. Colombia.

**commatis** Wirth and Blanton, 1959: 321. Panama.

**crescentis** Wirth and Blanton, 1959: 317. Panama.

**cummingi** Spinelli and Borkent, 2004a: 379. Costa Rica.

**daedaloides** Wirth and Blanton, 1959: 330. Panama.

**daedalus** Macfie, 1948: 83. Mexico (Chiapas).

**dunni** Wirth and Blanton, 1959: 328. Panama.

**luglani** Jones and Wirth, 1958: 89. USA (Texas).

**pampoikilus** Macfie, 1948: 79. Mexico (Chiapas).

*dominicii* Ortiz, 1951b: 7. Venezuela.

**phaeotus** Wirth and Blanton, 1959: 326. Panama.

**picadoae** Spinelli and Borkent, 2004a: 381. Costa Rica.

**pseudocrescentis** Tavares and Luna Dias, 1980: 397. Brazil (Rio de Janeiro).

### Subgenus unplaced, *dasyophrus* species group

**dasyophrus** Macfie, 1940d: 27. Guyana.

**estevezae** Ronderos and Spinelli, 1994: 47. Argentina (Salta).

**guerrai** Wirth and Blanton, 1971a: 41. Trinidad and Tobago.

**rodriguezi** Ortiz, 1968: 67. Venezuela.

### Subgenus unplaced, *dekeyseri* species group

**dekeyseri** Clastrier, 1958b: 214. Senegal.

**galliardi** Callot, Kremer and Molet, 1973: 381. Lesotho.

**hirsutus** Khamala and Kettle, 1971: 59. Uganda.

**kaimosiensis** Khamala and Kettle, 1971: 58. Kenya.

**zikaensis** Khamala and Kettle, 1971: 56. Uganda.

### Subgenus unplaced, *eublepharus* species group

**archboldi** Wirth and Blanton, 1970b: 39. Dominica.

**caldasii** Browne, 1980: 535. Colombia.

**caucaensis** Wirth and Lee, 1967: 19. Colombia.

**eublepharus** Macfie, 1948: 86. Guyana.

*transferrans* Ortiz, 1953a: 801. Venezuela.

**florenciae** Messersmith, 1972: 167. Colombia.

**guadeloupensis** Floch and Abonnenc, 1950b: 2. Guadeloupe (France).  
**guarani** Ronderos and Spinelli, 1994: 48. Argentina (Misiones).  
**micayensis** Spinelli, Santamaría, Cabrera, Ronderos and Suárez, 2009a: 85. Colombia.  
**pabloi** Browne, 1980: 541. Colombia.  
**propriipennis** Macfie, 1948: 84. Mexico (Chiapas).  
**rangeli** Ortiz and Mirsa, 1952b: 126. Venezuela.  
    *donajii* Vargas, 1954: 28. Mexico (Oaxaca).  
    *patulipalpis* Wirth and Blanton, 1959: 421. Panama.  
**tamaensis** Perruolo, 2006a: 115. Venezuela.  
**tamboensis** Wirth and Lee, 1967: 20. Colombia.  
**zumbadoi** Spinelli and Borkent, 2004a: 383. Costa Rica.

#### Subgenus unplaced, *fluvialis* species group

**balsapambensis** Ortiz and León, 1955: 569 (as variety of *pifanoi* Ortiz). Ecuador.  
**castillae** Fox, 1946a: 251. Honduras.  
    *gibsoni* Wirth, 1952d: 246. Guatemala.  
    *flochabonnenci* Ortiz and Mirsa, 1952a: 267. Venezuela.  
**fernandezi** Ortiz, 1954: 223. Venezuela.  
**fluvialis** Macfie, 1940d: 25. Guyana.  
**leopoldoi** Ortiz, 1951c: 579. Venezuela.  
**lichyi** Floch and Abonnenc, 1949: 1 (1950a: 69). Venezuela.  
**pulchripennis** Macfie, 1939c: 200. Brazil (Santa Catarina).  
**tetrathyris** Wirth and Blanton, 1959: 409. Panama.  
**williamsi** Spinelli, *in* Spinelli *et al.* 2005: 147. Paraguay.  
**yaracuyensis** Ortiz, 1959: 364 (as *yaracuyanus*). Venezuela.

#### Subgenus unplaced, *immaculatus* species group

**agas** Wirth and Hubert, 1989: 438. Indonesia.  
**collessi** Bellis and Dyce, *in* Bellis *et al.* 2013: 25. New Caledonia (France).  
**immaculatus** Lee and Reye, 1953: 375. Australia (Queensland).  
**shivasi** Bellis and Dyce, *in* Bellis *et al.* 2013: 25. Australia (Northern Territory).

#### Subgenus unplaced, *inornatipennis* species group

**amaniensis** Khamala and Kettle, 1971: 25. Tanzania.  
**arenarius** Edwards, 1922: 164. Somalia.  
**excavatus** Khamala and Kettle, 1971: 24. Uganda.  
**inornatipennis** Carter, Ingram and Macfie, 1920: 227. Ghana.  
**kumbaensis** Callot, Kremer, Mouchet and Bach, 1965: 540. Cameroon.  
**latifrons** Khamala and Kettle, 1971: 23. Uganda.  
**nairobiensis** Glick, 1990: 131. Kenya.  
**nigeriae** Ingram and Macfie, 1921: 325. Nigeria.

#### Subgenus unplaced, *kusaiensis* species group

**ardentissimus** Tokunaga, 1940a: 216. Micronesia.  
**kusaiensis** Tokunaga, 1940a: 215. Micronesia.  
**leei** Tokunaga, 1960b: 72. Papua New Guinea.

### Subgenus unplaced, *leoni* species group

- benarrochi** Ortiz and Mirsa, 1952b: 126 (as *benarrochei*). Venezuela.  
**fieldi** Wirth and Blanton, 1956c: 50. Honduras.  
**gabaldoni** Ortiz, 1954: 221. Venezuela.  
**glabellus** Wirth and Blanton, 1956c: 47. Panama.  
**leoni** Barbosa, 1952: 17 (1953: 19). Ecuador.  
**reevesi** Wirth, 1952a: 193. USA (California).  
**trifidus** Spinelli and Borkent, 2004a: 385. Costa Rica.

### Subgenus unplaced, *limai* species group

- antunesi** Forattini, 1954b: 315. Brazil (Goiás).  
**boliviensis** Spinelli and Wirth, 1984a: 172. Bolivia.  
**carvalhoi** Wirth and Blanton, 1973: 429. Brazil (Pará).  
**duartei** Tavares and Luna Dias, 1980: 395. Brazil (Rio de Janeiro).  
**galindoi** Wirth and Blanton, 1953a: 73. Panama.  
**limai** Barretto, 1944: 99. Brazil (São Paulo).  
**lobatoi** Felipe-Bauer, in Felipe-Bauer and Quintelas 1994: 25. Brazil (Rio de Janeiro).  
**lopesi** Barretto, 1944: 102. Brazil (São Paulo).  
**santanderi** Browne, 1980: 536. Colombia.  
**tenuilobus** Wirth and Blanton, 1959: 354. Panama.  
**vernoni** Wirth and Blanton, 1973: 448. Brazil (Pará).  
**willinki** Spinelli and Veggiani, in Spinelli *et al.* 2013b: 587. Argentina (Tucumán).

### Subgenus unplaced, *melanesiae* species group

- leanderensis** Lee and Reye, 1963: 355. Australia (Queensland).  
**melanesiae** Macfie, 1939b: 368. Papua New Guinea.

### Subgenus unplaced, *milnei* species group

- africanus** Clastrier, 1959a: 186. Senegal.  
**austeni** Carter, Ingram and Macfie, 1920: 261. Ghana.  
**diamouanganai** Itoua and Cornet, 1986: 237. Congo.  
**giganteus** Khamala and Kettle, 1971: 35. Kenya.  
**hortensis** Khamala and Kettle, 1971: 29. Uganda.  
**isiloensis** Cornet, Nevill and Walker, 1974: 240. Kenya.  
**kerichoensis** Khamala and Kettle, 1971: 37. Kenya.  
**krameri** Clastrier, 1959a: 194. Senegal, Ivory Coast and Mali.  
*ciliodentatus* Khamala and Kettle, 1971: 28. Uganda.  
**milnei** Austen, 1909: 283. Kenya.  
*lugens* Kieffer, 1918a: 51. South Africa.  
**moreli** Clastrier, 1959a: 189. Senegal and Ivory Coast.  
**murtalai** Boorman and Dipeolu, 1979: 41. Nigeria.  
**nobrei** Caeiro, 1961: 241. Angola.  
**quinqulineatus** Goetghebuer, 1934d: 192. Democratic Republic of the Congo.  
**rutshuruensis** Goetghebuer, 1935d: 174. Democratic Republic of the Congo.  
**sylicola** Khamala and Kettle, 1971: 36. Kenya.  
**trouilleti** Itoua and Cornet, 1986: 239. Congo.  
**vitshumbiensis** Goetghebuer, 1935d: 176. Democratic Republic of the Congo.  
**wansoni** Goetghebuer, 1935c: 477. Democratic Republic of the Congo.  
*obscuripennis* Clastrier and Wirth, 1961b: 318. Gambia.

**zuluensis** de Meillon, 1936: 145. South Africa.  
*acastus* de Meillon, 1947: 118. South Africa.

#### Subgenus unplaced, *mohave* species group

**bajensis** Wirth and Moraes, 1979: 291. Mexico (Baja California).  
**hoguei** Wirth and Moraes, 1979: 293. USA (California).  
**mohave** Wirth, 1952a: 187. USA (California).  
**woodruffi** Spinelli and Huerta, 2015: 821. Mexico (Morelos).

#### Subgenus unplaced, *molestus* species group

**cancrisocius** Macfie, 1946: 15. Fiji.  
**molestus** (Skuse, 1889): 305 (*Ceratopogon*). Australia (New South Wales).  
**subimmaculatus** Lee and Reye, 1953: 375. Australia (New South Wales).  
**submagnesianus** Tokunaga, 1962b: 484. Papua New Guinea.

#### Subgenus unplaced, *monticola* species group

**andinus** Wirth and Lee, 1967: 17. Colombia.  
**magnipalpis** Wirth and Blanton, 1953a: 76. Panama.  
**monticola** Wirth and Lee, 1967: 15. Colombia.  
*pichindensis* Browne, 1980: 538. Colombia.

#### Subgenus unplaced, *neavei* species group

**bernardae** Itoua and Cornet, 1986: 244. Congo.  
**bwambanus** de Meillon, 1952: 173. Uganda.  
**citroneus** Carter, Ingram and Macfie, 1920: 259. Ghana.  
**eriodendroni** Carter, Ingram and Macfie, 1920: 250. Ghana.  
**neavei** Austen, 1912: 102. Uganda.  
**ovalis** Khamala and Kettle, 1971: 88. Kenya.  
**punctithorax** Carter, Ingram and Macfie, 1920: 235. Ghana.  
**vomensis** Boorman and Dipeolu, 1979: 61. Nigeria.  
**yankari** Boorman and Dipeolu, 1979: 62. Nigeria.

#### Subgenus unplaced, *nigripennis* species group

**nigripennis** Carter, Ingram and Macfie, 1920: 253. Ghana.  
**rageai** Vattier and Adam, 1966b: 727. Congo.

#### Subgenus unplaced, *ornatus* species group

**belkini** Wirth and Arnaud, 1969: 509. French Polynesia (France).  
**circumbasalis** Tokunaga, 1959: 232. Indonesia.  
*praesignis* Delfinado, 1961: 652. Philippines.  
**cordiger** Macfie, 1934c: 193. Malaysia.  
*magnesianus* Lee and Reye, 1953: 385. Australia (Queensland).  
**corti** Causey, 1938: 411. Thailand.  
**damnosus** Delfinado, 1961: 642. Philippines.  
**flumineus** Macfie, 1937c: 116. Malaysia.  
**garciai** Wirth and Hubert, 1989: 304. Malaysia.

**griffithi** Wirth and Hubert, 1989: 307. Thailand.  
**hewitti** Causey, 1938: 413. Thailand.  
**hollandiensis** Tokunaga, 1959: 226. Indonesia.  
**infulatus** Delfinado, 1961: 644. Philippines.  
**longior** Hagan and Reye, 1986: 340. Australia (Queensland).  
**maai** Wirth and Hubert, 1989: 312. Malaysia.  
**marmoratus** (Skuse, 1889): 304 (*Ceratopogon*). Australia (New South Wales).  
**mcdowellii** Delfinado, 1961: 647. Philippines.  
**mollis** Edwards, 1928: 55. Western Samoa.  
**niphanae** Wirth and Hubert, 1989: 316. Thailand.  
**okinawensis** Arnaud, 1956a: 118. Japan.  
**ornatus** Taylor, 1913: 73. Australia (Queensland).  
**palawanensis** Delfinado, 1961: 648. Philippines.  
**pampangensis** Delfinado, 1961: 650. Philippines.  
**pangkorensis** Wirth and Hubert, 1989: 326. Malaysia.  
**papuensis** Tokunaga, 1962b: 513. Papua New Guinea.  
**paragarciai** Dyce, 1996: 313. Papua New Guinea.  
**peliliouensis** Tokunaga, *in* Tokunaga and Esaki 1936: 55. Belau (USA).  
    *ejercitoi* Delfinado, 1961: 643. Philippines.  
**pongsomiensis** Chu, 1986: 254. Cambodia.  
**quatei** Wirth and Hubert, 1989: 333. Malaysia.  
**quaterifasciatus** Tokunaga, 1959: 240. Papua New Guinea.  
**sabroskyi** Tokunaga, *in* Tokunaga and Murachi 1959: 336. Belau (USA).  
**samoensis** Wirth and Arnaud, 1969: 513. American Samoa (USA).

#### Subgenus unplaced, *pachymerus* species group

**almirantei** Wirth and Blanton, 1959: 454. Panama.  
**atelis** Wirth, 1982b: 249. Panama.  
**caprilesi** Fox, 1952: 364. Venezuela.  
    *kintzi* Wirth and Blanton, 1953a: 72. Panama.  
**cylindricornis** Wirth and Blanton, 1973: 430. Brazil (Pará).  
**obnoxius** Fox, 1952: 365. Venezuela.  
**pachymerus** Lutz, 1914: 83. Brazil (Amazonas).  
**uniradialis** Wirth and Blanton, 1953a: 70. Panama.

#### Subgenus unplaced, *palmerae* species group

**calexicanus** Wirth and Rowley, 1971: 156. USA (California).  
**davisi** Wirth and Rowley, 1971: 157. USA (Washington).  
**hawsi** Wirth and Rowley, 1971: 159. USA (Washington).  
**leechi** Wirth, 1977: 53. USA (California).  
**novamexicanus** Atchley, 1967: 1012. USA (New Mexico).  
**oregonensis** Wirth and Rowley, 1971: 162. USA (Oregon).  
**palmerae** James, 1943: 151. USA (Colorado).  
**utahensis** Fox, 1946b: 246. USA (Utah).  
**wirthi** Foote and Pratt, 1954: 36. USA (Montana).

#### Subgenus unplaced, *piliferus* species group

**alexanderi** Wirth and Hubert, 1962: 190. USA (Massachusetts).  
    *pseudopiliferus* Wirth and Hubert, 1962: 189. USA (Maryland).

**bickleyi** Wirth and Hubert, 1962: 188. USA (Maryland).  
**cavaticus** Wirth and Jones, 1956: 166. USA (California).  
**chewaclae** Glick and Mullen, 1983: 378. USA (Alabama).  
**denticulatus** Wirth and Hubert, 1962: 193. USA (Wisconsin).  
**doeringae** Atchley, 1967: 1014. USA (New Mexico).  
**downesi** Wirth and Hubert, 1962: 186. Canada (Ontario).  
**franclemonti** Cochrane, 1974: 128. USA (New York).  
**husseyi** Wirth and Blanton, 1971c: 76. USA (Florida).  
**jamnbacki** Wirth and Hubert, 1962: 192. USA (New York).  
**kirbyi** Glick and Mullen, 1983: 380. USA (Maryland).  
**lophortygis** Atchley and Wirth, 1975: 1422. USA (California).  
**parapiliferus** Wirth and Blanton, 1974a: 71. USA (New York).  
**piliferus** Root and Hoffman, 1937: 163. USA (Maryland).  
**riggsi** Khalaf, 1957a: 198 (as subspecies of *piliferus* Root and Hoffman). USA (Oklahoma).  
**scanloni** Wirth and Hubert, 1962: 187. USA (Virginia).  
**snowi** Wirth and Jones, 1956: 163. USA (Virginia).  
**testudinalis** Wirth and Hubert, 1962: 191. USA (Pennsylvania).  
**unicolor** (Coquillett, 1905): 65 (*Ceratopogon*). USA (California).  
**utowana** Jamnback, 1965: 109. USA (New York).

#### Subgenus unplaced, *purus* species group

**capricorniae** Dyce and Wirth, 1997: 586. Australia (Queensland).  
**dubiosum** Dyce and Wirth, 1997: 591. Australia (Queensland).  
**elizabethae** Dyce and Wirth, 1997: 584. Papua New Guinea.  
**eupurus** Dyce and Wirth, 1997: 582. Indonesia.  
**purus** Lee and Reye, 1963: 352. Australia (New South Wales).  
**queenslandae** Dyce and Wirth, 1997: 589. Australia (Queensland).

#### Subgenus unplaced, *reticulatus* species group

**amazonicus** Santarém, Felipe-Bauer and Trindade, *in* Santarém *et al.* 2014: 259. Brazil (Pará).  
**aureus** Ortiz, 1951c: 585. Venezuela.  
     *miyamotoi* Wirth and Blanton, 1953b: 231. Panama.  
**castelloni** Santarém and Felipe-Bauer, *in* Santarém *et al.* 2015: 959. Brazil (Amazonas).  
**diplus** Santarém and Felipe-Bauer, *in* Santarém *et al.* 2014: 261. Colombia.  
**fittkaui** Wirth and Blanton, 1973: 432. Brazil (Pará).  
**fluminensis** Santarém and Felipe-Bauer, *in* Santarém *et al.* 2014: 263. Brazil (Rio de Janeiro).  
**forattinii** Ortiz, 1961: 211. Venezuela.  
**goeldii** Wirth and Blanton, 1973: 437. Brazil (Pará).  
**guamai** Wirth and Blanton, 1973: 438. Brazil (Pará).  
**guyanensis** Floch and Abonnenc, 1942a: 4. French Guiana (France).  
     *recifensis* Barbosa, 1943: 263. Brazil (Pernambuco).  
     *stubalensis* Fox, 1946a: 254. Trinidad and Tobago.  
**irregularis** Santarém, Felipe-Bauer and Castellón, *in* Santarém *et al.* 2014: 265. Brazil (Roraima).  
**kuripako** Felipe-Bauer, *in* Felipe-Bauer *et al.* 2010: 863. Brazil (Amazonas).  
**kuscheli** Wirth and Blanton, 1978: 236. Chile.  
**lanei** Ortiz, 1950a: 431. Panama.  
**lyrinotatus** Wirth and Blanton, 1955b: 126. Panama.  
**macrostigma** Wirth and Blanton, 1953b: 230. Panama.  
**martinezi** Wirth and Blanton, 1970b: 43. Trinidad and Tobago.  
**paucienfuscatus** Barbosa, 1947: 23. Brazil (Amazonas).

**pifanoi** Ortiz, 1951c: 588. Venezuela.

*tricoloratus* Wirth and Blanton, 1953b: 233. Panama.

**profundus** Santarém, Felipe-Bauer and Trindade, *in* Santarém *et al.* 2014: 266. Brazil (Pará).

**pseudoreticulatus** Santarém, Felipe-Bauer and Castellón, *in* Santarém *et al.* 2014: 268. Brazil (Roraima).

**reticulatus** Lutz, 1913: 49. Brazil (Bahia).

**rhombus** Santarém, Felipe-Bauer and Castellón, *in* Santarém *et al.* 2014: 270. Brazil (Roraima).

**tavaresi** Felipe-Bauer and Wirth, 1988: 261. Brazil (Rio de Janeiro).

#### Subgenus unplaced, *saundersi* species group

**atchleyi** Wirth and Blanton, 1969a: 559. USA (Alaska).

**ateripes** Nandi and Mazumdar, 2014b: 162. India.

**majorinus** Chu, 1977: 99. China (Tibet).

**saundersi** Wirth and Blanton, 1969a: 557. USA (Washington).

#### Subgenus unplaced, *shermani* species group

**ardleyi** Tokunaga, 1962b: 474. Papua New Guinea.

**bigeminus** Wirth and Hubert, 1989: 336. Malaysia.

**dryadeus** Wirth and Hubert, 1972: 41. Malaysia.

**geminus** Macfie, 1937d: 472. Malaysia.

*bifasciatus* Tokunaga, 1951: 104. Indonesia.

**interrogatus** Lee and Reye, 1963: 358. Australia (New South Wales).

**jefferyi** Kitaoka, 1983: 96. Malaysia.

**kelantanensis** Wirth and Hubert, 1989: 346. Malaysia.

**kepongensis** Lee, 1988: 69 (as *kepongensis* Wirth and Hubert). Taiwan.

*kepongensis* Wirth and Hubert, 1989: 346 (preoccupied by *Culicoides kepongensis* Lee, 1988). Malaysia.

**macclurei** Wirth and Hubert, 1989: 348. Malaysia.

**mackerrasi** Lee and Reye, 1963: 355. Australia (Northern Territory).

**marginatus** Delfinado, 1961: 646. Philippines.

**minipalpis** Wirth and Hubert, 1989: 351. Malaysia.

**morensis** Lee and Reye, 1955: 239. Australia (New South Wales).

**neomelanesiae** Tokunaga, 1963b: 123. Papua New Guinea.

**nigripes** Wirth and Hubert, 1989: 353. Thailand.

**rabauli** Macfie, 1939b: 367. Papua New Guinea.

*angularis* Lee and Reye, 1953: 384. Australia (New South Wales).

**reduncutheca** Yu, Wang and Tan, *in* Wang *et al.* 2012b: 284. China (Hainan).

**selangorensis** Wirth and Hubert, 1989: 355. Malaysia.

**shermani** Causey, 1938: 404. Thailand.

**siamensis** Wirth and Hubert, 1989: 359. Thailand.

**thurmanae** Wirth and Hubert, 1989: 360. Thailand.

**wenzeli** Delfinado, 1961: 649. Philippines.

#### Subgenus unplaced, *stigmalis* species group

**alvarezii** Ortiz, 1957: 161. Venezuela.

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

**fluviatilis** (Lutz, 1914): 82 (*Johannseniella*). Brazil (Amazonas).

*scorzai* Ortiz, 1956: 93. Venezuela.

**stigmalis** Wirth, 1952d: 245. Guatemala.



### Subgenus unplaced, *stonei* species group

- melleus** (Coquillett, 1901a): 604 (*Ceratopogon*). USA (Florida).  
**mortivallis**, Wirth and Blanton, 1971b: 465. USA (California).  
**owyheensis** Jones and Wirth, 1978: 57 (as *owyheensis*). USA (Idaho).  
**pallidicornis** Kieffer, 1919a: 46. Hungary, Romania.  
    *susae* Kieffer, 1919a: 44. Italy.  
    *dileucus* Kieffer, 1921a: 55. France.  
    *brunneiscutellatus* Zilahi-Sebess, 1933: 151 (as variety of *pallidicornis* Kieffer). Hungary.  
    *bruneoscutellatus* Zilahi-Sebess, 1934: 155 (as variety of *pallidicornis* Kieffer). Bulgaria.  
    *niger* Root and Hoffman, 1937: 168. USA (Maryland).  
**stonei** James, 1943: 149. USA (Colorado).  
    *weesei* Khalaf, 1952a: 44 (also 1952b: 351). USA (Oklahoma).  
**tissoti** Wirth and Blanton, 1966: 279. USA (Florida).  
**wernerii** Wirth and Blanton, 1971b: 463. USA (Arizona).

### Subgenus unplaced, *shortii* species group

- fadzili** Kitaoka, 1983: 97. Malaysia.  
**rectilis** Nandi and Mazumdar, 2014c: 62. India.  
**shortii** Smith and Swaminath, 1932: 183. India.  
    *fortis* Sen and Das Gupta, 1959a: 622. India.  
**swaminathi** Majumdar and Das Gupta, in Gangopadhyay and Das Gupta 2000: 128. India.

### Subgenus unplaced, *victoriae* species group

- bougainvillae** Tokunaga, 1962b: 492. Papua New Guinea.  
**bundyensis** Lee and Reye, 1955: 239. Australia (New South Wales).  
**crassus** Tokunaga, 1962b: 508. Papua New Guinea.  
**cuniculus** Lee and Reye, 1953: 389. Australia (Queensland).  
**flavidorsalis** Tokunaga, 1959: 245. Papua New Guinea.  
**fulbrighti** Lee and Reye, 1963: 361. Australia (New South Wales).  
**henryi** Lee and Reye, 1963: 360. Australia (Queensland).  
**longiradialis** Tokunaga, 1962b: 499. Papua New Guinea.  
**maculiscutellaris** Tokunaga, 1959: 249. Indonesia.  
**magnipictus** Tokunaga, 1962b: 494. Papua New Guinea.  
**mcmillani** Lee and Reye, 1953: 391. Australia (New South Wales).  
**multimaculatus** Taylor, 1918: 169. Australia (Victoria).  
**pallidizonatus** Tokunaga, 1963b: 135. Papua New Guinea.  
**pallidothorax**, Lee and Reye, 1963: 362. Australia (Northern Territory).  
**paulipictus** Tokunaga, 1977: 45. Papua New Guinea.  
**tritenuifasciatus** Tokunaga, 1959: 242. Papua New Guinea.  
**trizonatus** Tokunaga, 1963b: 134. Papua New Guinea.  
**victoriae** Macfie, 1941: 67. Australia (Victoria).  
    *magnimaculatus* Lee and Reye, 1953: 388. Australia (New South Wales).  
**waringi** Lee and Reye, 1955: 240. Australia (Western Australia).

### Subgenus unplaced, *williwilli* species group

- austropalpalis** Lee and Reye, 1955: 240. New name for *palpalis* Lee and Reye.  
    *palpalis* Lee and Reye, 1953: 380 (preoccupied by *Culicoides palpalis* Macfie, 1948). Australia (Queensland).

**cambodiensis** Chu, 1986: 253. Cambodia.  
**delfinadoae** Wirth and Hubert, 1989: 386. Malaysia.  
**flaviscryptus** Tokunaga, 1959: 252. Papua New Guinea.  
**murrayi** Wirth and Hubert, 1989: 388. Indonesia.  
**narrabeenensis** Lee and Reye, 1963: 357. Australia (New South Wales).  
**nattaiensis** Lee and Reye, 1955: 237. Australia (New South Wales).  
**neopalpalis** Tokunaga, 1962b: 483. Papua New Guinea.  
**pallidimaculosus** Tokunaga, 1959: 219. Papua New Guinea.  
**palpisimilis** Wirth and Hubert, 1989: 390. Malaysia.  
**petersi** Tokunaga, 1962b: 490. Papua New Guinea.  
**pictilis** Wirth and Hubert, 1989: 392. Malaysia.  
**pseudopalpalis** Wirth and Hubert, 1989: 394. Indonesia.  
**semicircum** Tokunaga, 1959: 208. Indonesia.  
**sigmoidus** Lee and Reye, 1963: 359. Australia (Capital Territory).  
**smeei** Tokunaga, 1960b: 73. Papua New Guinea.  
**williwilli** Lee and Reye, 1955: 234. Australia (New South Wales).  
**yasumatsui** Tokunaga, 1941a: 113. Micronesia.  
*lingensis* Tokunaga, 1963b: 129. Papua New Guinea.

#### Species of **CULICOIDES** unplaced to subgenus or species group

**adamskii** Wirth, 1990: 242. Aldabra (Seychelles).  
**adersi** Ingram and Macfie, 1923: 56. Kenya and Tanzania.  
**albipennis** Kieffer, 1919a: 32. France.  
**albomaculus** Root and Hoffman, 1937: 164. Mexico (Mexico City).  
**albosparsus** Kieffer, 1918a: 52. Ethiopia.  
**algeriensis** Clastrier, 1957: 426. Algeria.  
**arubae** Fox and Hoffman, 1944: 109. Netherlands Antilles (Netherlands).  
**badooshensis** Khalaf, 1961: 460. Iraq.  
**bahrainensis** Boorman, 1989: 177. Bahrain.  
**barrosmachadoi** Callot, Kremer and Molet, 1967b: 39. Angola.  
**bassetorum** Callot, Kremer and Molet, 1973: 378. Lesotho.  
**bicornus** Liu and Yu, *in* Yu *et al.* 2005a: 1288. China (Tibet).  
**bicultellus** Yu and Liu, 1990: 3. China (Sichuan).  
**bilobatus** Kieffer, 1912c: 6. Sri Lanka.  
**biscapus** Kieffer, 1925a: 418. Vietnam.  
**bisignatus** Kieffer, 1921b: 14. Cameroon.  
**bisolis** Kremer and Brunhes, 1973: 287. Madagascar.  
**brachcordylus** Liu and Zhao, *in* Yu *et al.* 2005a: 1290. China (Yunnan).  
**brevipenis** Mai and Yu, *in* Hao *et al.* 1990: 42. China (Guangxi).  
**buettikeri** Boorman, 1989: 179. Oman.  
**buhetoensis** Takahasi, 1941: 81. China (Heilongjiang).  
**calloti** Kremer, Delécolle, Bailly-Choumara and Chaker, 1979: 195. Morocco.  
**ceylanicus** Kieffer, 1912c: 5. Sri Lanka.  
**chateai** Cornet, 1970: 357. Senegal.  
**clarkei** Carter, Ingram and Macfie, 1920: 246. Ghana.  
**cleaves** Liu, 1995: 9. China (Hainan).  
**clivus** Yu and Liu, 1990: 3. China (Chongqing).  
**coarctatus** Clastrier and Wirth, 1961b: 312. Nigeria.  
**confusus** Carter, Ingram and Macfie, 1920: 250. Ghana.  
**corsoni** Ingram and Macfie, 1921: 324. Ghana.  
**dentatus** Kieffer, 1921b: 13. Cameroon.

**eremicus** Yu and Liu, *in* Yu *et al.* 2005a: 1296. China (Xinjiang).  
**filamentis** Liu, Yan and Liu, 1996a: 34. China (Hainan).  
**floridensis** Beck, 1951: 135. USA (Florida).  
**foleyi** Kieffer, 1922g: 503. Algeria.  
**fretensis** Wang and Yu, *in* Wang *et al.* 1990: 73. China (Hainan).  
**guineensis** Kieffer, 1918a: 54. Guinea.  
**herero** (Enderlein, 1908): 460 (*Ceratopogon*). Namibia.  
**ibriensis** Boorman, 1989: 181. Oman.  
**iranicus** Navai, 1971: 202. Iran.  
**iriomotensis** Kitaoka, 1975: 198. Japan.  
**javae** Tokunaga, 1951: 103. Indonesia.  
**javanicus** Salm, 1917b: 139. Indonesia.  
**jouberti** Huttel, Huttel and Verdier, 1953: 98. Gabon.  
**judaeae** Macfie, 1933c: 79. Israel.  
**kadenensis** McDonald, Bolinguit and Lu, 1973: 639. Japan.  
**kasimi** Khalaf, 1961: 464. Iraq.  
**korossoensis** (Huttel and Huttel, 1952d): 472 (*Monohelea*). Mali.  
**kotonkan** Boorman and Dipeolu, 1979: 35. Nigeria.  
**kribiensis** Kieffer, 1921b: 18. Cameroon.  
**krombeini** Giles, Wirth and Messersmith, 1981: 542. Sri Lanka.  
**kucheensis** Liu and Yu, *in* Yu *et al.* 2005a: 1302. China (Xinjiang).  
**labis** Yu and Liu, *in* Yu *et al.* 2005a: 1303. China (Xinjiang).  
**lamborni** Ingram and Macfie, 1925: 283. Malawi.  
**landauae** Kremer, Rebholtz-Hirtzel and Bailly-Choumara, 1975a: 206. Morocco.  
**laoshanensis** Yu and Kang, *in* Yu 1988: 137. China (Shandong).  
**leizhouensis** Lai and Yu, *in* Lai *et al.* 1990: 69. China (Guangdong).  
**lochmocola** Yu, Ayiken and Chen, *in* Chen *et al.* 2016: 583. China (Xinjiang).  
**longidens** Arnaud, 1956a: 111. Japan.  
     *paucidentatus* Kitaoka, 1973: 216. Japan.  
**longipalpis** Delfinado, 1961: 645. Philippines.  
**longzhouensis** Hao and Yu, 1990: 40. China (Guangxi).  
**lui** Yu and Liu, 1990: 10. China (Hubei).  
**macintoshi** Cornet and Nevill, 1980: 383. South Africa.  
**madagascarensis** de Meillon, 1961: 40. Madagascar.  
**magnificus** Sen and Das Gupta, 1959a: 622. India.  
**malariaiogensis** Perruolo, 1990: 28. Venezuela.  
**marinus** Yu and Zhu, *in* Lai *et al.* 1990: 70. China (Guangdong).  
**mesghalii** Navai, 1973: 196. Iran.  
**midorensis** Arnaud, 1956a: 113. Japan.  
**minutunculus** Yu and Liu, *in* Yu *et al.* 2005a: 1312. China (Yunnan).  
**monoensis** Wirth, 1952a: 193. USA (California).  
**murphyi** Clastrier and Wirth, 1961b: 303. Nigeria.  
**nanellus** Wirth and Blanton, 1969a: 564. USA (California).  
**nanus** Root and Hoffman, 1937: 165. USA (Maryland).  
**neghmei** Vargas, 1955: 673. Mexico (Puebla).  
**nigroannulatus** Goetghebuer, 1932b: 5. Indonesia.  
**nilogenus** Kieffer, 1921b: 17. Sudan.  
**nilophilus** Kieffer, 1921b: 20. Sudan.  
**noshaquensis** Tokunaga, 1966b: 285. Afghanistan.  
**nudipennis** Kieffer, 1922g: 507. Algeria.  
**octosignatus** Kieffer, 1921b: 17. Democratic Republic of the Congo.  
**odai** Boorman, 1989: 195. Oman.

**onderstepoortensis** Fiedler, 1951: 6. South Africa.  
**onoï** Tokunaga, 1940d: 147. China (Heilongjiang).  
**pancensis** Browne, 1980: 537. Colombia.  
**paolae** Boorman, *in* Boorman *et al.* 1996: 501. Italy.  
**perakensis** Kitaoka, 1983: 95. Malaysia.  
**polystictus** Kieffer, 1921c: 181. Paraguay.  
**posoensis** Wirth and Blanton, 1969a: 562. USA (California).  
**propinquus** Macfie, 1948: 81. Mexico (Chiapas).  
**pseudocordiger** Wirth and Hubert, 1989: 447. Malaysia.  
**pseudolangeroni** Kremer, Chaker and Delécolle, 1981: 291. Tunisia.  
**puripennis** Austen, 1921: 109. Israel.  
**qingdaoensis** Kong and Yu, 1990: 58. China (Shandong).  
**qiongzhongensis** Liu, Yan and Liu, 1996a: 35. China (Hainan).  
**quadrisignatus** Kieffer, 1921b: 16. Cameroon.  
**rarus** Das Gupta, 1963: 40. India.  
**remerki** Boorman and Dipeolu, 1979: 51. Nigeria.  
**remotus** Kieffer, 1918a: 54. Guinea.  
**ribeiroi** Lemblé, Messaddeq, Capela and Kremer, 1990: 267. Portugal.  
**riebe** Delécolle, Mathieu and Baldet, 2005: 70. France.  
**riouxi** Callot and Kremer, 1961a: 679. France.  
**robini** Cornet, 1970: 352. Senegal.  
**rubzovi** Dzhafarov, 1960a: 1181. Azerbaijan.  
**rutilus** Ingram and Macfie, 1921: 326 (as variety of *inornatipennis* Carter, Ingram and Macfie). Ghana.  
**saboyae** Cornet, 1970: 355. Senegal.  
**salihi** Khalaf, 1952b: 351. USA (Oklahoma).  
**sasai** Kitaoka, 1975: 192. Japan.  
**shamaensis** Yu and Deng, *in* Zhang *et al.* 1990: 31. China (Tibet).  
**shimoniensis** Khamala and Kettle, 1971: 54. Kenya.  
**signatus** Kieffer, 1921b: 19. Sudan.  
**silvestrii** Kieffer, 1918a: 50. Cameroon.  
**spinapenis** Yu and Hao, *in* Hao *et al.* 1990: 41. China (Guangxi).  
**stagetus** Lee, 1979b: 33. China (Tibet).  
**subdubius** Tokunaga, 1962c: 53. Japan.  
**taylori** (Boorman and Lane, 1979): 327 (*Neoculicoides*). Nigeria.  
**tianshanensis** Chen, Ayiken and Yu, 2016: 582. China (Xinjiang).  
**tobaensis** Tokunaga, 1937a: 317. Japan.  
**towadaensis** Okada, 1941: 25. Japan.  
**travisi** Vargas, 1949: 233. New name for *simulans* Root and Hoffman.  
*simulans* Root and Hoffman, 1937: 167 (preoccupied by *Culicoides simulans* Vimmer, 1932). USA (Maryland).  
*horneae* Foote and Pratt, 1954: 25. USA (New York).  
**trilineatus** Fox, 1946a: 250. Virgin Islands (USA).  
**tresignatus** Kieffer, 1921b: 21. Cameroon.  
**tristanii** Huttel, Huttel and Verdier, 1953: 100. Gabon.  
**turgeopalpulus** Liu and Yu, 1990b: 23. China (Tibet).  
**turgidus** Sen and Das Gupta, 1959a: 626. India.  
**uncistylus** Wirth and Hubert, 1989: 449. Philippines.  
**unetensis** Perruolo, 2001: 35. Venezuela.  
**vitreipennis** Austen, 1921: 108. Israel.  
**wakuensis** McDonald, Bolinguit and Lu, 1973: 647. Japan.  
*chaetocellaris* Kitaoka, 1973: 214. Japan.  
**walkeri** Boorman, 1979: 69. Kenya.

**wardi** Boorman, 1989: 209. United Arab Emirates.  
**wokei** Fox, 1947: 90. Panama.  
*aethionotus* Wirth and Blanton, 1955b: 121. Panama.  
**xanthogaster** Kieffer, 1918a: 53. Guinea.  
**yaeyamaensis** Kitaoka, 1975: 196. Japan.  
**yanbianensis** Liu, Wu and Wang, 2006: 321. China (Jilin).  
**yichunensis** Yu, 1982: 202. China (Jiangxi).

#### Fossil species of **CULICOIDES** (some placed to subgenera by authors)

**abbreviatipennis** Statz, 1944: 142. Germany. Oligocene.  
**agamus** Borkent, 1995: 63. Canada (Manitoba). Upper Cretaceous.  
**ambericus** Szadziewski and Grogan, 1998a: 40. Dominican Republic. Miocene.  
**antilleanus** Szadziewski and Grogan, 1998a: 40. Dominican Republic. Miocene.  
**annosus** Borkent, 1995: 65. Canada (Manitoba). Upper Cretaceous.  
**atratus** Statz, 1944: 147. Germany. Oligocene.  
**austerus** Statz, 1944: 144. Germany. Oligocene.  
**balticus** Szadziewski, 1988: 41. Poland. Eocene.  
**bicolor** Statz, 1944: 146. Germany. Oligocene.  
**bifidus** Borkent, 1996: 19. USA (New Jersey). Upper Cretaceous.  
**bojarskii** Szadziewski and Dominiak, 2019: 538. Burma. Lower Cretaceous.  
**brisaci** (Choufani and Nel, 2013): 76 (*Devalquia*). France. Upper Cretaceous.  
**brodzinskyi** Szadziewski and Grogan, 1998a: 40. Dominican Republic. Miocene.  
**bullus** Borkent, 1995: 61. Canada (Alberta). Upper Cretaceous.  
**burmiticus** Szadziewski and Dominiak, 2019: 539. Burma. Lower Cretaceous.  
**canadensis** (Boesel, 1937): 47 (*Atrichopogon*). Canada (Manitoba). Upper Cretaceous.  
**casei** Grogan and Szadziewski, 1988: 809. USA (New Jersey). Upper Cretaceous.  
**ceranowiczii** Szadziewski, 1988: 45. Poland. Eocene.  
**dasyheleiformis** Szadziewski, 1988: 36. Baltic region. Eocene.  
**doyeni** Choufani, Perrichot, Azar and Nel, 2014: 38. France. Upper Cretaceous.  
**ellenbergeri** Szadziewski and Dominiak, 2019: 540. Burma. Lower Cretaceous.  
**elongatulus** Statz, 1944: 143. Germany. Oligocene.  
**eoselficus** Szadziewski, 1988: 43. Poland. Eocene.  
**filipalpis** Remm, 1976b: 111. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**gedanensis** Szadziewski, 1988: 46. Poland. Eocene.  
**gracilior** Statz, 1944: 143. Germany. Oligocene.  
**grandiboca** Borkent, 1996: 19. USA (New Jersey). Upper Cretaceous.  
**hispanicola** Szadziewski and Grogan, 1998a: 41. Dominican Republic. Miocene.  
**jucundus** Statz, 1944: 147. Germany. Oligocene.  
**kaluginae** Remm, 1976b: 110. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**liliputanus** Statz, 1944: 142. Germany. Oligocene.  
**mammalicola** Szadziewski and Grogan, 1998a: 41. Dominican Republic. Miocene.  
**megacanthus** Palmer, 1957: 272. USA (California). Miocene.  
**myanmaricus** Szadziewski and Dominiak, 2019: 541. Burma. Lower Cretaceous.  
**obesus** Statz, 1944: 145. Germany. Oligocene.  
**obscuratus** Statz, 1944: 144. Germany. Oligocene.  
**obuncus** Borkent, 1995: 64. Canada (Manitoba). Upper Cretaceous.  
**prussicus** Szadziewski, 1988: 48. Baltic region. Eocene.  
**speciosus** (Meunier, 1904a): 229 (1904b: 240) (*Ceratopogon*). Baltic region. Eocene.  
**sphenostylus** Remm, 1976b: 112. Russia (Krasnoyarsk Krai). Upper Cretaceous.  
**subgedanensis** Szadziewski, 1993: 608. Germany. Eocene.  
**succineus** Remm, 1976b: 113. Russia (Krasnoyarsk Krai). Upper Cretaceous.

**succivarius** Szadziewski, 1988: 40. Poland. Eocene.  
**tenuipennis** Statz, 1944: 147. Germany. Oligocene.  
**truncatus** Borkent, 2000b: 461. USA (New Jersey). Upper Cretaceous.  
**tyrrelli** (Boesel, 1937): 48 (*Dasyhelea*). Canada (Manitoba). Upper Cretaceous.  
**ventralis** Borkent, in Borkent and Wirth 1997: 84. New name for *abdominalis* Statz.  
    *abdominalis* Statz, 1944: 145 (preoccupied by *Dasyhelea abdominalis* (Santos Abreu, 1918)). Germany.  
    Oligocene.  
**yoosti** Borkent, 2000b: 462. USA (New Jersey). Upper Cretaceous.

### *Nomina dubia*

**albonotatus** Kieffer, 1918a: 94. Turkey.  
**alpicola** (Strobl, 1910): 263 (*Ceratopogon*, as variety of *oculatus* Strobl). Austria.  
**analis** Santos Abreu, 1918: 297. Canary Islands (Spain).  
**aricola** Kieffer, 1922f: 391. Austria.  
**australiensis** Kieffer, 1917a: 188. Papua New Guinea.  
**belgicus** Kieffer, 1919a: 43. Belgium.  
**biarcuatus** Vimmer, 1932: 137. Israel.  
**bodenheimeri** Vimmer, 1932: 138. Israel.  
**bromophilus** Kieffer, 1922f: 391. Austria.  
**cantabricus** (Strobl, 1900): 169 (*Ceratopogon*). Spain.  
**cilipes** Kieffer, 1921d: 275. Latvia.  
**cinereus** (Kieffer, 1925a): 417 (*Prosapelma*). Slovak Republic.  
**coracinus** Borkent, in Borkent and Wirth 1997: 65. New name for *niger* Tokunaga.  
    *niger* Tokunaga, 1941b: 98 (as *nigrus*, as variety of *arcuatus* Winnertz). China (Heilongjiang).  
**cordiformis** Kieffer, 1927: 61. Estonia.  
**cunctans** (Winnertz, 1852): 42 (*Ceratopogon*). Germany.  
**flavipes** Vimmer, 1932: 136. Israel.  
**flavirostris** Vimmer, 1932: 137. Israel.  
**fossicola** Kieffer, 1922c: 236. Germany.  
**fuscus** Goetghebuer, 1952: 1. Belgium.  
**latipennis** Kieffer, 1919a: 37. Romania, Ukraine.  
**maculatus** Zilahi-Sebess, 1936a: 202 (as variety of *pictipennis* Staeger). Hungary.  
**mayeri** Goetghebuer, 1935a: 3. Germany.  
**meijereri** Kieffer, 1919c: 192. New name for *guttipennis* de Meijere.  
    *guttipennis* (de Meijere, 1906): 69 (*Ceratopogon*, preoccupied by *Culicoides guttipennis* (Coquillett, 1901a)).  
    Indonesia.  
**micromaculatus** Vimmer, 1932: 139. Israel.  
**muscicola** Kieffer, 1925d: 85. France.  
**mystacinus** Vimmer, 1932: 139. Israel.  
**nanulus** Kieffer, 1919a: 38. Hungary.  
**nigrosignatus** Kieffer, 1901a: 161. France.  
**nocivum** (Harris, 1841): 405 (*Simulium*). New England, eastern Canada.  
**nuntius** Cambournac, 1970a: 249. Portugal.  
**obscuripes** Santos Abreu, 1918: 297 (as variety of *varius* Winnertz). Canary Islands (Spain).  
**oculatus** (Strobl, 1910): 262 (*Ceratopogon*). Austria.  
**photophilus** Kieffer, 1911d: 5. Germany.  
**pictellum** (Rondani, 1869): 190 (*Ceratopogon*). Italy.  
**pilosipennis** Kieffer, 1925e: 257. Egypt.  
**pumilus** (Winnertz, 1852): 46 (*Ceratopogon*). Germany.  
**quadrivittatus** Vimmer, 1932: 136. Israel.  
**quinquemaculatus** Vimmer, 1932: 132. Israel.

**rochenus** Cambournac, 1970a: 250. Portugal.  
**similis** (Goetghebuer, 1927a): 203 (*Monohelea*). Belgium.  
**simulans** Vimmer, 1932: 136. Israel.  
**stigmaticus** Kieffer, 1911d: 4. Germany.  
**triangulatus** Shevchenko, 1970b: 11. Ukraine.  
**ukrainensis** Shevchenko, 1970b: 14. Ukraine.  
**xanthoceras** Kieffer, 1917a: 186. Papua New Guinea.

### Genus PARADASYHELEA Macfie

**PARADASYHELEA** Macfie, 1940f: 17. Type species: *Dasyhelea brevipalpis* Ingram and Macfie, by original designation.

**albipunctata** Wirth and Lee, 1959: 116. Australia (New South Wales).  
**boucheti** Clastrier, 1989b: 134. New Caledonia (France).  
**brevipalpis** (Ingram and Macfie, 1931a): 178 (*Dasyhelea*). Argentina (Río Negro).  
**egregria** (Macfie, 1932c): 36 (*Dasyhelea*). New Zealand.  
**harrisoni** Wirth, 1981: 384. New Zealand.  
**ingrami** Spinelli and Grogan, 2003: 572. Argentina (Río Negro).  
**macfiei** Spinelli and Grogan, 2003: 574. Chile.  
**minuta** Wirth and Lee, 1959: 118. Australia (New South Wales).  
**neocaledoniensis** Clastrier, 1989b: 135. New Caledonia (France).  
**olympiae** Wirth and Blanton, 1969c: 98. USA (Washington).  
**reyei** Elson-Harris and Kettle, 1985: 233. Australia (Queensland).

### Genus WASHINGTONHELEA Wirth and Grogan

**WASHINGTONHELEA** Wirth and Grogan, 1988: 97. Type species: *Washingtonhelea frommeri* Wirth and Grogan, by original designation.

**frommeri** Wirth and Grogan, 1988: 98. USA (California).

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### Genus AFROHELEA Wirth

**AFROHELEA** Wirth, 1965b: 230. Type species: *Parabezzia capensis* de Meillon and Hardy, by original designation.

**capensis** (de Meillon and Hardy, 1954): 67 (*Parabezzia*). South Africa.

### Genus AFROSTILOBEZZIA Szadziewski and Dominiak

**AFROSTILOBEZZIA** Szadziewski and Dominiak, 2015: 445. Type species: *Afrostilobezzia clastrieri* Szadziewski and Dominiak, by original designation.

**clastrieri** Szadziewski and Dominiak, 2015: 446. Nigeria.  
**ornatithorax** (Clastrier, 1988c): 128 (*Stilobezzia*). Guinea.

## Genus AGILIHELEA Yu

**AGILIHELEA** Yu, *in* Yu *et al.* 2005a: 1326. Type species: *Agilihelea jiania* Yu, by original designation.

**jiania** Yu, *in* Yu *et al.* 2005a: 1326. China (Jiangxi).

## Genus ALLOHELEA Kieffer

**ALLOHELEA** Kieffer, 1917b: 364. Type species: *Sphaeromias pulchripennis* Kieffer, by original designation.

**BOREOHELEA** Clastrier and Delécolle, 1990: 146. Type species: *Boreohelea afrotropica* Clastrier and Delécolle, by original designation.

**afra** Clastrier and Delécolle, 1990: 130. Guinea.

**africana** (Clastrier, 1960b): 282 (*Monohelea*). Congo.

**afrotropica** (Clastrier and Delécolle, 1990): 146 (*Boreohelea*). Guinea.

**allocota** Yu and Zhang, *in* Yu *et al.* 2005a: 1329. China (Tibet).

**ampligonata** (Ratanaworabhan and Wirth, 1972): 468 (*Monohelea*). Malaysia.

**annulata** Yu and Yan, 2004: 37 (Yu, *in* Yu *et al.* 2005a: 1330). China (Fujian).

**arboricola** Clastrier and Delécolle, 1990: 138. Guinea.

**arcuata** (Ratanaworabhan and Wirth, 1972): 469 (*Monohelea*). Malaysia.

**basiflava** (Tokunaga, 1963a): 248 (*Monohelea*). Papua New Guinea.

**basilobata** (Ratanaworabhan and Wirth, 1972): 463 (*Monohelea*). Malaysia.

**bellula** (Macfie, 1934c): 282 (*Monohelea*). Malaysia.

**borealosisinica** Yu and Liu, *in* Yu *et al.* 2005a: 1339. China (Heilongjiang).

**bottimeri** Wirth, 1991a: 502. USA (Texas).

**brinchangensis** (Ratanaworabhan and Wirth, 1972): 452 (*Monohelea*). Malaysia.

**camptostyla** (Ratanaworabhan and Wirth, 1972): 461 (*Monohelea*). Malaysia.

**capitata** (Ratanaworabhan and Wirth, 1972): 459 (*Monohelea*). Malaysia.

**chelagonata** (Ratanaworabhan and Wirth, 1972): 454 (*Monohelea*). Malaysia.

**digitata** (Ratanaworabhan and Wirth, 1972): 466 (*Monohelea*). Malaysia.

**distortifemur** Wirth, 1991a: 499. USA (Florida).

**fruticosa** Yan and Yu, *in* Liu *et al.* 1996b: 359. China (Hainan).

**guineensis** Clastrier and Delécolle, 1990: 135. Guinea.

**hainanena** (Liu, Yan and Liu, 1996a): 45 (*Monohelea*). China (Hainan).

**harpagonifera** (Debenham, 1972): 9 (*Monohelea*). Australia (Capital Territory).

**inflativena** (Tokunaga, 1962a): 214 (*Monohelea*). Japan.

**insularis** (Tokunaga, 1941a): 114 (*Monohelea*). Micronesia.

**israelensis** Szadziewski and Alwin, *in* Alwin-Kownacka *et al.* 2016b: 554. Israel.

**japonica** (Udaka, 1959): 20 (*Monohelea*). Japan.

**jianfengensis** Liu and Yu, *in* Liu *et al.* 1996b: 358. China (Hainan).

**johannseni** (Wirth, 1953b): 153 (*Monohelea*). USA (Virginia).

**kindiae** Clastrier and Delécolle, 1990: 140. Guinea.

**limosa** Clastrier and Delécolle, 1990: 143. Guinea.

**litoraurea** (Ingram and Macfie, 1921): 344 (*Monohelea*). Ghana.

*venustula* (Goetghebuer, 1935d): 178 (*Monohelea*). Democratic Republic of the Congo.

**makonde** (de Meillon and Wirth, 1983a): 363 (*Monohelea*). South Africa.

**maureenae** (de Meillon and Wirth, 1987a): 53 (*Monohelea*). South Africa.

**meeseri** (de Meillon, 1939a): 16 (*Monohelea*). South Africa.

**mimas** (de Meillon, 1939a): 13 (*Monohelea*). South Africa.

**minxia** Yu and Yan, 2004: 39 (Yu and Yan, *in* Yu *et al.* 2005a: 1333). China (Fujian).

**nebulosa** (Coquillett, 1901a): 606 (*Ceratopogon*). USA (New Jersey).

**neotropica** Wirth, 1991a: 503. Jamaica.



**nigripes** (Ratanaworabhan and Wirth, 1972): 460 (*Monohelea*). Thailand.  
**pallifemorata** (Remm, 1980): 91 (*Monohelea*). Tajikistan.  
**papuae** (Tokunaga, 1963a): 245 (*Monohelea*). Papua New Guinea.  
**parafurcata** (Ratanaworabhan and Wirth, 1972): 458 (*Monohelea*). Malaysia.  
**paucimaculata** Clastrier and Delécolle, 1990: 136. Guinea.  
**pedicellata** Wirth, 1991a: 502. USA (Florida).  
**pulchripennis** (Kieffer, 1911c): 344 (*Sphaeromias*). Seychelles.  
**qingdaoensis** Ren and Yu, 1999: 345. China (Shandong).  
**quatei** (Ratanaworabhan and Wirth, 1972): 457 (*Monohelea*). Malaysia.  
**solidipedalis** (Tokunaga, 1963a): 247 (*Monohelea*). Papua New Guinea.  
**subannulata** Yu, Sun and Ke, 2008: 35. China (Guangdong).  
**subnigripes** Yu and Deng, in Yu *et al.* 2005a: 1336. China (Tibet).  
**superlobata** (Ratanaworabhan and Wirth, 1972): 462 (*Monohelea*). Thailand.  
**sylvatica** (Clastrier, 1960b): 284 (*Monohelea*). Congo.  
**tenuilobata** (Ratanaworabhan and Wirth, 1972): 455 (*Monohelea*). Thailand.  
**tessellata** (Zetterstedt, 1850): 3642 (*Ceratopogon*). Sweden.  
*illustris* (Winnertz, 1852): 53 (*Ceratopogon*). Germany and Great Britain.  
**tokunagai** (Remm, 1993): 185 (*Monohelea*). Russia (Sakhalin Oblast).  
**tricuspis** (Debenham, 1972): 10 (*Monohelea*). Australia (New South Wales).  
**vesperilio** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 644. United Arab Emirates.  
**weemsi** Wirth, 1991a: 501. USA (Florida).  
**yorkensis** (Debenham, 1972): 27 (*Monohelea*). Australia (Queensland).  
**zherihhini** (Remm, 1993): 185 (*Monohelea*). Russia (Sakhalin Oblast).  
**zhuhaiensis** Yu and Hao, in Yu *et al.* 2005a: 1337. China (Guangdong).

#### Genus ALLUAUDOMYIA Kieffer

**ALLUAUDOMYIA** Kieffer, 1913e: 12. Type species: *Alluaudomyia imparunguis* Kieffer, by monotypy.  
**NEOCERATOPOGON** Malloch, 1915b: 310. Type species: *Ceratopogon bellus* Coquillett, by original designation.  
**PRIONOGNATHUS** Carter, Ingram and Macfie, 1921a: 309 (preoccupied by *Prionognathus* LaFerté-Sénéctère, 1851). Type species: *Prionognathus marmoratus* Carter, Ingram and Macfie, by original designation.  
**THYSANOGNATHUS** Ingram and Macfie, 1922: 244. New name for *Prionognathus* Carter, Ingram and Macfie. Type species: *Prionognathus marmoratus* Carter, Ingram and Macfie, automatic.  
**ISOECACTA** Garrett, 1925: 9. Type species: *Isoeacta poeyi* Garrett (= *Ceratopogon bellus* Coquillett), by original designation.

**abonnenci** Clastrier, 1958b: 233. Senegal.  
**abdominalis** Wirth and Delfinado, 1964: 606. Malaysia.  
**acicula** Yu, in Yu *et al.* 2005a: 1369. China (Fujian).  
**adunca** Wirth and Delfinado, 1964: 609. Thailand.  
**albigena** Wirth and Delfinado, 1964: 618. Thailand.  
**albopicta** (Ingram and Macfie, 1922): 244 (*Thysanognathus*). Ghana.  
**alpina** Debenham, 1971: 146. Australia (New South Wales).  
**altaocei** Delécolle and Rieb, 1989: 127. France.  
**amazonica** Spinelli and Wirth, 1984c: 676. Brazil (Amazonas).  
**angulata** Wirth and Delfinado, 1964: 611. Malaysia.  
**annulata** Wirth and Delfinado, 1964: 637. Malaysia.  
**annulipes** Wirth and Delfinado, 1964: 637. Thailand.  
*australiensis* Debenham, 1971: 133 (valid subspecies of *annulipes*). Australia (Queensland).  
**anserina** de Meillon and Wirth, 1983a: 354. South Africa.  
**appendiculata** Debenham, 1971: 151. Australia (New South Wales).

**asperata** Yu and Liu, *in* Yu *et al.* 2005a: 1348. China (Henan).  
**astera** Tokunaga, 1963a: 222. Papua New Guinea.  
**aterivena** Tokunaga, 1940d: 154. Japan.  
**bella** (Coquillett, 1902a): 87 (*Ceratopogon*). USA (District of Columbia).  
     *poeyi* (Garrett, 1925): 9 (*Isoecata*). Canada (British Columbia).  
**bicornis** Debenham, 1971: 159. Australia (Northern Territory).  
**bifasciata** Tokunaga, 1963a: 220. Papua New Guinea.  
**bifurcata** Wirth and Delfinado, 1964: 633. Malaysia.  
**bimaculata** Clastrier and Wirth, 1961a: 228. Nigeria.  
**bipunctata** Tokunaga and Murachi, 1959: 356. Belau (USA).  
**bispinula** Zhang and Yu, *in* Zhang *et al.* 2004: 317 (Yu and Deng, *in* Yu *et al.* 2005a: 1349). China (Tibet).  
**bistorta** Yu and Zou, *in* Yu *et al.* 2005a: 1377. China (Heilongjiang).  
**boucheti** Clastrier, 1985c: 194. New Caledonia (France).  
**brandti** Tokunaga, 1963a: 223. Papua New Guinea.  
**brevicosta** Clastrier, 1960b: 261. Congo.  
**brevis** Wirth and Delfinado, 1964: 608. Malaysia.  
**canariensis** Szadziewski and Dominiak, *in* Szadziewski *et al.* 2015a: 346. Canary Islands (Spain).  
**candidata** Yu, 1999: 220. China (Beijing).  
**caracalla** Yu and Kong, *in* Yu *et al.* 2005a: 1351. China (Shandong).  
**caribbeana** Spinelli and Wirth, 1984c: 678. Belize.  
**catarinensis** Spinelli and Wirth, 1984c: 681. Brazil (Santa Catarina).  
     *biestroi* Spinelli, 1988: 130. Argentina (Corrientes).  
**claudia** de Meillon, 1942a: 92. Zimbabwe.  
**cobra** de Meillon and Wirth, 1987a: 41. South Africa.  
**columinis** Liu, Yan and Liu, 1996a: 42. China (Hainan).  
**congolensis** de Meillon, 1939b: 12. Democratic Republic of the Congo.  
**conjuncta** Kieffer, 1918a: 52. Guinea.  
**crumena** Yu and Liu, *in* Yu *et al.* 2005a: 1379. China (Tibet).  
**dekeyseri** Clastrier, 1958c: 487. Senegal.  
**delfinadoae** Giles and Wirth, 1984: 211. Malaysia.  
**demeilloni** Clastrier and Wirth, 1961a: 223. Nigeria.  
**debilipenis** Sinha, Mazumdar and Chaudhuri, 2005: 116. India.  
**desma** Yu, *in* Yu *et al.* 2005a: 1346. China (Tibet).  
**distispinulosa** Spinelli and Wirth, 1984c: 682. Brazil (Amazonas).  
**epsteini** Giles and Wirth, 1987: 459. New Caledonia (France).  
**estevezae** Spinelli and Wirth, 1984c: 684. Mexico (Morelos).  
**exigua** Clastrier, 1985c: 193. New Caledonia (France).  
**falcata** de Meillon and Wirth, 1983a: 356. South Africa.  
**fimbriatinervis** Clastrier, 1958b: 230. Senegal.  
**finitima** Sinha, Mazumdar and Chaudhuri, 2005: 118. India.  
**fittkau** Spinelli and Wirth, 1984c: 686. Brazil (Amazonas).  
**flexistyla** Chaudhuri and Ghosh, 1980: 422. India.  
**flexuosa** Yu and Hao, *in* Yu *et al.* 2005a: 1352. China (Guangdong).  
**footei** Wirth, 1952c: 428. USA (Florida).  
**forcipulata** Yu and Liu, *in* Yu *et al.* 2005a: 1372. China (Sichuan).  
**formosana** Okada, 1942: 317 (as variety of *maculipennis* Carter, Ingram and Macfie). Taiwan.  
**fragilicornis** Clastrier, 1958c: 489. Senegal.  
**fragmentum** Debenham, 1971: 163. Australia (Northern Territory).  
**fregata** Yu, Li and Nie, *in* Nie *et al.* 2009: 162. China (Hebei) (on ship from Paradip, India).  
**fumosipennis** Debenham, 1971: 135. Australia (Northern Territory).  
**fuscipennis** Wirth and Delfinado, 1964: 612. Thailand.  
**fuscipes** Wirth and Delfinado, 1964: 606. Malaysia.

**fuscitarsis** Chaudhuri, Das Gupta and Chatterjee, 1981: 147. India.  
**fuscula** Yu and Liu, *in* Yu *et al.* 2005a: 1355. China (Tibet).  
**griffithi** Wirth and Delfinado, 1964: 635. Thailand.  
**guarani** Spinelli, 1988: 131. Uruguay.  
**haiyingi** Liu, Liu and Yu, 2011: 364. China (Jiangxi).  
**halterata** Remm, 1993: 187. Russia (Sakhalin Oblast).  
**hirsutipennis** Clastrier, 1960b: 267. Congo.  
**huberti** Wirth and Delfinado, 1964: 622. Malaysia.  
**hygropetrica** Vaillant, 1954: 228. France.  
**immaculata** Tokunaga, 1963a: 219. Indonesia.  
**imparunguis** Kieffer, 1913e: 12. Kenya.  
**inaequalis** Wirth and Delfinado, 1964: 613. Thailand.  
**infusata** Wirth and Delfinado, 1964: 621. Malaysia.  
**inexpectata** Clastrier, 1983c: 10. Seychelles.  
**insignis** Chaudhuri, Das Gupta and Chaudhuri, 1972: 94. India.  
**insulana** Tokunaga and Murachi, 1959: 358. Micronesia.  
**insulicola** Tokunaga and Murachi, 1959: 361. Micronesia.  
**jimmensis** Tokunaga, 1963a: 229. Papua New Guinea.  
**lactella** Remm, 1980: 97. Kyrgyzstan.  
**latipennis** (Skuse, 1889): 308 (*Ceratopogon*). Australia (New South Wales).  
**leei** Spinelli and Wirth, 1984c: 687. Colombia.  
**limosa** Clastrier, 1961a: 432. France.  
**linearis** Saha and Chaudhuri, 2011: 56. India.  
**longzhouensis** Hao and Yu, 1991: 45. China (Guangxi).  
**lousi** de Meillon and Wirth, 1981b: 535. South Africa.  
**lucania** Li and Yu, 1997a: 124. China (Henan).  
**lunata** de Meillon and Wirth, 1983a: 356. South Africa.  
**macclurei** Wirth and Delfinado, 1964: 622. Malaysia.  
**maculiabdominis** Yu, Nie and Li, *in* Nie *et al.* 2007: 476. Australia or India.  
**maculipennis** (Carter, Ingram and Macfie, 1921a): 316 (*Prionognathus*). Ghana.  
**maculithorax** (Carter, Ingram and Macfie, 1921a): 319 (*Prionognathus*). Ghana.  
**maculosa** de Meillon, 1936: 172. South Africa.  
**maculosinota** Saha and Chaudhuri, 2011: 56. India.  
**maculosipennis** Tokunaga, 1940e: 181 (1940d: 154). Micronesia.  
**maculosissima** Wirth and Delfinado, 1964: 624. Indonesia.  
**magobai** de Meillon, Meiswinkel and Wirth, 1982: 134. South Africa.  
**magna** Wirth and Delfinado, 1964: 632. Thailand.  
**marginalis** Wirth and Delfinado, 1964: 625. Malaysia.  
     *splendentis* Liu, Yan and Liu, 1996a: 42. China (Hainan).  
**marmorata** (Carter, Ingram and Macfie, 1921a): 312 (*Prionognathus*). Ghana.  
**marmorea** Clastrier, 1960b: 258. Congo.  
**mcmillani** Clastrier and Wirth, 1961a: 236. Nigeria.  
**megaparamera** Williams, 1957: 327. USA (Michigan).  
**meeseri** (de Meillon and Hardy, 1954): 74 (*Ceratopogon*). Zimbabwe.  
**melanesiae** Clastrier, 1985c: 190. New Caledonia (France).  
**melanosticta** (Ingram and Macfie, 1922): 248 (*Thysanognathus*). Ghana.  
     *nilogenes* (Kieffer, 1925e): 262 (*Thysanognathus*). Egypt.  
**meridiana** Clastrier, 1978: 25. France.  
**monopunctata** Tokunaga and Murachi, 1959: 354. Micronesia.  
**mouensis** Giles and Wirth, 1987: 463. New Caledonia (France).  
**mynistensis** Remm, 1979b: 55. Estonia.  
**natalensis** de Meillon, 1939b: 14. South Africa.

**needhami** Thomsen, 1935: 287. USA (New York).  
*pentaspila* Remm and Glukhova, 1971: 304. Russia (Krasnodar Krai).  
**neocaledoniensis** Clastrier, 1985c: 188. New Caledonia (France).  
**novaguineae** Tokunaga, 1963a: 227. Papua New Guinea.  
**nubeculosa** Spinelli and Wirth, 1984c: 689. Brazil (Amazonas).  
**ocellata** Remm, 1980: 99. Tajikistan.  
**onoi** Tokunaga, 1972: 15. Japan.  
**opacata** Yu, in Yu *et al.* 2005a: 1380. China (Hebei).  
**ornatithorax** Chaudhuri, Das Gupta and Chaudhuri, 1972: 89. India.  
**pacifica** Clastrier, 1985c: 195. New Caledonia (France).  
**papuae** Tokunaga, 1963a: 217. Papua New Guinea.  
**parafurcata** Wirth and Delfinado, 1964: 640. Malaysia.  
**paraspina** Wirth, 1952c: 429. USA (Georgia).  
**parva** Wirth, 1952c: 431. USA (Florida).  
*downesi* Wirth, 1952c: 433. USA (Virginia).  
**peculiaris** Chaudhuri, Das Gupta and Chaudhuri, 1972: 100. India.  
**personata** Debenham, 1971: 133. Australia (Queensland).  
**petersi** Tokunaga, 1963a: 228. Papua New Guinea.  
**platipyga** Tokunaga, 1963a: 221. Papua New Guinea.  
**plaumanni** Spinelli and Wirth, 1984c: 691. Brazil (Santa Catarina).  
**polyommata** Macfie, 1947b: 76. Sudan.  
**poguei** Giles and Wirth, 1987: 461. New Caledonia (France).  
**prima** Clastrier, 1976: 205. French Guiana (France).  
**pseudomaculipennis** (Carter, Ingram and Macfie, 1921a): 318 (*Prionognathus*). Ghana.  
**pseudomaculithorax** Clastrier, 1958b: 225. Senegal.  
**pseudomarginalis** Wirth and Delfinado, 1964: 628. Philippines.  
**punctiradialis** Chaudhuri, Das Gupta and Chaudhuri, 1972: 97. India.  
**punctivenosa** Wirth and Grogan, 1988: 20. New name for *punctiradialis* Spinelli and Wirth.  
*punctiradialis* Spinelli and Wirth, 1984c: 692 (preoccupied by *Alluaudomyia punctiradialis* Chaudhuri, Das Gupta and Chaudhuri, 1972). Brazil (Pará).  
**punctulata** Wirth and Delfinado, 1964: 639. Malaysia.  
**quadripunctata** (Goetghebuer, 1934c): 288 (*Culicoides*). Russia (Leningrad Oblast).  
**quadripunctata** Tokunaga, 1972: 17. Japan.  
**quasivudu** Stam, 1964: 195. Democratic Republic of the Congo.  
**quinquenebulosa** Wirth and Delfinado, 1964: 619. Malaysia.  
**quinquepicina** Yu and Zhyang, in Yu *et al.* 2005a: 1361. China (Sichuan).  
**quinquepunctata** Tokunaga, 1940b: 256. Japan.  
**remmi** Szadziewski, 1983b: 395. Algeria.  
**reyei** Debenham, 1971: 157. Australia (Northern Territory).  
**riparia** Clastrier, 1978: 29. France.  
*falcata* Knoz and Ratajsky, 1987: 566 (preoccupied by *Alluaudomyia falcata* de Meillon and Wirth, 1983a).  
Czech Republic.  
*bohemiae* Boorman, 1997a: 173. New name for *falcata* Knoz and Ratajsky.  
**rostrata** Yu and Zhang, in Zhang *et al.* 2004: 317 (Yu and Deng, in Yu *et al.* 2005a: 1362). China (Tibet).  
**rudolfi** de Meillon and Downes, 1986: 171. South Africa.  
**sagaensis** Tokunaga, 1940b: 257. Japan.  
**schnacki** Spinelli, 1983b: 403. Argentina (Buenos Aires).  
**senta** de Meillon, 1936: 175. South Africa.  
**sexpunctata** Spinelli and Wirth, 1984c: 695. Colombia.  
**shogakii** Tokunaga, 1960a: 74. Japan.  
**siebenschwabi** Havelka, 1982: 59. Spain.  
**signosoma** Yu and Zhang, in Yu *et al.* 2005a: 1363. China (Sichuan).

**similiforceps** Clastrier, 1960b: 265. Congo.  
**simulata** Sinha, Mazumdar and Chaudhuri, 2005: 119. India.  
**smeei** Tokunaga, 1963a: 230. Papua New Guinea.  
**sophiae** Stam, 1964: 193. Democratic Republic of the Congo.  
**sordidipennis** Clastrier and Wirth, 1961a: 233. Gambia.  
**soutini** de Meillon and Wirth, 1983a: 359. South Africa.  
**spinellii** Wirth and Grogan, 1988: 21. New name for *tripunctata* Spinelli and Wirth.  
*tripunctata* Spinelli and Wirth, 1984c: 697 (preoccupied by *Alluaudomyia tripunctata* Chaudhuri, Das Gupta and Chaudhuri, 1972). Colombia.  
**spinosiforceps** Clastrier, 1977: 345. Guinea.  
**spinosipes** Tokunaga, 1962a: 206. Japan.  
**splendida** (Winnertz, 1852): 47 (*Ceratopogon*). Europe.  
**sternalis** Wirth and Delfinado, 1964: 617. Thailand.  
**stictipennis** Wirth, 1952a: 197. USA (California).  
**streptomera** Remm, 1980: 99. Turkmenistan.  
**striata** Remm, 1993: 187. Russia (Primorsky Krai).  
**subadunca** Chaudhuri, Das Gupta and Chaudhuri, 1972: 95. India.  
**subannulata** Wirth and Delfinado, 1964: 636. Malaysia.  
**subflexuosa** Yu, in Yu *et al.* 2005a: 1353. China (Sichuan).  
**succinea** Szadziewski, 1988: 112. Poland. Eocene.  
**tauffliebi** Clastrier, 1960b: 263. Congo.  
**tenuiannulata** Spinelli and Wirth, 1984c: 696. Guatemala.  
**tenuistylata** Tokunaga, 1959: 296. Indonesia.  
**thurmanorum** Wirth and Delfinado, 1964: 629. Thailand.  
**tiberghieni** Neveu, 1978: 355. France.  
*depuncta* Remm, 1980: 101. Tajikistan.  
**tillierorum** Clastrier, 1985c: 191. New Caledonia (France).  
**tokunagai** Wirth and Delfinado, 1964: 633. New name for *splendida* Tokunaga.  
*splendida* Tokunaga, 1963a: 216 (preoccupied by *Alluaudomyia splendida* (Winnertz, 1852)). Papua New Guinea.  
**transvaalensis** de Meillon, 1947: 119. South Africa.  
**tripartita** Okada, 1942: 316 (as variety of *sagaensis* Tokunaga). Taiwan.  
**tripunctata** Chaudhuri, Das Gupta and Chaudhuri, 1972: 91. India.  
**tropaea** Yu, in Yu *et al.* 2005a: 1366. China (Jiangxi).  
**typica** Chaudhuri, Das Gupta and Chaudhuri, 1972: 91. India.  
**undecimpunctata** Tokunaga, 1940b: 257. Japan.  
**unguistyla** Debenham, 1971: 139. Australia (New South Wales).  
**ussurica** Isaev, 1993: 70. Russia (Primorsky Krai).  
**varia** Debenham, 1971: 154. Australia (Queensland).  
**variegata** Glick and Mullen, 1982: 540. USA (Alabama).  
**verecunda** Debenham, 1971: 143. Papua New Guinea.  
**vicina** Clastrier, 1960b: 260. Congo.  
**vudu** de Meillon and Hardy, 1954: 65. Cameroon.  
**wasoni** de Meillon, 1939b: 10. Democratic Republic of the Congo.  
**wirthi** Williams, 1957: 328. USA (Michigan).  
**wyskokensis** Szadziewski and Dominiak, in Szadziewski *et al.* 2015a: 349. Poland.  
**xanthocoma** (Kieffer, 1913d): 182 (*Culicoides*). India.  
**youngi** Spinelli and Wirth, 1984c: 699. Colombia.

## *Nomina dubia*

**bertrandi** Harant and Cellier, 1949: 10. France.  
**gloriosa** Kieffer, 1925a: 422. Austria.  
**ljatifeidae** Remm, 1967: 27 (as *latifeidae*). Azerbaijan.

### Genus ANKYLOHELEA de Meillon and Wirth

**ANKYLOHELEA** de Meillon and Wirth, 1987b: 384. Type species: *Ankylohelea montana* de Meillon and Wirth, by original designation.

**montana** de Meillon and Wirth, 1987b: 384. South Africa.

### Genus ATYPHOHELEA Borkent

**ATYPHOHELEA** Borkent, 1998: 138. Type species: *Johannsenomyia macroneura* Malloch, by original designation.

**cothurnata** (Meunier, 1904a): 231 (1904b: 242) (*Ceratopogon*). Baltic region. Eocene.

*flagella* Meunier, 1904a: 230 (1904b: 241) (*Ceratopogon*). Baltic region. Eocene.

**macroneura** (Malloch, 1915a): 337 (*Johannsenomyia*). USA (Kansas).

*nigra* (Wirth, 1952a): 208 (*Neurohelea*). USA (California).

### Genus AUSTROHELEA Wirth and Grogan

**AUSTROHELEA** Wirth and Grogan, 1988: 22. Type species: *Monohelea shannoni* Wirth and Blanton, by original designation.

**antipodalis** (Ingram and Macfie, 1931b): 205 (*Monohelea*). New Zealand.

**brevipes** (Lee, 1948c): 355 (*Monohelea*). Australia (Western Australia).

**campbellensis** (Tokunaga, 1964b): 289 (*Monohelea*). New Zealand.

**ferruginea** (Macfie, 1932c): 49 (*Monohelea*). New Zealand.

**shannoni** (Wirth and Blanton, 1972b): 175 (*Monohelea*). Argentina (Río Negro).

**sirii** Ronderos, Spinelli and Grogan, 2017: 260. Argentina (Neuquén).

**spinosa** Ronderos, Spinelli and Grogan, 2017: 263. Argentina (Neuquén).

**tasmaniensis** (Lee, 1948c): 354 (*Monohelea*). Australia (Tasmania).

**tonnoiri** (Macfie, 1932c): 46 (*Monohelea*). New Zealand.

### Genus BAEODASYMYIA Clastrier and Raccurt

**BAEODASYMYIA** Clastrier and Raccurt, 1979b: 100. Type species: *Baeodasymyia modesta* Clastrier and Raccurt, by monotypy.

**christopheri** Borkent, *in* Borkent and Craig 1999: 15. Costa Rica.

**dominicana** Szadziewski and Grogan, 1994: 220. Dominican Republic. Miocene.

**gustavo** Borkent, *in* Borkent and Craig 1999: 20. Paraguay.

**lydiae** Borkent, *in* Borkent and Craig 1999: 19. Costa Rica.

**michaeli** Borkent, *in* Borkent and Craig 1999: 13. Costa Rica.

**modesta** Clastrier and Raccurt, 1979b: 100. Haiti.

### Genus BAEOHELEA Wirth and Blanton

**BAEOHELEA** Wirth and Blanton, 1970c: 95. Type species: *Baeohelea nana* Wirth and Blanton, by original designation.

**nana** Wirth and Blanton, 1970c: 95. Dominica.

### Genus BAHIAHELEA Wirth

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

**brasiliensis** Wirth, 1992: 280. Brazil (Bahia).

### Genus BORKENTHELEA Spinelli and Grogan

**BORKENTHELEA** Spinelli and Grogan, 1993: 321. Type species: *Borkenthelea nothofagus* Spinelli and Grogan, by original designation.

**harii** Spinelli and Grogan, 2001: 148. Argentina (Chubut).

**nerudai** Spinelli and Grogan, 2001: 151. Chile.

**nothofagus** Spinelli and Grogan, 1993: 323. Argentina (Río Negro).

**quatei** Spinelli and Grogan, 2001: 153. Argentina (Chubut).

### Genus BOTHERHELEA Grogan and Wirth

**BOTHERHELEA** Grogan and Wirth, 1983: 199. Type species: *Bothahelea phelpsi* Grogan and Wirth, by original designation.

**gigantostyla** Grogan and Wirth, 1983: 203. Zimbabwe.

**nama** de Meillon and Wirth, 1987a: 42. South Africa.

**phelpsi** Grogan and Wirth, 1983: 200. Zimbabwe.

### Genus BOTHAMIA Meiswinkel

**BOTHAMIA** Meiswinkel, 1987: 300. Type species: *Bothamia demeilloni* Meiswinkel, by original designation.

**demeilloni** Meiswinkel, 1987: 300. South Africa.

### Genus BRACHYCRETACEA Szadziewski

**BRACHYCRETACEA** Szadziewski, 1996: 63. Type species: *Brachycretacea taimyrica* (Remm), by original designation.

**taimyrica** (Remm, 1976b): 115 (*Baeohelea*). Russia (Krasnoyarsk Krai). Upper Cretaceous.

### Genus BRACHYPOGON Kieffer

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

## Subgenus BRACHYPOGON Kieffer

- acutus** Yu, *in* Yu *et al.* 2005a: 1388. China (Hubei).  
**afifi** Boorman and Harten, 2002: 452. Yemen.  
**americanus** Szadziewski and Grogan, 1998a: 42. Dominican Republic. Miocene.  
**apunctipennis** Spinelli and Grogan, 1998: 64. Brazil (Rondônia).  
**arabicus** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 646. United Arab Emirates.  
**artemis** Debenham, 1991: 771. Australia (New South Wales).  
**baculus** Das, Mazumdar and Chaudhuri, 2010: 456. India.  
**balticus** Szadziewski, 1988: 93. Baltic region. Eocene.  
**beaufortanensis** Delécolle and Rieb, 1992: 33. France.  
    *sudowicus* Szadziewski, 2001: 211. Poland.  
**beccus** Saha, Brahma & Hazra, 2019: 2. India.  
**bergensis** (de Meillon and Hardy, 1953): 26 (*Ceratopogon*). South Africa.  
**bifidus** Spinelli and Grogan, 1998: 66. Dominica.  
**bifurcus** Debenham, 1991: 780. Australia (New South Wales).  
**bimaculatus** Spinelli and Grogan, 1998: 67. Colombia.  
**bonaerensis** Spinelli, 1990: 744. Argentina (Buenos Aires).  
**boormani** Grogan and de Meillon, 1993: 400. Senegal.  
**brazzai** (Vattier and Adam, 1966b): 736 (*Ceratopogon*). Congo.  
**bryanae** Debenham, 1991: 774. Australia (New South Wales).  
**caecus** Sarkar and Das Gupta, *in* Saha and Das Gupta 2006: 18. India.  
**calchaqui** Spinelli, 1990: 746. Argentina (Salta).  
**calloti** Grogan and de Meillon, 1993: 403. Senegal.  
**canadensis** Downes, 1976: 1147. Canada (Quebec).  
**carpinteroi** Spinelli and Marino, 2008: 120. Peru.  
**chuanxicus** Yu and Wen, *in* Yu *et al.* 2005a: 1389. China (Sichuan).  
**citrithecus** Yu and Lai, *in* Yu *et al.* 2005a: 1390. China (Guangdong).  
**complanothecus** Yu, *in* Yu *et al.* 2005a: 1392. China (Chongqing).  
**compressus** Yu and Liu, *in* Yu *et al.* 2005a: 1393. China (Chongqing).  
**corius** (de Meillon and Hardy, 1954): 69 (*Ceratopogon*). South Africa.  
    *emphuxi* (Vattier and Adam, 1966b): 734 (*Ceratopogon*). Congo.  
**corneti** Grogan and de Meillon, 1993: 392. Senegal.  
**corneus** Saha, Brahma & Hazra, 2019: 6. India.  
**corniger** Debenham, 1991: 777. Australia (New South Wales).  
**curtus** Debenham, 1991: 796. Australia (Queensland).  
**debenhamae** Grogan and de Meillon, 1993: 405. Senegal.  
**defectivus** (Strobl, 1906): 400 (*Ceratopogon*). Spain.  
**delecollei** Grogan and de Meillon, 1993: 404. Senegal.  
**demeilloni** Grogan and Wirth, 1993: 30. Zimbabwe.  
**ecuadorensis** Spinelli and Grogan, 1998: 68. Ecuador.  
**emeiensis** Wen and Yu, *in* Wen *et al.* 1991: 30. China (Sichuan).  
**eocenicus** Szadziewski, 1988: 91. Denmark. Eocene.  
**ethelae** Spinelli and Grogan, 1998: 62. Panama.  
**fagicola** Delécolle and Schiegg, 1999a: 31. Switzerland.  
**flecteris** Das, Mazumdar and Chaudhuri, 2010: 457. India.  
**fuscivenosus** (Lutz, 1914): 94 (*Palpomyia*). Brazil (Rio de Janeiro).  
**gearyae** Debenham, 1991: 786. Australia (New South Wales).  
**gedanicus** Szadziewski, 1988: 95. Poland. Eocene.  
**ginue** Huerta and Spinelli, 2016: 479. Mexico (Hidalgo).  
**gongdongi** Yu and Huang, *in* Yu *et al.* 2009: 48. China (Fujian).  
**gravidus** Debenham, 1991: 790. Australia (Queensland).



**griffithsae** Debenham, 1991: 797. Australia (Queensland).  
**grobleri** de Meillon and Wirth, 1981c: 575. South Africa.  
**hamiltoni** de Meillon and Wirth, 1981c: 576. South Africa.  
**halimos** Yu and Li, *in* Li *et al.* 2008: 706. China (Hong Kong).  
**havelkai** Grogan and de Meillon, 1993: 402. Central African Republic.  
**hercules** Debenham, 1991: 788. Australia (New South Wales).  
**idolon** Debenham, 1991: 791. Australia (Queensland).  
**impar** (Johannsen, 1938): 223 (*Ceratopogon*). Puerto Rico (USA).  
**infarctipes** Delécolle and Grogan, 1990: 133. Senegal.  
**infrequens** Saha and Das Gupta, *in* Saha and Das Gupta 2006: 20. India.  
**insularis** Spinelli and Grogan, 1998: 70. Cuba.  
**insulicola** (Tokunaga, *in* Tokunaga and Murachi 1959): 350 (*Ceratopogon*). Micronesia.  
**institor** Debenham, 1991: 796. Australia (New South Wales).  
**jorgei** Spinelli and Marino, 2008: 122. Peru.  
**kokocinskii** Szadziewski, 1983b: 393. Algeria.  
**kremeri** Szadziewski and Havelka, 1984: 353. North Korea.  
**krugeri** de Meillon and Wirth, 1981c: 578. South Africa.  
**krzeminskii** Szadziewski and Havelka, 1984: 344. North Korea.  
**laneae** Swanson and Grogan, 2011: 533. USA (Alabama).  
**latifemoris** Clastrier, 1989c: 190. Guinea.  
**libanius** (de Meillon, 1943): 104 (*Ceratopogon*). South Africa.  
**limushanensis** Liu, Yan and Liu, 1996a: 41. China (Hainan).  
**lobulus** Yu and Zhang, *in* Yu *et al.* 2005a: 1399. China (Tibet).  
**lorica** Debenham, 1991: 793. Australia (Queensland).  
**medusae** Debenham, 1991: 778. Australia (New South Wales).  
**maitangensis** Yu, Wang and Tan, *in* Wang *et al.* 2009: 181. China (Hainan).  
**miocaenicus** Szadziewski, 1993: 610. Germany. Eocene.  
**mireillae** (Vattier and Adam, 1966b): 733 (*Ceratopogon*). Congo.  
**monicae** Spinelli and Grogan, 1998: 70. Colombia.  
**nanchuanensis** Yu, *in* Yu *et al.* 2005a: 1400. China (Chongqing).  
**neotericus** Yu and Zhang, *in* Wen *et al.* 1991: 32. China (Sichuan).  
**nicolaii** Debenham, 1991: 798. Papua New Guinea.  
**nieves** (Havelka, 1976b): 91 (*Ceratopogon*). Germany.  
**novaguineae** (Tokunaga, 1964a): 294 (*Ceratopogon*). Papua New Guinea.  
**obesus** Szadziewski, Gwizdalska-Kentzer and Giłka, 2011: 647. United Arab Emirates.  
**optimus** Saha and Das Gupta, *in* Saha and Das Gupta 2006: 21. India.  
**pakistanicus** Szadziewski and Havelka, 1984: 346. Pakistan.  
**paraensis** Wirth and Blanton, 1970c: 99 (as *parasensis*). Brazil (Pará).  
**peruensis** Spinelli and Marino, 2008: 118. Peru.  
**petersi** (Tokunaga, 1964a): 293 (*Ceratopogon*). Papua New Guinea.  
**phymos** Delécolle and Grogan, 1990: 129. Senegal.  
**placodus** Yu, *in* Yu *et al.* 2005a: 1403. China (Hubei).  
**pollices** Debenham, 1991: 783. Australia (New South Wales).  
**proprius** Sarkar and Das Gupta, *in* Saha and Das Gupta 2006: 21. India.  
**pseudocanadensis** Sarkar and Das Gupta, *in* Saha and Das Gupta 2006: 22. India.  
**pseudoparaensis** Spinelli and Grogan, 1998: 64. Brazil (Pará).  
**riebi** Grogan and de Meillon, 1993: 397. Senegal.  
**ringueleti** Spinelli, 1990: 748. Argentina (Río Negro).  
**schmitzi** Spinelli and Grogan, 1998: 65. Brazil (Rondônia).  
**senegalensis** (de Meillon and Wirth, 1955): 275 (*Ceratopogon*). Senegal.  
**sitius** (de Meillon, 1959a): 345 (*Ceratopogon*). South Africa.  
**soavei** Spinelli and Marino, 2008: 128. Peru.

**sparsus** Yu, *in* Yu *et al.* 2005a: 1404. China (Hubei).  
**spatuliformis** Spinelli and Grogan, 1998: 65. Brazil (Rondônia).  
**spinosipes** Clastrier, 1989c: 194. Guinea.  
**spinosissimus** Clastrier, 1989c: 195. Guinea.  
**subiectus** Debenham, 1991: 789. Australia (New South Wales).  
**szadziwskii** Grogan and de Meillon, 1993: 400. Senegal.  
**tabernaculum** Debenham, 1991: 784. Australia (New South Wales).  
**telesfordi** Spinelli and Grogan, 1998: 71. St. Vincent.  
**tokunagai** Grogan and Wirth, 1981c: 96. Solomon Islands.  
**turpanensi** Ma and Yu, *in* Ma *et al.* 2017: 64. China (Xinjiang).  
**usticius** Yu and Liu, *in* Yu *et al.* 2005a: 1405. China (Qinghai).  
**vitiosus** (Winnertz, 1852): 49 (*Ceratopogon*). Germany.  
    *minimus* (Kieffer, 1924b): 402 (*Anakempia*). France.  
    *niger* (Mayer, 1934a): 291 (*Trishelea*). Poland.  
**woodruffi** Spinelli and Grogan, 1998: 72. Dominica Republic.  
**wudangshanensis** Yu, *in* Yu *et al.* 2005a: 1408. China (Hubei).  
**xingyangensis** Yu, *in* Yu *et al.* 2005a: 1409. China (Henan).  
**yarimii** Boorman and Harten, 2002: 453. Oman.  
**zhuhaiensis** Yu and Hao, *in* Yu *et al.* 2005a: 1411. China (Guangdong).

### Subgenus ISOHELEA Kieffer

**ISOHELEA** Kieffer, 1917b: 295. Type species: *Ceratopogon lacteipennis* Zetterstedt (misidentified, = *Psilohelea sociabilis* Goetghebuer), by original designation.

**NILOHELEA** Kieffer, 1921b: 22. Type species: *Nilohelea albipennis* Kieffer, by monotypy.

**TRISHELEA** Kieffer, 1925b: 153. Type species: *Trishelea incompleta* Kieffer, by original designation.

**abdominalis** (Tokunaga, 1940b): 259 (*Ceratopogon*). Japan.  
**aethiopicus** (Clastrier, Rioux and Descous, 1961): 87 (*Ceratopogon*). Chad.  
**africanus** de Meillon, 1929: 248. South Africa.  
**alpinus** (Clastrier, 1961a): 413 (*Ceratopogon*). Austria.  
**aquilonalis** (Clastrier, 1961a): 421 (*Ceratopogon*). Finland.  
**babiogorensis** Szadziwski, *in* Szadziwski *et al.* 1994: 5. Poland.  
**basiflagellatus** (Tokunaga, 1940b): 263 (*Ceratopogon*). Japan.  
**beskidicus** Krzywinski, *in* Szadziwski *et al.* 1994: 7. Poland.  
**bialoviesicus** Krzywinski, *in* Szadziwski *et al.* 1994: 9. Poland.  
**bilobatus** (Remm, 1993): 189 (*Ceratopogon*). Kazakhstan.  
**borealis** (Kieffer, 1919b): 41 (1919a: 68) (*Psilohelea*). Norway.  
**borkenti** Spinelli and Cazorla, 2004: 3. Argentina (Mendoza).  
**carpathicus** Szadziwski, *in* Szadziwski *et al.* 1994: 12. Poland.  
**caucasicus** (Remm, 1967): 28 (*Ceratopogon*). Georgia.  
**clastrieri** Szadziwski, 1983b: 386. Algeria.  
**clavatus** (Clastrier, 1966): 706 (*Ceratopogon*). Canary Islands (Spain).  
**cuacuahuitlus** Huerta and Borkent, 2005: 115. Mexico (Jalisco).  
**darvazi** (Remm, 1974c): 55 (*Ceratopogon*). Tajikistan.  
**dehiscens** Debenham, 1991: 802. Australia (New South Wales).  
**dilatatus** Yu, *in* Yu *et al.* 2005a: 1413. China (Henan).  
**dominicanus** Szadziwski and Grogan, 1998a: 42. Dominican Republic. Miocene.  
**falcifer** (Tokunaga, 1940b): 261 (*Ceratopogon*). Russia (Sakhalin Oblast).  
**ferganicus** (Remm, 1974c): 56 (*Ceratopogon*). Kyrgyzstan.  
**flaviventris** (Kieffer, 1919a): 66 (*Psilohelea*). Croatia.  
    *croaticus* (Remm, 1981): 32 (*Ceratopogon*). New name for *flaviventris* Kieffer.  
**freidbergi** Dominiak, Alwin and Gilka, 2014: 135. Israel.

**glukhovae** Grogan and de Meillon, 1993: 406. Senegal.  
**griseipennis** (Storå, 1945): 34 (*Isohelea*). Azores (Portugal).  
**hadrosaurus** Debenham, 1991: 801. Australia (New South Wales).  
**hamoni** (Vattier and Adam, 1966b): 730 (*Ceratopogon*). Congo.  
**henningseni** Szadziewski, 1988: 89. Denmark. Eocene.  
**herati** Navai, 1997: 184. Afghanistan.  
**hudjakovi** (Remm, 1974c): 53 (*Ceratopogon*). Russia (Mari El Republic).  
**hugoi** Spinelli and Grogan, 1994: 2. Colombia.  
**huochengensis** Yu and Xiang, in Yu *et al.* 2005a: 1414. China (Xinjiang).  
**hyperboreus** (Clastrier, 1961a): 415 (*Ceratopogon*). Norway.  
**incerticuris** Sarkar and Das Gupta, in Saha and Das Gupta 2006: 23. India.  
**incompletus** (Kieffer, 1925b): 153 (*Trishelea*). Poland.  
     *thienemanni* (Mayer, 1940): 162 (*Helea*). Sweden.  
     *lapiae* (Clastrier, 1961a): 416 (*Ceratopogon*). Finland.  
     *xuguitensis* Cao and Chen, 1984: 298 (*Culicoides*). China (Inner Mongolia).  
**jaroslavi** Szadziewski, 1983b: 388. Algeria.  
**laricis** (Remm, 1974c): 51 (*Ceratopogon*). Russia (Sakhalin Oblast).  
**longipalpis** (Kieffer, 1925a): 412 (*Trishelea*). Russia (Kaliningrad Oblast).  
**lunatus** Borkent, in Borkent and Wirth 1997: 93. New name for *arcuatus* Remm.  
     *arcuatus* (Remm, 1993): 189 (*Ceratopogon*, preoccupied by *Culicoides arcuatus* (Winnertz, 1852)). Russia (Sakha Republic).  
**magnipalpis** (Clastrier, 1961a): 409 (*Ceratopogon*). France.  
**mapuche** Spinelli, 1990: 750. Argentina (Río Negro).  
**misionensis** Spinelli, 1990: 752. Argentina (Misiones).  
**montanus** (Tokunaga, 1940d): 152 (*Ceratopogon*). Japan.  
**monticola** (Tokunaga, 1940b): 262 (*Ceratopogon*). Japan.  
**montivagus** Yu and Wen, in Wen *et al.* 1991: 35. China (Sichuan).  
**nevis** Saha, Brahma & Hazra, 2019: 12. India.  
**nipponensis** Wirth and Grogan, 1988: 32. New name for *albitarsis* Tokunaga.  
     *albitarsis* (Tokunaga, 1940b): 261 (*Ceratopogon*, preoccupied by *Schizohoelea albitarsis* (Wiedemann, 1817)). Japan.  
**nitidulus** (Edwards, 1921): 125 (*Psilohoelea*). Great Britain.  
     *crassiforceps* (Kieffer, 1925a): 411 (*Trishelea*). Russia (Kaliningrad Oblast).  
     *turfaceus* (Kieffer, 1925a): 415 (*Anakempia*). Russia (Kaliningrad Oblast).  
     *finniae* (Clastrier, 1961a): 417 (*Ceratopogon*). Finland.  
**norvegicus** Szadziewski and Hagan, 2000: 459. Norway.  
**oreinus** (Remm, 1974c): 55 (*Ceratopogon*). Kyrgyzstan.  
**pallidipennis** Spinelli and Grogan, 1994: 6. Honduras.  
**pasquieri** (Clastrier, 1961a): 402 (*Ceratopogon*). Algeria.  
**pelecatius** (Remm, 1974c): 54 (*Ceratopogon*). Kyrgyzstan.  
**perpusillus** (Edwards, 1921): 125 (*Psilohoelea*). Great Britain.  
**polonicus** Szadziewski, 1988: 88. Poland. Eocene.  
**prominulus** (Meunier, 1904a): 228 (1904b: 239) (*Ceratopogon*). Baltic region. Eocene.  
**prominuloides** Szadziewski and Grogan, 1998a: 43. Dominican Republic. Miocene.  
**pruinus** (Wirth, 1952a): 201 (*Helea*). USA (California).  
**qinghai** Yu and Liu, in Yu *et al.* 2005a: 1421. China (Qinghai).  
**raohenicus** Yu and Liu, in Yu *et al.* 2005a: 1422. China (Heilongjiang).  
**remmi** Wirth and Grogan, 1988: 32. New name for *falcatus* Remm.  
     *falcatus* (Remm, 1974c): 54 (*Ceratopogon*, preoccupied by *Stilobezzia falcata* (Meunier, 1904a)). Russia (Sakhalin Oblast).  
**sahariensis** (Clastrier, 1961a): 422 (*Ceratopogon*). Algeria.  
**saxatilis** (Clastrier, 1961a): 411 (*Ceratopogon*). Algeria.

**sentiger** Borkent, *in* Borkent and Wirth 1997: 94. New name for *spiniger* Remm.  
*spiniger* (Remm, 1974c): 53 (*Ceratopogon*, preoccupied by *Serromyia spinigera* (Loew, 1850)). Kyrgyzstan.  
**serratus** (Lewis, 1956): 46 (*Helea*). USA (Connecticut).  
**sevanicus** (Remm, 1974c): 50 (*Ceratopogon*). Armenia.  
**silecis** Szadziewski, 1990b: 485. Poland.  
**sociabilis** (Goetghebuer, 1920): 68 (*Psilohhelea*). Belgium.  
**spinosus** Liu, Yan and Liu, 1996a: 40. China (Hainan).  
**stigmalis** (Coquillett, 1902a): 86 (*Ceratopogon*). USA (New Mexico).  
**stolida** Sarkar, Saha and Das Gupta, *in* Saha and Das Gupta 2006: 23. India.  
**subnitidulus** Yu and Wang, *in* Yu *et al.* 2005a: 1424. China (Jiangxi).  
**surae** Szadziewski, 1984a: 555. Algeria.  
**susunai** (Remm, 1974c): 51 (*Ceratopogon*). Russia (Sakhalin Oblast).  
**sylvaticus** Yu and Liu, *in* Wen *et al.* 1991: 35. China (Sichuan).  
**taivoi** (Remm, 1974c): 50 (*Ceratopogon*). Kyrgyzstan.  
**tiiveli** (Remm, 1980): 103 (*Ceratopogon*). Tajikistan.  
**turkestanicus** (Remm, 1974c): 56 (*Ceratopogon*). Kyrgyzstan.  
**ussuriensis** (Glukhova, 1979): 169 (*Isohelea*). Russia (Primorsky Krai).  
**vaillantii** (Mayer, 1955): 111 (*Helea*). Algeria.  
*ajjerensis* (Clastrier, 1961a): 408 (*Ceratopogon*). Algeria.  
**vanharteni** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 647. United Arab Emirates.  
**wirthei** Spinelli, 1990: 753. Argentina (La Rioja).  
**wirthorum** Grogan and de Meillon, 1997: 130. Zimbabwe.  
**yariensis** (Tokunaga, 1940d): 151 (*Ceratopogon*). Japan.  
**zavoicus** Szadziewski, *in* Szadziewski *et al.* 1994: 29. Poland.

#### Subgenus SARISSOHELEA Debenham

**SARISSOHELEA** Debenham, 1991: 798 (as subgenus of *Brachypogon*). Type species: *Brachypogon kraussi* Grogan and Wirth, by original designation.

**alexandros** Debenham, 1991: 800. Papua New Guinea.  
**kraussi** Grogan and Wirth, 1981c: 93. Solomon Islands.  
**maai** (Tokunaga, 1964a): 298 (*Ceratopogon*). Indonesia.  
**papuensis** (Tokunaga, 1964a): 296 (*Ceratopogon*). Papua New Guinea.  
**peregrinator** (Edwards, 1928): 56 (*Ceratopogon*). Western Samoa.

#### Species of BRACHYPOGON unplaced to subgenus

**biradialis** Spinelli, Borkent and Ronderos, 2013c: 91. Chile.  
**tico** Spinelli, Borkent and Ronderos, 2013c: 93. Costa Rica.

#### *Nomina dubia*

**albipennis** (Kieffer, 1921b): 22 (*Nilohhelea*). South Sudan.  
**obscurus** (Santos Abreu, 1918): 323 (*Ceratolophus*, as variety of *rufigastris* Santos Abreu). Canary Islands (Spain).  
**rufigastris** (Santos Abreu, 1918): 321 (*Ceratolophus*). Canary Islands (Spain).  
**singularis** (Santos Abreu, 1918): 317 (*Ceratolophus*). Canary Islands (Spain).

### Genus CACAOHELEA Wirth and Grogan

CACAOHELEA Wirth and Grogan, 1988: 33. Type species: *Cacaohelea youngi* Wirth and Grogan, by original designation.

**adusta** Borkent and Picado, 2008: 28. Costa Rica.

**curva** Borkent and Picado, 2008: 28. Costa Rica.

**glukhovae** Borkent and Picado, 2008: 28. Costa Rica.

**youngi** Wirth and Grogan, 1988: 34. Costa Rica.

### Genus CALCARHELEA Wirth and Grogan

CALCARHELEA Wirth and Grogan, 1988: 35. Type species: *Alluaudomyia bimater* de Meillon and Hardy, by original designation.

**bimater** (de Meillon and Hardy, 1953): 25 (*Alluaudomyia*). South Africa.

### Genus CAMPTOPTEROHELEA Wirth and Hubert

CAMPTOPTEROHELEA Wirth and Hubert, 1960b: 89. Type species: *Camptopterohelea hoogstraali* Wirth and Hubert, by original designation.

**admirabilis** Das Gupta and Sarkar, 1982: 73. India.

**distincta** Das Gupta and Sarkar, 1982: 70. India.

**hoogstraali** Wirth and Hubert, 1960b: 90. Philippines.

**javanensis** Wirth and Wada, 1979: 347. Indonesia.

**odora** Stebner, Szadziewski, Rühr, Singh, Hammel, Kvitte and Rust, 2016: 2. India. Eocene.

**tokunagai** Wirth and Wada, 1979: 349. Malaysia.

### Genus CAPEHELEA de Meillon and Wirth

CAPEHELEA de Meillon and Wirth, 1987b: 387. Type species: *Capehelea steli* de Meillon and Wirth, by original designation.

**steli** de Meillon and Wirth, 1987b: 388. South Africa.

### Genus CERATOCULICOIDES Wirth and Ratanaworabhan

CERATOCULICOIDES Wirth and Ratanaworabhan, 1971a: 170. Type species: *Helea longipennis* Wirth, by original designation.

**aliciae** Huerta and Borkent, 2005: 112. Mexico (Jalisco).

**blantoni** Wirth and Ratanaworabhan, 1971a: 174. USA (Maryland).

**danicus** Szadziewski, 1988: 102. Denmark. Eocene.

**longipennis** (Wirth, 1952a): 201 (*Helea*). USA (California).

**moravicus** Knoz, 1987: 390. Czech Republic.

*gracilipes* (Remm, 1967): 27 (*Ceratopogon*, preoccupied by *Bezzia gracilipes* (Winnertz, 1852)). Georgia.

*havelkai* Wirth and Grogan, 1988: 40. New name for *gracilipes* Remm.

*remmi* Gosseries, 1989: 2. New name for *gracilipes* Remm.

**tontoeguri** (Havelka, 1980): 86 (*Ceratopogon*). Germany.

**virginianus** (Wirth, 1951d): 318 (*Helea*). USA (Virginia).

## Genus CERATOHELEA Wirth and Grogan

**CERATOHELEA** Wirth and Grogan, 1988: 40. Type species: *Ceratopogon advena* de Meillon, by original designation.

**advena** (de Meillon, 1959a): 341 (*Ceratopogon*). Zimbabwe.

**kama** (de Meillon, 1959a): 340 (*Ceratopogon*). South Africa. **New Combination.**

## Genus CERATOPALPOMYIA Szadziewski

**CERATOPALPOMYIA** Szadziewski, 1988: 171. Type species *Ceratopalpomyia eocenica* Szadziewski, by original designation.

**eocenica** Szadziewski, 1988: 173. Denmark. Eocene.

## Genus CERATOPOGON Meigen

**HELEA** Meigen, 1800: 18. Type species: *Ceratopogon communis* Meigen, designation by Coquillett, 1910: 549. Generic name suppressed by ICZN Opinion 678.

**HELEA** Latreille, 1802: 425. Unavailable name.

**CERATOPOGON** Meigen, 1803: 261. Type species: *Tipula barbicornis* Linnaeus (misidentified, = *Ceratopogon communis* Meigen), by monotypy.

**CERAPOGON** Rafinesque, 1815: 130 (Unnecessary new name for *Ceratopogon* Meigen). Type species: *Ceratopogon communis* Meigen, automatic.

**HELEA** Latreille, 1820: 360. Unavailable name.

**HELEA** Osten Sacken, 1882: 193. Type species: *Tipula barbicornis* Linnaeus, 1767 (as “*Tip. barbicornis* F.”), sensu Meigen, 1803 (misidentified, = *Ceratopogon communis* Meigen), by subsequent monotypy (Hendel, 1908: 49).

**PSILOHELEA** Kieffer, 1915c: 284 (misspelled as *Psilohelca*), 1917: 294. Type species: *Ceratopogon candidatus* Winnertz (= *Ceratopogon niveipennis* Meigen), by original designation.

**ANAKEMPIA** Kieffer, 1924a: 13. Type species: *Dasyhelea grandiforceps* Kieffer, by original designation.

**DIPLOHELEA** Kieffer, 1925a: 420. Type species: *Diplohelea parvula* Kieffer (= *Ceratopogon grandiforceps* Kieffer), by original designation.

**abstrusus** Borkent and Grogan, 1995: 40. Canada (British Columbia).

**adductus** Borkent and Grogan, 1995: 53. Mongolia.

**algidus** Borkent and Grogan, 1995: 80. Canada (British Columbia).

**annettae** Borkent and Grogan, 1995: 87. Canada (British Columbia).

**arcanus** Borkent and Grogan, 1995: 44. USA (Maryland).

**azari** Dominiak, Alwin and Gilka, 2014: 138. Lebanon.

**bitterfeldi** Szadziewski, 1993: 613. Germany. Eocene.

**boomerangus** Borkent and Grogan, 1995: 33. USA (Maryland).

**cavatus** Borkent and Grogan, 1995: 67. North Korea.

**ceranowiczi** Szadziewski, 1988: 77. Baltic region. Eocene.

**cinaedicus** Borkent and Grogan, 1995: 54. USA (Colorado).

**cirrosus** Remm, 1974c: 45. Russia (Altai Republic).

**communis** Meigen, 1804: 27. Germany.

**contextus** Yu and Ma, in Yu *et al.* 2005a: 1429. China (Xinjiang).

**crypticus** Szadziewski, 1988: 70. Baltic region. Eocene.

**culicoidithorax** Hoffman, 1926a: 156. USA (New York).

**curtus** Borkent and Grogan, 1995: 64. USA (Alaska).

**curvistylus** Remm, 1993: 189. Russia (Sakha Republic).

**denticulatus** Borkent and Grogan, 1995: 58. Great Britain.  
**dsungaricus** Remm, 1980: 101. Kazakhstan.  
**elevatus** Borkent and Grogan, 1995: 48. Austria.  
**eminens** Meunier, 1904a: 229 (1904b: 240). Baltic region. Eocene.  
**ferulae** Remm, 1974c: 43. Kyrgyzstan.  
**forcipiformis** Meunier, 1904a: 235 (1904b: 246). Baltic region. Eocene.  
     *defectus* Meunier, 1904a: 229 (1904b: 240). Baltic region. Eocene.  
**fumipennis** Remm, 1974c: 41. Kyrgyzstan.  
**gedanicus** Szadziewski, 1988: 74. Baltic region. Eocene.  
**gigaforceps** Remm, 1973: 180. Russia (Sakha Republic).  
**grandiforceps** (Kieffer, 1913a): 7 (*Dasyhelea*). Great Britain.  
     *parvula* (Kieffer, 1925a): 420 (*Diplohelea*). Russia (Kaliningrad Oblast).  
**grogani** Szadziewski, 1988: 64. Baltic region. Eocene.  
**hennigi** Szadziewski, 1988: 60. Baltic region. Eocene.  
**inverecundus** Borkent and Grogan, 1995: 46. Canada (British Columbia).  
**kolensis** Remm, 1993: 189. Russia (Murmansk Oblast).  
**kotejai** Szadziewski, 1993: 616. Germany. Eocene.  
**kurilensis** Remm, 1974c: 41. Russia (Sakhalin Oblast).  
**lacteipennis** Zetterstedt, 1838: 820. Norway.  
     *edentatus* (Edwards, 1921): 124 (*Psilohelea*). Great Britain.  
     *sphagnicola* (Kieffer, 1924b): 403 (*Anakempia*). Great Britain.  
     *conjunctus* (Kieffer, 1925a): 416 (*Anakempia*). Great Britain.  
     *longitarsis* (Mayer, 1940): 164 (*Helea*). Great Britain.  
**magniforceps** (Kieffer, 1925a): 413 (*Trishelea*). Russia (Kaliningrad Oblast).  
**mallochi** (Cole, in Cole and Lovett 1921): 213 (*Hartomyia*). USA (Oregon).  
**mammulus** Borkent and Grogan, 1995: 65. Canada (Yukon).  
**margaritae** Szadziewski, 1988: 80. Baltic region. Eocene.  
**miocaenicus** Szadziewski, 1993: 617. Germany. Eocene.  
**multisetosus** Borkent and Grogan, 1995: 76. Canada (Nova Scotia).  
**naccinervis** Borkent, in Borkent and Wirth 1997: 97. New name for *crassinervis* Goetghebuer.  
     *crassinervis* (Goetghebuer, 1920): 62 (*Stilobezzia*, preoccupied by *Palpomyia crassinervis* (de Meijere, 1907)). Belgium.  
**nanalobus** Borkent and Grogan, 1995: 97. Baltic region. Eocene.  
**niveipennis** Meigen, 1818: 73. Germany.  
     *candidatus* Winnertz, 1852: 57. Netherlands.  
**pallicoleatus** Borkent and Grogan, 1995: 83. USA (Oregon).  
**pandus** Borkent and Grogan, 1995: 53. USA (Wisconsin).  
**paraeminens** Borkent and Grogan, 1995: 99. Baltic region. Eocene.  
**paucisetosus** Remm, 1974c: 43. Estonia.  
**piotrowskii** Szadziewski, 1988: 75. Baltic region. Eocene.  
**pisinnus** Borkent and Grogan, 1995: 97. Baltic region. Eocene.  
**pontis** Borkent and Grogan, 1995: 56. USA (Kansas).  
**pubiantennalis** Borkent and Grogan, 1995: 74. Canada (Northwest Territories).  
**rectus** Borkent and Grogan, 1995: 84. USA (Colorado).  
**relictus** Borkent and Grogan, 1995: 32. USA (California).  
**remmicola** Szadziewski, 1988: 71. Baltic region. Eocene.  
**ritzkowskii** Szadziewski, 1988: 78. Baltic region. Eocene.  
**romanicus** Damian-Georgescu, 1972: 19. Romania.  
**seculus** Borkent and Grogan, 1995: 79. USA (Maryland).  
**subeminens** Szadziewski, 1993: 617. Germany. Eocene.  
**succinicola** Szadziewski, 1993: 620. Germany. Eocene.  
**tertiaricus** Szadziewski, 1988: 62. Baltic region. Eocene.

**unguis** (Tokunaga, 1940b): 255 (*Culicoides*). Japan.  
**willisi** Borkent and Grogan, 1995: 81. USA (Maryland).

### Genus CHAIROPOGON Yu

**CHAIROPOGON** Yu, *in* Yu *et al.* 2005a: 1430. Type species: *Chairopogon chengdeiensis* Yu and Hao, by original designation.

**chengdeiensis** Yu and Hao, *in* Yu *et al.* 2005a: 1430. China (Hebei).

### Genus CONGOHELEA Wirth and Grogan

**CONGOHELEA** Wirth and Grogan, 1988: 46. Type species: *Serromyia fulgipennis* Clastrier, by original designation.

**fulgipennis** (Clastrier, 1960b): 291 (*Serromyia*). Congo.

### Genus DIAPHANOBEZZIA Ingram and Macfie

**DIAPHANOBEZZIA** Ingram and Macfie, 1931a: 223. Type species: *Diaphanobezzia pellucida* Ingram and Macfie, by original designation.

**araucaria** Spinelli, 1996: 77. Argentina (Neuquén).

**patagonica** Spinelli and Grogan, 1990: 127. Argentina (Santa Cruz).

**pellucida** Ingram and Macfie, 1931a: 223. Argentina (Río Negro).

**spinellii** Wirth and Grogan, 1988: 48. Argentina (Neuquén).

### Genus DOWNESHELEA Wirth and Grogan

**DOWNESHELEA** Wirth and Grogan, 1988: 50. Type species: *Monohelea stonei* Wirth, by original designation.

**balboa** (Lane and Wirth, 1964): 225 (*Monohelea*). Panama.

**bicornis** Felipe-Bauer and Quintelas, 1993b: 185. Brazil (Rio de Janeiro).

**bimaculata** Clastrier and Delécolle, 1990: 148. Ivory Coast.

**blantoni** (Lane and Wirth, 1964): 217 (*Monohelea*). Panama.

**carioca** (Tavares and Silva Pereira, 1978): 157 (*Monohelea*). Brazil (Rio de Janeiro).

**casimirensis** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 517. Brazil (Rio de Janeiro).

**castroi** (Tavares and Silva Pereira, 1978): 159 (*Monohelea*). Brazil (Rio de Janeiro).

**cebaco** (Lane and Wirth, 1964): 218 (*Monohelea*). Panama.

**charrua** Felipe-Bauer and Spinelli, 1994: 161. Uruguay.

**chiapasi** (Lane and Wirth, 1964): 219 (*Monohelea*). Nicaragua.

**chirusi** (Lane and Wirth, 1964): 218 (*Monohelea*). Panama.

**colombiae** (Lane and Wirth, 1964): 220 (*Monohelea*). Colombia.

**costaricensis** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 518. Costa Rica.

**deanei** Felipe-Bauer and Quintelas, *in* Felipe-Bauer *et al.* 1995: 395. Trinidad.

**eclectica** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 521. Costa Rica.

**fluminensis** Felipe-Bauer and Quintelas, 1993a: 33. Brazil (Rio de Janeiro).

**fuscipennis** (Lane and Wirth, 1964): 221 (*Monohelea*). Colombia.

**grogani** Huerta, Felipe-Bauer and Spinelli, 2012b: 64. Mexico (Oaxaca).

**guianae** (Wirth, 1953b): 150 (*Monohelea*). Guyana.

**jarina** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 526. Costa Rica.

**lanei** Felipe-Bauer and Borkent, *in* Felipe-Bauer *et al.* 2011: 21. Brazil (Pará).



**leei** (Debenham, 1972): 16 (*Monohelea*). Australia (New South Wales).  
**litorale** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 533. Bahamas.  
**macclurei** (Ratanaworabhan and Wirth, 1972): 448 (*Monohelea*). Malaysia.  
**marambaia** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 535. Brazil (Rio de Janeiro).  
**mcdanieli** (Tokunaga, in Tokunaga and Murachi 1959): 411 (*Monohelea*). Belau (USA).  
**moravia** Santarém, Borkent, Spinelli and Felipe-Bauer, 2018: 536. Costa Rica.  
**multilineata** (Lutz, 1914): 93 (*Palpomyia*). Brazil (Rio de Janeiro).  
**nigeriae** (Ingram and Macfie, 1922): 268 (*Monohelea*). Nigeria.  
**nigra** (Tokunaga, 1963a): 243 (*Monohelea*). Papua New Guinea.  
**notialisinica** Yu and Hao, in Yu *et al.* 2005a: 1432. China (Guangxi).  
**nubeculosa** (Macfie, 1932c): 45 (*Monohelea*). New Zealand  
**oliveirai** Felipe-Bauer, in Felipe-Bauer and Silva 2008: 400. Brazil (Rondônia).  
**panamensis** (Lane and Wirth, 1964): 221 (*Monohelea*). Panama.  
**quasidentica** Felipe-Bauer and Quintelas, 1993a: 37. Brazil (Rio de Janeiro).  
**scanloni** (Ratanaworabhan and Wirth, 1972): 449 (*Monohelea*). Thailand.  
**sepikensis** (Debenham, 1972): 13 (*Monohelea*). Papua New Guinea.  
**stenochora** Wirth and Giles, 1990: 446. Fiji.  
**stonei** (Wirth, 1953b): 148 (*Monohelea*). USA (Louisiana).  
**unimaculata** (Debenham, 1972): 5 (*Monohelea*). Australia (New South Wales).  
**whartoni** (Ratanaworabhan and Wirth, 1972): 451 (*Monohelea*). Malaysia.  
**xanthogonua** (Tokunaga, 1963a): 242 (*Monohelea*). Papua New Guinea.

#### **Genus ECHINOHELEA Macfie**

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

#### **Subgenus ECHINOHELEA Macfie**

**australiensis** Debenham, 1970c: 152. Australia (Capital Territory).  
**blantoni** Wirth, 1994c: 232. Panama.  
**flava** Tokunaga, 1963a: 235. Papua New Guinea.  
**harbelensis** de Meillon, 1960: 409. Liberia.  
**hardyi** Tokunaga, 1963a: 235. Papua New Guinea.  
**jamaicensis** Wirth, 1994c: 234. Jamaica.  
**laensis** Tokunaga, 1963a: 236. Papua New Guinea.  
**lanei** Wirth, 1951d: 319. USA (Virginia).  
**leei** Wirth, 1994c: 237. Colombia.  
**longirostris** Debenham, 1970c: 147. Papua New Guinea.  
**macfiei** Lane, 1948: 228. Brazil (São Paulo).  
**moresbyensis** Debenham, 1970c: 149. Papua New Guinea.  
**neotropica** Wirth, 1994c: 237. Colombia.  
**notipes** Debenham, 1970c: 152. Australia (Queensland).  
**ornata** Clastrier, 1984c: 368. Guinea.  
**ornatipennis** Macfie, 1940c: 188. Guyana.  
**pallida** Debenham, 1970c: 155. Papua New Guinea.  
**panamensis** Wirth, 1994c: 239. Panama.  
**papuensis** Tokunaga, 1966a: 112. Papua New Guinea.  
**pastoriana** Clastrier, 1984c: 362. Guinea.  
**pictipennis** Tokunaga, 1963a: 231. Papua New Guinea.  
**richardsi** Macfie, 1940c: 189. Guyana.  
**smartii** Macfie, 1940c: 190. Guyana.  
**vicina** Clastrier, 1984c: 366. Guinea.

**voltana** de Meillon, 1959b: 15. Burkina Faso.  
**zonata** Tokunaga, 1963a: 234. Papua New Guinea.

### Subgenus ECHINOIDESHELEA Wirth

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

**aitkeni** Wirth, 1994c: 231. Brazil (Pará).

### Genus EOHELEA Petrunkevitch

**EOHELEA** Petrunkevitch, 1957: 208. Type species: *Eohelea stridulans* Petrunkevitch (= *Ceratopogon sinuosus* Meunier), by original designation.

**fossicola** Szadziewski, 1993: 624. Germany. Eocene.

**gedanica** Szadziewski, 1988: 165. Poland. Eocene.

**grogani** Szadziewski, 1988: 164. Poland. Eocene.

**indica** Stebner and Szadziewski, 2017: 5. India. Eocene.

**miocaenea** Szadziewski, 1993: 625. Germany. Eocene.

**petrunkevitchi** Szadziewski, 1984b: 39 (1985b: 127). Poland. Eocene.

**sakhalinica** Szadziewski, 1990a: 78. Russia (Sakhalin Oblast). Paleocene.

**sinuosa** (Meunier, 1904a): 234 (1904b: 245) (*Ceratopogon*). Baltic region. Eocene.  
*stridulans* Petrunkevitch, 1957: 209. Baltic region. Eocene.

### Genus FANTHAMIA de Meillon

**FANTHAMIA** de Meillon, 1939c: 103 (as subgenus of *Ceratopogon*). Type species: *Ceratopogon adulator* de Meillon, by original designation.

**abdita** de Meillon and Wirth, 1987a: 46. South Africa.

**adulator** (de Meillon, 1939c): 104 (*Ceratopogon*). South Africa.

**aniculae** de Meillon and Downes, 1986: 167. South Africa.

**cardinis** de Meillon and Wirth, 1979c: 194. Zimbabwe.

**carina** (de Meillon and Hardy, 1953): 28 (*Ceratopogon*). South Africa.

**draconis** de Meillon and Downes, 1986: 170. South Africa.

**forsteri** de Meillon and Downes, 1986: 169. South Africa.

**gigantulus** de Meillon and Wirth, 1979c: 196. South Africa.

**imperfecta** (Goetghebuer, 1935d): 172 (*Culicoides*). Democratic Republic of the Congo.

**jonkeri** de Meillon and Wirth, 1987a: 48. South Africa.

**mennoi** de Meillon and Wirth, 1981c: 582. South Africa.

**montana** de Meillon and Downes, 1986: 167. South Africa.

**ornatipennis** (de Meillon, 1939c): 106 (*Ceratopogon*). South Africa.

**sani** de Meillon and Downes, 1986: 168. South Africa.

### Genus FITTKAUHELEA Wirth and Blanton

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

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

### Genus FOSSIHELEA Szadziewski

**FOSSIHELEA** Szadziewski, 1988: 104. Type species: *Ceratopogon gracilitarsis* Meunier, by original designation.

**gracilitarsis** (Meunier, 1904a): 235 (1904b: 246) (*Ceratopogon*). Baltic region. Eocene.

**miocaenica** Szadziewski, 1993: 627. Germany. Eocene.

### Genus GEDANOHELEA Szadziewski

**GEDANOHELEA** Szadziewski, 1988: 166. Type species: *Gedanohelea loewi* Szadziewski, by original designation.

**fushunensis** Stebner, Szadziewski and Wang, 2016: 4. China (Liaoning). Eocene.

**gerdesorum** Stebner and Szadziewski, 2017: 6. India. Eocene.

**liaoningensis** Stebner, Szadziewski and Wang, 2016: 4. China (Liaoning). Eocene.

**loewi** Szadziewski, 1988: 168. Poland. Eocene.

**succinea** Szadziewski, 1988: 169. Poland. Eocene.

**wirthi** Szadziewski, 1988: 170. Denmark. Eocene.

### Genus HETEROCERATOPOGON Wirth and Grogan

**HETEROCERATOPOGON** Wirth and Grogan, 1988: 55. Type species: *Heteroceratopogon poguei* Wirth and Grogan, by original designation.

**poguei** Wirth and Grogan, 1988: 57. New Caledonia (France).

### Genus HETEROHELEA Clastrier

**HETEROHELEA** Clastrier, 1985b: 272. Type species: *Heterohelea minutissima* Clastrier, by original designation.

**minutissima** Clastrier, 1985b: 272. New Caledonia (France).

### Genus HYPsimyIA Yu

**HYPsimyIA** Yu, in Yu *et al.* 2005a: 1433. Type species: *Hypsimyia emeiensis* Yu and Li, by original designation.

**emeiensis** Yu and Li, in Yu *et al.* 2005a: 1433. China (Sichuan).

### Genus ISTHMOHELEA Ingram and Macfie

**ISTHMOHELEA** Ingram and Macfie, 1931a: 208. Type species: *Isthmohelea disjuncta* Ingram and Macfie, by original designation.

**disjuncta** Ingram and Macfie, 1931a: 209. Chile.

### Genus KOLENOHELEA de Meillon and Wirth

**KOLENOHELEA** de Meillon and Wirth, 1981a: 513. Type species: *Kolenohelea dycei* de Meillon and Wirth, by original designation.

**calcarata** (Goetghebuer, 1920): 64 (*Monohalea*). Belgium.

*sharpi* (Edwards, 1929a): 427 (*Stilobezzia*). Great Britain.  
*fusca* (Goetghebuer, 1932a): 125 (*Stilobezzia*). Belgium.  
**dycei** de Meillon and Wirth, 1981a: 517. South Africa.  
**equilis** de Meillon and Wirth, 1987a: 48. South Africa.  
**fuscipennis** Clastrier, 1984e: 369. Guinea.  
**inuitata** de Meillon and Wirth, 1981c: 586. South Africa.  
**jarmilae** de Meillon and Downes, 1986: 172. South Africa.  
**kindiae** Clastrier, 1984e: 366. Guinea.  
**leonina** de Meillon and Wirth, 1987a: 50. South Africa.  
**levantica** Szadziewski and Alwin, in Alwin-Kownacka *et al.* 2016b: 561. Israel.  
**luciae** de Meillon and Wirth, 1983a: 361. South Africa.  
**milleri** de Meillon and Wirth, 1981a: 521. South Africa.  
**mira** de Meillon and Wirth, 1981c: 583. South Africa.  
**mirabunda** de Meillon and Wirth, 1981a: 522. South Africa.  
**mirifica** de Meillon and Wirth, 1981a: 519. South Africa.  
**monticola** de Meillon and Downes, 1986: 174. South Africa.  
**ornata** Clastrier, 1984e: 367. Guinea.  
**pedi** de Meillon and Wirth, 1987a: 50. South Africa.  
**pugilator** de Meillon and Wirth, 1987a: 52. South Africa.  
**uysorum** de Meillon, Meiswinkel and Wirth, 1982: 138. South Africa.

#### Genus LEPTOHELEA Wirth and Blanton

**LEPTOHELEA** Wirth and Blanton, 1970a: 12. Type species: *Leptohelea micronyx* Wirth and Blanton, by original designation.

**micronyx** Wirth and Blanton, 1970a: 12. Colombia.

#### Genus LUCIAMYIA de Meillon

**LUCIAMYIA** de Meillon, 1937b: 380. Type species: *Luciamyia biloba* de Meillon, by original designation.

**biloba** de Meillon, 1937b: 380. South Africa.

*irrita* (de Meillon, 1937b): 383 (*Monohelea*). South Africa.

#### Genus MACRUROHELEA Ingram and Macfie

**MACRUROHELEA** Ingram and Macfie, 1931a: 203. Type species: *Macrurohelea caudata* Ingram and Macfie, by original designation.

**caudata** Ingram and Macfie, 1931a: 205. Chile.

**commoni** Lee, 1963: 339. Australia (New South Wales).

**dycei** Grogan and Wirth, 1985: 133. Australia (New South Wales).

**fuscipennis** Spinelli and Grogan, 1990: 128. Argentina (Chubut).

**gentilii** Spinelli and Grogan, 1984: 963. Argentina (Neuquén).

**irwini** Grogan and Wirth, 1980b: 140. Chile.

**kuscheli** Wirth, 1965c: 49. Chile.

**leei** Grogan and Wirth, 1985: 131. Australia (Queensland).

**monotheca** Spinelli and Grogan, 1984: 965. Argentina (Neuquén).

**paracaudata** Grogan and Wirth, 1980b: 141. Chile.

**setosa** Wirth, 1965c: 49. Chile.

**similis** Spinelli and Grogan, 1990: 131. Argentina (Río Negro).

**thoracica** Ingram and Macfie, 1931a: 206. Argentina (Río Negro).

**wirthi** Spinelli and Grogan, 1984: 965. Argentina (Neuquén).  
**yamana** Spinelli and Grogan, 1999: 710. Argentina (Tierra del Fuego).

### Genus MANTOHELEA Szadziewski

**MANTOHELEA** Szadziewski, 1988: 144. Type species: *Ceratopogon lacus* Meunier, by original designation.

**gedanica** Szadziewski, 1988: 146. Poland. Eocene.  
**laca** (Meunier, 1904a): 232 (1904b: 243) (*Ceratopogon*). Baltic region. Eocene.  
**sinica** Stebner, Szadziewski and Wang, 2016: 2. China (Liaoning). Eocene.

### Genus METACANTHOHELEA Wirth and Grogan

**METACANTHOHELEA** Wirth and Grogan, 1988: 65. Type species: *Metacanthohelea cogani* Wirth and Grogan, by original designation.

**cogani** Wirth and Grogan, 1988: 66. Aldabra (Seychelles).

### Genus MEUNIEROHELEA Szadziewski

**MEUNIEROHELEA** Szadziewski, 1988: 148. Type species: *Meunierohelea nielseni* Szadziewski, by original designation.

**CHIMAEROHELEA** Debenham, 1988: 801. Type species: *Chimaerohelea caligula* Debenham, by original designation.

**borkenti** Stebner and Szadziewski, 2017: 10. India. Eocene.  
**caligula** (Debenham, 1988): 803 (*Chimaerohelea*). Australia (Queensland).  
**cambayana** Stebner and Szadziewski, 2017: 9. India. Eocene.  
**gedanicola** Szadziewski, 1988: 153. Poland. Eocene.  
**miocaenica** (Szadziewski, 1993): 622 (*Chimaerohelea*). Germany. Eocene.  
**nielseni** Szadziewski, 1988: 150. Denmark. Eocene.  
**orientalis** Stebner and Szadziewski, 2017: 12. India. Eocene.  
**wirthi** Szadziewski, 1988: 157. Denmark. Eocene.

### Genus MONOHELEA Kieffer

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

**accipiter** Debenham, 1972: 34. Australia (New South Wales).  
**affinis** Felipe-Bauer and Spinelli, 1991: 201. Brazil (Amazonas).  
**aguirrei** Tavares and Sousa, 1980: 97. Brazil (Rio de Janeiro).  
**albiclavatoris** Tokunaga and Murachi, 1959: 407. Micronesia.  
**andersoni** Wirth and Grogan, 1981: 30. USA (Maryland).  
**andrei** Vattier and Adam, 1966b: 744. Congo.  
**annulata** Debenham, 1972: 18. Australia (Northern Territory).  
**archibaldoi** Tavares and Sousa, 1980: 98. Brazil (Rio de Janeiro).  
**avicularis** Remm, 1993: 185. Azerbaijan.  
**baltica** Szadziewski, 1988: 130. Poland. Eocene.  
**barbara** Felipe-Bauer and Trindade, 2017: 144. Brazil (Pará).  
**beaveri** Wirth and Giles, 1990: 448. Fiji.  
**bidens** Debenham, 1972: 35. Australia (Capital Territory).  
**bidentata** Felipe-Bauer and Spinelli, 1994: 163. Argentina (Buenos Aires).

**bifurcata** Wirth and Williams, 1964: 308. USA (Massachusetts).  
**boucheti** Clastrier, 1993b: 161. New Caledonia (France).  
**boudinoti** Clastrier, 1993b: 160. New Caledonia (France).  
**brasiliensis** Lane, 1948: 226. Brazil (Rio de Janeiro).  
**candescens** Debenham, 1972: 25. Australia (New South Wales).  
**chalybeata** Clastrier, 1960b: 286. Congo.  
**chazeau** Clastrier, 1985d: 752. New Caledonia (France).  
**clavipes** Macfie, 1932c: 48. New Zealand.  
**clunipes** (Loew, 1850): 30 (*Ceratopogon*). Baltic region. Eocene.  
**cognata** Clastrier, 1960b: 289. Congo.  
**coloisuvae** Wirth and Giles, 1990: 449. Fiji.  
**cornuta** Felipe-Bauer and Trindade, 2017: 146. Brazil (Pará).  
**cunasi** Lane and Wirth, 1964: 232. Panama.  
**dorsotaeniata** Clastrier, 1985d: 756. New Caledonia (France).  
**ema** Felipe-Bauer and Trindade, 2017: 148. Brazil (Pará).  
**estonica** Remm, 1965: 182. Estonia.  
**fairchildi** Lane and Wirth, 1964: 214. Panama.  
**falcata** Debenham, 1972: 7. Australia (New South Wales).  
**fijiensis** Wirth and Giles, 1990: 451. Fiji.  
**floridensis** Wirth and Williams, 1964: 309. USA (Florida).  
**forceps** Felipe-Bauer and Trindade, 2017: 149. Brazil (Pará).  
**gemina** Debenham, 1972: 39. Australia (New South Wales).  
**gorayebi** Felipe-Bauer and Trindade, 2017: 151. Brazil (Pará).  
**grogani** Delécolle and Rieb, 1995: 34. USA (Arkansas).  
**guaimiesi** Lane and Wirth, 1964: 227. Panama.  
**hainanensis** Liu and Yan, 1996: 19. China (Hainan).  
**hieroglyphica** Kieffer, 1917b: 312. Paraguay.  
**hirsuta** Wirth and Grogan, 1981: 36. USA (Maryland).  
**hissarica** Remm, 1980: 91. Tajikistan.  
**hyalinipennis** Clastrier, 1993b: 162. New Caledonia (France).  
**impunctatipennis** Clastrier, 1985d: 748. New Caledonia (France).  
**inflatistyla** Debenham, 1972: 30. Australia (New South Wales).  
**jamnbacki** Wirth and Williams, 1964: 308. USA (Michigan).  
**knighti** Wirth and Williams, 1964: 305. USA (Florida).  
**lanei** Wirth, 1953b: 142. USA (Florida).  
**legrandi** Clastrier, 1984a: 49. Gabon.  
**leveri** Wirth and Giles, 1990: 452. Fiji.  
**lutea** Tokunaga, 1963a: 241. Papua New Guinea.  
**macfie** Wirth, 1953b: 143. USA (Louisiana).  
**maculipennis** (Coquillett, 1905): 64 (*Ceratopogon*). USA (Florida).  
**magnitheca** Wirth and Grogan, 1981: 42. USA (Maryland).  
**maya** Felipe-Bauer, Huerta and Ibáñez-Bernal, 2000b: 815. Mexico (Yucatan).  
**mayeri** Ortiz, 1950d: 202. Venezuela.  
**minuscula** Clastrier, 1985d: 758. New Caledonia (France).  
**neocaledonica** Clastrier, 1993b: 158. New Caledonia (France).  
**novaguinensis** Tokunaga, 1959: 309. Papua New Guinea.  
**obscura** Wirth and Williams, 1964: 304. USA (Massachusetts).  
**orientalis** Ratanaworabhan and Wirth, 1972: 444. Thailand.  
**ornata** Wirth, 1953b: 144. USA (Florida).  
**ornatissima** Clastrier, 1985d: 750. New Caledonia (France).  
**ornatithorax** Clastrier and Delécolle, 1990: 153. Guinea.  
**pahangensis** Ratanaworabhan and Wirth, 1972: 443. Malaysia.

**palauensis** Tokunaga, *in* Tokunaga and Murachi 1959: 408. Belau (USA).  
**pallida** Clastrier and Delécolle, 1990: 151. Guinea.  
**palustria** Debenham, 1972: 28. Australia (Queensland).  
**paranigripes** Saha and Das Gupta, 1991: 6. India.  
**patauateua** Felipe-Bauer and Trindade, 2017: 152. Brazil (Pará).  
**periucunda** de Meillon and Wirth, 1981c: 587. South Africa.  
**phoenix** Debenham, 1972: 38. Australia (New South Wales).  
**polychroma** Clastrier, 1958b: 252. Senegal.  
**poncai** Lane and Wirth, 1964: 228. Panama.  
**ponticulifera** Debenham, 1972: 38. Australia (Capital Territory).  
**praecleara** Goetghebuer, 1935d: 178. Democratic Republic of the Congo.  
**pseudochelagonata** Saha and Das Gupta, 1991: 8. India.  
**radialis** Debenham, 1972: 22. Australia (Queensland).  
**roraimensis** Felipe-Bauer and Spinelli, 1991: 202. Brazil (Roraima).  
**scirpi** (Kieffer, 1901a): 157 (*Palpomyia*). France.  
**scutofasciata** Clastrier, 1985d: 754. New Caledonia (France).  
**sinica** Yu and Deng, *in* Yu *et al.* 2005a: 1435. China (Tibet).  
**smeei** Tokunaga, 1963a: 239. Papua New Guinea.  
**subpahangensis** Saha and Das Gupta, 1991: 7. India.  
**texana** Wirth, 1953b: 143. USA (Texas).  
**tigrina** (Skuse, 1889): 306 (*Ceratopogon*). Australia (New South Wales).  
**transversalis** Clastrier, 1960b: 290. Congo.  
**umbrosipennis** Debenham, 1972: 32. Australia (Queensland).  
**unica** Sinha and Das Gupta, 1992: 26. India.  
**urracaisi** Lane and Wirth, 1964: 231. Panama.  
**uruguayensis** Felipe-Bauer and Spinelli, 1998: 63. Uruguay.  
**ussurica** Remm, 1971: 208. Russia (Primorsky Krai).  
**visinensis** Felipe-Bauer and Trindade, 2017: 154. Brazil (Pará).  
**wirthi** Khalaf, 1969: 407. USA (Mississippi).  
**wuzhishanensis** Yu, Wang and Tan, *in* Wang *et al.* 2011a: 973. China (Hainan).

#### Genus NANNOHELEA Grogan and Wirth

**NANNOHELEA** Grogan and Wirth, 1980a: 374. Type species: *Ceratopogon bourioni* Clastrier, by original designation.

**bourioni** (Clastrier, 1961a): 424 (*Ceratopogon*). Algeria.  
**clastrieri** Grogan and Wirth, 1980a: 381. Colombia.  
**eocenica** Szadziewski, 1988: 101. Denmark. Eocene.  
**fuscipennis** (Tokunaga, 1964a): 298 (*Ceratopogon*). Papua New Guinea.  
**grogani** Szadziewski, 1988: 99. Denmark. Eocene.  
**tamil** Grogan and Wirth, 1990: 348. Sri Lanka.

#### Genus NEOHELEA Clastrier

**NEOHELEA** Clastrier, 1988a: 53. Type species: *Neohelia pastoriana* Clastrier, by original designation.

**pastoriana** Clastrier, 1988a: 55. Guinea.

### Genus NEUROBEZZIA Wirth and Ratanaworabhan

**NEUROBEZZIA** Wirth and Ratanaworabhan, 1972b: 244. Type species: *Bezzia granulosa* Wirth, by original designation.

**MEDEOBEZZIA** Yu, 1995: 287 (also as *Meddeobezzia*, *Medeobizzia*). Type species: *Medeobezzia singularis* Yu, by monotypy.

**granulosa** (Wirth, 1952a): 240 (*Bezzia*). USA (California).

**singularis** (Yu, 1995): 287 (*Medeobezzia*). China (Hubei).

**tsacasi** Clastrier, 1983c: 64. Seychelles.

### Genus NOTIOHELEA Grogan and Wirth

**NOTIOHELEA** Grogan and Wirth, 1979c: 283. Type species: *Notiohelea chilensis* Grogan and Wirth, by original designation.

**chilensis** Grogan and Wirth, 1979c: 284. Chile.

**pilosa** Spinelli and Grogan, 1990: 133. Argentina (Chubut).

### Genus NOTOCERATOPOGON de Meillon and Downes

**NOTOCERATOPOGON** de Meillon and Downes, 1986: 157. Type species: *Notoceratopogon minutus* de Meillon and Downes, by original designation.

**alcides** (de Meillon and Hardy, 1954): 74 (*Ceratopogon*). South Africa.

**minutus** de Meillon and Downes, 1986: 161. South Africa.

**natalensis** (de Meillon, 1937b): 378 (*Ceratopogon*). South Africa.

**vockerothi** de Meillon and Downes, 1986: 162. South Africa.

### Genus OXYRIA Yu

**OXYRIA** Yu, in Yu *et al.* 2005a: 1436. Type species: *Oxyria xui* Yu, by original designation.

**xui** Yu, in Yu *et al.* 2005a: 1437. China (Ningxia).

### Genus PALAEOBRACHYPOGON Borkent

**PALAEOBRACHYPOGON** Borkent, 1995: 70. Type species: *Palaeobrachypogon vetus* Borkent, by original designation.

**aquilonius** (Boesel, 1937): 49 (*Ceratopogon*). Canada (Manitoba). Upper Cretaceous.

**grandiforceps** Borkent, 2000b: 463. USA (New Jersey). Upper Cretaceous.

**macronyx** (Remm, 1976b): 113 (*Ceratopogon*). Russia (Krasnoyarsk Krai). Upper Cretaceous.

**remmi** Borkent, 1995: 76. Canada (Alberta). Upper Cretaceous.

**taimyrica** (Szadziewski, 1996): 71 (*Washingtonhelea*). Russia (Krasnoyarsk Krai). Upper Cretaceous.

**vetus** Borkent, 1995: 78. Canada (Alberta). Upper Cretaceous.

### Genus PARABEZZIA Malloch

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

**alexanderi** Wirth, 1965b: 219. USA (Massachusetts).



**arenosa** Clastrier and Raccurt, 1979a: 172. Haiti.  
**atchleyi** Grogan and Wirth, 1977a: 67. USA (Texas).  
**balseiroi** Spinelli and Grogan, 1987: 13. Argentina (Entre Ríos).  
**blantoni** Wirth, 1965b: 220. Panama.  
**brasiliensis** Spinelli and Grogan, 1987: 34. Brazil (Mato Grosso).  
**brunnea** Wirth, 1965b: 220. Panama.  
**bystraki** Grogan and Wirth, 1977a: 70. USA (Maryland).  
**caribbeana** Clastrier and Raccurt, 1979a: 173. Haiti.  
**casimirensis** Felipe-Bauer and Spinelli, 2015: 396. Brazil (Rio de Janeiro).  
**cayoensis** Spinelli and Grogan, 1987: 36. Belize.  
**clastrieri** Spinelli and Grogan, 1987: 23. El Salvador.  
**costalis** Wirth, 1965b: 221. Panama.  
**downesi** Wirth, 1965b: 222. Canada (Ontario).  
**eupetiolata** Grogan and Wirth, 1977a: 79. USA (New York).  
**falcipennis** Clastrier, 1960b: 293. Congo.  
     *insolita* Vattier and Adam, 1966b: 769. Congo.  
**florentinae** Grogan, Spinelli, Ronderos and Cazorla, 2013: 8. Guadeloupe (France).  
**fluminensis** Felipe-Bauer and Spinelli, 2015: 399. Brazil (Rio de Janeiro).  
**fuscipennis** Wirth, 1965b: 223. Panama.  
**grogani** Szadziewski and Wirth, 1983: 359. Algeria.  
**haitiensis** Clastrier and Raccurt, 1979a: 170. Haiti.  
**hondurensis** Spinelli and Grogan, 1987: 25. Honduras.  
**horvathi** Grogan and Wirth, 1977a: 81. USA (Florida).  
**huberti** Grogan and Wirth, 1977a: 75. USA (Maryland).  
**inaequalis** Spinelli and Grogan, 1987: 38. Brazil (Amazonas).  
**indistinca** Felipe-Bauer and Spinelli, 2015: 393. Brazil (Rio de Janeiro).  
**inermis** (Coquillett, 1902a): 86 (*Ceratopogon*). USA (Arizona).  
**jamaicensis** Wirth, 1965b: 224. Jamaica.  
**neunguis** Grogan and Wirth, 1977a: 65. USA (Virginia).  
**obscura** de Meillon and Wirth, 1981c: 588. South Africa.  
**orientalis** Giles and Wirth, 1982b: 823. Sri Lanka.  
**pallida** Spinelli and Grogan, 1987: 40. Mexico (Oaxaca).  
**panamensis** Wirth, 1965b: 225. Panama.  
**petiolata** Malloch, 1915a: 359. USA (Illinois).  
**pseudunguis** Spinelli and Grogan, 1987: 30. Panama.  
**raccurti** Spinelli and Grogan, 1987: 42. El Salvador.  
**spangleri** Wirth, 1965b: 227. Puerto Rico (USA).  
**stagni** de Meillon and Wirth, 1981b: 538. South Africa.  
**texensis** Grogan and Wirth, 1977a: 60. USA (Texas).  
**uncinata** (Johannsen, 1943): 761 (*Stilobezzia*). USA (Alabama).  
**unguis** Wirth, 1965b: 228. USA (Arizona).  
**unica** Felipe-Bauer and Spinelli, 2015: 391. Brazil (Rio de Janeiro).  
**williamsi** Wirth, 1965b: 229. USA (Michigan).  
**wirthi** Clastrier and Raccurt, 1979a: 169. Haiti.

#### Genus PARALLUAUDOMYIA Clastrier

**PARALLUAUDOMYIA** Clastrier, 1960b: 268. Type species: *Paralluaudomyia maculata* Clastrier, by original designation.

**maculata** Clastrier, 1960b: 269. Congo.

### Genus PARASTILOBEZZIA Wirth and Blanton

**PARASTILOBEZZIA** Wirth and Blanton, 1970a: 10. Type species: *Parastilobezzia leei* Wirth and Blanton, by original designation.

**leei** Wirth and Blanton, 1970a: 10. Colombia.

### Genus PERONEHELEA Borkent

**PERONEHELEA** Borkent, 1995: 80. Type species: *Peronehelea chrimikalydia* Borkent, by original designation.

**chrimikalydia** Borkent, 1995: 82. Canada (Alberta). Upper Cretaceous.

**frigida** (Remm, 1976b): 115 (*Ceratopogon*). Russia (Krasnoyarsk Krai). Upper Cretaceous.

**sibirica** Szadziewski, 1996: 69. Russia (Krasnoyarsk Krai). Upper Cretaceous.

### Genus PSEUDOSTILOBEZZIA Wirth and Ratanaworabhan

**PSEUDOSTILOBEZZIA** Wirth and Ratanaworabhan, 1973: 177. Type species: *Pseudostilobezzia macclurei* Wirth and Ratanaworabhan, by original designation.

**macclurei** Wirth and Ratanaworabhan, 1973: 178. Vietnam.

**wirthi** Yu and Yan, 2003: 238. China (Hainan).

### Genus RHYNCHOHELEA Wirth and Blanton

**RHYNCHOHELEA** Wirth and Blanton, 1970c: 96. Type species: *Rhynchohelea monilicornis* Wirth and Blanton, by original designation.

**monilicornis** Wirth and Blanton, 1970c: 98. USA (Florida).

### Genus SCHIZOHELEA Kieffer

**SCHIZOHELEA** Kieffer, 1917b: 295. Type species: *Ceratopogon copiosus* Winnertz (= *Ceratopogon leucopeza* Meigen), by monotypy.

**KIEFFEROMYIA** Mayer, 1937a: 303. Type species: *Kiefferomyia gorana* Mayer (= *Ceratopogon leucopeza* Meigen), by original designation.

**armata** (Remm, 1993): 182 (*Monohelea*). Russia (Sakhalin Oblast).

**incerta** (Clastrier, 1963): 60 (*Monohelea*). Algeria.

**lampropeza** (Remm, 1967): 29 (*Monohelea*). Georgia.

**leucopeza** (Meigen, 1804): 29 (*Ceratopogon*). Europe.

*albitarsis* (Wiedemann, 1817): 67. (*Ceratopogon*). Germany.

*copiosa* (Winnertz, 1852): 56 (*Ceratopogon*). Germany.

*polita* (Coquillett, 1901a): 606 (*Ceratopogon*). USA (Massachusetts).

*stecki* (Kieffer, 1915b): 65 (*Bezzia*). Switzerland.

*gorana* (Mayer, 1937a): 303 (*Kiefferomyia*). Germany.

*xanthopeza* (Clastrier, 1963): 55 (*Monohelea*). Belgium, Norway, Finland.

**pekae** (Remm, 1980): 89 (*Monohelea*). Kyrgyzstan.

**spathulata** (Remm, 1993): 183 (*Monohelea*). Armenia.

## Genus SCHIZONYXHELEA Clastrier

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

- afra** (Clastrier, 1991a): 298 (*Stilobezzia*). Guinea.  
**afrotropica** (Clastrier, 1991a): 302 (*Stilobezzia*). Guinea.  
**amazonica** (Clastrier, 1991a): 306 (*Stilobezzia*). French Guiana (France).  
**brevicostalis** (Das Gupta and Wirth, 1968): 28 (*Stilobezzia*). Malaysia.  
**bullae** (Thomsen, 1935): 289 (*Stilobezzia*). USA (New York).  
**caribe** (Lane and Forattini, 1958): 208 (*Stilobezzia*). Panama.  
**corneti** (Clastrier, 1991a): 303 (*Stilobezzia*). Burkina Faso.  
**diminuta** (Lane and Forattini, 1958): 209 (*Stilobezzia*). Panama.  
**forattinii** Wirth and Grogan, 1988: 81. Brazil (Santa Catarina).  
**gallica** (Clastrier, 1991a): 305 (*Stilobezzia*). France.  
**guyana** Clastrier, 1984b: 2. French Guiana (France).  
**insolita** (Das Gupta and Wirth, 1968): 49 (*Stilobezzia*). Malaysia.  
**obscura** (Lane and Forattini, 1958): 216 (*Stilobezzia*). Panama.  
**panamensis** (Lane and Forattini, 1958): 218 (*Stilobezzia*). Panama.  
**thomsenae** (Wirth, 1953): 83 (*Stilobezzia*). USA (Florida).  
    *scutata* (Lane and Forattini, 1961): 92 (*Stilobezzia*). Panama.  
**zoologica** Huerta and Grogan, 2017: 404. Mexico (Tabasco).

## Genus SERROMYIA Meigen

- SERROMYIA** Meigen, 1818: 83. Type species: *Ceratopogon femoratus* Meigen, by monotypy.  
**PRIONOMYIA** Stephens, 1829b: 237. Type species: *Ceratopogon femoratus* Meigen, designation by Westwood 1840: 126.  
**ATMOBIA** Bigot, 1857: 519. Type species: *Ceratopogon femoratus* Meigen, designation by Evenhuis and Pont 2004: 15.  
**CERATOLOPHUS** Kieffer, 1899: 69 (preoccupied by *Ceratolophus* Barboza de Bocage, 1873). Type species: *Ceratopogon femoratus* Meigen, by original designation.  
**JOHANNSENIELLA** Williston, 1907: 1. New name for *Ceratolophus* Kieffer. Type species: *Ceratopogon femoratus* Meigen, automatic.  
**CERATOLOPHANA** Strand, 1928: 48. New name for *Ceratolophus* Kieffer. Type species: *Ceratopogon femoratus* Meigen, automatic.
- aethiopiae** Clastrier and Wirth, 1961a: 219. Gambia.  
**agathae** de Meillon and Wirth, 1983b: 388. South Africa.  
**alpheae** (Heyden), 1870: 251 (*Ceratopogon*). Germany. Oligocene.  
    *austera* Statz, 1944: 150. Germany. Oligocene.  
    *colorata* Statz, 1944: 150. Germany. Oligocene.  
    *spinofemorata* Statz, 1944: 151. Germany. Oligocene.  
**anomalicornis** (Loew, 1850): 30 (*Ceratopogon*). Baltic region. Eocene.  
**arabica** Szadziewski, Gwizdalska-Kentzer and Gilka, 2011: 648. United Arab Emirates.  
**atra** (Meigen, 1818): 84 (*Ceratopogon*). Latvia.  
    *albitarsis* Kieffer, 1919a: 71. Hungary.  
    *micronyx* Kieffer, 1919a: 70. Hungary.  
    *spinosipes* Kieffer, 1919a: 72. Hungary.  
    *nitens* Goetghebuer, 1920: 73. Belgium.  
**barberi** Wirth, 1952a: 205. USA (California).  
**bicolor** Borkent, in Borkent and Bissett 1990: 196. Germany.

**borealis** Borkent, *in* Borkent and Bissett 1990: 186. Canada (Alberta).  
**crassifemorata** Malloch, 1914a: 218. USA (Illinois).  
**diabolica** Dominiak and Mathieu, 2015: 437. Lebanon.  
**errata** Szadziewski, 2017. Baltic region. Eocene.  
**esakii** Tokunaga, 1940a: 218. Micronesia.  
**femorata** (Meigen, 1804): 28 (*Ceratopogon*). Europe.  
     *armata* (Meigen, 1818): 83 (*Ceratopogon*). Germany.  
     *foersteri* (Meigen, 1838): 21 (*Ceratopogon*). Great Britain.  
     *flavipes* (Gimmerthal, 1847): 144 (*Ceratopogon*, preoccupied by *Palpomyia flavipes* (Meigen, 1804)). Great Britain.  
     *flavicrus* (Kieffer, 1906a): 63 (*Palpomyia*). New name for *flavipes* Gimmerthal.  
     *inermipes* Kieffer, 1919a: 73. Great Britain.  
**festiva** Kieffer, 1911c: 346. Seychelles.  
**flaviventris** Remm, 1993: 182. Russia (Amur Oblast).  
**galilaeae** Szadziewski and Alwin, *in* Alwin-Kownacka *et al.* 2016b: 564. Israel.  
**hainana** Yu and Yan, 2002: 168. China (Hainan).  
**heveli** Giles and Wirth, 1982a: 442. Sri Lanka.  
**ledicola** Kieffer, 1925b: 156. Estonia.  
     *europaea* Clastrier, 1963: 61. Austria.  
     *macronyx* Goetghebuer, 1933c: 355. Belgium.  
**maculipennis** Giles and Wirth, 1982a: 444. Sri Lanka.  
**mangrovi** Delécolle and Braverman, 1987: 57. Egypt.  
**meiswinkeli** de Meillon and Wirth, 1983b: 390. South Africa.  
**morio** (Fabricius, 1775): 800 (*Culex*). Great Britain.  
     *nudipennis* Kieffer, 1913a: 10. Great Britain.  
**neethlingi** de Meillon and Wirth, 1983b: 392. South Africa.  
**nocticolor** Kieffer, 1914b: 268. South Africa.  
     *armipes* (de Meillon, 1959a): 343 (*Ceratopogon*, preoccupied by *Palpomyia armipes* (Meigen, 1838)). South Africa.  
     *corinneae* (Gosseries, 1989): 2 (*Ceratopogon*). New name for *armipes* de Meillon.  
**nudicolis** Borkent, *in* Borkent and Bissett 1990: 188. USA (Maine).  
**pacifica** Remm, 1990: 4 (Remm, *in* Borkent and Bissett 1990: 201). Russia (Sakhalin Oblast).  
**pendleburyi** Macfie, 1934c: 280. Malaysia.  
**polonica** Szadziewski, 1988: 135. Poland. Eocene.  
**punctata** Giles and Wirth, 1982a: 446. Sri Lanka.  
**reyei** Debenham, 1970d: 161. Australia (Northern Territory).  
**rossi** de Meillon and Wirth, 1983b: 396. Madagascar.  
**rufitarsis** (Meigen, 1818): 83 (*Ceratopogon*). Europe.  
     *gelida* Kieffer, 1925a: 429. Latvia.  
     *bispinosa* Goetghebuer, 1936: 321. Belgium.  
     *dipetala* Remm, 1965: 182. Estonia.  
**ryszardi** Borkent, *in* Borkent and Bissett 1990: 207. Poland. Eocene.  
**sierrensis** Borkent, *in* Borkent and Bissett 1990: 190. USA (California).  
**silvatica** de Meillon and Downes, 1986: 175. South Africa.  
**sinuosa** Borkent, *in* Borkent and Bissett 1990: 207. Poland. Eocene.  
**spinigera** (Loew, 1850): 30 (*Ceratopogon*). Baltic region. Eocene.  
     *elongata* (Meunier, 1904a): 231 (1904b: 242) (*Ceratopogon*, preoccupied by *Forcipomyia elongata* (Kieffer, 1901a)). Baltic region. Eocene.  
**stuckenbergi** de Meillon and Wirth, 1983b: 398. South Africa.  
**subinermis** Kieffer, 1919a: 73 (as variety of *spinosipes* Kieffer). Hungary.  
**succinea** Szadziewski, 1988: 136. Poland. Eocene.  
**tecta** Borkent, *in* Borkent and Bissett 1990: 205. Austria.

**trimohiniensis** Saha and Hazra, 2017: 45. India.  
**vockerothi** Borkent, in Borkent and Bissett 1990: 191. Canada (Manitoba).  
**zuluensis** de Meillon and Wirth, 1981c: 589. South Africa.

### Genus **SINHALOHELEA** Grogan and Borkent

**SINHALOHELEA** Grogan and Borkent, 1992: 314. Type species: *Sinhalohelea gansi* Grogan and Borkent, by original designation.

**dayongi** Yu, 2003b: 201. China (Henan).  
**gansi** Grogan and Borkent, 1992: 315. Sri Lanka.  
**pingyii** Yu, in Yu *et al.* 2005a: 1443. China (Hubei).

### Genus **SPINELLIHELEA** Borkent, Grogan and Picado

**SPINELLIHELEA** Borkent, Grogan and Picado, 2008: 623. Type species: *Spinellihelea brevicosta* Borkent, Grogan and Picado, by original designation.

**brevicosta** Borkent, Grogan and Picado, 2008: 627. Costa Rica.

### Genus **STILOBEZZIA** Kieffer

**STILOBEZZIA** Kieffer, 1911a: 118. Type species: *Stilobezzia festiva* Kieffer, by original designation.  
**HARTOMYIA** Malloch, 1915a: 339. Type species: *Ceratopogon pictus* Coquillett (= *Stilobezzia coquilletti* Kieffer), by original designation.

### Subgenus **ACANTHOHELEA** Kieffer

**ACANTHOHELEA** Kieffer, 1917a: 198. Type species: *Acanthohelea pruinosa* Kieffer, by monotypy.  
**PALEOTETRAGONEURA** Meunier, 1920a: 897 (1920b: 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, 1953a: 63. Type species: *Ceratopogon ochraceus* Winnertz, by original designation.

**acrotrichis** Tokunaga, 1959: 301. Papua New Guinea.  
**alba** Tokunaga, 1940d: 155. Japan.  
**albiabdominalis** Tokunaga and Murachi, 1959: 368. Micronesia.  
**amaniensis** de Meillon, in Wirth *et al.* 1980: 168. New name for *monticola* de Meillon.  
*monticola* de Meillon, 1960: 403 (preoccupied by *Stilobezzia monticola* Tokunaga, 1940b). Tanzania.  
**amplistyla** Clastrier, 1989a: 13. Guinea.  
**anomalapennis** Yu, in Yu *et al.* 2005a: 1449. China (Hubei).  
**antipodalis** Ingram and Macfie, 1931b: 203. New Zealand.  
**armatibiae** Tokunaga, 1963a: 260. Papua New Guinea.  
**artistyla** Das Gupta and Wirth, 1968: 41. Thailand.  
**atrichopogon** Lane and Forattini, 1956: 208. Panama.  
**badia** Macfie, 1932c: 41. New Zealand.  
**biangulata** Tokunaga, 1963a: 274. Papua New Guinea.  
**bicinctipes** Ingram and Macfie, 1931a: 195. Chile.  
**bifurcata** Tokunaga, 1959: 307. Papua New Guinea.  
**borkenti** Cazorla and Spinelli, 2012a: 74. Argentina (Neuquén).  
**brandti** Tokunaga, 1963a: 276. Papua New Guinea.

**brevistyla** Clastrier, 1989a: 12. Guinea.  
**calcaris** Tokunaga and Murachi, 1959: 382. Micronesia.  
**carayoni** Clastrier, 1986a: 284. Guinea.  
**centripictura** Tokunaga, 1963a: 252. Indonesia.  
**cereola** Clastrier, 1963: 51. Macedonia.  
**challieri** Vattier and Adam, 1966b: 741. Congo.  
**clavicula** Tokunaga, 1963a: 270. Papua New Guinea.  
**chlorogastrula** Yu and Yuan, 2007: 76. China (Hong Kong).  
**constans** Das Gupta and Wirth, 1968: 42. Philippines.  
**corneti** Clastrier, 1991a: 303. Burkina Faso.  
**crassiforceps** Tokunaga, 1963a: 266. Papua New Guinea.  
**crassivenosa** Das Gupta and Wirth, 1968: 44. Pakistan.  
**curvistyla** Cazorla and Spinelli, 2007: 182. Argentina (Chubut).  
**differentis** de Meillon, 1960: 406. Liberia.  
**disparthea** Das Gupta, Chaudhuri and Sanyal, 1971: 440. India.  
**distinctigenitalis** Das Gupta, Chaudhuri and Sanyal, 1971: 438. India.  
**djalonensis** Clastrier, 1988c: 127. Guinea.  
**dominicana** Szadziwski and Grogan, 1998a: 45. Dominican Republic. Miocene.  
**donskoffi** Clastrier, 1988a: 60. Democratic Republic of the Congo.  
**douryi** Clastrier, 1963: 42. Algeria.  
**downesi** Cazorla and Spinelli, 2012a: 77. Chile.  
**edwardsi** Ingram and Macfie, 1931a: 198. Argentina (Río Negro).  
**eliptaminensis** Tokunaga, 1963a: 265. Papua New Guinea.  
**estepae** Cazorla and Spinelli, 2014: 164. Argentina (Río Negro).  
**falcata** (Meunier, 1904a): 233 (1904b: 244) (*Ceratopogon*). Baltic region. Eocene.  
     *spinosa* (Meunier, 1904a): 234 (1904b: 245) (*Ceratopogon*). Baltic region. Eocene.  
**fasciscutata** Das Gupta and Wirth, 1968: 46. Malaysia.  
**fitzroyensis** Lee, 1948c: 350. Australia (New South Wales).  
**flaccisacca** Yu and Zhang, *in* Yu *et al.* 2005a: 1452. China (Tibet).  
**flava** Chaudhuri, Das Gupta and Sinharay, 1974: 49. India.  
**flavida** de Meillon and Wirth, 1987a: 56. South Africa.  
**fortistyla** Das Gupta and Wirth, 1968: 48. Malaysia.  
**fulva** de Meillon and Downes, 1986: 176. South Africa.  
**fulvacea** Remm, 1980: 95. Tajikistan.  
**fulviscuta** Tokunaga and Murachi, 1959: 399. Micronesia.  
**furcellata** Remm, 1980: 93. Tajikistan.  
**furcipes** de Meillon, 1960: 404. Liberia.  
**furva** Ingram and Macfie, 1931a: 200. Argentina (Neuquén).  
**fuscidorsum** Kieffer, 1921a: 58. Germany.  
**fuscigenua** Tokunaga and Murachi, 1959: 373. Belau (USA).  
**fusciscutellata** Tokunaga and Murachi, 1959: 376. Micronesia.  
**fuscula** Wirth, 1952a: 204. USA (California).  
**fusistylata** Tokunaga and Murachi, 1959: 392. Micronesia.  
**genitalis** Lee, 1948c: 349. Australia (Tasmania).  
**gigantiforceps** Clastrier, 1989a: 6. Guinea.  
**gracilentata** Yu and Zou, *in* Yu *et al.* 2005a: 1454. China (Guangxi).  
**gracilis** (Haliday, 1833): 152 (*Ceratopogon*). Great Britain.  
     *dorsalis* (Zetterstedt, 1850): 3644 (*Ceratopogon*). Sweden.  
**gressitti** Tokunaga and Murachi, 1959: 372. Micronesia.  
**grogani** Cazorla and Spinelli, 2012a: 87. Chile.  
**guarani** Cazorla and Spinelli, 2010: 46. Argentina (Misiones).  
**guianae** (Macfie, 1940d): 28 (*Acanthohelea*). Guyana.

**hirsuta** Ingram and Macfie, 1931a: 201. Argentina (Río Negro).  
**illustris** Das Gupta, Chaudhuri and Sanyal, 1971: 441. India.  
**imparthea** Das Gupta, Chaudhuri and Sanyal, 1971: 443. India.  
**ingrami** Cazorla and Spinelli, 2012a: 90. Argentina (Neuquén).  
**insigniforceps** Clastrier, 1989a: 9. Guinea.  
**kindiae** Clastrier, 1988c: 121. Guinea.  
**kunashiri** Remm, 1993: 186. Russia (Sakhalin Oblast).  
**kutscheri** Szadziewski, 1993: 637. Germany. Eocene.  
**lanceloti** Macfie, 1937b: 78. Ethiopia.  
**latiforceps** Tokunaga, *in* Tokunaga and Murachi 1959: 386. Belau (USA).  
     *setigera* Tokunaga, *in* Tokunaga and Murachi 1959: 387 (valid subspecies of *latiforceps*). Belau (USA).  
**latistyla** Clastrier, 1989a: 10. Guinea.  
**latiunguis** Clastrier, 1985e: 460. Guinea.  
**lengi** Yu, *in* Yu *et al.* 2005a: 1456. China (Fujian).  
**limai** Wirth and Derron, 1976: 234. Sao Tomé and Príncipe.  
**longicornis** Goetghebuer, 1934d: 193. Democratic Republic of the Congo.  
**longisacca** Yu and Deng, *in* Yu *et al.* 2005a: 1457. China (Tibet).  
**longisternalis** Cazorla and Spinelli, 2012b: 188. Argentina (Río Negro).  
**longistyla** Tokunaga, 1941a: 117. Micronesia.  
**longiradix** Cazorla and Spinelli, 2016: 189. Brazil (Rondônia).  
**lutacea** Edwards, 1926a: 412. Great Britain.  
**lutea** (Malloch, 1918a): 18 (*Hartomyia*). USA (Illinois).  
     *mallochi* Hoffman, 1924: 283. USA (New York).  
**luteola** de Meillon, 1940: 460. South Africa.  
**maai** Tokunaga, 1963a: 264. Indonesia.  
**macclurei** Das Gupta and Wirth, 1968: 51. Malaysia.  
**magnithea** Das Gupta and Wirth, 1968: 52. Indonesia.  
**manaosensis** Lane and Forattini, 1958: 205. Brazil (Amazonas).  
**mapuche** Cazorla and Spinelli, 2014: 170. Argentina (Río Negro).  
**megathea** Cazorla and Spinelli, 2014: 172. Argentina (Neuquén).  
**menglaensis** Yu and Huang, *in* Yu *et al.* 2005a: 1459. China (Yunnan).  
**miripes** Das Gupta and Wirth, 1968: 54. Malaysia.  
**monomorphica** Cazorla and Spinelli, 2014: 175. Argentina (Neuquén).  
**monopicta** Cazorla and Spinelli, 2010: 48. Argentina (San Luis).  
**monticola** Tokunaga, 1940b: 279. Japan.  
**natalensis** de Meillon, 1939a: 20. South Africa.  
**nebulosa** Tokunaga, 1963a: 252. Papua New Guinea.  
**nigerrima** Ingram and Macfie, 1931a: 196. Argentina (Río Negro).  
**nigriapicalis** Tokunaga, 1963a: 275. Papua New Guinea.  
**niveus** Liu, Yan and Liu, 1996a: 44. China (Hainan).  
**obesa** Das Gupta and Wirth, 1968: 56. Indonesia.  
**obesigenitalis** Das Gupta and Wirth, 1968: 58. Malaysia.  
**ochracea** (Winnertz, 1852): 48 (*Ceratopogon*). Germany.  
     *rufithorax* Kieffer, 1919a: 84. Slovak Republic.  
     *scutellata* Goetghebuer, 1920: 111. Belgium.  
**ohakunei** Ingram and Macfie, 1931b: 202. New Zealand.  
**okinawensis** Tokunaga, 1962a: 211. Japan.  
**orientis** de Meillon and Wirth, 1981b: 541. South Africa.  
**ornata** Lane and Forattini, 1958: 206. Panama.  
**ornaticrus** Ingram and Macfie, 1931a: 194. Chile.  
**ovatithea** Das Gupta, Chaudhuri and Sanyal, 1971: 445. India.  
**pabloi** Cazorla and Spinelli, 2014: 182. Argentina (Neuquén).

**pallidicornis** Tokunaga and Murachi, 1959: 366. Belau (USA).  
**papillata** Remm, 1980: 93. Tajikistan.  
**papuae** Tokunaga, 1963a: 272. Papua New Guinea.  
**paranaense** Cazorla and Spinelli, 2010: 50. Argentina (Misiones).  
**parvaeungulae** Das Gupta and Wirth, 1968: 61. Malaysia.  
**parvitheca** Das Gupta and Wirth, 1968: 59. Malaysia.  
**patagonica** Ingram and Macfie, 1931a: 196. Argentina (Río Negro).  
**personi** Neveu, 1977: 230. France.  
**postcervix** Tokunaga, 1959: 303. Indonesia.  
**pruefferi** Szadziewski, 1992a: 83. Algeria.  
**pruinosa** (Kieffer, 1917a): 198 (*Acanthohelea*). Australia (New South Wales).  
**pseudoparvitheca** Das Gupta, Chaudhuri and Sanyal, 1971: 447. India.  
**rava** Ingram and Macfie, 1931a: 203. Chile.  
**reflexa** Tokunaga, 1963a: 269. Papua New Guinea.  
**robusta** Das Gupta and Wirth, 1968: 62. Malaysia.  
**royi** Das Gupta, Chaudhuri and Sanyal, 1971: 447. India.  
**sahariensis** Kieffer, 1923a: 681. Algeria.  
     *aureola* Clastrier, 1963: 49. Algeria.  
**samoana** Edwards, 1928: 57. Western Samoa.  
**sanctibernardini** Kieffer, 1917b: 308. Paraguay.  
**saxonica** Szadziewski, 1993: 638. Germany. Eocene.  
**scutica** Chaudhuri, Das Gupta and Sinharay, 1974: 47. India.  
**seguyi** Clastrier, 1990: 399. Guinea.  
**semiartistyla** Sinha, Das Gupta and Chaudhuri, 2003a: 530. India.  
**setigeripes** Tokunaga, 1963a: 268. Papua New Guinea.  
**setigeriscutellata** Tokunaga and Murachi, 1959: 394. Micronesia.  
**similisegmenta** Tokunaga, 1959: 306. Papua New Guinea.  
**simulator** de Meillon, 1960: 408. Liberia.  
**singularis** Clastrier, 1985e: 464. Guinea.  
**soror** Johannsen, 1932: 432. Indonesia.  
**spadicicoxalis** Tokunaga and Murachi, 1959: 396. Micronesia.  
**spadicitibialis** Tokunaga and Murachi, 1959: 370. Micronesia.  
**speculae** Macfie, 1934c: 284. Malaysia.  
**spinellii** Huerta and Grogan, 2017: 408. Mexico (Oaxaca).  
**spinifemorata** Tokunaga, 1963a: 262. Indonesia.  
**spinosa** Cazorla and Spinelli, 2014: 190. Argentina (Río Negro).  
**stonei** Wirth, 1953a: 66. USA (Virginia).  
**subalba** Das Gupta and Wirth, 1968: 64. Malaysia.  
**subnebulosa** Das Gupta and Wirth, 1968: 38. Thailand.  
**subsoror** Tokunaga, 1941a: 116. Micronesia.  
**subumbrosa** Das Gupta, Chaudhuri and Sanyal, 1971: 449. India.  
**succinea** Ingram and Macfie, 1931a: 200. Argentina (Río Negro).  
**szadziewskii** Chaudhuri and Das Gupta, 1991: 182. New name for *falcata* Chaudhuri, Das Gupta and Sinharay.  
     *falcata* Chaudhuri, Das Gupta and Sinharay, 1974: 48 (preoccupied by *Stilobezzia falcata* (Meunier, 1904a)).  
     India.  
**tarsispinosa** Cazorla and Spinelli, 2016: 191. Brazil (Rondônia).  
**tasmaniensis** Lee, 1948c: 347. Australia (Tasmania).  
**tenuiforceps** Tokunaga and Murachi, 1959: 384. Belau (USA).  
**thibaulti** Neveu, 1977: 226. France.  
**thomasi** Grogan, Spinelli, Ronderos and Cazorla, 2013: 9. Guadeloupe (France).  
**thyridofera** Tokunaga, 1959: 304. Indonesia.  
**tibialis** Lane and Forattini, 1956: 209. Panama.



**tomensis** Wirth and Derron, 1976: 236. Sao Tomé and Príncipe.  
**tonnoiri** Macfie, 1932c: 43. New Zealand.  
**tridentis** Cazorla and Spinelli, 2014: 195. Chile  
**trilineata** de Meillon and Wirth, 1983a: 365. South Africa.  
**trimaculata** de Meillon and Wirth, 1987a: 57. South Africa.  
**truncata** Tokunaga, *in* Tokunaga and Murachi 1959: 389. Micronesia.  
**umbrosa** Das Gupta, Chaudhuri and Sanyal, 1971: 452. India.  
**unicellula** Clastrier, 1985e: 463. Guinea.  
**unifascioidorsalis** Tokunaga, *in* Tokunaga and Murachi 1959: 379. Belau (USA).  
**vandeli** Vattier and Adam, 1966b: 738. Congo.  
**varia** Ingram and Macfie, 1931a: 191. Chile.  
**venefica** Das Gupta and Wirth, 1968: 39. Thailand.  
**veterana** (Meunier, 1920a): 897 (1920b: 1221) (*Tetragoneura*). Germany. Oligocene.  
*goetghebueri* Statz, 1944: 148. Germany. Oligocene.  
**vittula** Tokunaga, 1963a: 260. Papua New Guinea.  
**wanlinensis** Yu and Li, *in* Yu *et al.* 2005a: 1461. China (Sichuan).  
**wirthicola** Szadziewski and Grogan, 1998a: 45. New name for *succinea* Szadziewski.  
*succinea* Szadziewski, 1993: 639 (preoccupied by *Stilobezzia succinea* Ingram and Macfie, 1931a). Germany. Eocene.  
**xanthogaster** Das Gupta and Wirth, 1968: 65. Malaysia.  
**xerophila** Cazorla and Spinelli, 2010: 52. Argentina (Salta).

#### Subgenus DEBENHAMIA Wirth and Grogan

**DEBENHAMIA** Wirth and Grogan, 1988: 89 (as subgenus of *Stilobezzia*). Type species: *Stilobezzia collessi* Wirth and Grogan, by original designation.

**collessi** Wirth and Grogan, 1988: 91. Australia (New South Wales).  
**dycei** Wirth and Grogan, 1988: 93. Australia (Western Australia).

#### Subgenus EUKRAIOHELEA Ingram and Macfie

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

**africana** (Ingram and Macfie, 1921): 347 (*Eukraiohelea*). Ghana.  
**amnigena** (Macfie, 1935a): 56 (*Eukraiohelea*). Brazil (Maranhão).  
**clarifemorata** Das Gupta and Wirth, 1968: 18. Malaysia.  
**dorsofasciata** (Lutz, 1914): 96 (*Palpomyia*). Brazil (Rio de Janeiro).  
**elegantula** (Johannsen, 1907): 109 (*Bezzia*). USA (Kansas).  
*subsessilis* Kieffer, 1917b: 311. Paraguay.  
*maculitibia* Lane and Forattini, 1956: 207. Panama.  
**foyi** (Ingram and Macfie, 1922): 270 (*Eukraiohelea*). Nigeria.  
**fuscipes** Das Gupta and Wirth, 1968: 20. Thailand.  
**fusciterga** Das Gupta and Wirth, 1968: 22. Thailand.  
**minima** Kieffer, 1918a: 100. India.  
**minuta** Das Gupta and Wirth, 1968: 23. Thailand.  
**proxima** Cazorla and Felipe-Bauer, *in* Cazorla *et al.* 2017: 562. Brazil (Rio de Janeiro).  
**punctifemorata** Das Gupta and Wirth, 1968: 25. Malaysia.  
**quasielegantula** Cazorla and Felipe-Bauer, *in* Cazorla *et al.* 2017: 566. Brazil (Rio de Janeiro).  
**versicolor** (Ingram and Macfie, 1921): 351 (*Eukraiohelea*). Ghana.

## Subgenus **STILOBEZZIA** Kieffer

- addita** Clastrier, 1986b: 380. Democratic Republic of the Congo.  
**albicoxa** Lane and Forattini, 1956: 210. Panama.  
**albocincta** Kieffer, 1917b: 309. Paraguay.  
**americana** Kieffer, 1917b: 310. Paraguay.  
**angustipennis** Clastrier, 1988c: 125. Guinea.  
**ani** Yu, in Yu *et al.* 2005a: 1464. China (Fujian).  
**antennalis** (Coquillett, 1901a): 606 (*Ceratopogon*). USA (District of Columbia).  
**antilleana** Szadziewski and Grogan, 1998a: 46. Dominican Republic. Miocene.  
**areolaris** (Kieffer, 1911c): 345 (*Sphaeromias*). Seychelles.  
**atronitens** Goetghebuer, 1933e: 148. Democratic Republic of the Congo.  
**baojia** Liu and Shi, 2002: 187. China (Shaanxi).  
**basizonata** Tokunaga, 1963a: 254. Indonesia.  
**bata** de Meillon and Hardy, 1954: 62. Cameroon.  
**beckae** Wirth, 1953a: 69. USA (Florida).  
**bessa** Yu and Zhang, in Yu *et al.* 2005a: 1465. China (Tibet).  
**bicolor** Lane, 1947a: 208. Brazil (São Paulo).  
**bimacula** (Kieffer, 1910): 201 (*Palpomyia*). India.  
**bimaculata** Lane and Forattini, 1956: 211. Panama.  
**biscutata** Cazorla, 2013: 324. Argentina (Formosa).  
**bispinosa** Kieffer, 1917b: 310. Paraguay.  
**bizonata** Tokunaga, 1963a: 256. Papua New Guinea.  
**blaesospira** Yu and Deng, in Yu *et al.* 2005a: 1467. China (Tibet).  
**blantoni** Lane and Forattini, 1956: 211. Panama.  
**boharti** Tokunaga, 1962a: 211. Japan.  
**brevicornis** Clastrier, 1988c: 130. Guinea.  
**browni** Wirth and Giles, 1990: 454. Fiji.  
**castanea** Macfie, 1934c: 284 (1934d: 220). Malaysia.  
**chaconi** Macfie, 1938: 166. Trinidad and Tobago.  
**chasteli** Clastrier, 1967: 115. Cambodia.  
    *punctivenosa* Das Gupta and Wirth, 1968: 106. Thailand.  
**chlorosa** Clastrier, 1986b: 364. New name for *viridis* Goetghebuer.  
    *viridis* Goetghebuer, 1935d: 179 (preoccupied by *Stilobezzia viridis* (Coquillett, 1901a)). Democratic Republic of the Congo.  
**claripennis** Clastrier, 1958b: 243. Senegal.  
**claripes** Das Gupta and Wirth, 1968: 128. South Korea.  
    *tokunagai* Das Gupta and Wirth, 1968: 131. Japan.  
    *maihensis* Remm, 1971: 209. Russia (Primorsky Krai).  
**clavella** Yu, in Yu *et al.* 2005a: 1468. China (Henan).  
**congestiterga** Das Gupta and Wirth, 1968: 124. Malaysia.  
**coquilletti** Kieffer, 1917b: 308. New name for *picta* Coquillett.  
    *picta* (Coquillett, 1905): 60 (*Ceratopogon*, preoccupied by *Sphaeromias pictus* (Meigen, 1818)). USA (Virginia).  
**coracina** Kieffer, 1917b: 311. Paraguay.  
**crassipes** Kieffer, 1918a: 101. India.  
**crassistyla** Das Gupta and Wirth, 1968: 125. Philippines.  
**crossi** de Meillon and Wirth, 1981c: 591. South Africa.  
**debilipes** Das Gupta and Wirth, 1968: 134. Malaysia.  
**decora** Kieffer, 1916a: 89. Taiwan.  
**distinctifasciata** Das Gupta and Wirth, 1968: 135. Thailand.  
**diversa** (Coquillett, 1901a): 607 (*Ceratopogon*). USA (New Jersey).

**dorsosignata** Sinha, Das Gupta and Chaudhuri, 2003a: 529. India.  
**dryadum** Macfie, 1940b: 186. Guyana.  
**dubitans** Lane, Forattini and Rabello, 1955: 85. Brazil (São Paulo).  
**dureti** Lane and Forattini, 1958: 210. Brazil (São Paulo).  
**enigma** Ronderos, Spinelli and Borkent, 2012: 2. Argentina (Misiones).  
**ensistyla** Chaudhuri, Das Gupta and Chatterjee, 1981: 149. India.  
**erectiseta** Liu, Yan and Liu, 1996a: 43. China (Hainan).  
**esmeralda** Lane and Forattini, 1958: 211. Panama.  
**eximitarsis** Das Gupta and Wirth, 1968: 115. Malaysia.  
**femoralis** Lane and Forattini, 1956: 212. Panama.  
**festiva** Kieffer, 1911a: 118. India.  
     *scutellaris* Kieffer, 1912c: 7 (as variety of *festiva* Kieffer). Sri Lanka.  
**fiebrigi** Kieffer, 1917b: 309. Paraguay.  
**filapenis** Yu and Liu, 1991: 50. China (Hubei).  
**flavipectoralis** Remm, 1993: 187. Russia (Sakhalin Oblast).  
**flavirostris** (Winnertz, 1852): 52 (*Ceratopogon*). Germany.  
     *albicornis* Kieffer, 1919a: 84. Austria.  
     *virescens* Kieffer, 1919a: 84. Bulgaria.  
**flavirostroides** (Strobl, 1880): 64 (*Ceratopogon*). Austria.  
     *lateralis* (Walzl, 1837): 279 (*Ceratopogon*, preoccupied by *Forcipomyia lateralis* (Bouché, 1834)).  
     Germany.  
**flavizonata** Tokunaga, 1963a: 263. Indonesia.  
**fortipes** Das Gupta and Wirth, 1968: 72. Malaysia.  
**fuscitibia** Sarkar, Nandi and Mazumdar, 2016: 3. India.  
**gambiae** Clastrier and Wirth, 1961a: 216. Gambia.  
**glauca** Macfie, 1939c: 204. Brazil (Santa Catarina).  
     *fluminensis* Lane, 1947a: 210. Brazil (Rio de Janeiro).  
**grandis** Lane and Forattini, 1958: 213. Panama.  
**harurii** Boorman and Harten, 2002: 454. Yemen.  
**hirta** Borkent, in Borkent and Wirth 1997: 111. New name for *pruinosa* Wirth.  
     *pruinosa* Wirth, 1952a: 203 (preoccupied by *Stilobezzia pruinosa* (Kieffer, 1917a)). USA (California).  
**hirtaterga** Yu, 1989a: 475. China (Guangdong).  
**hollandia** Tokunaga, 1959: 299. Indonesia.  
**huberti** Das Gupta and Wirth, 1968: 85. Malaysia.  
**immodentis** Liu, Yan and Liu, 1996a: 44. China (Hainan).  
**imparungulae** Das Gupta and Wirth, 1968: 136. Malaysia.  
**inermipes** Kieffer, 1912c: 8. Sri Lanka.  
     *lineata* Kieffer, 1913d: 185. India.  
     *biroi* Kieffer, 1918a: 102. Singapore.  
     *aberrans* Johannsen, 1932: 431. Indonesia.  
     *esakiana* Tokunaga, 1940e: 183 (1940d: 155). Micronesia.  
     *inusitata* (Johannsen, 1946): 190 (*Eukraiohelea*). Guam (USA).  
**inkisiensis** Clastrier, 1986b: 379. Democratic Republic of the Congo.  
**intermedia** de Meillon, 1939a: 18. South Africa.  
**isthmostheca** Das Gupta and Wirth, 1968: 116. Thailand.  
**jinggangshana** Yu, Liu and Ma, in Liu *et al.* 2010b: 572. China (Jiangxi).  
**kiefferi** Lane, 1947a: 205. Brazil (Minas Gerais).  
     *punctipes* Wirth, 1953a: 79. USA (Florida).  
**kisantuensis** Clastrier, 1986b: 369. Democratic Republic of the Congo.  
**lasioterga** Das Gupta and Wirth, 1968: 126. Malaysia.  
**leucopeza** Clastrier, 1958b: 249. Senegal.  
**lijiangi** Yu, Zhang and Mo, in Deng *et al.* 2011: 116. China (Sichuan).

**limnophila** Ingram and Macfie, 1922: 267. Ghana.  
**longiforceps** Clastrier, 1960b: 274. Congo.  
**longihamata** Tokunaga, 1963a: 258. Papua New Guinea.  
**macfie** Lane, 1947a: 213. Brazil (São Paulo).  
**maculata** Lane, 1947a: 207. Brazil (Rio de Janeiro).  
**maculipes** Macfie, 1933b: 103. French Polynesia (France).  
**mahensis** Clastrier, 1983c: 76. Seychelles.  
**maia** Lane and Forattini, 1958: 204. Panama.  
**merceri** Cazorla and Spinelli, *in* Cazorla *et al.* 2005: 290. Peru.  
**modesta** Lane, 1947a: 206. Brazil (Rio de Janeiro).  
**mutabilis** Clastrier, 1986c: 63. Guinea.  
**nasicae** de Meillon, 1959b: 9. Congo.  
**navaiae** Wirth and Grogan, 1981: 86. USA (New York).  
**nigroflava** Lane and Forattini, 1958: 215. Costa Rica.  
**nitela** Yu and Yan, 2005: 168. Vietnam.  
**notata** (de Meijere, 1907): 210 (*Ceratopogon*). Indonesia.  
**nudisthmoseca** Das Gupta and Wirth, 1968: 118. Sri Lanka.  
**neyi** Clastrier, 1983c: 77. Seychelles.  
**oxiana** Remm, 1980: 95. Tajikistan.  
**pallescens** Lane and Forattini, 1958: 218. Panama.  
**pallidicollis** Yu, *in* Yu *et al.* 2005a: 1480. China (Sichuan).  
**pallidipes** Clastrier, 1983c: 78. Seychelles.  
**pallidiventris** (Malloch, 1915a): 344 (*Hartomyia*). USA (Illinois).  
**palpalis** Tokunaga, 1963a: 255. Indonesia.  
**parvula** Goetghebuer, 1933e: 149. Democratic Republic of the Congo.  
**pastoriana** Clastrier, 1986c: 66. Guinea.  
**paucimaculata** Clastrier, 1984d: 46. Guinea.  
**paucipictipes** Das Gupta and Wirth, 1968: 98. Indonesia.  
**pauliani** de Meillon, 1961: 57. Madagascar.  
**paulistensis** Lane, 1947a: 200. Brazil (São Paulo).  
**perspicua** Johannsen, 1932: 433 (as variety of *notata* de Meijere). Indonesia.  
**photophila** Clastrier, 1984d: 43. Guinea.  
**pictipes** Kieffer, 1917a: 191. Australia (New South Wales).  
**poikiloptera** (Ingram and Macfie, 1922): 276 (*Parabezzia*). Ghana.  
**proprietyla** Das Gupta and Wirth, 1968: 129. Malaysia.  
**pseudofestiva** Das Gupta and Wirth, 1968: 89. Thailand.  
**pseudonotata** Das Gupta and Wirth, 1968: 91. Malaysia.  
**pseudopunctulata** Cazorla and Ronderos, *in* Cazorla *et al.* 2012: 400. Argentina (Chaco).  
**punctulata** Lane, 1947a: 204. Brazil (Rio de Janeiro).  
**quatei** Das Gupta and Wirth, 1968: 111. Vietnam.  
**rabelloi** Lane, 1947a: 203. Brazil (Rio de Janeiro).  
**rotundithea** Das Gupta and Wirth, 1968: 73. Malaysia.  
**rufa** Kieffer, 1921b: 23. Cameroon.  
**rutshuruensis** Clastrier, 1986b: 373. Democratic Republic of the Congo.  
**seychelleana** Clastrier, 1983c: 79. Seychelles.  
**silvicola** Macfie, 1940b: 185. Guyana.  
**similans** Lane and Forattini, 1956: 214. Panama.  
**simplex** Lane and Forattini, 1958: 222. Panama.  
**spinipes** Das Gupta and Wirth, 1968: 74. Philippines.  
**spinitarsis** Das Gupta and Wirth, 1968: 92. Malaysia.  
**spiniterga** Das Gupta and Wirth, 1968: 119. Malaysia.  
**spirogyrae** Carter, Ingram and Macfie, 1921a: 325. Ghana.

**subfestiva** Das Gupta and Wirth, 1968: 94. Thailand.  
**subflava** Das Gupta and Wirth, 1968: 76. Malaysia.  
**subviridis** Macfie, 1934d: 218. Indonesia.  
     *esakii* Tokunaga, 1940e: 183 (1940d: 155). Micronesia.  
**supernotata** Das Gupta and Wirth, 1968: 95. Malaysia.  
**sybleae** Wirth, 1953a: 82. USA (Virginia).  
**tauffliebi** de Meillon, 1959b: 12. Congo.  
**tenebrosa** Macfie, 1933b: 101. French Polynesia (France).  
**tenuicolorata** Das Gupta and Wirth, 1968: 123. Malaysia.  
**tetragona** Goetghebuer, 1934d: 193. Democratic Republic of the Congo.  
**transversa** Lane and Forattini, 1958: 222. Panama.  
**traubi** Das Gupta and Wirth, 1968: 77. Malaysia.  
**travassosi** Lane, 1947a: 210. Brazil (Espírito Santo).  
**tropica** Clastrier, 1958b: 247. Senegal.  
**unifasciata** Tokunaga, 1963a: 262. Indonesia.  
**venezuelensis** Ortiz, 1950d: 199 (as variety of *glauca* Macfie). Venezuela.  
**viridis** (Coquillett, 1901a): 607 (*Ceratopogon*). USA (New Jersey).  
**viridiventris** (Kieffer, 1910): 203 (*Palpomyia*). Burma.  
**vittata** Clastrier, 1960b: 276. Congo.  
**vulgaris** Yu, 1989a: 478. China (Guangdong).  
**wenganga** Yu, Wu and Liu, 2011: 46. China (Jiangxi).  
**williamsi** Cazorla and Spinelli, in Cazorla *et al.* 2005: 290. Peru.  
**wirthi** Lane and Forattini, 1956: 214. Panama.  
**wudangshanensis** Yu and Liu, 1991: 47. China (Hubei).  
**wygodzinskyi** Lane, 1947a: 212. Brazil (São Paulo).  
**zonata** Tokunaga, 1963c: 43. Japan.

#### Species of **STILOBEZZIA** unplaced to subgenus

**kurthi** Borkent, 2000b: 464. USA (New Jersey). Upper Cretaceous.  
**pikei** Borkent, 2012: 763. Canada (Alberta). Upper Cretaceous.  
**roggeroi** (Choufani and Nel, 2013): 83 (*Metahelea*). France. Upper Cretaceous.

#### Genus **STILOCULICOIDES** Wirth and Grogan

**STILOCULICOIDES** Wirth and Grogan, 1988: 95. Type species: *Stilobezzia ugandae* Ingram and Macfie, by original designation.

**africanus** Clastrier, 1993a: 134. Guinea.  
**congoensis** Clastrier, 1993a: 139. Congo.  
**guineensis** Clastrier, 1993a: 141. Guinea.  
**kindiae** Clastrier, 1993a: 138. Guinea.  
**ugandae** (Ingram and Macfie, 1923): 62 (*Stilobezzia*). Uganda.  
**vaclusensis** Clastrier, 1993a: 141. France.

#### Genus **WIRTHOHELEA** Szadziewski

**WIRTHOHELEA** Szadziewski, 1988: 158. Type species: *Wirthohelea trifida* Szadziewski, by original designation.

**trifida** Szadziewski, 1988: 159. Poland. Eocene.

## Genus YUNGAHELEA Spinelli and Ronderos

**YUNGAHELEA** Spinelli and Ronderos, *in* Spinelli *et al.* 2018: 139. Type species: *Yungahelea australis* Spinelli and Ronderos, by original designation.

**australis** Spinelli and Ronderos, *in* Spinelli *et al.* 2018: 142. Argentina (Tucumán).

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## Genus CLINOHELEA Kieffer

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

### Subgenus CERATOBIZZIA Kieffer

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

**fallax** Kieffer, 1917b: 326. Paraguay.

*barrettoi* Lane and Duret, 1954: 249. Brazil (São Paulo).

### Subgenus CLINOHELEA Kieffer

**albopennis** Lane, 1944: 259. Brazil (São Paulo).

**argentina** Lane and Duret, 1954: 248. Argentina (Corrientes).

**bimaculata** (Loew, 1861): 311 (*Ceratopogon*). USA (District of Columbia).

**bisignata** (Kieffer, 1910): 200 (*Palpomyia*). India.

**curriei** (Coquillett, 1905): 62 (*Ceratopogon*). Canada (British Columbia).

*nebulosa* (Malloch, 1915a): 322 (*Palpomyia*). USA (Michigan).

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

**dimidiata** (Adams, 1903): 27 (*Ceratopogon*). USA (Arizona).

**dryas** Debenham, 1974: 12. Australia (Queensland).

**flagellata** (Edwards, 1916): 500 (*Palpomyia*). Australia (North Australia).

**fuscoalata** Remm, 1993: 181. Russia (Sakhalin Oblast).

**hollandiae** Tokunaga, 1966a: 111. Indonesia.

**horacioi** Lane, 1944: 257. Brazil (São Paulo).

**hygropetrica** Clastrier, 1983b: 19. Guinea.

**insperata** de Meillon and Wirth, 1981c: 592. South Africa.

**lacustris** Macfie, 1939a: 91. Uganda.

**longipalpis** Kieffer, 1918a: 96. Singapore.

**longithecata** Grogan and Wirth, 1975b: 286. USA (Florida).

**muzoni** Spinelli and Duret, 1993: 46. Colombia.

**neivai** Lane, 1944: 252. Brazil (São Paulo).

**nigeriae** (Ingram and Macfie, 1923): 68 (*Ceratobizzia*). Nigeria.

**nigripes** Macfie, 1939c: 205. Brazil (Santa Catarina).

**nubifera** (Coquillett, 1905): 61 (*Ceratopogon*). USA (Florida).

**pachydactyla** Kieffer, 1918a: 96. Singapore.

**papuensis** Tokunaga, 1966a: 109. Papua New Guinea.

**podagrica** Goetghebuer, 1948b: 17. Democratic Republic of the Congo.

**pseudobisignata** Saha and Das Gupta, 1996: 7. India.

**pseudonubifera** Grogan and Wirth, 1975b: 280. USA (Maryland).

**repericia** Yu and Zhang, 1996: 294. China (Sichuan).

**rubriceps** Kieffer, 1917b: 318. Paraguay.  
**saltanensis** Lane and Duret, 1954: 252. Argentina (Corrientes).  
**tasmaniensis** Lee, 1948d: 65. Australia (Tasmania).  
**tenuipes** Tokunaga, 1966a: 110. Indonesia.  
**tenuissima** (Kieffer, 1917a): 195 (*Sphaeromias*). Papua New Guinea.  
**townsendi** Lane, 1944: 256. Brazil (São Paulo).  
*townesi* Lane, 1944: 254. Brazil (Mato Grosso do Sul).  
**trimaculata** Clastrier, 1983b: 24. Guinea.  
**unimaculata** (Macquart, 1826): 178 (*Ceratopogon*). France.  
*maculipes* (Meigen, 1830): 265 (*Ceratopogon*). Europe.  
*variegata* (Winnertz, 1852): 59 (*Ceratopogon*). Germany.  
**usherii** de Meillon, 1959b: 20. Mozambique.  
**usingeri** Wirth, 1952a: 209. USA (California).  
**wygodzinskyi** Lane, 1948: 231. Brazil (Rio de Janeiro).

### Genus HETEROMYIA Say

**HETEROMYIA** Say, 1825: plate 35. Type species: *Heteromyia fasciata* Say, by monotypy.  
**PACHYLEPTUS** Walker, 1856b: 426. Type species: *Pachyleptus fasciatus* Walker (= *Heteromyia nigra* Kieffer), by monotypy.

**antequerae** (Lynch Arribáizaga, 1893): 227 (*Pachyleptus*). Argentina (Chaco).  
**bejaranoi** Duret and Lane, 1955: 36. Argentina (Chaco).  
**castanea** Lane, 1946a: 214. Brazil (São Paulo).  
**chaquensis** Duret and Lane, 1955: 37. Argentina (Chaco).  
**clavata** Williston, 1900: 225. Mexico (Veracruz).  
*rufa* Kieffer, 1917b: 325. Colombia.  
*caloptera* Kieffer, 1919c: 192. Unnecessary new name for *rufa* Kieffer.  
**correntina** Duret and Lane, 1955: 39. Argentina (Chaco).  
**dominicana** Szadziewski and Grogan, 1997: 254. Dominican Republic. Miocene.  
**fasciata** Say, 1825: plate 35. North America.  
*festiva* (Loew, 1861): 314 (*Ceratopogon*). USA (Pennsylvania).  
**kiefferi** Lane, 1946a: 213. Brazil (Rio de Janeiro).  
**lamprogaster** Edwards, 1933b: 87. Argentina (Misiones).  
**nigra** Kieffer, 1917b: 326. Paraguay.  
*fasciatus* (Walker, 1856b): 426 (*Pachyleptus*, preoccupied by *Heteromyia fasciata* Say, 1825). South America.  
**orellana** (Roback, 1957): 1 (*Palpomyia*). Peru.  
**prattii** Coquillett, 1902a: 88. USA (Virginia).  
**wokei** Wirth and Grogan, 1977: 181. Nicaragua.

### Genus METAHELEA Edwards

**METAHELEA** Edwards, 1929b: 12. Type species: *Metahelea metallescens* Edwards, by monotypy.

**bifasciata** (Kieffer, 1917a): 194 (*Palpomyia*). Australia (Queensland).  
**metallescens** Edwards, 1929b: 12. Philippines.  
**serafini** Szadziewski, 1998a: 247. Russia (Kaliningrad Oblast). Eocene.

### Genus NEUROHELEA Kieffer

**NEUROHELEA** Kieffer, 1925d: 112. Type species: *Ceratopogon luteitarsis* Waltl, by monotypy.

**luteitarsis** (Waltl, 1837): 279 (*Ceratopogon*). Germany.  
*subsessilis* (Goetghebuer, 1921): 181 (*Clinohelea*). Belgium.

### Genus PELLUCIDOMYIA Macfie

**PELLUCIDOMYIA** Macfie, 1939a: 99. Type species: *Pellucidomyia ugandae* Macfie, by original designation.  
**MACFIEHELEA** Lane, 1946a: 208. Type species: *Macfiehelea oliveirai* Lane, by original designation.

**blantoni** (Lane, 1956b): 435 (*Macfiehelea*). Panama.  
**dycei** Debenham, 1970a: 137. Australia (Queensland).  
**geari** (de Meillon and Wirth, 1981b): 547 (*Macropeza*). South Africa.  
**lanei** Wirth and Ratanaworabhan, 1971b: 446. Colombia.  
**leei** Wirth, 1960: 2. Australia (Queensland).  
**oliveirai** (Lane, 1946a): 209 (*Macfiehelea*). Brazil (Minas Gerais).  
**sambulena** (de Meillon, 1942c): 14 (*Bezzia*). Mozambique.  
**ugandae** Macfie, 1939a: 100. Uganda.  
**wirthi** (Lane, 1956b): 437 (*Macfiehelea*). Panama.

### Genus PHYSOHELEA Grogan and Wirth

**PHYSOHELEA** Grogan and Wirth, 1979b: 53. Type species: *Neurohelea oedidactyla* Ingram and Macfie, by original designation.

**obtusa** (Meunier, 1904a): 235 (1904b: 246) (*Ceratopogon*). Baltic region. Eocene.  
*cothurnatula* (Meunier, 1904a): 231 (1904b: 242) (*Ceratopogon*). Baltic region. Eocene.  
**oedidactyla** (Ingram and Macfie, 1931a): 212 (*Neurohelea*). Argentina (Río Negro).  
**turgidipes** (Ingram and Macfie, 1931a): 214 (*Neurohelea*). Chile.

### Genus TETRABEZZIA Kieffer

**TETRABEZZIA** Kieffer, 1917b: 296. Type species: *Dibezzia spinigera* Kieffer, by original designation.

**africana** Clastrier, 1982a: 307. Guinea.  
**argentea** Ingram and Macfie, 1923: 70. Nigeria.  
**dasguptai** Saha and Hazra, 2018: 293. India.  
**diazi** de Meillon, 1961: 55. Madagascar.  
**pictipennis** (Kieffer, 1913d): 191 (*Dibezzia*). India.  
**soeiroi** (de Meillon, 1942c): 16 (*Bezzia*). Mozambique.  
**spinigera** (Kieffer, 1914c): 313 (*Dibezzia*). India.

TRIBE HEBETULINI BORKENT, 2014: 79

### Genus HEBETULA Wirth and Debenham

**HEBETULA** Wirth and Debenham, 1977: 282. Type species: *Mixohelea lemur* Debenham, by original designation.

**armiger** (Debenham, 1974): 20 (*Mixohelea*). Australia (Queensland).



**atypipennis** (Tokunaga, 1966a): 127 (*Palpomyia*). Indonesia.  
**bequaerti** (Goetghebuer, 1933e): 151 (*Palpomyia*). Democratic Republic of the Congo.  
**bisulca** (Debenham, 1974): 24 (*Mixohelea*). Australia (Western Australia).  
**centonis** (Debenham, 1974): 21 (*Mixohelea*). Australia (Queensland).  
**gladiator** (Debenham, 1974): 23 (*Mixohelea*). Australia (Capital Territory).  
**hexacantha** (Kieffer, 1911c): 343 (*Sphaeromyias*). Seychelles.  
**imparunguis** (Kieffer, 1917a): 194 (*Palpomyia*). Papua New Guinea.  
*australiensis* (Kieffer, 1917b): 364 (*Mixohelea*). Unnecessary new name for *imparunguis* Kieffer.  
**infirmior** (Debenham, 1974): 28 (*Mixohelea*). Australia (New South Wales).  
**latifrons** (Debenham, 1974): 29 (*Mixohelea*). Australia (Queensland).  
**lemur** (Debenham, 1974): 32 (*Mixohelea*). Australia (Western Australia).  
**lucta** (Debenham, 1974): 31 (*Mixohelea*). Australia (New South Wales).  
**maai** (Tokunaga, 1966a): 115 (*Xenohelea*). Indonesia.  
**matileorum** Clastrier, 1985b: 268. New Caledonia (France).  
**muroides** (Debenham, 1974): 30 (*Mixohelea*). Australia (New South Wales).  
**novaebritanica** (Tokunaga, 1966a): 130 (*Palpomyia*). Papua New Guinea.  
**novaecaledoniae** Clastrier, 1985b: 271. New Caledonia (France).  
**sarmensis** (Tokunaga, 1966a): 116 (*Xenohelea*). Indonesia.  
**sensilis** (Debenham, 1974): 27 (*Mixohelea*). Australia (New South Wales).  
**tonnoiri** (Lee, 1948d): 66 (*Xenohelea*). Australia (Tasmania).  
**uveae** Clastrier and Delécolle, 1996: 308. Wallis and Futuna Islands (France).  
**versicolor** (Debenham, 1974): 35 (*Mixohelea*). Australia (Western Australia).

TRIBE JOHANNSENYIINI CRAMPTON, 1925: 61

#### Genus ANEBOMYIA Borkent

**ANEBOMYIA** Borkent, 2014: 92. Type species: *Mallochohelea atripes* Wirth, by original designation.

**atripes** (Wirth, 1962): 281 (*Mallochohelea*). USA (New Jersey).  
**aukurabis** (de Meillon and Wirth, 1983a): 371 (*Mallochohelea*). South Africa.  
**fluminea** (de Meillon and Wirth, 1981): 550 (*Mallochohelea*). South Africa.  
**hamata** (de Meillon and Wirth, 1987a): 60 (*Mallochohelea*). Madagascar.  
**hansfordi** (de Meillon and Wirth, 1983a): 372 (*Mallochohelea*). South Africa.  
**siricis** (de Meillon, 1961): 50 (*Sphaeromyias*). Madagascar.  
**texensis** (Wirth, 1962): 283 (*Mallochohelea*). USA (Texas).  
**unca** (de Meillon and Wirth, 1987a): 61 (*Mallochohelea*). Kenya.  
**yunnana** (Yu and Zou, in Yu *et al.* 2005a): 1503 (*Mallochohelea*). China (Yunnan).

#### Genus CALYPTOPOGON Kieffer

**CALYPTOPOGON** Kieffer, 1910: 209. Type species: *Calyptopogon albitarsis* Kieffer (= *Macropeza gibbosus* Wiedemann), by monotypy.

**brevitarsis** Macfie, 1939d: 8. Thailand.  
**gibbosus** (Wiedemann, 1824): 10 (*Macropeza*). Indonesia.  
*albitarsis* Kieffer, 1910: 209. India.  
*kiefferi* (Johannsen, 1927b): 423 (*Macropeza*). Unnecessary new name for *albitarsis* Kieffer.  
*similis* (Johannsen, 1927b): 424 (*Macropeza*). Taiwan.  
**javanensis** (Kieffer, 1910): 210 (*Macropeza*). Indonesia.  
*edwardsi* (Macfie, 1939d): 9 (*Macropeza*). Sri Lanka.  
**maithonensis** Saha and Das Gupta, in Saha *et al.* 1995: 30. India.

**mirus** Sarkar and Das Gupta, *in Saha et al.* 1995: 32. India.

**pseudoalbitarsis** Sarkar and Das Gupta, *in Saha et al.* 1995: 31. India.

### Genus CRISPOMYIA Debenham

**CRISPOMYIA** Debenham, 1974: 48. Type species: *Crispomyia receptaculum* Debenham, by original designation.

**monacha** Debenham, 1974: 52. Australia (Western Australia).

**receptaculum** Debenham, 1974: 51. Australia (Western Australia).

### Genus DIBEZZIA Kieffer

**DIBEZZIA** Kieffer, 1911a: 120. Type species: *Dibezzia clavata* Kieffer, by original designation.

**brevistila** Kieffer, 1911a: 122. Bangladesh.

**clavata** Kieffer, 1911a: 120. India.

**debenhamae** Wirth and Ratanaworabhan, 1981a: 290. Malaysia.

**gideoni** de Meillon and Wirth, 1981c: 595. South Africa.

**prominens** (Johannsen, 1932): 435 (*Johannsenomyia*). Indonesia.

### Genus GROGANHELEA Spinelli and Dippolito

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

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

### Genus GUIHELEA Yu and Qian

**GUIHELEA** Yu and Qian, *in Yu et al.* 2005a: 1496. Type species: *Guihelea jingxiensis* Yu and Qian, by original designation.

**jingxiensis** Yu and Qian, *in Yu et al.* 2005a: 1497. China (Guangxi).

### Genus INDOBEZZIA Das Gupta and Saha

**INDOBEZZIA** Das Gupta and Saha, 1995: 638. Type species: *Indobezzia nova* Das Gupta and Saha, by original designation.

**nova** Das Gupta and Saha, 1995: 638. India.

**recens** Das Gupta and Saha, 1995: 639. India.

### Genus JENKINSHELEA Macfie

**JENKINSIA** Kieffer, 1913d: 165 (preoccupied by *Jenkinsia* Jordan and Evermann, 1896). Type species: *Jenkinsia setosipennis* Kieffer, by original designation.

**JENKINSHELEA** Macfie, 1934c: 177. New name for *Jenkinsia* Kieffer. Type species: *Jenkinsia setosipennis* Kieffer, automatic.

**accraensis** (Ingram and Macfie, 1923): 41 (*Jenkinsia*). Ghana.

**albaria** (Coquillett, 1895): 308 (*Ceratopogon*). USA (Florida).

*aequalis* (Malloch, 1915a): 336 (*Johannsenomyia*). USA (Illinois).  
**blantoni** Grogan and Wirth, 1977b: 139. USA (Florida).  
**corea** de Meillon, 1942b: 116. Zimbabwe.  
**distincta** de Meillon and Wirth, 1983a: 367. South Africa.  
**djalonensis** Clastrier, 1983a: 261. Guinea.  
**magnipennis** (Johannsen, 1908): 268 (*Johannseniella*). USA (New York).  
**niphanae** Grogan and Wirth, 1981b: 45. Thailand.  
**paliki** Szadziewski, 1992b: 77. North Korea.  
**papuae** Tokunaga, 1966a: 104. Papua New Guinea.  
**parsetosipennis** Saha and Das Gupta, 1996: 8. India.  
**polyxena** de Meillon, 1936: 189. South Africa.  
**rhodesiensis** de Meillon, 1937a: 261. Zimbabwe.  
**setosiforceps** Grogan and Wirth, 1981b: 50. Malaysia.  
**setosipennis** (Kieffer, 1913d): 165 (*Jenkinsia*). India.  
**stenoptera** Remm, 1979a: 178. Turkmenistan.  
**stonei** Grogan and Wirth, 1977b: 135. USA (Florida).  
**sudwalai** de Meillon and Wirth, 1983a: 369. South Africa.  
**tokunagai** Grogan and Wirth, 1981b: 49. Thailand.  
**trisensillata** Clastrier, 1983a: 266. Guinea.

### Genus JOHANNSENYOMYIA Malloch

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

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

**abdominalis** (Tokunaga, 1966a): 120 (*Dicrohelea*). Papua New Guinea.  
**albidorsata** (de Meillon, 1937b): 368 (*Dicrohelea*). South Africa.  
**angulosa** de Meillon and Wirth, 1983a: 369. South Africa.  
**annulicornis** Malloch, 1918b: 230. USA (Illinois).  
**argentata** (Loew, 1861): 310 (*Ceratopogon*). USA (District of Columbia).  
*halteralis* Malloch, 1915a: 338 USA (Illinois).  
**blantoni** (Lane and Wirth, 1961): 81 (*Dicrohelea*). Panama.  
**ceylanica** (Kieffer, 1912c): 6 (*Dibezzia*). Sri Lanka.  
**filicornis** (Kieffer, 1910): 196 (*Palpomyia*). India.  
**filitarsis** (Kieffer, 1910): 202 (*Palpomyia*). India.  
**grahami** (Ingram and Macfie, 1923): 65 (*Palpomyia*). Nigeria.  
**imparunguis** (Becker, 1903): 72 (*Ceratopogon*). Egypt.  
**inermicrus** (Kieffer, 1913d): 186 (*Sphaeromias*). India.  
**interrupta** (Kieffer, 1910): 199 (*Palpomyia*). India.  
**lalokiensis** (Lee, 1948d): 69 (*Dicrohelea*). Papua New Guinea.  
**lanei** Wirth, 1965a: 4. Brazil (Santa Catarina).  
**longistila** (Kieffer, 1911a): 121 (*Dibezzia*). India.  
**maai** (Tokunaga, 1966a): 122 (*Dicrohelea*). Indonesia.  
**nigeriae** (Ingram and Macfie, 1923): 67 (*Palpomyia*). Nigeria.  
**nigra** Goetghebuer, 1933e: 149. Democratic Republic of the Congo.  
**novaebrittanica** (Tokunaga, 1966a): 118 (*Dicrohelea*). Papua New Guinea.  
**novaequineae** (Tokunaga, 1966a): 119 (*Dicrohelea*). Indonesia.  
**petersi** (Tokunaga, 1966a): 151 (*Probezzia*). Papua New Guinea.  
**pseudoargentata** Saha and Das Gupta, 1996: 9. India.  
**schoutedeni** (Goetghebuer, 1933e): 150 (*Palpomyia*). Democratic Republic of the Congo.  
**scriba** Debenham, 1974: 39. Papua New Guinea.

**sejuncta** (Kieffer, 1916a): 90 (*Sphaeromias*). Taiwan.

**uncinata** (Kieffer, 1916a): 91 (*Sphaeromias*). Taiwan.

### Genus LANATOMYIA Debenham

**LANATOMYIA** Debenham, 1974: 43. Type species: *Lanatomyia miles* Debenham, by original designation.

**dichroa** (Edwards, 1933c): 253 (*Dicrohelea*). Malaysia.

**electra** Debenham, 1974: 46. Australia (Northern Territory).

**miles** Debenham, 1974: 44. Australia (Capital Territory).

### Genus MACROPEZA Meigen

**MACROPEZA** Meigen, 1818: 87. Type species: *Macropeza albitarsis* Meigen, by monotypy.

**MACROPTILUM** Becker, 1903: 76. Type species: *Macroptilum nudum* Becker, by monotypy.

**HAASIELLA** Kieffer, 1913d: 190. Type species: *Haasiella semiflava* Kieffer, by original designation.

**abonnenci** (Clastrier, 1958c): 495 (*Bezzia*). Senegal.

**aethiopica** (Ingram and Macfie, 1923): 45 (*Macroptilum*). South Africa.

*meeseri* (de Meillon, 1936): 204 (*Macroptilum*). South Africa.

**affinis** Macfie, 1939d: 10. South Africa.

**albitarsis** Meigen, 1818: 87. Europe.

*valvata* (Winnertz, 1852): 72 (*Ceratopogon*). Germany.

**bayeri** (de Meillon, 1937b): 351 (*Macroptilum*). South Africa.

**blantoni** Wirth and Ratanaworabhan, 1972d: 216. USA (Florida).

**calcipennis** (Macfie, 1939d): 11 (*Macroptilum*). Sierra Leone.

**capensis** Macfie, 1939d: 10. South Africa.

**fluviatilis** (de Meillon, 1940): 463 (*Macroptilum*). South Africa.

**insignipennis** (Macfie, 1939d): 11 (*Macroptilum*). Sierra Leone.

**longipes** (Séguy, 1931b): 645 (*Macroptilum*, as *Macroptylum*). Mozambique.

**natalensis** (de Meillon, 1937b): 355 (*Macroptilum*). South Africa.

**navasi** (Séguy, 1934): 10 (*Macroptilum*, as *Macroptylum*). Spain.

**nigeriae** (Ingram and Macfie, 1923): 43 (*Macroptilum*). Nigeria.

**nigra** (Séguy, 1931b): 646 (*Macroptilum*, as *Macroptylum*). Mozambique.

**nuda** (Becker, 1903): 77 (*Macroptilum*). Egypt.

**pallidipes** (Séguy, 1931b): 646 (*Macroptilum*, as *Macroptylum*). Madagascar.

**pamunkeiana** Knausenberger and Wirth, 1980: 128. USA (Virginia).

**semiflava** (Kieffer, 1913d): 190 (*Haasiella*). India.

**senegalensis** (Clastrier, 1958b): 239 (*Bezzia*). Senegal.

**sibayae** (de Meillon, 1936): 183 (*Bezzia*). South Africa.

**stephensi** (Ingram and Macfie, 1921): 369 (*Probezzia*). Ghana.

### Genus MALLOCHOHELEA Wirth

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

**aenipes** (Macfie, 1940c): 193 (*Bezzia*). Guyana.

**albibasis** (Malloch, 1915b): 315 (*Johannsenomyia*). USA (Illinois).

**albiclava** (Kieffer, 1921g): 566 (*Dicrohelea*). Taiwan.

**albihalter** Wirth, 1962: 280. USA (Michigan).

**alpina** (Clastrier, 1962b): 282 (*Johannsenomyia*). Switzerland.

**aspera** Debenham, 1974: 88. Australia (Tasmania).  
**australiensis** (Lee, 1948d): 67 (*Johannsenomyia*). Australia (Capital Territory).  
**boettcheri** (Edwards, 1929b): 11 (*Palpomyia*). Philippines.  
**borneana** (Macfie, 1934c): 289 (*Palpomyia*). Malaysia.  
**caudellii** (Coquillett, 1905): 63 (*Ceratopogon*). Canada (British Columbia).  
**errinae** (de Meillon, 1940): 461 (*Palpomyia*). South Africa.  
**flavidula** (Malloch, 1914a): 230 (*Johannseniella*). USA (Illinois).  
**hardyi** (Tokunaga, 1966a): 139 (*Nilobezzia*). Papua New Guinea.  
**inermis** (Kieffer, 1909b): 38 (*Johannseniella*). Germany.  
     *kiefferi* (Goetghebuer, 1921): 182 (*Johannsenomyia*). Belgium.  
**kirki** (Macfie, 1939a): 92 (*Sphaeromyias*). Kenya.  
**limitrofe** Spinelli and Felipe-Bauer, 1990a: 87. Argentina (Corrientes).  
**luaboensis** (de Meillon, 1959b): 3 (*Johannsenomyia*). Mozambique.  
**martae** Szadziewski, 2005: 364. Russia (Kaliningrad Oblast). Eocene.  
**microcera** (Rieth, 1915): 410 (*Palpomyia*). Denmark. (Kieffer, 1915c): 287 (*Palpomyia*).  
**munda** (Loew, 1864): 381 (*Ceratopogon*). Germany.  
     *breviforceps* (Rieth, 1915c): 410 (*Palpomyia*). Denmark. (Kieffer, 1915c): 289 (*Palpomyia*).  
     *dentata* (Kieffer, 1909b): 38 (*Johannseniella*). Germany.  
**nemorialis** (Macfie, 1940c): 190 (*Johannsenomyia*). Guyana.  
**nigripes** (Macfie, 1939c): 216 (*Johannsenomyia*). Brazil (Santa Catarina).  
**nitida** (Macquart, 1826): 178 (*Ceratopogon*). France.  
     *clavicornis* (Kieffer, 1919a): 88 (*Sphaeromyias*, as variety of *nitida* Macquart). Slovak Republic.  
     *longiforceps* (Kieffer, 1919a): 88 (*Sphaeromyias*, as variety of *nitida* Macquart). Denmark.  
**pullata** (Wirth, 1952a): 213 (*Johannsenomyia*). USA (California).  
     *bicellii* (Lane, 1961b): 449 (*Nilobezzia*). Brazil (Amapá).  
**remota** (Kieffer, 1919a): 87 (*Sphaeromyias*, as variety of *nitida* Macquart). Slovak Republic.  
     *bulgarica* (Zilahi-Sebess, 1934): 157 (*Sphaeromyias*, as variety of *nitida* Macquart). Bulgaria.  
     *dimidiata* (Kieffer, 1921a): 59 (*Sphaeromyias*). France.  
**sabroskyi** (Tokunaga, in Tokunaga and Murachi 1959): 412 (*Palpomyia*). Belau (USA).  
**sanctaeluciae** (de Meillon, 1937b): 365 (*Palpomyia*). South Africa.  
**satelles** Debenham, 1974: 86. Australia (New South Wales).  
**scandinaviae** (Clastrier, 1962b): 286 (*Johannsenomyia*). Norway.  
**senex** Debenham, 1974: 89. Australia (Queensland).  
**setigera** (Loew, 1864): 380 (*Ceratopogon*). Germany.  
     *maihensis* Remm, 1971: 209. Russia (Primorsky Krai).  
**shibuyai** (Tokunaga, 1940b): 277 (*Johannsenomyia*). Japan.  
**sidis** (de Meillon, 1959b): 5 (*Johannsenomyia*). South Africa.  
**silvicola** (Goetghebuer, 1920): 75 (*Johannsenomyia*). Belgium.  
**smithi** (Lewis, 1956): 47 (*Johannsenomyia*). USA (Connecticut).  
**spinipes** Wirth, 1962: 282. USA (Georgia).  
**stygia** Debenham, 1974: 85. New name for *nigra* Tokunaga.  
     *nigra* (Tokunaga, 1966a): 124 (*Johannsenomyia*, preoccupied by *Johannsenomyia nigra* Goetghebuer, 1933e). Papua New Guinea.  
**sybleae** (Wirth, 1952a): 212 (*Johannsenomyia*). USA (California).  
**termophila** (Spinelli, 1984): 197 (*Neobezzia*). Argentina (Jujuy).  
**tianshanica** Remm, 1980: 85. Kyrgyzstan.  
**tumidicornis** Debenham, 1974: 87. Australia (Queensland).  
**turneri** (Ingram and Macfie, 1923): 63 (*Sphaeromyias*). South Africa.  
**variegata** Wirth, 1962: 283. USA (Michigan).  
**vernalis** Remm, 1965: 185. Estonia.  
**yanana** Yu and Wu, in Yu *et al.* 2005a: 1501. China (Shaanxi).

## Genus NEOBEZZIA Wirth and Ratanaworabhan

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

**albitarsis** Wirth and Ratanaworabhan, 1972a: 478. Brazil (Pará).

**annicola** (Macfie, 1940d): 30 (*Bezzia*). Guyana.

**blantoni** Wirth and Ratanaworabhan, 1972a: 482. Panama.

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

**clavipes** Wirth and Ratanaworabhan, 1972a: 485. Brazil (Amazonas).

**costaricae** Wirth and Ratanaworabhan, 1972a: 486. Costa Rica.

**fittkau** Wirth and Ratanaworabhan, 1972a: 489. Brazil (Amazonas).

**wirthi** Spinelli and Felipe-Bauer, 1990a: 88. Argentina (Corrientes).

## Genus NEOSPHAEROMIAS Das Gupta and Wirth

**NEOSPHAEROMIAS** Das Gupta and Wirth, 1971: 875. Type species: *Neosphaeromias gibbus* Das Gupta and Wirth, by original designation.

**afrotropicalis** Clastrier, 1983a: 268. Guinea.

**choriodes** Grogan and Wirth, 1982: 198. Solomon Islands.

**gibbus** Das Gupta and Wirth, 1971: 877. Thailand.

**niger** Das Gupta and Wirth, 1971: 879. Sri Lanka.

## Genus NILOBEZZIA Kieffer

**NILOBEZZIA** Kieffer, 1921b: 24. Type species: *Nilobezzia armata* Kieffer, by monotypy.

**CRESPINIA** Kieffer, 1923b: 141. Type species: *Crespinia brevivalpis* Kieffer, by monotypy.

**PARROTIA** Kieffer, 1923b: 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.

**acanthopus** (de Meijere, 1907): 215 (*Ceratopogon*). Indonesia.

*conspicua* (Johannsen, 1932): 441 (*Bezzia*, as variety of *raphaelis* Salm). Indonesia.

**albilata** Das Gupta, in Mazumdar *et al.* 2009: 132. India.

**albipennis** (Kieffer, 1911a): 124 (*Bezzia*, as variety of *nigricans* Kieffer). India.

**allotropica** (Kieffer, 1913d): 193 (*Bezzia*). India.

**animifascia** Das Gupta, in Mazumdar *et al.* 2009: 133. India.

**aranea** Debenham, 1974: 72. Australia (New South Wales).

**arciscuta** Das Gupta, in Mazumdar *et al.* 2009: 135. India.

**arcuatipes** (Kieffer, 1913d): 195 (*Bezzia*, as variety of *hamifera* Kieffer). Indonesia.

**armata** Kieffer, 1921b: 24. South Sudan.

*albipennis* Kieffer, 1921b: 25 (as variety of *armata* Kieffer, preoccupied by *Nilobezzia albipennis* (Kieffer, 1911a)). South Sudan.

*flaviventris* Kieffer, 1921b: 25 (as variety of *armata* Kieffer, preoccupied by *Nilobezzia flaviventris* (Kieffer, 1910)). South Sudan.

**atoporna** Yu and Zhang, 1997: 307. China (Sichuan).

**atroxifemorata** Das Gupta, in Mazumdar *et al.* 2009: 137. India.

**badia** (Johannsen, 1932): 442 (*Bezzia*, as variety of *flaviventris* Kieffer). Indonesia.

**bakeri** (Kieffer, 1921g): 570 (*Probezzia*). Philippines.

**basispinigera** Debenham, 1974: 74. Australia (Queensland).

**belligera** (de Meillon, 1940): 459 (*Dicrobezzia*). South Africa.  
**borkenti** Das Gupta, in Mazumdar *et al.* 2009: 139. India.  
**brevicornis** (Wirth, 1952a): 215 (*Sphaeromias*). USA (California).  
**brevipalpis** (Kieffer, 1923b): 141 (*Crespinia*). Indonesia.  
**claripennis** (Kieffer, 1916a): 97 (*Bezzia*). Taiwan.  
**curticornis** (Kieffer, 1917a): 196 (*Bezzia*). Australia (New South Wales).  
*triquetrinotata* Debenham, 1974: 64. Australia (New South Wales).  
**curvopennis** Yu, in Yu *et al.* 2005a: 1506. China (Guangdong).  
**diffidens** (Johannsen, 1932): 441 (*Bezzia*, as variety of *ochriventris* Edwards). Indonesia.  
**discritus** Yu, in Yu *et al.* 2005a: 1507. China (Anhui).  
**disjuncta** (Kieffer, 1913d): 189 (*Palpomyia*). India.  
**duodenalis** Liu, Yan and Liu, 1996a: 46. China (Hainan).  
**facialis** (Kieffer, 1910): 206 (*Bezzia*). India.  
**fijiensis** Wirth and Giles, 1990: 456. Fiji.  
**flavida** Remm, 1980: 86. Tajikistan.  
**flaviventris** (Kieffer, 1910): 204 (*Bezzia*). Nepal.  
**formosa** (Loew, 1869a): 1 (*Ceratopogon*). Hungary.  
*paradoxa* (Zilahi-Sebess, 1940): 108 (*Bezzia*). Hungary.  
**formosana** (Kieffer, 1912a): 30 (*Bezzia*). Taiwan.  
**fusca** Kieffer, 1921b: 25 (as variety of *armata* Kieffer). South Sudan.  
**fuscitarsus** Debenham, 1974: 78. Australia (Queensland).  
**hamifera** (Kieffer, 1913d): 194 (*Bezzia*). India.  
**henanei** Clastrier, 1962a: 121. Algeria.  
**hunyani** de Meillon, 1943: 111. Zimbabwe.  
**japana** (Tokunaga, 1939a): 284 (*Bezzia*). Japan.  
**kerteszi** (Kieffer, 1916a): 97 (*Bezzia*). Taiwan.  
**kiefferi** Wirth, 1973: 383. New name for *flaviventris* Kieffer.  
*flaviventris* (Kieffer, 1923b): 140 (*Parrotia*, preoccupied by *Nilobezzia flaviventris* (Kieffer, 1910)).  
Indonesia.  
**lacteipennis** (Kieffer, 1910): 206 (*Bezzia*). India.  
**leucothrix** Remm, 1980: 88. Turkmenistan.  
**maai** Tokunaga, 1966a: 140. Indonesia.  
**magnithea** Das Gupta, in Mazumdar *et al.* 2009: 141. India.  
**mallochi** Wirth, 1962: 284. USA (Michigan).  
**manicata** Clastrier, 1958c: 500. Senegal.  
**minor** (Wirth, 1952a): 216 (*Sphaeromias*). USA (California).  
**neotropica** (Macfie, 1940a): 78 (*Bezzia*). Brazil (Mato Grosso do Sul).  
**nigra** Sen and Das Gupta, 1958a: 69. India.  
**nigricans** (Kieffer, 1910): 207 (*Bezzia*). India.  
**nigritibialis** (Ingram and Macfie, 1921): 371 (*Dicrobezzia*). Ghana.  
**nilotica** (Kieffer, 1925e): 263 (*Parrotia*). Egypt.  
**ningxia** Yu, in Yu *et al.* 2005a: 1510. China (Ningxia).  
**nipponensis** (Tokunaga, 1939a): 287 (*Bezzia*). Japan.  
**ochriventris** Edwards, 1929b: 12. Philippines.  
**opaca** Das Gupta, in Mazumdar *et al.* 2009: 142. India.  
**ordospina** Das Gupta, in Mazumdar *et al.* 2009: 144. India.  
**paraensis** (Lane, 1958): 33 (*Bezzia*). Brazil (Pará).  
**posticata** (Zetterstedt, 1850): 3658 (*Ceratopogon*). Norway.  
*schineri* (Kieffer, 1919a): 93 (*Palpomyia*). Austria.  
*grisea* (Zilahi-Sebess, 1936b): 44 (*Sphaeromias*). Hungary.  
**raphaelis** (Salm, 1917b): 135 (*Ceratopogon*). New name for *blanchardi* Salm.  
*blanchardi* (Salm, 1917a): 106 (*Ceratopogon*, preoccupied by *Ceratopogon blanchardi* Ichés, 1906).

Indonesia.

*nigriventris* (Kieffer, 1923b): 141 (*Parrotia*). Indonesia.

**robusta** (de Meillon, 1937b): 346 (*Bezzia*). South Africa.

*capensis* de Meillon and Hardy, 1954: 70. South Africa.

**schwarzii** (Coquillett, 1901a): 605 (*Ceratopogon*). USA (Texas).

*setipes* (Coquillett, 1905): 59 (*Ceratopogon*). USA (Texas).

*banksi* (Gerry, 1933): 94 (*Bezzia*). Cuba.

*brasiliensis* (Lane, 1958): 28 (*Bezzia*). Brazil (Rio de Janeiro).

**scotti** (Kieffer, 1911c): 348 (*Probezzia*). Seychelles.

*longipennis* (Kieffer, 1911c): 349 (*Probezzia*). Seychelles.

**semirufa** (Kieffer, 1922b): 161 (*Probezzia*). Taiwan.

**setoensis** (Tokunaga, 1939a): 286 (*Bezzia*). Japan.

**simplicior** Debenham, 1974: 77. Australia (New South Wales).

**subtilicrinis** Debenham, 1974: 80. Australia (Northern Territory).

**tenuicolor** Das Gupta, in Mazumdar *et al.* 2009: 146. India.

**theileri** (de Meillon and Wirth, 1981b): 552 (*Sphaeromias*). South Africa.

**typica** Das Gupta, in Mazumdar *et al.* 2009: 147. India.

**vaga** (Kieffer, 1911b): 329 (*Bezzia*). Nepal.

**virago** Debenham, 1974: 68. Australia (Northern Territory).

**whartoni** Lee, 1948b: 343. Papua New Guinea.

**yasumatsui** Wirth and Ratanaworabhan, 1981b: 409. Thailand.

**zibanensis** Clastrier, 1962a: 123. Algeria.

### Genus NIPHANOHELEA Grogan and Wirth

**NIPHANOHELEA** Grogan and Wirth, 1981d: 201. Type species: *Niphanohalea bannae* Grogan and Wirth, by original designation.

**bannae** Grogan and Wirth, 1981d: 202. Thailand.

### Genus PROBEZZIA Kieffer

**PROBEZZIA** Kieffer, 1906a: 57 (as subgenus of *Bezzia*). Type species: *Ceratopogon venustus* Meigen (= *Tipula seminigra* Panzer), designation by Coquillett, 1910: 594.

**DICROBEZZIA** Kieffer, 1919a: 127. Type species: *Ceratopogon venustus* Meigen (= *Tipula seminigra* Panzer), by original designation.

**albitibia** Wirth, 1971a: 732. USA (Virginia).

**albiventris** (Loew, 1861): 311 (*Ceratopogon*). USA (Georgia).

**atriventris** Wirth, 1951b: 31. USA (Michigan).

**baptosmixa** Yu, in Yu *et al.* 2005a: 1513. China (Heilongjiang).

**bottimeri** Wirth, 1971a: 734. USA (Texas).

**concinna** (Meigen, 1818): 77 (*Ceratopogon*). Europe.

**fairchildi** Wirth, 1994b: 142. USA (Florida).

**flavonigra** (Coquillett, 1905): 60 (*Ceratopogon*). Canada (British Columbia).

**flavipeda** Yu and Zhang, in Yu *et al.* 2005a: 1514. China (Tibet).

**fuscipennis** Wirth, 1971a: 735. USA (Maine).

**glicki** Wirth, 1994b: 142. USA (Alabama).

**infuscata** Malloch, 1915b: 316. USA (Illinois).

**jamnbacki** Wirth, 1971a: 735. USA (Michigan).

**ludoviciana** Wirth, 1951b: 28. USA (Louisiana).

**manshurica** Remm, 1993: 180. Russia (Primorsky Krai).



- meadi** Wirth, 1994b: 143. USA (Florida).  
**nigra** Wirth, 1971a: 736. USA (Louisiana).  
**pallida** Malloch, 1914b: 138. USA (Illinois).  
**rosewalli** Wirth, 1951b: 32. USA (Louisiana).  
**sabroskyi** Wirth, 1951b: 31. USA (Michigan).  
**seminigra** (Panzer, 1798): plate 10 (*Tipula*). Germany.  
     *varipes* Curtis, 1829: plate 285. Europe.  
     *munda* (Loew, 1869a): 3 (*Ceratopogon*, preoccupied by *Mallochohelea munda* (Loew, 1864)). Europe.  
     *venusta* (Meigen, 1818): 78 (*Ceratopogon*). Austria.  
     *inflata* (Winnertz, 1852): 71 (*Ceratopogon*). Germany.  
     *spinosidorsum* Kieffer, 1921a: 61. Poland.  
     *borealis* (Clastrier, 1962a): 119 (*Bezzia*). Finland.  
**smithii** (Coquillett, 1901a): 600 (*Ceratopogon*). USA (New Jersey).  
**sugiyama** (Tokunaga, 1940b): 282 (*Dicrobezzia*). Japan.  
**unica** (Johannsen, 1934): 345 (*Lasiobezzia*). USA (New York).  
**weemsi** Wirth, 1994b: 143. USA (Florida).  
**williamsi** Wirth, 1971a: 737. USA (Michigan).  
**wirthi** Spinelli and Grogan, 1997: 230. USA (Florida).  
**xanthogaster** (Kieffer, 1917b): 329 (*Bezzia*). New name for *elegans* Coquillett.  
     *elegans* (Coquillett, 1901a): 599 (*Ceratopogon*, preoccupied by *Sphaeromias elegans* (Winnertz, 1852)).  
     USA (New Jersey).

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##### Genus ALLOIMYIA Yu and Liu

- ALLOIMYIA** Yu, in Yu *et al.* 2005a: 1493. Type species: *Alloimyia yanjiensis* Yu and Xu, by original designation.  
**yanjiensis** Yu and Xu, in Yu *et al.* 2005a: 1494. China (Jilin).

##### Genus AUSTROSPHAEROMIAS Spinelli

- AUSTROSPHAEROMIAS** Spinelli, 1997: 224. Type species: *Palpomyia apricans* Ingram and Macfie, by original designation.  
**apricans** (Ingram and Macfie, 1931a): 219 (*Palpomyia*). Argentina (Río Negro).  
     *sentior* (Ingram and Macfie, 1931a): 222 (*Palpomyia*, as variety of *apricans* Ingram and Macfie). Chile.  
**chilensis** Ingram and Macfie, 1931a: 218. Chile.  
**setosa** Spinelli, Ronderos and Grogan, 2015b: 98. Argentina (Río Negro).  
**wirthi** Spinelli, 1997: 228. Argentina (Río Negro).

##### Genus CHELOHELEA Giles and Wirth

- CHELOHELEA** Giles and Wirth, 1985: 364. Type species: *Chelohelea comata* Giles and Wirth, by original designation.  
**comata** Giles and Wirth, 1985: 365. Malaysia.

## Genus HOMOHELEA Kieffer

**HOMOHELEA** Kieffer, 1917b: 364. Type species: *Palpomyia abjuncta* Kieffer, designation by Macfie 1940f: 26.  
**SCHIZODACTYLUS** Ingram and Macfie, 1921: 353 (preoccupied by *Schizodactylus* Brullé, 1835). Type species: *Schizodactylus telmatoscopus* Ingram and Macfie, by monotypy.  
**ANKISTRODACTYLUS** Ingram and Macfie, 1922: 272. New name for *Schizodactylus* Ingram and Macfie. Type species: *Schizodactylus telmatoscopus* Ingram and Macfie, automatic.

**abjuncta** (Kieffer, 1913d): 189 (*Palpomyia*). India.  
**agrestia** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 92. India.  
**albitudinis** de Meillon and Wirth, 1981b: 543. South Africa.  
**barkudensis** Edwards, 1932a: 179. India.  
**delanoe** (de Meillon, 1942b): 113 (*Palpomyia*). Zimbabwe.  
**diabola** (de Meillon, 1961): 52 (*Sphaeromias*). Madagascar.  
**dispartivena** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 94. India.  
**diunota** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 96. India.  
**iberica** Delécolle, Blasco-Zumeta and Rieb, 1997: 338. Spain.  
**insolita** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 98. India.  
**insons** (Johannsen, 1932): 436 (*Sphaeromias*). Indonesia.  
*obscuripes* (Macfie, 1934d): 225 (*Sphaeromias*). Indonesia.  
**kraussi** (Tokunaga, in Tokunaga and Murachi 1959): 415 (*Sphaeromias*). Guam (USA).  
**lacteal** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 100. India.  
**longicosta** (Goetghebuer, 1933e): 150 (*Palpomyia*). Democratic Republic of the Congo.  
**melia** de Meillon, 1943: 112. Zimbabwe.  
**optima** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 102. India.  
**splendida** Ghosh, Majumdar, Mazumdar and Chaudhuri, 2009: 104. India.  
**stuckenbergi** (de Meillon, 1961): 51 (*Sphaeromias*). Madagascar.  
**telmatoscopa** (Ingram and Macfie, 1921): 353 (*Schizodactylus*). Ghana.

## Genus LANEHELEA Wirth and Blanton

**LANEHELEA** Wirth and Blanton, 1972a: 433. Type species: *Lanehelea leei* Wirth and Blanton, by original designation.

**leei** Wirth and Blanton, 1972a: 434. Colombia.  
**spinifemur** Wirth and Blanton, 1972a: 436. Colombia.

## Genus LEEHELEA Debenham

**LEEHELEA** Debenham, 1974: 54. Type species: *Homohalea hollandiensis* Tokunaga, by original designation.

**brevidensis** Nandi, Mazumdar and Chaudhuri, 2012: 53. India.  
**fuscilateralis** Nandi, Mazumdar and Chaudhuri, 2012: 55. India.  
**hispidia** Debenham, 1974: 57. Australia (New South Wales).  
**hollandiensis** (Tokunaga, 1966a): 123 (*Homohalea*). Indonesia.  
**leucophaeata** Debenham, 1974: 60. Australia (Queensland).  
**magnidentata** Nandi, Mazumdar and Chaudhuri, 2012: 57. India.  
**parvicapusula** Nandi, Mazumdar and Chaudhuri, 2012: 58. India.  
**punctipes** (Macfie, 1934c): 287 (*Sphaeromias*). Malaysia.  
**wasselli** Debenham, 1974: 58. Australia (Queensland).

## Genus MACKERRASOMYIA Debenham

**MACKERRASOMYIA** Debenham, 1970b: 140. Type species: *Heteromyia brevibarba* Kieffer, by original designation.

- brevibarba** (Kieffer, 1917a): 192 (*Heteromyia*). Australia (Queensland).  
**caesia** (Macfie, 1934c): 288 (1934d: 224) (*Palpomyia*). Malaysia.  
**indica** (Kieffer, 1913d): 183 (*Heteromyia*). India.  
**magna** (Das Gupta and Wirth, 1971): 880 (*Neosphaeromias*). Vietnam.  
**marginata** Debenham, 1970b: 143. Australia (Queensland).  
**pingxiangensis** Yu, in Yu *et al.* 2005a: 1500. China (Guangxi).  
**wongsirii** Wirth and Ratanaworabhan, 1981b: 404. Thailand.  
**zumpti** de Meillon and Wirth, 1979a: 182. Zimbabwe.

## Genus SPHAEROHELEA Spinelli and Felipe-Bauer

**SPHAEROHELEA** Spinelli and Felipe-Bauer, 1990b: 195. Type species: *Sphaerohelea biestroi* Spinelli and Felipe-Bauer, by original designation.

- biestroi** Spinelli and Felipe-Bauer, 1990b: 197. Argentina (Corrientes).

## Genus SPHAEROMIAS Curtis

**SPHAEROMIAS** Curtis, 1829: plate 285. Type species: *Sphaeromias albomarginatus* Curtis (= *Ceratopogon fasciatus* Meigen), by original designation.

*XYLOCRYPTA* Kieffer, 1899: 69. Type species: *Ceratopogon fasciatus* Meigen, by original designation.

- bifidus** Wirth and Grogan, 1979: 893. USA (Maryland).  
**brevispinus** (Kieffer, 1911a): 117 (*Palpomyia*). India.  
**cinereus** (Kieffer, 1910): 197 (*Palpomyia*). India.  
**conjunctus** Kieffer, 1916a: 93. Taiwan.  
**connexus** Kieffer, 1916a: 92. Taiwan.  
**corsoni** (Ingram and Macfie, 1924c): 182 (*Ankistrodactylus*). Ghana.  
**decoratus** Debenham, 1974: 54. Australia (Queensland).  
**discolor** (de Meijere, 1907): 214 (*Ceratopogon*). Indonesia.  
    *javanensis* Macfie, 1934c: 285. Indonesia.  
**distictus** (Kieffer, 1911a): 115 (*Palpomyia*). India.  
**eugenei** de Meillon and Wirth, 1987a: 62. Zimbabwe.  
**fasciatus** (Meigen, 1804): 30 (*Ceratopogon*). Europe.  
    *cingulatus* (Meigen, 1804): 30 (*Ceratopogon*). Europe.  
    *albomarginatus* Curtis, 1829: plate 285. Great Britain.  
    *procerus* (Zetterstedt, 1855): 4867 (*Ceratopogon*). Sweden.  
    *ocularis* (Kieffer, 1924c): 397 (*Xylocrypta*). Germany.  
    *goetghebueri* de Meijere, 1946: 9. Netherlands.  
**inermipes** Kieffer, 1916b: 115. Taiwan.  
**inermithorax** (Kieffer, 1918a): 99 (*Palpomyia*). Singapore.  
**lineus** Saha, Mazumdar and Chaudhuri, 2009a: 286. India.  
**litoraureus** Ingram and Macfie, 1921: 359. Ghana.  
**longipennis** (Loew, 1861): 313 (*Ceratopogon*). USA (Pennsylvania).  
**meeseri** de Meillon, 1942a: 95. Zimbabwe.  
**ornatipennis** Goetghebuer, 1933b: 113. Russia (Primorsky Krai).  
    *nubeculosus* (Tokunaga, 1941a): 100 (*Palpomyia*). China (Heilongjiang).

**ornatipes** Saha, Mazumdar and Chaudhuri, 2009a: 287. India.  
**par** (Ingram and Macfie, 1922): 272 (*Ankistrodactylus*). Ghana.  
*servilia* de Meillon, 1943: 25. Mozambique.  
**photophilus** (Kieffer, 1913d): 188 (*Palpomyia*). India.  
**pictipes** (Kieffer, 1910): 199 (*Palpomyia*). India.  
**pictus** (Meigen, 1818): 80 (*Ceratopogon*). Germany.  
*punctatus* (Meigen, 1830): 264 (*Ceratopogon*, preoccupied by *Culicoides punctatus* (Meigen, 1804)). Europe.  
*elegans* (Winnertz, 1852): 58 (*Ceratopogon*). Poland.  
*candidatus* (Loew, 1856): 23 (*Ceratopogon*, preoccupied by *Ceratopogon candidatus* Winnertz, 1852). Europe.  
*miricornis* (Kieffer, 1919a): 77 (*Xylocrypta*). Hungary.  
*copiosus* (Kieffer, 1925a): 423 (*Xylocrypta*). Czech Republic.  
*sparus* Borkent, in Borkent and Wirth 1997: 123. New name for *punctatus* Meigen.  
**pistiae** (Ingram and Macfie, 1922): 274 (*Palpomyia*). Ghana.  
**prominens** Saha, Mazumdar and Chaudhuri, 2009a: 287. India.  
**simililineus** Saha, Mazumdar and Chaudhuri, 2009a: 287. India.  
**spiniferus** (Kieffer, 1916a): 94 (*Palpomyia*). Taiwan.  
**stictonotus** Kieffer, 1911a: 118. India.  
**tetrastictus** (Kieffer, 1911a): 116 (*Palpomyia*). India.  
**verbosus** Saha, Mazumdar and Chaudhuri, 2009a: 289. India.

#### Genus WANNOHELEA Yu

**WANNOHELEA** Yu, in Yu *et al.* 2005a: 1517. Type species: *Wannohelea huoquiensis* Yu, by original designation.

**huoquiensis** Yu, in Yu *et al.* 2005a: 1517. China (Anhui).

#### Genus XENOHELEA Kieffer

**XENOHELEA** Kieffer, 1917b: 295. Type species: *Xenohelea pruinosa* Kieffer, by original designation.

**MIXOHELEA** Kieffer, 1917b: 364. Type species: *Palpomyia pulchripes* Kieffer, designation by Wirth, 1973: 384.

**albinervis** (Kieffer, 1913d): 187 (*Palpomyia*). India.

**ciliaticrus** (Kieffer, 1921g): 568 (*Mixohelea*). Taiwan.

**galatea** de Meillon, 1942c: 23. Mozambique.

**inaequalis** (Kieffer, 1910): 200 (*Palpomyia*). India.

**luteinervis** (de Meijere, 1907): 214 (*Ceratopogon*). Indonesia.

**nuansriae** Wirth and Ratanaworabhan, 1981b: 411. Thailand.

**polydora** Macfie, 1934d: 226. Indonesia.

**polysticta** (Kieffer, 1911a): 117 (*Palpomyia*). India.

**pruinosa** Kieffer, 1917b: 295 (1918a: 96). India.

**pulchripes** (Kieffer, 1910): 198 (*Palpomyia*). India.

**roseiventris** (Kieffer, 1911a): 114 (*Palpomyia*). India.

**rufiventris** (Kieffer, 1910): 208 (*Bezzia*). India.

**spinosis** (Goetghebuer, 1948b): 13 (*Palpomyia*). Democratic Republic of the Congo.

**spinusus** Liu, Yan and Liu, 1996a: 46. China (Hainan).

**Genus AMEROHELEA Grogan and Wirth**

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

**dalcyi** Grogan and Wirth, 1981a: 1289. Brazil (Amazonas).

**fasciata** Grogan and Wirth, 1981a: 1283. Belize.

**frontispina** (Dow and Turner, 1976): 138 (*Bezzia*). USA (Texas).

**galindoi** Grogan and Wirth, 1981a: 1294. Colombia.

**nelsoni** Grogan and Wirth, 1981a: 1290. Brazil (Amazonas).

**paranaensis** Gaddi, Spinelli and Grogan, *in* Gaddi *et al.* 2011: 301. Argentina (Misiones).

**pseudofasciata** Grogan and Wirth, 1981a: 1286. Brazil (Santa Catarina).

**ronderosi** Grogan and Wirth, 1981a: 1298. Colombia.

**similis** Spinelli, 1989: 27. Uruguay.

**sordidipes** (Macfie, 1939c): 209 (*Palpomyia*). Brazil (Santa Catarina).

**spinellii** Grogan and Wirth, 1981a: 1292. Colombia.

**vargasi** Grogan and Wirth, 1981a: 1296. Belize.

**xerophila** Gaddi, Spinelli and Grogan, *in* Gaddi *et al.* 2011: 305. Argentina (San Luis).

**Genus BEZZIA Kieffer**

**BEZZIA** Kieffer, 1899: 69. Type species: *Ceratopogon ornatus* Meigen, by original designation.

**PSEUDOBEZZIA** Malloch, 1915a: 351. Type species: *Ceratopogon explitus* Coquillett, by original designation.

**ALLOBEZZIA** Kieffer, 1917b: 296. Type species: *Ceratopogon explitus* Coquillett, by original designation.

**LASIOBEZZIA** Kieffer, 1925d: 54. Type species: *Bezzia pilipennis* Lundström, by original designation.

**HOMOBEZZIA** Macfie, 1932b: 496. Type species: *Homobezzia nyasae* Macfie, by monotypy.

**SIVABEZZIA** Remm, 1974a: 440 (as subgenus of *Bezzia*). Type species: *Bezzia campanai* Clastrier, by original designation.

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

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

**acuta** Remm, 1974b: 891. Estonia.

**adamsi** Tokunaga and Murachi, 1959: 418. Micronesia.

**affinis** (Staeger, 1839): 595 (*Ceratopogon*). Denmark.

**africana** Ingram and Macfie, 1923: 71. South Africa.

*hopkinsi* de Meillon and Hardy, 1954: 62. Cameroon.

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

**aklavikensis** Wirth and Grogan, 1983: 495. Canada (Northwest Territories).

**albicornis** (Meigen, 1818): 74 (*Ceratopogon*). Europe.

*pallidetarsata* (Strobl, 1900): 171 (*Ceratopogon*). Spain.

*strobli* Kieffer, 1919a: 122. Serbia-Montenegro.

*brevinervis* Kieffer, 1919a: 122. Hungary.

*aegyptia* Kieffer, 1925e: 264. Egypt.

*atrata* (Macfie, 1944a): 126 (*Homobezzia*). Egypt.

**albidorsata** Malloch, 1915a: 349. USA (Illinois).

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

**aldanica** Remm, 1974b: 893. Russia (Sakha Republic).

**algeriana** Clastrier, 1962a: 89. Algeria.

**alia** Liu and Yu, *in* Yu *et al.* 2005a: 1525. China (Qinghai).  
**amana** de Meillon and Wirth, 1981b: 554. South Africa.  
**ammosovi** Remm, 1974b: 894. Russia (Sakha Republic).  
**ampla** Saha and Chaudhuri, *in* Saha *et al.* 2009b: 2. India.  
**analis** Kieffer, 1913d: 196 (as variety of *gracilipes* Winnertz). India.  
**andersonorum** Wirth and Grogan, 1983: 497. USA (Maryland).  
**angulata** Remm, 1974b: 900. Tajikistan.  
**annulipes** (Meigen, 1830): 264 (*Ceratopogon*). Europe.  
     *circumdata* (Staeger, 1839): 596 (*Ceratopogon*). Denmark.  
     *bidentata* Kieffer, 1901a: 162. France.  
     *fossicola* Kieffer, 1912b: 102. Germany.  
     *ploenensis* Kieffer, 1921a: 62. Germany.  
     *media* Kieffer, 1925d: 126 (preoccupied by *Bezzia media* (Coquillett, 1904b)). Belgium.  
     *phragmitis* Kieffer, 1925a: 428. Germany.  
     *digramma* Kieffer, 1925a: 428. Poland.  
     *kyotoensis* Tokunaga, 1939a: 282. Japan.  
     *sicarti* Clastrier, 1962a: 83. France.  
**apicata** Malloch, 1914c: 284. USA (Illinois).  
**araucana** Spinelli and Wirth, 1990: 14. Argentina (Río Negro).  
**armatipes** Kieffer, 1910: 207. India.  
**atacina** Clastrier, 1962a: 65. France.  
**atrifemorata** Clastrier, 1962a: 69. France.  
**atripluma** Kieffer, 1919a: 123. Hungary.  
**atrovittata** Remm, 1972: 87. Russia (Republic of Buryatia).  
**australiensis** Kieffer, 1917a: 197. Australia (New South Wales).  
**azhanghua** Yu and Sun, *in* Sun *et al.* 2007: 232. China (Guangdong).  
**badiifemorata** Tokunaga and Murachi, 1959: 419. Micronesia.  
**bargaensis** Remm, 1974a: 436. Russia (Zabaykalsky Krai).  
**bengalensis** Kieffer, 1913d: 196 (as variety of *gracilipes* Winnertz). India.  
**biannulata** Wirth, 1952a: 237. USA (California).  
**bicolor** (Meigen, 1804): 31 (*Ceratopogon*). Europe.  
     *typhae* (Kieffer, 1919a): 130 (*Probezzia*). Czech Republic.  
     *brehmiana* (Kieffer, 1924a): 22 (*Probezzia*). Austria.  
     *algarum* (Zilahi-Sebess, 1930b): 186 (*Probezzia*). Hungary.  
     *rufithorax* (Goetghebuer, 1933a): 287 (*Probezzia*). Germany.  
     *copiosa* (Thomsen, 1935): 292 (*Probezzia*). USA (New York).  
**bilineata** Wirth, 1952a: 230. USA (California).  
**bistorta** Yu and Hao, *in* Yu *et al.* 2005a: 1536. China (Guangdong).  
**bivittata** (Coquillett, 1905): 60 (*Ceratopogon*). USA (California).  
**blandiata** Remm, 1967: 32. Azerbaijan.  
**blantoni** Spinelli and Wirth, 1989b: 771. Honduras.  
**bohemica** Kieffer, 1919a: 118. Czech Republic.  
**boiemica** Kieffer, 1922e: 73 (as variety of *taeniata* Haliday). Czech Republic.  
**boluensis** Yu and Ma, *in* Yu *et al.* 2005a: 1536. China (Xinjiang).  
**bresi** Huttel and Huttel, 1951: 102. France.  
**brevicornis** (Kieffer, 1917b): 328 (*Allobezzia*). Paraguay.  
**brevipennata** Saha and Chaudhuri, *in* Saha *et al.* 2009b: 4. India.  
**brevipluma** Kieffer, 1919a: 121. Hungary, Croatia.  
**bromeliae** Spinelli and Wirth, 1991: 9. Panama.  
**bruna** Yu, *in* Yu *et al.* 2005a: 1526. China (Henan).  
**bucina** Li and Yu, 1997b: 121. China (Henan).  
**calceata** (Walker, 1856a): 239 (*Ceratopogon*). Great Britain.

*trilobata* Kieffer, 1922c: 237. Germany.

**calcuttensis** Kieffer, 1913d: 195. India.

**campanai** Clastrier, 1962a: 103. Algeria.

**capitata** Wirth and Grogan, 1983: 503. Honduras.

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

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

**cayoensis** Spinelli and Wirth, 1991: 6. Belize.

**chelistyla** Wirth and Grogan, 1983: 504. USA (Arizona).

**chilensis** Spinelli and Ronderos, 2001: 752. Chile.

**chrysolopha** Kieffer, 1912a: 31. Taiwan.

**chuzhouensis** Yu, *in* Yu *et al.* 2005a: 1556. China (Anhui).

**clarivirga** Saha and Chaudhuri, *in* Saha *et al.* 2009b: 5. India.

**clarkei** Tokunaga and Murachi, 1959: 423. Micronesia.

**clavipennis** Spinelli and Wirth, 1989b: 775. Brazil (Amazonas).

**cockerelli** Malloch, 1915a: 346. USA (Colorado).

*obscura* (Malloch, 1915a): 355 (*Probezzia*). USA (New York).

**collessi** Wirth and Ratanaworabhan, 1981b: 415. Thailand.

**conjunctivena** Tokunaga, 1966a: 147. Papua New Guinea.

**coracina** (Zetterstedt, 1850): 3646 (*Ceratopogon*). Sweden.

*albipes* (Winnertz, 1852): 77 (*Ceratopogon*). Germany.

*fusci-clava* Kieffer, 1919a: 121. Hungary.

**corvina** Remm, 1974b: 902. Russia (Sakhalin Oblast).

**crista** Yu, *in* Yu *et al.* 2005a: 1540. China (Anhui).

**curtforceps** Goetghebuer, 1929: 233 (1934a: 78). Belgium.

**cyrtonotum** Remm, 1974b: 898. Tajikistan.

**datana** Yu, Chen and Liang, *in* Yu *et al.* 2007a: 488. China (Hong Kong).

**decincta** Edwards, 1932b: 47. Great Britain.

**demeilloni** Haeselbarth, 1975: 368. Madagascar.

**dentata** Malloch, 1914c: 284. USA (Illinois).

**dentifemur** Spinelli and Wirth, 1991: 3. Colombia.

**dessarti** Haeselbarth, 1980: 656. Democratic Republic of the Congo.

**dewulfi** Goetghebuer, 1935d: 181. Democratic Republic of the Congo.

**dilatara** Saha and Chaudhuri, *in* Saha *et al.* 2009b: 7. India.

**dinhaiensis** Yu and He, *in* Yu *et al.* 2005a: 1557. China (Zhejiang).

**diversipes** Clastrier, 1958c: 490. Senegal.

**dividua** Tokunaga, 1966a: 148. Indonesia.

**dorsasetula** Dow and Turner, 1976: 89. USA (New York).

**downesi** Dow and Turner, 1976: 93. USA (Maine).

**echinata** Clastrier, 1985a: 49. New Caledonia (France).

**edwardsi** de Meillon, 1938: 268. Zambia.

**elongata** Zilahi-Sebess, 1940: 101. Hungary.

**eocenica** Szadziewski, 1988: 187. Poland. Eocene.

**excavata** Tokunaga, 1966a: 145. Papua New Guinea.

**exclamationis** Kieffer, 1918a: 61. Tunisia.

**exigua** Goetghebuer, 1935a: 4. Belgium.

**expedita** Sinha and Das Gupta, *in* Sinha *et al.* 2003d: 24. India.

**expolita** (Coquillett, 1901a): 600 (*Ceratopogon*). USA (New Jersey).

*johnsoni* (Coquillett, 1901a): 600 (*Ceratopogon*). USA (New Jersey).

**fairchildi** Wirth, 1983b: 303. USA (Florida).

**fangchengi** Yu and Mai, *in* Yu *et al.* 2005a: 1549. China (Guangxi).

**fascispinosa** Clastrier, 1962a: 91. France.

*sexstrigata* Remm, 1971: 213. Russia (Primorsky Krai).

*longiradia* Dow and Turner, 1976: 97. Canada (Ontario).

**fenestrata** Clastrier, 1962a: 86. France.

**filiducta** Spinelli and Wirth, 1991: 3. Colombia.

**flava** Tokunaga, 1939a: 292. Japan.

**flavescens** Kieffer, 1913d: 196 (as variety of *gracilipes* Winnertz). India.

**flavicornis** (Staeger, 1839): 599 (*Ceratopogon*). Denmark.  
*flavipalpis* (Winnertz, 1852): 80 (*Ceratopogon*). Germany.  
*flavipluma* Kieffer, 1919a: 126. Slovak Republic.  
*spinifera* Goetghebuer, 1920: 106. Belgium.  
*spinosula* Clastrier, 1962a: 100. France.

**flavicorporis** de Meillon, 1939a: 22. South Africa.

**flavipennis** Tokunaga, 1939a: 290. Japan.  
*spinosa* Tokunaga, 1940d: 161. Japan.

**flavitaris** Malloch, 1914c: 283. USA (Illinois).

**flavitibia** Dow and Turner, 1976: 140. USA (New York).

**flavoscutellaris** Haeselbarth, 1975: 362. Zimbabwe.

**flinti** Spinelli and Wirth, 1989a: 113. Dominica.

**fluminensis** Lane, 1948: 236. Brazil (Rio de Janeiro).

**fontana** Liu, Yan and Liu, 1996a: 47. China (Hainan).

**fortigenitalis** Sinha and Das Gupta, in Sinha *et al.* 2003d: 26. India.

**foyi** Ingram and Macfie, 1921: 361. Nigeria.

**fuliginata** Clastrier, 1962a: 116. Serbia-Montenegro.

**fusca** Spinelli and Wirth, 1991: 9. Colombia.

**fuscifemoris** Remm, 1971: 216. Russia (Primorsky Krai).

**galera** Saha and Chaudhuri, in Saha *et al.* 2009b: 9. India.

**galesa** Spinelli, in Spinelli *et al.* 2013a: 264. Argentina (Chubut).

**gibbera** (Coquillett, 1905): 60 (*Ceratopogon*). Cuba.

**gibberella** Wirth and Grogan, 1983: 508. USA (Maryland).

**gilvigaster** Borkent, 2014: 102. New name for *xanthogaster* Kieffer.  
*xanthogaster* (Kieffer, 1919a): 130 (*Probezzia*, preoccupied by *Probezzia xanthogaster* (Kieffer)). Russia  
 (Republic of Tatarstan).

**glabra** (Coquillett, 1902a): 85 (*Ceratopogon*). USA (Florida).

**glaucivena** Sinha and Das Gupta, in Sinha *et al.* 2003d: 27. India.

**globulosa** Spinelli and Wirth, 1990: 18. Puerto Rico (USA).

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

**gracilipes** (Winnertz, 1852): 72 (*Ceratopogon*). Germany.

**gressitti** Tokunaga, 1966a: 149. Papua New Guinea.

**griseata** Remm, 1972: 85. Russia (Republic of Buryatia).

**griseipes** Clastrier, Rioux and Descous, 1961: 85. Chad.

**grogani** Spinelli and Wirth, 1990: 19. Panama.

**hainana** Liu, Yan and Liu, 1996a: 48. China (Hainan).

**haroldi** de Meillon and Wirth, 1987a: 66. South Africa.

**hihifoi** Clastrier and Delécolle, 1996: 296. Wallis and Futuna Islands (France).

**hissarica** Remm, 1974b: 891. Tajikistan.

**hoggarensis** Clastrier, 1962a: 81. Algeria.

**hondurensis** Spinelli and Wirth, 1990: 20. Honduras.

**huochengensis** Yu and Ma, in Yu *et al.* 2005a: 1560. China (Xinjiang).

**imbifida** Dow and Turner, 1976: 38. USA (Maryland).

**indecora** Kieffer, 1912c: 8. Sri Lanka.

**inflatifemora** Tokunaga, 1966a: 141. Papua New Guinea.

**insolita** de Meillon and Wirth, 1983a: 376. South Africa.

**insularis** Kieffer, 1921g: 571. Taiwan.



**jamaicensis** Spinelli and Wirth, 1989a: 115. Jamaica.  
**japonica** Tokunaga, 1939a: 280. Japan.  
     *suffusa* Dow and Turner, 1976: 110. Canada (Manitoba).  
**jiaonana** Yu and Xue, in Yu *et al.* 2005a: 1551. China (Shandong).  
**jubata** Spinelli and Wirth, 1990: 20. Colombia.  
**kazlauskasi** Remm, 1966: 67. Lithuania.  
**kelamayi** Yu and Ma, in Yu *et al.* 2005a: 1561. China (Xinjiang).  
**kempi** Kieffer, 1913d: 197. India.  
**kiefferiana** Goetghebuer, 1934a: 80. Germany.  
**kitaokai** Tokunaga, 1963c: 46. Japan.  
**kuhetiensis** Remm, 1967: 33. Azerbaijan.  
**kurensis** Remm, 1967: 34. Azerbaijan.  
**laciniastyla** Dow and Turner, 1976: 42. USA (Florida).  
**lancanga** Yu, in Yu *et al.* 2005a: 1553. China (Yunnan).  
**latipalpis** Clastrier, 1962a: 106. Tunisia.  
**leei** Spinelli and Wirth, 1990: 21. Colombia.  
**lenkoi** Lane, 1958: 31. Brazil (São Paulo).  
**leucogaster** (Zetterstedt, 1850): 3659 (*Ceratopogon*). Sweden.  
     *xanthocephala* Goetghebuer, 1911: 95. Belgium.  
     *parvidens* Kieffer, 1914a: 240. Sweden.  
     *picticornis* Kieffer, 1914a: 241. Germany.  
     *danica* Kieffer, 1915c: 291. Denmark.  
     *grisea* Kieffer, 1919a: 119. Hungary.  
     *brachycera* Kieffer, 1919a: 119. Hungary.  
     *belgica* Kieffer, 1919a: 120. Belgium.  
     *hungarica* Zilahi-Sebess, 1930b: 190. Hungary.  
**levifusca** Saha and Chaudhuri, in Saha *et al.* 2009b: 11. India.  
**lewvanichae** Wirth and Ratanaworabhan, 1981b: 422. Thailand.  
**liangpinensis** Yu, in Yu *et al.* 2005a: 1527. China (Chongqing).  
**libanensis** Alwin-Kownacka and Szadziewski, in Alwin-Kownacka *et al.* 2017: 4. Lebanon.  
**lijunchengi** Yu, Nie and Li, in Nie, *et al.* 2012: 35. China (Hebei) (on ship from Portland, Australia).  
**longgangi** Yu, Nie and Yang, in Nie *et al.* 2015: 382. China (Hebei) (on ship from North Korea).  
**longiforceps** Tokunaga, 1959: 312. Indonesia.  
**longipennis** Statz, 1944: 151. Germany. Oligocene.  
**longisaeta** (Spataru, 1973): 287 (*Probezzia*). Romania.  
**lophophora** Clastrier, 1988a: 58. Guinea.  
**lucida** de Meillon, 1939a: 24. Democratic Republic of the Congo.  
**lujingi** Yu, Chen and Pan, in Yu *et al.* 2007a: 488. China (Hong Kong).  
**lutea** Wirth and Ratanaworabhan, 1981b: 417. Thailand.  
**luteiventris** Wirth and Grogan, 1983: 510. USA (Virginia).  
**maai** Tokunaga, 1966a: 149. Indonesia.  
**maculifemorata** Tokunaga and Murachi, 1959: 424. Micronesia.  
**magnisetula** Dow and Turner, 1976: 46. Canada (Manitoba).  
**mallochi** Wirth, 1951d: 323. USA (Virginia).  
**mathisi** Spinelli and Wirth, 1989a: 117. Ecuador.  
**mazaruni** Macfie, 1940c: 193. Guyana.  
     *coloradensis* Wirth, 1952a: 238. USA (California).  
**media** (Coquillett, 1904b): 166 (*Ceratopogon*). USA (New Jersey).  
**medusa** Yu, Li and Nie, in Nie *et al.* 2005: 103. Indonesia or China (Hebei).  
**megatheca** Spinelli and Wirth, 1990: 22. Colombia.  
**melanesiae** Clastrier, 1985a: 45. New Caledonia (France).  
**melanoflava** Clastrier, 1958b: 235. Senegal.

**melanoflava** Clastrier and Wirth, 1961a: 205. Nigeria.  
**mellori** Boorman and Harten, 2002: 456. Oman.  
**mesotibialis** Spinelli and Wirth, 1990: 23. Belize.  
**mexicana** Spinelli and Wirth, 1991: 6. Mexico (San Luis Potosi).  
**meyensis** Vattier and Adam, 1966b: 748. Congo.  
**micronyx** Kieffer, 1922b: 162. Taiwan.  
     *crassistyla* Tokunaga, 1966a: 143. Indonesia.  
**minuta** Remm, 1974b: 895. Kyrgyzstan.  
**mohave** Wirth and Grogan, 1983: 511. USA (California).  
**mollis** Johannsen, 1932: 442. Indonesia.  
**monacantha** Kieffer, 1925a: 427. Russia (Kaliningrad Oblast).  
**mongolica** Remm, 1972: 88. Russia (Zabaykalsky Krai).  
**monothea** Sinha and Das Gupta, *in* Sinha *et al.* 2003d: 29. India.  
**morvani** Clastrier, 1962a: 95. Algeria.  
**multiannulata** (Strobl, 1906): 400 (*Ceratopogon*). Spain.  
     *gandavensis* Goetghebuer, 1935a: 4. Belgium.  
     *strigula* Clastrier, 1962a: 68. France.  
**multispinosa** Clastrier, 1962a: 77. Algeria.  
**murina** Kieffer, 1922b: 162. Taiwan.  
**murphyi** Clastrier and Wirth, 1961a: 207. Gambia.  
**myrmedon** (Kieffer, 1921g): 571 (*Probezzia*). Taiwan.  
**narynica** Remm, 1973: 183. Kyrgyzstan.  
**naseri** Boorman and Harten, 2002: 457. Yemen.  
**neixianga** Yu and Guo, *in* Yu *et al.* 2005a: 1529. China (Henan).  
**nicator** de Meillon, 1959b: 18. South Africa.  
**nigerrima** Haeselbarth, 1965b: 9. South Africa.  
**nigrialula** Tokunaga, *in* Tokunaga and Murachi 1959: 428. Belau (USA).  
**nigriclava** Kieffer, 1921g: 572. Taiwan.  
**nigripes** Wirth and Grogan, 1983: 513. USA (Utah).  
**nigrita** Clastrier, 1962a: 117. Norway.  
**nigritibialis** Spinelli and Wirth, 1991: 5. Belize.  
**nigritula** (Zetterstedt, 1838): 820 (*Ceratopogon*). Norway.  
     *tenebricosa* Goetghebuer, 1912: 208. Belgium.  
     *atripes* Zilahi-Sebess, 1940: 100. Hungary.  
**nigrofasciata** Tokunaga, *in* Tokunaga and Murachi 1959: 429. Micronesia.  
**nigroflava** Remm, 1974b: 891. Russia (Sakha Republic).  
**niokoloensis** Clastrier, 1958c: 493. Senegal.  
**niphatoda** Yu, 2000: 162. China (Hebei).  
**nobilis** (Winnertz, 1852): 79 (*Ceratopogon*). Germany.  
     *setulosa* (Loew, 1861): 312 (*Ceratopogon*). USA (District of Columbia).  
     *barberi* (Coquillett, 1901a): 601 (*Ceratopogon*). USA (Maryland).  
     *punctata* Lundström, 1910: 42 (as variety of *leucogaster* Zetterstedt). Finland.  
     *leucosticta* Kieffer, 1919a: 124. Russia (Republic of Tatarstan).  
     *cinerella* Kieffer, 1919a: 124. Hungary.  
     *armaticrus* Kieffer, 1919a: 125. Hungary.  
     *csikiana* Kieffer, 1919a: 126. Russia (Republic of Tatarstan).  
     *chrysocoma* Kieffer, 1922d: 355. Poland.  
     *acanthodes* Macfie, 1940c: 192. Guyana.  
     *atlantica* Wirth and Williams, 1957: 13. Bermuda (Great Britain).  
     *nobiliformis* Clastrier, 1962a: 74. France.  
**nodosipes** Kieffer, 1924a: 22. Austria.  
**numidiana** Clastrier, 1962a: 72. Algeria.

**nyasae** (Macfie, 1932b): 497 (*Homobezzia*). Malawi.  
*agathae* de Meillon, 1940: 455. South Africa.  
**obelisca** Dow and Turner, 1976: 104. USA (New York).  
**ornata** (Meigen, 1830): 262 (*Ceratopogon*). Europe.  
*vittiger* (Zetterstedt, 1850): 3642 (*Ceratopogon*). Sweden.  
*albosignata* Kieffer, 1919a: 117. Hungary.  
**ornatissima** (Kieffer, 1911c): 349 (*Probezzia*). Seychelles.  
*bipunctata* (Kieffer, 1911c): 350 (*Probezzia*, as variety of *ornatissima* Kieffer). Seychelles.  
**pachypyga** Remm, 1974a: 441. Tajikistan.  
*omanensis* Boorman and Harten, 2002: 458. Oman.  
**pallidipes** Clastrier and Wirth, 1961a: 209. Gambia.  
**palustris** Clastrier, 1962a: 94. France.  
**papillistyla** Sinha and Das Gupta, in Sinha *et al.* 2003d: 31. India.  
**papuae** Tokunaga, 1966a: 150. Indonesia.  
**pediaureola** Tokunaga and Murachi, 1959: 427. Micronesia.  
**perplexa** Dow and Turner, 1976: 57. USA (Florida).  
**picipes** Goetghebuer, 1948b: 17. Democratic Republic of the Congo.  
**pilipennis** Lundström, 1916b: 674. Sweden.  
**pilosella** Remm, 1974b: 896. Kazakhstan.  
**platyura** (Macfie, 1947b): 77 (*Palpomyia*). Sudan.  
*dubia* Clastrier, Rioux and Descous, 1961: 81. Chad.  
**propriostyla** Sinha and Das Gupta, in Sinha *et al.* 2003d: 33. India.  
**prospicula** Remm, 1974a: 435. Kyrgyzstan.  
**pruinosa** (Coquillett, 1905): 59 (*Ceratopogon*). Canada (British Columbia).  
*modocensis* Wirth, 1952a: 233. USA (California).  
**pseudobscura** Wirth, 1951d: 324. USA (Virginia).  
**pseudogibbera** Spinelli and Wirth, 1990: 23. Panama.  
**pseudovenustula** Spinelli and Wirth, 1991: 8. Brazil (Pará).  
**pulchripes** Kieffer, 1917b: 330. Paraguay.  
**pulverea** (Coquillett, 1901a): 600 (*Ceratopogon*). USA (New Jersey).  
**punctipennis** (Williston, 1896): 278 (*Ceratopogon*). St. Vincent.  
**pygmaea** Goetghebuer, 1920: 100. Belgium.  
**raoheensis** Yu and Liu, in Yu *et al.* 2005a: 1562. China (Heilongjiang).  
**raposoensis** Spinelli and Wirth, 1991: 4. Colombia.  
**rhodesiensis** Haeselbarth, 1975: 360. Zimbabwe.  
**rhynchostylata** Remm, 1974b: 891. Russia (Sakha Republic).  
**riparia** Clastrier, 1985a: 51. New Caledonia (France).  
**roldani** Spinelli and Wirth, 1981: 187. Argentina (Buenos Aires).  
**rossii** Clastrier, 1962a: 55. Algeria.  
**rufescens** Remm, 1971: 213. Russia (Primorsky Krai).  
**rufifascies** Goetghebuer, 1932a: 126. Germany.  
**rufipes** (Kieffer, 1911c): 347 (*Pachyleptus*). Seychelles.  
*femorialis* (Kieffer, 1911c): 348 (*Pachyleptus*, as variety of *rufipes* Kieffer). Seychelles.  
**sahariensis** Clastrier, 1962a: 97. Algeria.  
**saileri** Wirth, 1983a: 770. USA (Alaska).  
**sajana** Remm, 1972: 89. Russia (Republic of Buryatia).  
*quadridens* Remm, 1972: 89. Russia (Chelyabinsk Oblast).  
**sandersoni** Wirth and Grogan, 1983: 514. USA (Arizona).  
**schmitzorum** Dippolito and Spinelli, in Dippolito *et al.* 1995: 54. Brazil (Rondônia).  
**segermanae** Haeselbarth, 1975: 359. South Africa.  
**separata** Kieffer, 1916a: 96. Taiwan.  
**serena** Johannsen, 1932: 443. Indonesia.

**sergenti** Kieffer, 1922g: 515. Algeria.  
**setigera** Spinelli and Wirth, 1990: 24. Colombia.  
**setosa** Remm, 1974b: 892. Russia (Sakhalin Oblast).  
**setosinotum** Wirth and Grogan, 1983: 517. USA (Maryland).  
**sevanica** Remm, 1974a: 438. Armenia.  
**sexspinosa** Edwards, 1928: 57. American Samoa (USA).  
**sharjahi** Alwin-Kownacka and Szadziewski, in Alwin-Kownacka *et al.* 2017: 7. United Arab Emirates.  
**shihei** Yu and Li, in Yu *et al.* 2005a: 1543. China (Hebei).  
**signata** (Meigen, 1804): 29 (*Ceratopogon*). Europe.  
     *heusdensis* Goetghebuer, 1935b: 414. Belgium.  
**similis** Saha and Chaudhuri, in Saha *et al.* 2009b: 13. India.  
**sinica** Hao and Yu, 2003: 200. China (Guangdong).  
**sivashica** Remm, in Remm and Zhogolev 1968: 842. Ukraine.  
**snowi** Lane, 1958: 34. Guatemala.  
**solstitialis** (Winnertz, 1852): 78 (*Ceratopogon*). Europe.  
     *hydrophila* Kieffer, 1909b: 38 (1911d: 6). Germany.  
     *sieberti* Kieffer, 1921d: 277. Latvia.  
     *aquatilis* Goetghebuer, 1923: 105. Belgium.  
     *stagnalis* Kieffer, 1925d: 129 (as variety of *hydrophila* Kieffer). Germany.  
**sordida** Wirth, 1952a: 232. USA (California).  
**spathula** Wirth and Grogan, 1983: 518. USA (Maryland).  
**spicata** Dow and Turner, 1976: 77. USA (Florida).  
**spinosella** Clastrier, 1983c: 21. Seychelles.  
**spinositibialis** Tokunaga and Murachi, 1959: 421. Micronesia.  
**suavis** Johannsen, 1932: 444. Indonesia.  
**subfusca** Macfie, 1939c: 218. Brazil (Santa Catarina).  
**sulfureicruris** Tokunaga and Murachi, 1959: 425. Micronesia.  
**tadsignata** Remm, 1974b: 896. Tajikistan.  
**taeniata** (Haliday, in Walker 1856a): 238 (*Ceratopogon*). Great Britain.  
     *brehmii* Kieffer, 1925d: 129. France.  
**tasmaniensis** Lee, 1948b: 341. Australia (Tasmania).  
**tenuipennis** Yu and Zhang, in Yu *et al.* 2005a: 1564. China (Tibet).  
**ternidentata** Yu, 2000: 161. China (Hebei).  
**texensis** Wirth and Grogan, 1983: 519. USA (Texas).  
**tirawati** Wirth and Ratanaworabhan, 1981b: 420. Thailand.  
**transitiva** Remm, 1974a: 434. Russia (Sakha Republic).  
**trichia** Yu and Liu, in Yu *et al.* 2005a: 1565. China (Heilongjiang).  
**trispinosa** Kieffer, 1911a: 123. India.  
**tshernovskii** Remm, 1993: 180. Armenia.  
**tuoliensis** Yu and Xiang, in Yu *et al.* 2005a: 1544. China (Xinjiang).  
**turbipes** Sinha and Das Gupta, in Sinha *et al.* 2003d: 35. India.  
**turkmenica** Glukhova, 1979: 163. Turkmenistan.  
**turmidifemura** Yu and Xu, in Yu *et al.* 2005a: 1545. China (Heilongjiang).  
**turrata** de Meillon and Wirth, 1983a: 378. South Africa.  
**twinni** Wirth, 1983a: 774. Canada (Manitoba).  
**umlalazia** de Meillon, 1940: 457. South Africa.  
**uncistyla** Dow and Turner, 1976: 80. USA (New Mexico).  
**unispina** Dow and Turner, 1976: 114. USA (Alaska).  
**ussurica** Glukhova, 1979: 167. Russia (Primorsky Krai).  
**varia** Haeselbarth, 1975: 368. Zimbabwe.  
**varicolor** (Coquillett, 1902b): 84 (*Ceratopogon*). USA (New York).  
**ventanensis** Spinelli, in Spinelli *et al.* 2012b: 62. Argentina (Buenos Aires).

**venustula** (Williston, 1896): 278 (*Ceratopogon*). St. Vincent.  
*concoloripes* Macfie, 1940d: 31. Guyana.  
**vilbastei** Remm, 1971: 215. Russia (Primorsky Krai).  
**vitilevuensis** Wirth and Giles, 1990: 458. Fiji.  
**vittata** Tokunaga, 1966a: 146. Indonesia.  
**wanyuanensis** Yu, *in* Yu *et al.* 2005a: 1566. China (Sichuan).  
**winnertziana** Kieffer, 1919a: 113. New name for *gracilis* Winnertz.  
*gracilis* (Winnertz, 1852): 76 (*Ceratopogon*, preoccupied by *Stilobezzia gracilis* (Haliday, 1833)).  
Germany.  
**wirthi** Haeselbarth, 1965b: 10. Zimbabwe.  
**woodruffi** Spinelli and Wirth, 1989a: 120. Jamaica.  
**xinyangensis** Yu, *in* Yu *et al.* 2005a: 1547. China (Henan).  
**yaeyama** (Tokunaga, 1962a): 216 (*Nilobezzia*). Japan.  
**yasumatsui** Wirth and Ratanaworabhan, 1981b: 424. Thailand.  
**yigonga** Yu and Yan, *in* Yu *et al.* 2005a: 1533. China (Tibet).  
**zajantshkauskasi** Remm, 1966: 68. Lithuania.  
**zhangmuensis** Yu and Zhang, *in* Yu *et al.* 2005a: 1567. China (Tibet).  
**zhangxingwangi** Yu and Gao, *in* Yu *et al.* 2005a: 1570. China (Heilongjiang).  
**zhongnina** Yu and Liu, *in* Yu *et al.* 2005a: 1569. China (Ningxia).  
**zonatipes** Tokunaga, 1966a: 146. Indonesia.

#### *Nomina dubia*

**goezii** (Schrank, 1803): 72 (*Tipula*). Germany.  
**soikai** (Harant, Huttel and Huttel, 1952): 12 (*Dicrobezzia*). Italy.

#### **Genus CLASTRIEROMYIA Spinelli and Grogan**

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

**dycei** Spinelli and Grogan, 1986: 456. Uruguay.  
**kremeri** Spinelli and Grogan, 1985: 332. Brazil (Amazonas).  
**schnacki** Spinelli and Grogan, 1985: 331. Ecuador.  
**uruguayensis** Spinelli and Grogan, 1986: 458. Uruguay.

#### **Genus PACHYHELEA Wirth**

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

**albidiventris** (Kieffer, 1917b): 316 (*Sphaeromyias*). Colombia.  
**pachymera** (Williston, 1900): 224 (*Ceratopogon*). Mexico (Veracruz).  
*magna* (Coquillett, 1905): 61 (*Ceratopogon*). USA (Texas).  
*latifemoris* (Ingram and Macfie, 1931a): 231 (*Johannsenomyia*). Argentina (Buenos Aires).

#### **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, 1976a: 174 (as subgenus of *Palpomyia*). Type species: *Palpomyia miki* Goetghebuer (= *Palpomyia schmidti* Goetghebuer), by original designation.

*NEMOROMYIA* Liu and Yu, 1991: 25. Type species: *Nemoromyia nemorosa* Liu and Yu, by original designation.

*EOPALPOMYITIS* Hong, Guo and Ren, 2000: 226 (Hong 2002a: 165). Type species: *Palpomyia unca* Hong, by original designation.

**abdominalis** Kieffer, 1922b: 161 (as variety of *tainana* Kieffer). Taiwan.

**abrupta** Yu, in Yu *et al.* 2005a: 1575. China (Henan).

**aculeata** Ingram and Macfie, 1931a: 215. Chile.

**afra** Goetghebuer, 1948b: 14. Democratic Republic of the Congo.

**alba** Yu and Liu, in Yu *et al.* 2005a: 1576. China (Qinghai).

**albiditarsis** Kieffer, 1910: 203. India.

**albipennis** Kieffer, 1901a: 163. France.

**aldrichi** (Malloch, 1915a): 326 (*Heteromyia*). USA (Idaho).

**algeriana** Clastrier, 1962b: 244. Algeria.

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

**altispina** Grogan and Wirth, 1975a: 32. USA (New York).

**amazonensis** Almeida, Farias, Alencar and Pessoa (as Fiejó, Farias, Alencar and Pessoa), 2017: 119. Brazil (Amazonas).

**amplofemoria** Yu and Zhang, in Yu *et al.* 2005a: 1577. China (Tibet).

**ancorifera** Tokunaga, 1966a: 129. Papua New Guinea.

**angustipennis** Kieffer, 1919a: 105. Hungary.

**aquilotibialis** Borkent, in Borkent and Wirth 1997: 130. New name for *nigrotibialis* Remm.  
*nigrotibialis* Remm, 1976a: 183 (preoccupied by *Palpomyia nigrotibialis* Goetghebuer, 1933d). Kyrgyzstan.

**arcutibia** Yu, in Yu *et al.* 2005a: 1578. China (Hubei).

**arenosa** (Remm and Nazarmukhamedov, 1969): 54 (*Bezzia*). Uzbekistan.

**arkitensis** Remm, 1976a: 183. Kyrgyzstan.

**armata** Kieffer, 1921a: 60. France.

**armatipes** Wirth, 1952a: 222. USA (California).

**armigera** de Meillon and Downes, 1986: 177. South Africa.

**armipes** (Meigen, 1838): 20 (*Ceratopogon*). Germany.  
*erythrocephala* (Staeger, 1839): 579 (*Ceratopogon*). Denmark.  
*rufipecta* (Winnertz, 1852): 62 (*Ceratopogon*). Poland.

**ashantii** Ingram and Macfie, 1923: 64. Ghana.

**aspina** Grogan and Wirth, 1979a: 37. USA (Texas).

**aterrima** Goetghebuer, 1921: 183. Belgium.

**atriclava** Kieffer, 1921g: 569. Taiwan.

**atricoxa** Kieffer, 1919a: 110. Romania.

**balozeti** Clastrier, 1962b: 260. Algeria.

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

**basalis** (Walker, 1848): 27 (*Ceratopogon*). USA (New York).  
*trivialis* (Loew, 1861): 309 (*Ceratopogon*). USA (District of Columbia).  
*tenuicornis* (Malloch, 1915a): 328 (*Heteromyia*). USA (Wisconsin).

**belkini** Grogan and Wirth, 1979a: 72. USA (California).

**bicolor** Macfie, 1941: 67. Malawi.

**binotata** (Staeger, 1839): 596 (*Ceratopogon*). Denmark.

**bipicta** Remm, 1976a: 175. Tajikistan.

- bispinosa** Rieth, 1915: 410. Denmark. Kieffer, 1915c: 286.  
*kiefferi* Goetghebuer, 1934a: 69. Unnecessary new name for *bispinosa* Rieth.
- boliviensis** Kieffer, 1917b: 324. Bolivia.
- bottimeri** Grogan and Wirth, 1979a: 75. USA (Texas).
- brachialis** (Haliday, 1833): 152 (*Ceratopogon*). Great Britain.  
*longipennis* Kieffer, 1919a: 104. Slovak Republic.  
*fusci-clava* Kieffer, 1919a: 109. Slovak Republic.  
*nemorivaga* Goetghebuer, 1920: 84. Belgium.
- brandti** Tokunaga, 1966a: 138. Papua New Guinea.
- brasiliensis** Macfie, 1939c: 213. Brazil (Santa Catarina).
- brevicornis** Edwards, 1926a: 422. Great Britain.
- brevipes** Goetghebuer, 1948b: 14. Democratic Republic of the Congo.
- buettikeri** Boorman and Harten, 2002: 458. Saudi Arabia.
- burmae** Kieffer, 1910: 196. Burma.
- calcarata** Edwards, 1929b: 10. Philippines.
- calderana** Storå, 1936: 37. Canary Islands (Spain).
- callangana** Kieffer, 1917b: 323. Peru.
- canadensis** Grogan and Wirth, 1979a: 109. USA (California).
- cantuaris** Ingram and Macfie, 1931b: 207. New Zealand.
- carioca** Lane, 1960: 384. Brazil (Rio de Janeiro).
- carrerai** (Lane, 1948): 235 (*Dicrobezzia*, as *carreirai*). Brazil (São Paulo).
- castanea** Macfie, 1939c: 211. Brazil (Santa Catarina).
- castellana** (Strobl, 1900): 170 (*Ceratopogon*). Spain.
- catarinensis** Lane, 1960: 385. Brazil (Santa Catarina).
- chongqingi** Yu, in Yu *et al.* 2005a: 1581. China (Chongqing).
- citrinipes** Kieffer, 1922e: 72. Czech Republic.
- columbiana** Kieffer, 1917b: 323. Colombia.
- concoloripes** Clastrier, 1962b: 258. Norway.
- conifera** Macfie, 1939c: 214. Brazil (Santa Catarina).
- coroicoensis** Wirth, 1974: 54. New name for *boliviensis* Kieffer.  
*boliviensis* (Kieffer, 1917b): 331 (*Jenkinsia*, preoccupied by *Palpomyia boliviensis* Kieffer, 1917b). Bolivia.
- craponnei** Clastrier, 1962b: 242. France.
- crassicrus** Kieffer, 1917b: 321. Paraguay.
- crassifemur** Kieffer, 1918a: 98. Sri Lanka.  
*festiva* Kieffer, 1918a: 99 (as variety of *crassifemur* Kieffer). Sri Lanka.
- crassinervis** (de Meijere, 1907): 213 (*Ceratopogon*). Indonesia.
- crassipalpis** Sinha, Das Gupta and Chaudhuri, 2003b: 75. India.  
*flexidigita* Sinha, Das Gupta and Chaudhuri, 2003b: 79. India.  
*novita* Saha and Das Gupta, 2005: 63. India.
- ressoni** (Malloch, 1915a): 327 (*Heteromyia*). USA (Pennsylvania).
- croatica** Kieffer, 1919a: 99 (as variety of *serripes* Meigen). Slovak Republic, Romania, Hungary.
- csikii** Remm, 1981: 31. New name for *longicornis* Kieffer.  
*longicornis* Kieffer, 1919a: 107 (preoccupied by *Palpomyia longicornis* (Williston, 1896)). Romania.
- curtata** Yu and Deng, in Yu *et al.* 2005a: 1582. China (Tibet).
- decima** Lee, 1948d: 58. Australia (Tasmania).
- deminutipalpis** Sinha, Das Gupta and Chaudhuri, 2003b: 79. India.  
*barbara* Saha and Das Gupta, 2005: 62. India.
- distincta** (Haliday, 1833): 152 (*Ceratopogon*). Great Britain.  
*ephippium* (Zetterstedt, 1855): 4873 (*Ceratopogon*). Sweden.  
*rubra* Kieffer, 1919a: 101. Romania.  
*flaviscutellum* Kieffer, 1919a: 103. Romania.  
*ruficornis* Goetghebuer, 1934c: 289 (as variety of *distincta* Haliday). Europe.

**divisa** Kieffer, 1916a: 94. Taiwan.  
**ebejeri** Boorman and Harten, 2002: 458. Oman.  
**ectasa** Yu, in Yu *et al.* 2005a: 1588. China (Qinghai).  
**edwardsi** Cockerell, 1921: 469. Great Britain. Late Eocene.  
**elgoni** Macfie, 1939a: 97. Kenya.  
**erikae** Szadziewski, 1993: 642. Germany. Eocene.  
**exotica** Yu and Nie, in Nie and Yu 2006: 376. China (Hebei) (on ship from Tomita, Japan).  
**fergana** Remm, 1976a: 183. Kyrgyzstan.  
**flaviceps** (Johannsen, 1908): 268 (*Johannseniella*). USA (New York).  
     *opacithorax* (Malloch, 1915a): 329 (*Heteromyia*). USA (Illinois).  
     *hirta* (Malloch, 1915a): 330 (*Heteromyia*). USA (Illinois).  
**flavipecta** Kieffer, 1918a: 59. Tunisia.  
**flavipes** (Meigen, 1804): 28 (*Ceratopogon*). Europe.  
     *hortulana* (Meigen, 1818): 81 (*Ceratopogon*). Europe.  
     *mutabilis* Clastrier, 1962b: 246. France.  
**flavitaris** (Meigen, 1838): 20 (*Ceratopogon*). Europe.  
**flaviventris** (Czerny and Strobl, 1909): 130 (*Ceratopogon*, as variety of *flavipes* Meigen). Spain.  
**freidbergi** Alwin-Kownacka and Szadziewski, in Alwin-Kownacka *et al.* 2017: 18. Israel.  
**freyi** (Pierce, 1966): 95 (*Neopalpomyia*). USA (California). Miocene.  
**fulva** Yu and Qi, in Yu *et al.* 2005a: 1585. China (Gansu).  
**fulvastra** Yu, in Yu *et al.* 2005a: 1586. China (Hubei).  
**fulvescens** Kieffer, 1919a: 100. Romania.  
**fumipecta** Yu and Zhang, in Yu *et al.* 2005a: 1587. China (Tibet).  
**fusca** de Meillon, 1938: 266. Mozambique.  
**fuscipecta** Kieffer, 1918a: 60. Tunisia.  
     *atrimana* Kieffer, 1918a: 60 (as variety of *fuscipectus* Kieffer). Tunisia.  
**fuscipeda** Yu and Liu, in Yu *et al.* 2005a: 1590. China (Sichuan).  
**fuscitibia** Yu and Deng, in Yu *et al.* 2005a: 1591. China (Tibet).  
**gilva** de Meillon and Wirth, 1987a: 67. South Africa.  
**globulifera** Remm, 1971: 211. Russia (Primorsky Krai).  
**grossipes** Goetghebuer, 1920: 88. Belgium.  
**guarani** Lane, 1946b: 221. Brazil (São Paulo).  
**guyana** Clastrier, 1992: 117. French Guiana (France).  
**hastata** Grogan and Wirth, 1975a: 34. USA (New York).  
**helviscutellata** Borkent, in Borkent and Wirth 1997: 132. New name for *flavoscutellata* Strobl.  
     *flavoscutellata* (Strobl, 1900): 170 (*Ceratopogon*, as variety of *flavipes* Meigen, preoccupied by *Dasyhelea flavoscutellata* (Zetterstedt, 1850)). Spain.  
**himalayae** (Kieffer, 1911b): 328 (*Dibezzia*). India.  
**hispidata** Borkent, in Borkent and Wirth 1997: 132. New name for *multispinosa* Spinelli and Grogan.  
     *multispinosa* Spinelli and Grogan, 1989: 6 (preoccupied by *Palpomyia multispinosa* (Pierce, 1966)). El Salvador.  
**iberaensis** Spinelli and Cazorla, 2006: 1068. Argentina (Corrientes).  
**indistincta** Remm, 1976a: 180. Russia (Sakhalin Oblast).  
**indivisa** Kieffer, 1916a: 95. Taiwan.  
**inermicollis** Kieffer, 1917b: 323. Paraguay.  
**inflatifemoralis** Tokunaga, 1966a: 131. Papua New Guinea.  
**infuscata** Kieffer, 1919a: 104. Slovak Republic, Croatia.  
**insularis** Spinelli and Grogan, 1989: 3. Puerto Rico (USA).  
**jamnbacki** Grogan and Wirth, 1979a: 88. USA (New York).  
**jantari** Szadziewski, 1988: 182. Poland. Eocene.  
**jimmensis** Tokunaga, 1966a: 126. Papua New Guinea.  
**johannseni** (Lane, 1948): 233 (*Dicrobezzia*). Brazil (São Paulo).



**johnstoni** Macfie, 1939a: 96. Uganda.  
**jonesi** Grogan and Wirth, 1975a: 17. USA (Wisconsin).  
**kernensis** Wirth, 1952a: 223. USA (California).  
**kilembei** Macfie, 1939a: 94. Uganda.  
**kirgizica** Glukhova, 1979: 161. Kyrgyzstan.  
**korni** Havelka, 1980: 89. Germany.  
**kurwana** de Meillon and Wirth, 1987a: 69. South Africa.  
**kyotoensis** Tokunaga, 1939a: 312. Japan.  
**lacorum** Debenham, 1989: 250. New name for *abdominalis* Tokunaga.  
*abdominalis* (Tokunaga, 1966a): 106 (*Heteromyia*, preoccupied by *Palpomyia abdominalis* Kieffer, 1922b).  
Indonesia.  
**lacteipennis** Remm, 1976a: 183. Russia (Sakhalin Oblast).  
**lacustris** Lane, Forattini and Rabello, 1955: 83. Brazil (São Paulo).  
**laensis** Tokunaga, 1966a: 134. Papua New Guinea.  
**lanceolata** Almeida, Farias, Alencar and Pessoa (as Fiejó, Farias, Alencar and Pessoa), 2017: 119. Brazil (Amazonas).  
**lanceolifera** Tokunaga, 1966a: 133. Papua New Guinea.  
**langyaensis** Yu, in Yu *et al.* 2005a: 1592. China (Anhui).  
**leucopogon** Kieffer, 1911a: 114. India.  
**limnochares** (Macfie, 1940a): 76 (*Sphaeromyias*). Brazil (Pernambuco).  
**lineata** (Meigen, 1804): 30 (*Ceratopogon*). Europe.  
*cinerea* (Macquart, 1826): 177 (*Ceratopogon*). France.  
*slossonae* (Coquillett, 1905): 61 (*Ceratopogon*). USA (New Hampshire).  
*algarum* Kieffer, in Kieffer and Thienemann 1908: 1. Germany.  
*winnertzi* Kieffer, 1914a: 238. Germany.  
*illinoisensis* Malloch, 1914a: 219. USA (Illinois).  
*octasema* Kieffer, 1914a: 239. Germany.  
*spinossissima* Kieffer, 1915c: 285. Denmark.  
*unifasciata* Kieffer, 1922e: 72. Czech Republic.  
*murina* Kieffer, 1925a: 426. Germany.  
*obesa* Goetghebuer, 1927b: 94. Belgium.  
*nigrotibialis* Goetghebuer, 1933d: 370 (as variety of *lineata* Meigen). Belgium.  
*pruinescens* Thomsen, 1935: 290. USA (New York).  
*edwardsi* de Meijere, 1946: 10 (preoccupied by *Palpomyia edwardsi* Cockerell, 1921). Netherlands.  
*stagnalis* Clastrier, 1962b: 274. France.  
**linsleyi** Wirth, 1952a: 224. USA (California).  
**longa** Remm, 1976a: 189. Georgia.  
**longtana** Yu, in Yu *et al.* 2005a: 1593. China (Hubei).  
**lundstroemi** Remm, 1981: 31. New name for *bispinosa* Lundström.  
*bispinosa* Lundström, 1916a: 15 (preoccupied by *Palpomyia bispinosa* Kieffer, 1915c). Finland.  
**luteifemorata** Edwards, 1926a: 419. Great Britain.  
**lutzi** Lane, 1947b: 440. Brazil (Rio de Janeiro).  
**maai** Tokunaga, 1966a: 132. Papua New Guinea.  
**macracantha** Clastrier, 1962b: 252. France.  
**magali** de Meillon and Wirth, 1981b: 557. South Africa.  
**magna** Tokunaga, 1966a: 130. Papua New Guinea.  
**magnispinosa** Clastrier, 1962b: 250. France.  
**mahyoubi** Boorman and Harten, 2002: 458. Yemen.  
**manilensis** Edwards, 1929b: 10. Philippines.  
**mapuche** Spinelli, Grogan and Ronderos, 2009b: 50. Argentina (Neuquén).  
**marinoi** Spinelli, Grogan and Ronderos, 2009b: 53. Argentina (Río Negro).  
**melacheira** Remm, 1976a: 186. Russia (Sakhalin Oblast).  
**mellichroa** Macfie, 1939c: 212. Brazil (Santa Catarina).

**micans** Kieffer, 1918a: 61. Tunisia.  
**microchela** Kieffer, 1917b: 321. Colombia.  
**montana** Tokunaga, 1939a: 304. Japan.  
**monticola** Tokunaga, 1939a: 306. Japan.  
**morenae** (Strobl, 1900): 170 (*Ceratopogon*). Spain.  
**multisaeta** Yu and Xu, *in* Yu *et al.* 2005a: 1594. China (Heilongjiang).  
**multispinosa** (Pierce, 1966): 97 (*Neopalpomyia*). USA (California). Miocene.  
**nachitai** He, Liu and Yu, 2017a: 82. China (Qinghai).  
**nakali** Boorman and Harten, 2002: 459. Oman.  
**namwambae** Macfie, 1939a: 99. Uganda.  
**nana** Zilahi-Sebess, 1934: 157. Bulgaria.  
**nanniwana** He, Liu and Yu, 2017b: 266. China (Shaanxi).  
**nelsoni** Macfie, 1932c: 50. New Zealand.  
**nemorosa** Liu and Yu, 1991: 26 (*Nemoromyia*). China (Heilongjiang).  
**nigricans** Macfie, 1934c: 288. Malaysia.  
**nigidorsum** Kieffer, 1919a: 111. Slovak Republic.  
**nigrina** Clastrier, 1962b: 226. France.  
**nigripalpis** Goetghebuer, 1934a: 91. Spain.  
**nigripecta** Kieffer, 1919a: 108. Slovak Republic.  
**nigripes** (Meigen, 1830): 265 (*Ceratopogon*). Europe.  
     *pratensis* (Meigen, 1830): 264 (*Ceratopogon*). Europe.  
     *bryocrypta* Kieffer, 1925a: 425. France.  
**nigritarsalis** Remm, 1976a: 185. Kyrgyzstan.  
**nigrithorax** de Meillon, 1929: 248. South Africa.  
**nigroflava** Lane, 1947b: 446. Brazil (São Paulo).  
**nigroscutellata** Lane, 1947b: 444. Brazil (São Paulo).  
**nitela** Yu and Ding, *in* Yu *et al.* 2005a: 1596. China (Liaoning).  
**nitidissima** Goetghebuer, 1948b: 15. Democratic Republic of the Congo.  
**novaeguineae** Tokunaga, 1966a: 135. Papua New Guinea.  
**novaeirelandensis** Tokunaga, 1966a: 135. Papua New Guinea.  
**novitibialis** Grogan and Wirth, 1975a: 13. USA (New York).  
**obscurella** Clastrier, 1962b: 256. France.  
**occidentalis** Grogan and Wirth, 1979a: 115. USA (Utah).  
**oliffi** de Meillon and Hardy, 1954: 72. South Africa.  
**oliveirai** Lane, 1947b: 443. Brazil (Minas Gerais).  
**pacifica** Remm, 1981: 31. New name for *aterrima* Kieffer.  
     *aterrima* Kieffer, 1922b: 159 (preoccupied by *Palpomyia aterrima* Goetghebuer, 1921). Taiwan.  
**pallida** (Tokunaga, 1966a): 107 (*Heteromyia*). Papua New Guinea.  
**pallidipeda** Yu and Liu, *in* Yu *et al.* 2005a: 1597. China (Tibet).  
**pampana** Lane, 1960: 386. Brazil (Rio Grande do Sul).  
**panacantha** Clastrier, 1962b: 270. France.  
**paraensis** Lane, 1960: 387. Brazil (Pará).  
**patagonica** Ingram and Macfie, 1931a: 222. Argentina (Río Negro).  
**paulistensis** Lane, 1947b: 445. Brazil (São Paulo).  
**pendleburyi** Edwards, 1933c: 254. Malaysia.  
**pilea** Yu, *in* Yu *et al.* 2005a: 1598. China (Hainan).  
**plebeiella** Grogan and Wirth, 1975a: 20. USA (New York).  
**plebeja** (Loew, 1861): 313 (*Ceratopogon*). USA (Pennsylvania).  
**polyacantha** Clastrier, 1962b: 268. France.  
**portali** Macfie, 1939a: 95. Uganda.  
**praeusta** (Loew, 1869b): 50 (*Ceratopogon*). Germany.  
     *apicalis* (Strobl, 1898): 612 (*Ceratopogon*, as variety of *flavipes* Meigen, preoccupied by *Ceratopogon*

*apicalis* Roser, 1840). Bosnia-Herzegovina.  
*terminalis* Kieffer, 1919a: 103. Slovak Republic.  
*schineri* Goetghebuer, 1920: 82 (as variety of *flavipes* Meigen, preoccupied by *Nilobezzia schineri* (Kieffer, 1919a)). Belgium.

**pruinulosa** Remm, 1976a: 178. Georgia.  
**pseudolacustris** Dippolito and Spinelli, in Dippolito *et al.* 1995: 55. Brazil (Rondônia).  
**pseudorivularis** Das Gupta, in Das Gupta *et al.* 2009: 47. India.  
**pseudorufa** Grogan and Wirth, 1975a: 26. USA (Maryland).  
**puberula** Remm, 1976a: 196. Estonia.  
**pubescens** Kieffer, 1919a: 105. Slovak Republic.  
*crassipes* Goetghebuer, 1920: 112. Belgium.  
*turfacea* Kieffer, 1925b: 155. Russia (Kaliningrad Oblast).  
**quadrispinosa** Goetghebuer, 1920: 83. Belgium.  
**quadristriata** (Strobl, 1910): 263 (*Ceratopogon*). Austria.  
**raignieri** Goetghebuer, 1931: 211. Belgium.  
**rastellifera** Macfie, 1932c: 51. New Zealand.  
**remmi** Havelka, 1974: 622. Germany.  
**reversa** Remm, 1972: 83. Russia (Altai Republic).  
**riedeli** Szadziewski, 1988: 183. Poland. Eocene.  
**riouxii** Huttel and Huttel, 1951: 99. France.  
**rivularis** Kieffer, 1911b: 328. India.  
**rossica** Remm, 1965: 185. Russia (Voronezh Oblast).  
**rubiginosa** Grogan and Wirth, 1975a: 22. USA (New York).  
**rufa** (Loew, 1861): 314 (*Ceratopogon*). USA (Pennsylvania).  
**ruficrus** Goetghebuer, 1948b: 15. Democratic Republic of the Congo.  
**rufipes** (Meigen, 1818): 81 (*Ceratopogon*). Europe.  
*spiniosior* Kieffer, 1919a: 106. Slovak Republic, Hungary, Croatia.  
*pseudospinipes* Goetghebuer, 1933b: 112. Russia (Primorsky Krai).  
*plurispinosa* Clastrier, 1962b: 265. France.  
**rutshuruensis** Goetghebuer, 1948b: 15. Democratic Republic of the Congo.  
**ruwenzorii** Macfie, 1939a: 98. Uganda.  
**ryshkoffi** (Pierce, 1966): 98 (*Parapalpomyia*). USA (California). Miocene.  
**ryszardi** Spinelli and Ronderos, 2013: 344. Peru.  
**scabra** (Coquillett, 1905): 62 (*Ceratopogon*). Mexico (Tabasco).  
**scalpellifera** Grogan and Wirth, 1975a: 33. USA (New York).  
**schmidti** Goetghebuer, 1934e: 36. Iraq.  
*miki* Goetghebuer, 1934a: 91. Hungary.  
**semiermis** Goetghebuer, 1914: 190. Belgium.  
*goetghebueri* Kieffer, 1919a: 98. Belgium.  
**seneveti** Clastrier, 1962b: 239. Algeria.  
**septentrionalis** Spinelli, Grogan and Ronderos, 2009b: 58. Argentina (Neuquén).  
**serraticauda** Tokunaga, 1966a: 128. Papua New Guinea.  
**serripes** (Meigen, 1818): 82 (*Ceratopogon*). Europe.  
*transfuga* (Staeger, 1839): 598 (*Ceratopogon*). Denmark.  
*tarsata* (Zetterstedt, 1855): 4874 (*Ceratopogon*). Sweden.  
*ruficeps* Kieffer, 1918a: 59. Tunisia.  
**shilo** (Pierce, 1966): 95 (*Miopalpomyia*). USA (California). Miocene.  
**simplitheca** Das Gupta, in Das Gupta *et al.* 2009: 47. India.  
**sinanoensis** Tokunaga, 1939a: 300. Japan.  
**singularis** de Meillon, 1937b: 362. South Africa.  
**sohraensis** Paul, Harsha and Mazumdar, 2014a: 369. India.  
**spinifemur** (Lane, 1948): 234 (*Dicrobezzia*). Brazil (São Paulo).

**spinipes** (Meigen, in Panzer 1806): plate 14 (*Ceratopogon*). Germany.  
*fulva* (Macquart, 1826): 181 (*Ceratopogon*). France.  
*ferruginea* (Meigen, 1830): 265 (*Ceratopogon*). Denmark.  
*parviforceps* Kieffer, 1925d: 98. France.  
**spinosa** Lutz, 1914: 93. Brazil (Rio de Janeiro).  
**spinulosa** Goetghebuer, 1935d: 180. Democratic Republic of the Congo.  
**stella** Tokunaga, 1966a: 136. Indonesia.  
**stonei** Wirth, 1951d: 322. USA (Virginia).  
**subalpina** Lee, 1948d: 59. Australia (Capital Territory).  
**subaspera** (Coquillett, 1901a): 606 (*Ceratopogon*). USA (New Mexico).  
*maculicrus* Ingram and Macfie, 1931a: 230. Argentina (Misiones).  
*essigi* Wirth, 1952a: 225. USA (California).  
**subfuscula** Ingram and Macfie, 1931a: 216. Chile.  
**succincta** (Meigen, 1818): 85 (*Ceratopogon*). Portugal.  
**succinea** Szadziewski, 1988: 185. Denmark. Eocene.  
**tainana** Kieffer, 1912a: 29. Taiwan.  
**tamaricis** Remm, 1976a: 176. Kyrgyzstan.  
**tamioi** Lane, 1960: 388. Brazil (Rio de Janeiro).  
**tanycornis** Borkent, in Borkent and Wirth 1997: 134. New name for *longicornis* Williston.  
*longicornis* (Williston, 1896): 280 (*Ceratopogon*, preoccupied by *Ceratopogon longicornis* Waltl, 1837). St. Vincent.  
**tasmanica** (Lee, 1948d): 62 (*Heteromyia*). Australia (Tasmania).  
**tauffliebi** Vattier and Adam, 1966b: 762. Congo.  
**tenuicrus** Kieffer, 1917b: 320. Paraguay.  
**terrea** (Meigen, 1818): 85 (*Ceratopogon*). Germany.  
*oldenbergi* Goetghebuer, 1932a: 127. Germany.  
**thomsoni** Macfie, 1939a: 96. Uganda.  
**tibialis** (Meigen, 1818): 82 (*Ceratopogon*). Austria.  
*atripecta* Kieffer, 1919a: 101. Serbia-Montenegro.  
*laticollis* Goetghebuer, 1922: 55. Belgium.  
*nipponica* Tokunaga, 1939a: 297. Japan.  
**tinctipennis** Kieffer, 1919a: 110. Romania, Slovak Republic.  
*obscuripennis* Kieffer, 1919a: 110. Croatia.  
*semifumosa* Goetghebuer, 1922: 58. Belgium.  
*adusta* Kieffer, 1925a: 426. Germany.  
*nigritella* Clastrier, 1962b: 255. France.  
**trifasciata** Wirth, 1952a: 222. USA (California).  
**turanica** Remm, 1976a: 176. Kazakhstan.  
**turnbowi** Grogan, Spinelli, Ronderos and Cazorla, 2013: 12. Guadeloupe (France).  
**tuvae** Remm, 1972: 84. Russia (Tuva Republic).  
*downesi* Grogan and Wirth, 1979a: 112. Canada (Manitoba).  
**umbella** Macfie, 1939c: 208. Brazil (Santa Catarina).  
**unca** (Hong, 1981): 58 (*Palpomyia*). China (Liaoning). Eocene.  
**urpicifemoris** Macfie, 1932c: 52. New Zealand.  
**vallouisensis** Clastrier, 1962b: 272. France.  
**variipila** Kieffer, 1924b: 407. Germany.  
**venetiae** Harant, Huttel and Huttel, 1952: 14. Italy.  
**verna** de Meillon and Wirth, 1987a: 70. South Africa.  
**versicolor** Macfie, 1939c: 215. Brazil (Santa Catarina).  
**vittata** Clastrier, Rioux and Descous, 1961: 78. Chad.  
**walteri** Grogan and Wirth, 1979a: 62. USA (West Virginia).  
**weemsi** Grogan and Wirth, 1979a: 35. USA (Florida).

**wirthi** Lane, Forattini and Rabello, 1955: 82. Brazil (São Paulo).  
**wirthorum** Szadziewski and Grogan, 1997: 257. Dominican Republic. Miocene.  
**wittei** Goetghebuer, 1948b: 14. Democratic Republic of the Congo.  
**xanthothorax** Remm, 1976a: 180. Tajikistan.  
**xizanga** Yu and Liu, *in* Yu *et al.* 2005a: 1605. China (Tibet).  
**yamana** Spinelli, Grogan and Ronderos, 2009b: 63. Argentina (Tierra del Fuego).  
**yasumatsui** Tokunaga, 1940d: 158. Japan.  
**yuanqingi** Yu, *in* Yu *et al.* 2005a: 1607. China (Shaanxi).  
**zernyi** Goetghebuer, 1934a: 92. Spain.  
**ziliangi** Yu, *in* Yu *et al.* 2005a: 1604. China (Hubei).  
**zyzza** Yu and Zou, *in* Yu *et al.* 2005a: 1608. China (Yunnan).

#### *Nomina dubia*

**flavitibialis** Santos Abreu, 1918: 325 (as variety of *flavipes* Meigen). Canary Islands (Spain).  
**floralis** (Meigen, 1804): 27 (*Ceratopogon*). Europe.  
**luteiventris** Santos Abreu, 1918: 326 (as variety of *flavipes* Meigen). Canary Islands (Spain).

#### Genus PHAENOBEZZIA Haeselbarth

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

**assimilis** (Johannsen, 1932): 445 (*Bezzia*). Indonesia.  
**ateles** (Macfie, 1940a): 78 (*Bezzia*). Brazil (Bahia).  
*astyla* Spinelli and Wirth, 1986: 232. Colombia.  
**beni** de Meillon and Wirth, 1983a: 379. South Africa.  
**chonganensis** Yu and Shen, 1998: 62. China (Fujian).  
**cinnae** (de Meillon, 1936): 185 (*Palpomyia*). South Africa.  
**conspersa** (Johannsen, 1932): 446 (*Bezzia*). Indonesia.  
**eucera** (Kieffer, 1911a): 123 (*Bezzia*). India.  
**excisa** (Clastrier, 1962a): 110 (*Bezzia*). Algeria.  
**fulvithorax** (Malloch, 1915a): 354 (*Probezzia*). USA (Illinois).  
**griseipennis** (Clastrier, 1958c): 498 (*Nilobezzia*). Senegal.  
**javana** (Kieffer, 1923b): 142 (*Probezzia*). Indonesia.  
**lineola** (Kieffer, 1910): 205 (*Bezzia*, as variety of *gracilipes* Kieffer). India.  
*gracilipes* (Kieffer, 1910): 205 (*Bezzia*, preoccupied by *Bezzia gracilipes* (Winnertz, 1852)). India.  
**mashonensis** (Ingram and Macfie, 1923): 73 (*Bezzia*). Zimbabwe.  
**maya** Spinelli and Wirth, 1986: 234. Belize.  
**mellipes** Wirth and Ratanaworabhan, 1981b: 427. Thailand.  
**minutistyla** (Tokunaga, 1939a): 293 (*Bezzia*). Japan.  
**nitens** Liu, Yan and Liu, 1996a: 48. China (Hainan).  
**nzuari** (Vattier and Adam, 1966b): 750 (*Probezzia*). Congo.  
*troglophila* (Vattier and Adam, 1966b): 754 (*Nilobezzia*). Congo.  
**opaca** (Loew, 1861): 312 (*Ceratopogon*). USA (District of Columbia).  
*incerta* (Malloch, 1915a): 358 (*Probezzia*). USA (Illinois).  
**pajoti** (Vattier and Adam, 1966b): 752 (*Probezzia*). Congo.  
*congolensis* (Vattier and Adam, 1966b): 758 (*Nilobezzia*). Congo.  
**pistiae** (Ingram and Macfie, 1921): 364 (*Probezzia*). Ghana.  
**probata** (de Meillon, 1937b): 349 (*Bezzia*). South Africa.  
**rara** Saha and Das Gupta, 2001: 250. India.  
**rubiginosa** (Winnertz, 1852): 72 (*Ceratopogon*). Germany.

*glyceriae* (Kieffer, 1913a): 9 (*Bezzia*). Germany.  
*nitidiventris* (Goetghebuer, 1923): 104 (*Probezzia*). Belgium.  
*radialis* (Goetghebuer, 1936): 323 (*Bezzia*). Belgium.  
**sabroskyi** Wirth and Grogan, 1982: 189. USA (Maryland).  
**seychelleana** (Kieffer, 1911c): 350 (*Probezzia*). Seychelles.  
**spekei** (Macfie, 1939a): 101 (*Nilobezzia*). Uganda.  
**stuckenbergi** Haeselbarth, 1965a: 308. South Africa.  
**suavis** Saha and Das Gupta, 2001: 251. India.  
**tenuiforceps** (Clastrier, 1962a): 109 (*Bezzia*). Algeria.  
**tropica** (Clastrier and Wirth, 1961a): 212 (*Nilobezzia*). Gambia.  
**vacunae** (de Meillon, 1936): 180 (*Bezzia*). South Africa.  
**vulgaris** Saha and Das Gupta, 2001: 251. India.  
**wirthi** Szadziewski and Grogan, 1997: 259. Dominican Republic. Miocene.  
**zuluensis** Haeselbarth, 1965a: 306. South Africa.

TRIBE STENOXENINI COQUILLET, 1899: 61

**Genus PARYPHOCONUS Enderlein**

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

**aemulus** Macfie, 1940b: 180. Guyana.  
**amapaensis** Lane, 1961b: 450. Brazil (Amapá).  
**angustipennis** Enderlein, 1912: 57. Brazil (Santa Catarina).  
**anomalicornis** Kieffer, 1917b: 333. Colombia and Paraguay.  
**apicalis** Spinelli and Wirth, 1984b: 889. Ecuador.  
**barrettoi** Lane, 1946a: 203. Brazil (Goiás).  
**batesi** Lane, 1961c: 455. Brazil (Distrito Federal).  
**brunneipennis** Spinelli and Wirth, 1984b: 890. Brazil (Amazonas).  
**ecuadorensis** Spinelli and Wirth, 1984b: 892. Ecuador.  
**enderleini** Lane, 1956a: 301. Brazil (Mato Grosso do Sul).  
**fittkaui** Spinelli and Wirth, 1984b: 892. Brazil (Amazonas).  
**flavidus** (Johannsen, 1943): 761 (*Ceratobezzia*). Guyana.  
*lanei* Wirth, 1959b: 236. Brazil (Amazonas).  
**flinti** Spinelli and Wirth, 1984b: 894. Mexico (Tabasco).  
**fusciradialis** Spinelli and Wirth, 1984b: 895. Brazil (Pará).  
**fuscus** Lane, 1946a: 206. Brazil (Goiás).  
**goianensis** Lane, 1961c: 456. Brazil (Distrito Federal).  
**grandis** Macfie, 1939d: 6. Brazil (Santa Catarina).  
**guianae** Macfie, 1940b: 180. Guyana.  
**kiefferi** Lane, 1956a: 302. Brazil (Goiás).  
**latipennis** Spinelli and Wirth, 1984b: 898. Colombia.  
**leei** Spinelli and Wirth, 1984b: 898. Colombia.  
**macfiei** Lane, 1946a: 203. Brazil (São Paulo).  
**maya** Spinelli and Wirth, 1984b: 899. Belize.  
**mayeri** Wirth, 1959b: 236. Brazil (Amazonas).  
**misionensis** Spinelli, 1998: 52. Argentina (Misiones).  
**neotropicalis** (Lane, 1948): 229 (*Macropeza*). Brazil (São Paulo).  
**nigripes** Macfie, 1939d: 8. Argentina (Misiones).  
**nubifer** Macfie, 1939d: 5. Brazil (Santa Catarina).  
**oliveirai** Lane, 1956a: 303. Brazil (Pará).

**paranaensis** Spinelli and Wirth, 1984b: 902. Argentina (Misiones).  
**paulistensis** Lane, 1961c: 457. Brazil (São Paulo).  
**peruvianus** Mauad and Spinelli, 2011: 487. Peru.  
**sonorensis** Wirth and Ratanaworabhan, 1972c: 1374. Mexico (Sonora).  
**steineri** Spinelli and Wirth, 1984b: 905. Peru.  
**subflavus** Macfie, 1940d: 23. Guyana.  
*travassosi* Lane, 1956a: 304. Brazil (Pará).  
**taragui** Spinelli, 1998: 53. Argentina (Corrientes).  
**telmatophilus** (Macfie, 1940a): 77 (*Bezzia*). Brazil (Paraíba).  
**terminalis** (Coquillett, 1904a): 90 (*Ceratopogon*). Nicaragua.  
**unimaculatus** Macfie, 1940b: 179. Guyana.  
**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 and Spinelli, in Dippolito *et al.* 1995: 56. Brazil (Rondônia).  
**arcuatus** Wirth and Ratanaworabhan, 1972c: 1379. Panama.  
**blantoni** Wirth and Ratanaworabhan, 1972c: 1379. Panama.  
**brasiliensis** Macfie, 1939c: 140. Brazil (Santa Catarina).  
**carrerai** Lane, 1956a: 305 (as *carreirai*). Brazil (Goiás).  
**coomani** Séguy, 1931a: 210. Vietnam.  
*insigninervis* Macfie, 1934c: 290. Malaysia.  
**dimorphus** Kieffer, 1909a: 47. Peru.  
**excentricus** Lane, 1961c: 453. Brazil (Pará).  
**fulvus** Johannsen, 1927a: 70. Peru.  
**johnsoni** Coquillett, 1899: 61. USA (New Jersey).  
**lanei** Wirth and Ratanaworabhan, 1972c: 1381. Panama.  
**limpidus** Wirth and Ratanaworabhan, 1972c: 1383. Costa Rica.  
**marginalis** Wirth and Ratanaworabhan, 1972c: 1385. Panama.  
**niger** Lane, 1948: 230. Brazil (Goiás).  
**paraensis** Lane, 1956a: 306. Brazil (Pará).  
**pastorianus** Clastrier, 1982b: 293. Guinea.  
**pauliani** Vattier and Adam, 1966b: 767. Congo.  
**pseudofulvus** Spinelli, 1998: 54. Argentina (Corrientes).  
**setiger** Macfie, 1939c: 138. Brazil (Santa Catarina).  
**stenopterus** Wirth and Ratanaworabhan, 1972c: 1387. Philippines.  
**usatae** de Meillon, 1959a: 355. South Africa.

### Extant genus unplaced to subfamily

#### Genus SINICOHELEA Yu, Wang and Tan

**SINICOHELEA** Yu, Wang and Tan, in Wang *et al.* 2012a: 42. Type species: *Sinicohelea xuanjui* Yu, Wang and Chen, by original designation.

**xuanjui** Yu, Wang and Chen, in Wang *et al.* 2012a: 43. China (Hainan).

## Fossil genera unplaced to subfamily

### Genus ADELOHELEA Borkent

**ADELOHELEA** Borkent, 1995: 45. Type species: *Adelohelea glabra* Borkent, by original designation.

**burmiticus** (Szadziwski and Poinar, 2005): 352 (*Protoculicoides*). Burma. Lower Cretaceous.

**glabra** Borkent, 1995: 46. Canada (Manitoba). Upper Cretaceous.

**magyarica** Borkent, 1997c: 6. Hungary. Upper Cretaceous.

### Genus ALAUTUNMYIA Borkent

**ALAUTUNMYIA** Borkent, 1996: 11. Type species: *Alautunmyia elongata* Borkent, by original designation.

**elongata** Borkent, 1996: 13. USA (New Jersey). Upper Cretaceous.

### Genus ARCHICULICOIDES Szadziwski

**ARCHICULICOIDES** Szadziwski, 1996: 29. Type species: *Archiculicoides schleei* Szadziwski, by original designation.

**acraorum** (Borkent, 2000a): 367 (*Protoculicoides*). Lebanon. Lower Cretaceous.

**schleei** Szadziwski, 1996: 29. Lebanon. Lower Cretaceous.

**unus** (Borkent, 2000a): 367 (*Protoculicoides*). Lebanon. Lower Cretaceous.

### Genus GERONTODACUS Borkent

**GERONTODACUS** Borkent, 2019a: 18. Type species: *Protoculicoides succineus* Szadziwski, by original designation.

**krzeminskii** (Choufani, Azar and Nel, 2015a): 276 (*Protoculicoides*). Lebanon. Lower Cretaceous.

**punctus** (Borkent, 2000a): 368 (*Protoculicoides*). Lebanon. Lower Cretaceous.

**skalskii** (Szadziwski and Arillo, 1998): 292 (*Protoculicoides*). Spain. Lower Cretaceous.

**succineus** (Szadziwski, 1996): 31 (*Protoculicoides*). Lebanon. Lower Cretaceous.

### Genus HELEAGERON Borkent

**HELEAGERON** Borkent, 1995: 47. Type species: *Heleageron arenatus* Borkent, by original designation.

**arenatus** Borkent, 1995: 48. Canada (Alberta). Upper Cretaceous.

**grimaldii** Borkent, 1996: 15. USA (New Jersey). Upper Cretaceous.

### Genus PROTOCULICOIDES Boesel

**PROTOCULICOIDES** Boesel, 1937: 50. Type species: *Protoculicoides depressus* Boesel, by original designation.

**depressus** Boesel, 1937: 51. Canada (Manitoba). Upper Cretaceous.

**revelatus** Borkent, 2019a: 3. Burma. Lower Cretaceous.



### *Nomina dubia of Forcipomyiinae*

**albipennis** Meigen, 1818: 73 (*Ceratopogon*). Germany.  
**anomalus** Macquart, 1826: 180 (*Ceratopogon*). France.  
**annulatus** Meigen, in Waltl 1835: 67 (*Ceratopogon*). Germany.  
**cypri** Kieffer, 1918a: 86 (*Ceratopogon*). Cyprus.  
**erronea** Speiser, 1910: 741 (*Helea*). France.  
**koniae** Kieffer, 1918a: 87 (*Ceratopogon*). Turkey.  
**leucopterus** Meigen, 1804: 28. Germany (*Ceratopogon*).  
**mediterraneus** Kieffer, 1919a: 16 (*Ceratopogon*). Greece.  
**pallipes** Meigen, 1818: 74 (*Ceratopogon*). Germany.  
**tristis** Meigen, 1830: 263 (*Ceratopogon*). Germany.

### *Nomina dubia of Ceratopogoninae*

NEOCULICOIDES Pierce, 1966: 93. Type species: *Neoculicoides jeanneae* Pierce, by original designation.  
**carri** Pierce, 1966: 91 (*Culicoides*). USA (California). Miocene.  
**escheri** Giebel, 1856: 252 (*Ceratopogon*). Baltic region. Eocene.  
**fossilis** Pierce, 1966: 91 (*Culicoides*). USA (California). Miocene.  
**hotchkissae** Pierce, 1966: 94 (*Johannsenomyia*). USA (California). Miocene.  
**jeanneae** Pierce, 1966: 94 (*Neoculicoides*). USA (California). Miocene.  
**laurae** Pierce, 1966: 91 (*Culicoides*). USA (California). Miocene.  
**mioceneus** Pierce, 1966: 93 (*Culicoides*). USA (California). Miocene.  
**nigrita** Goetghebuer, 1941: 288 (*Monohelea*). Germany.

### *Nomina dubia of Heteromyiini + Hebetulini + Johannsensomyiini + Sphaeromiini + Palpomyiini + Stenoxenini*

**apicalis** Roser, 1840: 50 (*Ceratopogon*). Europe.  
**quadrinaculatus** Strobl, 1906: 399 (*Ceratopogon*). Spain.  
**ruficornis** Macquart, 1826: 178 (*Ceratopogon*). France.  
**succinotus** Meigen, 1818: 85 (*Ceratopogon*). Portugal.

### *Nomina dubia of Ceratopogonidae*

**barbipes** Gimmerthal, 1846: 102 (*Ceratopogon*). Latvia.  
**claripennis** Lynch Arribálzaga, 1893: 229 (*Ceratopogon*). Argentina (Buenos Aires).  
**crassipalpis** Meunier, 1912: 365 (*Ceratopogon*). Madagascar. Holocene.  
**longicornis** Waltl, 1837: 279 (*Ceratopogon*). Germany.  
**madagascariensis** Meunier, 1912: 365 (*Ceratopogon*). Madagascar. Holocene.  
**pennicornis** Zetterstedt, 1850: 3696 (*Cecidomyia*). Sweden.  
**pusillus** Holmgren, in Holmgren and Aurivillius 1883: 182 (*Ceratopogon*). Russia (Nenets Autonomous Okrug).  
**scutellatus** Say, 1829: 150 (*Ceratopogon*). USA (Indiana).  
**subsultans** Schrank, 1803: 77 (*Tipula*). Germany.  
**tenuipes** Meunier, 1912: 366 (*Ceratopogon*). Madagascar. Holocene.  
**univittatus** Zetterstedt, 1838: 820 (*Ceratopogon*). Sweden.  
**varipes** Meigen, 1838: 18 (*Ceratopogon*). Germany.  
**viscatus** Meunier, 1912: 364 (*Ceratopogon*). Madagascar. Holocene.  
**vittatus** Wiedemann, 1817: 66 (*Ceratopogon*). Germany.

## *Nomina nuda* in Ceratopogonidae

- Alluaudomyia binotata Vaillant, 1956: 42.  
Alluaudomyia ljatifeidea Dzhafarov, 1964: fig. 163.  
Alluaudomyia magna Vaillant, 1956: 42.  
Alluaudomyia pallida Vaillant, 1956: 42.  
Atrichopogon algirus Vaillant, 1956: 42 (as variety of trifasciatus Kieffer).  
Atrichopogon anapicolaterali Maheshwari and Maheshwari, 2006: 4.  
Atrichopogon anfoliati Maheshwari and Maheshwari, 2006: 4.  
Atrichopogon arduus Sinha and Das Gupta, 2011: 30.  
Atrichopogon atriceps Blech and Rohlfien, 1987: 223 (attributed to Kieffer).  
Atrichopogon chunniensis Maheshwari and Maheshwari, 2006: 4  
Atrichopogon falciformi Maheshwari and Maheshwari, 2006: 4.  
Atrichopogon olivieri Vaillant, 1956: 167.  
Atrichopogon minibrevicornis Sinha and Das Gupta, 2011: 32.  
Atrichopogon palisadi Maheshwari and Maheshwari, 2006: 4.  
Atrichopogon pubescenti Maheshwari and Maheshwari, 2006: 4.  
Atrichopogon semibrevicornis Sinha and Das Gupta, 2011: 33.  
Atrichopogon spatulati Maheshwari and Maheshwari, 2006: 4.  
Atrichopogon subinfamis Sinha and Das Gupta, 2011: 31.  
Bezzia berlandi Vaillant, 1956: 42.  
Bezzia beniwali Maheshwari and Maheshwari, 2006: 8.  
Bezzia geetanjali Maheshwari and Maheshwari, 2006: 7.  
Bezzia jorbeeri Maheshwari and Maheshwari, 2006: 7.  
Bezzia paliensis Maheshwari and Maheshwari, 2006: 7.  
Bezzia rajeshiensis Maheshwari and Maheshwari, 2006: 8.  
Bezzia tricuspidi Maheshwari and Maheshwari, 2006: 7.  
Brachypogon edelweiss Nie, Bo and Yu, 2016: 45.  
Brachypogon longgangi Nie, Bo and Yu, 2016: 45.  
Ceratopogon angustatus Stephens, 1829a: 52; 1829b: 239.  
Ceratopogon assimilis Stephens, 1829a: 52; 1829b: 239.  
Ceratopogon bimaculatus Stephens, 1829a: 52; 1829b: 239.  
Ceratopogon eucerus Keilbach, 1982: 348.  
Ceratopogon exiguus Stephens, 1829a: 52; 1829b: 239.  
Ceratopogon ferox Lalor, 1912: 15.  
Ceratopogon heinei Keilbach, 1982: 348.  
Ceratopogon longicornis Keilbach, 1982: 348.  
Ceratopogon lutescens Stephens, 1829a: 52; 1829b: 239.  
Ceratopogon minimus Keilbach, 1982: 348.  
Ceratopogon nigerrimus Stephens, 1829a: 52; 1829b: 238.  
Ceratopogon pectinatus Keilbach, 1982: 348.  
Ceratopogon pilosus Keilbach, 1982: 348.  
Ceratopogon terminalis Keilbach, 1982: 349.  
Ceratopogon unguulatus Keilbach, 1982: 349.  
Ceratopogon unguulinus Keilbach, 1982: 349.  
Culicoides auresicus Vaillant, 1956: 42.  
Culicoides boyi Nielsen, 2009: 170; Lassen, Nielsen, Skovgard and Kristensen, 2012: 1767; Nielsen and Kristensen, 2015: 6.  
Culicoides chordiyai Maheshwari and Maheshwari, 2006: 7.  
Culicoides circuitus Yu, 2019: 142.  
Culicoides clavipalpalis Maheshwari and Maheshwari, 2006: 6.  
Culicoides djurdjurenensis Vaillant, 1956: 42.

*Culicoides elongatus* Vaillant, 1956: 42.  
*Culicoides facetus* Yu and Wang, *in* Yu 2019: 104.  
*Culicoides filamenti* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides globuli* Maheshwari and Maheshwari, 2006: 7.  
*Culicoides gonoelongati* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides goyali* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides kalix* Lassen, Nielsen, Skovgard and Kristensen, 2012: 1767; Nielsen and Kristensen, 2015: 6.  
*Culicoides lalsinghi* Maheshwari and Maheshwari, 2006: 7.  
*Culicoides moheensis* Ren and Liu, 2016: 374, *in* Ren *et al.* (2016).  
*Culicoides monocoili* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides monospermathecai* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides neopalpifer* Chen, 1983: 21. Taiwan.  
*Culicoides ningmingensis* Yu, 2019: 114.  
*Culicoides numidicus* Mayer, 1955: 108.  
*Culicoides renali* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides rukamanii* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides sanjayi* Maheshwari and Maheshwari, 2006: 6.  
*Culicoides sparsus* Yu, 2019: 126.  
*Culicoides tetraspermathecai* Maheshwari and Maheshwari, 2006: 7.  
*Culicoides tlemcenicus* Vaillant, 1956: 42.  
*Culicoides selandicus* Nielsen and Kristensen, 2015: 6.  
*Culicoides tufti* Maheshwari and Maheshwari, 2006: 7.  
*Culicoides variegata* Stephens, 1829a: 52; 1829b: 239.  
*Culicoides xinyuensis* Liu and Yu, *in* Yu 2019: 175.  
*Dasyhelea agarwali* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea algerica* Vaillant, 1956: 42.  
*Dasyhelea arverensis* Vaillant, 1956: 42.  
*Dasyhelea bifurcata* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea cavicola* Thienemann, 1925: 105, 108 (as variety of *sensualis* Kieffer).  
*Dasyhelea djurdjurica* Vaillant, 1956: 42.  
*Dasyhelea flava* Vaillant, 1956: 42.  
*Dasyhelea foliati* Maheshwari and Maheshwari, 2006: 22.  
*Dasyhelea frontali* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea heeraensis* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea lloydi* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea madicola* Vaillant, 1956: 42.  
*Dasyhelea maroccana* Vaillant, 1956: 42.  
*Dasyhelea minuta* Vaillant, 1956: 42.  
*Dasyhelea ramaensis* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea registani* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea salinaria* Vaillant, 1956: 42.  
*Dasyhelea subornaticornis* Sinha and Das Gupta, 2010a: 13.  
*Dasyhelea trifurcata* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea upiensis* Maheshwari and Maheshwari, 2006: 8.  
*Dasyhelea versigriseola* Sinha and Das Gupta, 2010a: 14.  
*Forcipomyia arvernensis* Vaillant, 1956: 42.  
*Forcipomyia barbipesi* Maheshwari and Maheshwari, 2006: 5.  
*Forcipomyia cameli* Maheshwari and Maheshwari, 2006: 5.  
*Forcipomyia djanetica* Vaillant, 1956: 42.  
*Forcipomyia frontotuberculi* Maheshwari and Maheshwari, 2006: 5.  
*Forcipomyia gondaensis* Maheshwari and Maheshwari, 2006: 5.  
*Forcipomyia gracilici* Maheshwari and Maheshwari, 2006: 4.

Forcipomyia hemiconalium Maheshwari and Maheshwari, 2006: 5.  
Forcipomyia longicaudata Vaillant, 1956: 42.  
Forcipomyia makanensis Jiang, Han, Liu et Hou, 2019: 344.  
Forcipomyia mediadonicus Maheshwari and Maheshwari, 2006: 4.  
Forcipomyia raji Maheshwari and Maheshwari, 2006: 5.  
Forcipomyia sambherensis Maheshwari and Maheshwari, 2006: 4.  
Forcipomyia satipalpiensis Maheshwari and Maheshwari, 2006: 5.  
Forcipomyia scalpeli Maheshwari and Maheshwari, 2006: 5.  
Forcipomyia vijayi Maheshwari and Maheshwari, 2006: 4.  
Forcipomyia yanichauriensis Maheshwari and Maheshwari, 2006: 4.  
Helea rupicola Vaillant, 1956: 42.  
Helea baborensis Vaillant, 1956: 42.  
Labidomyia albipuncta Stephens, 1829b: 239.  
Labidomyia albipunctata Stephens, 1829a: 52.  
Labidomyia brunnipes Stephens, 1829a: 52; 1829b: 239.  
Labidomyia costalis Stephens, 1829a: 52; 1829b: 239.  
Lasiohelea ensigera Yu, 2019: 31.  
Lasiohelea meilingensis Yu, Liu and Yan, *in* Yu 2019: 44.  
Lasiohelea quinlongxia Yu, 2019: 35.  
Leptoconops huaoensis Yu and Ma, *in* Yu 2019: 25.  
Leptoconops liuzengjia Yu, 2019: 20.  
Leptoconops muganicus Dzhafarov, 1961a: 67.  
Leptoconops mediapunctati Maheshwari and Maheshwari, 2006: 3.  
Leptoconops piplyai Maheshwari and Maheshwari, 2006: 3.  
Leptoconops sattali Maheshwari Maheshwari, 2006: 3.  
Leptoconops sparsus Yu and Liu, *in* Yu 2019: 18.  
Nilobezzia bichpuriensis Maheshwari and Maheshwari, 2006: 7.  
Nilobezzia decalongiantennai Maheshwari and Maheshwari, 2006: 7.  
Nilobezzia fortithea Sinha and Das Gupta, 2010b: 88.  
Nilobezzia hairnai Maheshwari and Maheshwari, 2006: 7.  
Nilobezzia pentabatonii Maheshwari and Maheshwari, 2006: 7.  
Nilobezzia proniger Sinha and Das Gupta, 2010b: 89.  
Nilobezzia pseudodiversa Sinha and Das Gupta, 2010b: 91.  
Palpomyia alticola Vaillant, 1956: 42.  
Palpomyia annulata Haliday, *in* Curtis 1837: 234.  
Palpomyia basalis Stephens, 1829a: 52; 1829b: 238.  
Palpomyia bicolor Vaillant, 1956: 42.  
Palpomyia dissimilis Vaillant, 1956: 42.  
Palpomyia fusca Vaillant, 1956: 42.  
Palpomyia lucens Vaillant, 1956: 42.  
Palpomyia pallida Vaillant, 1956: 42 (as form of *lucens* Vaillant).  
Palpomyia pauciarinata Vaillant, 1956: 42.  
Palpomyia pygmaea Vaillant, 1956: 42.  
Palpomyia rupestris Vaillant, 1956: 42.  
Palpomyia rupicola Vaillant, 1956: 42.  
Palpomyia scutellata Stephens, 1829a: 52; 1829b: 238.  
Palpomyia tenebricosa Vaillant, 1956: 43.  
Prionomyia pusilla Stephens, 1829a: 52; 1829b: 238.  
Sinopogonites Hong, 2002a: 167; 2002b: 109.  
Sinopogonites eocenicus Hong, 2002a: 167; 2002b: 109.  
Sphaeromyia aethiops Curtis, 1837: 233.  
Sphaeromyia annulitarsis Stephens, 1829a: 52; 1829b: 236.

*Sphaeromyias elegans* Curtis, 1837: 233.  
*Sphaeromyias varipes* Stephens, 1829a: 52; 1829b: 236.  
*Sphaeromyias albomarginatus* Stephens, 1829a: 52; 1829b: 236.

### Species In Other Families Previously Considered To Be Ceratopogonidae

*Ceratopogon blanchardi* Iches, 1906: 266. Undetermined Chironomidae.  
*Ceratopogon humeralis* Zetterstedt, 1838: 820. Junior synonym of *Cricotopus ephippium* (Zetterstedt).  
Chironomidae.  
*Ceratopogon imperfectus* Skuse, 1889: 307. A valid species of *Pseudosmittia* Goetghebuer. Chironomidae.  
*Ceratopogon nemorosus* (Meigen), 1804: 24 (*Tanypus*). Germany.  
*Ceratopogon pusio* Zetterstedt, 1850: 3647. Undetermined Chironomidae.  
*Ceratopogon validinervis* Zetterstedt, 1850: 3645. Junior synonym of *Mycetobia pallipes* (Meigen). Anisopodidae.  
*Paraculicoides rouseae* Pierce, 1966: 94. USA (California). Miocene. Psychodidae

### References

- Adams, C.F. (1903) Dipterological contributions. *University of Kansas Science Bulletin*, 2, 21–47.
- Almeida, J.F., Farias, E.S., Alencar, R.B. & Pessoa, F.A.C. 2017. Description of two new species of *Palpomyia* Meigen (Diptera: Ceratopogonidae) from the Brazilian Amazon. *EntomoBrasilis*, 10, 118–122.  
<https://doi.org/10.12741/ebrasilis.v10i2.607>
- Alwin-Kownacka, A., Szadziewski, R. & Szwedo, J. (2016a) Biting midges of the subfamily Forcipomyiinae (Diptera: Ceratopogonidae) from the Middle East, with keys and descriptions of new species. *Zootaxa*, 4173(4), 351–378.  
<https://doi.org/10.11646/zootaxa.4173.4.2>
- Alwin-Kownacka, A., Szadziewski, R. & Szwedo, J. (2016b) Biting midges of the tribe Ceratopogonini (Diptera: Ceratopogonidae) from the Middle East, with keys and descriptions of new species. *Zootaxa*, 4079 (5), 551–572.  
<https://doi.org/10.11646/zootaxa.4079.5.3>
- Alwin-Kownacka, A., Szadziewski, R. & Szwedo, J. (2017) Predatory midges of the tribes Palpomyiini and Sphaeromiini (Diptera: Ceratopogonidae) from the Middle East, with keys and descriptions of new species. *European Journal of Taxonomy*, 318, 1–30.  
<https://doi.org/10.5852/ejt.2017.318>
- Amosova, I.S. (1957) Some new or little known *Culicoides* Latr. (Diptera, Heleidae) from Ussuri Land [in Russian, English summary]. *Entomologicheskoe Obozrenie*, 36, 233–247.
- Ander, M., Troell, K. & Chirico, J. (2013) Barcoding of biting midges in the genus *Culicoides*: a tool for species determination. *Medical and Veterinary Entomology*, 27, 323–331.  
<https://doi.org/10.1111/j.1365-2915.2012.01050.x>
- Arakawa, S. (1910) On a new injurious "insect" (*Ceratopogon arakanae* Mats) [in Japanese]. *Konchu-Sekai*, 14, 411–414.
- Arnaud, P. (1956a) The heleid genus *Culicoides* in Japan, Korea and Ryukyu Islands (Insecta: Diptera). *Microentomology*, 21, 84–207. (Nov. 15).
- Arnaud, P. (1956b) *Culicoides goetghebueri*, nomen novum for *Culicoides setiger* Goetghebuer. *Proceedings of the Entomological Society of Washington*, 58, 94.
- Arnaud, P. (1979) A catalog of the types of Diptera in the collection of the California Academy of Sciences. *Myia* 1, v + 505 pp.
- Arnaud, P.H. & Arnaud, M.M. (1997) Taxonomic names published in the insect order Diptera by Willis Wagner Wirth (1916–1994), from 1947 through 1995, with type depositories of holotypes. *Memoirs of the Entomological Society of Washington*, 18, 8–57 (1996).
- Arnaud, P. & Wirth, W.W. (1964) A name list of the world *Culicoides*, 1956–1962 (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 66, 19–32.
- Arnett, R.H. & Samuelson, G.A. (1986) *The insect and spider collections of the world*. E. J. Brill / Florida: Flora and Fauna Publications, Gainesville, Florida, 220 pp.
- Arnold, M. & Jarry, D. (1956) Une espèce nouvelle de cératopogonide: *Forcipomyia hutteli* n. sp. (Dipt. Heleidae). *Bulletin de la Société Entomologique de France*, 61, 136–139.
- Ashe, P., O'Connor, J.P. & Chandler P. J. (2012) A Revised Checklist of the Biting Midges (Diptera: Ceratopogonidae) of Ireland. *Bulletin of the Irish Biogeographical Society No.* 36, 190–231.
- Ashe, P. & Spies, M. (2011) A chronological bibliography, with dates of publication, of J. J. Kieffer's works on Chironomidae (Diptera). Pp 3–14. In: Wang, X. & Liu, W. (eds), *Contemporary Chironomid Studies Proceedings of the 17th International*

- Symposium on Chironomidae (July 6–9, 2009 Nankai University, China)*. Nankai University Press, 412 pp, 18 plates.
- Ataev, K. (1976) A new species of *Culicoides* (Diptera, Ceratopogonidae) from Turkmenistan [in Russian, English summary]. *Izvestiia Akademiia Nauk Turkmensk SSR*, 3, 79–81.
- Atchley, W.R. (1967) The *Culicoides* of New Mexico (Diptera: Ceratopogonidae). *University of Kansas Science Bulletin*, 46, 937–1022.  
<https://doi.org/10.5962/bhl.part.20082>
- Atchley, W.R. (1970) A biosystematic study of the subgenus *Selfia* of *Culicoides* (Diptera: Ceratopogonidae). *University of Kansas Science Bulletin*, 49, 181–336.
- Atchley, W.R. & Wirth, W.W. (1975) Two new western *Culicoides* (Diptera: Ceratopogonidae) which are vectors of filaria in the California valley quail. *Canadian Journal of Zoology*, 53, 1421–1423.  
<https://doi.org/10.1139/z75-171>
- Atchley, W.R. & Wirth, W.W. (1979) A review of the *Culicoides haematopotus* group in North America (Diptera: Ceratopogonidae). *Journal of the Kansas Entomological Society*, 52, 524–545.
- Atchley, W.R., Wirth, W.W., Gaskins, C.T. & Strauss, S.L. (1981) *A bibliography and keyword index of the biting midges (Diptera: Ceratopogonidae)*. United States Department of Agriculture, Science and Education Administration, Bibliographies and Literature of Agriculture, 13, iv + 544 pp.
- Augot, D., Ninio, C., Akhoundi, M., Lehrter, V., Couloux, A., Jouet, D. & Depaquit, J. (2013a) Characterization of two cryptic species, *Culicoides stigma* and *C. parroti* (Diptera: Ceratopogonidae), based on barcode regions and morphology. *Journal of Vector Ecology*, 38, 260–265.  
<https://doi.org/10.1111/j.1948-7134.2013.12039.x>
- Augot, D., Randrianambinintsoa, F.J., Gasser, A. & Depaquit, J. (2013b) Record of two species of *Culicoides* (Diptera, Ceratopogonidae) new for Madagascar and molecular study showing the paraphyly of the subgenus *Oecacta* and the *Schultzei* group. *Bulletin de la Societe de Pathologie Exotique*, 106, 201–205.  
<https://doi.org/10.1007/s13149-013-0302-4>
- Augot, D., Mathieu, B., Hadj-Henni, L., Barriol, V., Mena, S.Z., Smolis, S., Slama, D., Randrianambinintsoa, F.J., Trueba, G., Kaltenbach, M., Rahola N. and Depaquit, J. (2017) Molecular phylogeny of 42 species of *Culicoides* (Diptera, Ceratopogonidae) from three continents. *Parasite*, 24, 23.  
<https://doi.org/10.1051/parasite/2017020>
- Austen, E.E. (1909) New African phlebotomic Diptera in the British Museum (Natural History). - Part VI. *Annals and Magazine of Natural History Ser. 8*, 3, 280–284. [Received at BMNH March 2].  
<https://doi.org/10.1080/00222930908692577>
- Austen, E.E. (1912) Notes on African blood-sucking midges (Family Chironomidae, subfamily Ceratopogoninae), with descriptions of new species. *Bulletin of Entomological Research*, 3, 99–108, pl. 1.  
<https://doi.org/10.1017/S0007485300001747>
- Austen, E.E. (1921) A contribution to knowledge of the blood-sucking Diptera, other than Tabanidae. *Bulletin of Entomological Research*, 12, 107–124.  
<https://doi.org/10.1017/S0007485300044941>
- Bakhoum, M.T., Fall, M., Fall, A.G., Bellis, G.A., Gottlieb, Y., Labuschagne, K., Venter, G.J., Diop, M., Mall, I., Seck, M.T., Al-lene, X., Diarra, M., Gardes, L., Bouyer, J., Delécolle, J.-C., Balenghien, T. & Garros, C. (2013) First record of *Culicoides oxystoma* Kieffer and diversity of species within the *Schultzei* Group of *Culicoides* Latreille (Diptera: Ceratopogonidae) Biting Midges in Senegal. *PLOS ONE*, 8 (12), 84316.  
<https://doi.org/10.1371/journal.pone.0084316>
- Bakhoum, M.T., Sarr, M., Fall, A.G., Huber, K., Fall, M., Sembène, M., Seck, M.T., Labuschagne, K., Gardès, L., Ciss, M., Gimonneau, G., Bouyer, J., Baldet T. and Garros, C. (2018) DNA barcoding and molecular identification of field-collected *Culicoides* larvae in the Niayes area of Senegal. *Parasites & Vectors*, 11, 615.  
<https://doi.org/10.1186/s13071-018-3176-y>
- Bangerter, H. (1933) Mücken-Metamorphosen V. *Konowia*, 12, 248–259.  
<https://doi.org/10.1007/BF01757745>
- Barbosa, F.A.S. (1943) Descricao de "*Culicoides recifensis*" n. sp. e do macho de "*Culicoides reticulatus*" Lutz (Diptera, Chironomidae). *Revista Brasileira de Biologia*, 3, 261–264.
- Barbosa, F.A.S. (1947) *Culicoides* (Diptera: Heleidae) da regio neotropica. *Anais da Sociedade de Biologia de Pernambuco*, 7, 3–30. (Nov.).
- Barbosa, F.A.S. (1951) A change of specific name in the genus *Culicoides* (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington*, 53, 163.
- Barbosa, F.A.S. (1952) *Novos subsidios para o conhecimento dos Culicoides neotropicos (Diptera: Heleidae)*. Thesis, Universidade do Recife, Recife: Imprensa Industrial, 21 pp.
- Barbosa, F.A.S. (1953) *Novos subsidios para o conhecimento dos Culicoides neotropicos (Diptera: Heleidae)*. *Publicacoes Avulsas do Instituto Aggeu Magalhaes*, 2, 11–41.
- Barretto, M.P. (1944) Sobre o género *Culicoides* Latreille, 1809, com a descricao de três novas espécies (Diptera, Ceratopogonidae). *Anais da Faculdade de Medicina (da Universidade) de São Paulo*, 20, 89–105, pls. 1–4.
- Battle, F.V. & Turner, E.C. (1971) The Insects of Virginia: no. 3. A systematic review of the genus *Culicoides* (Diptera: Cera-

- topogonidae) of Virginia with a geographic catalog of the species occurring in the eastern United States north of Florida. *Virginia Polytechnical Institute State University Research Division Bulletin*, 44, 1–129.
- Beck, E.C. (1951) A new *Culicoides* from Florida (Diptera, Ceratopogonidae). *Florida Entomologist*, 34, 135–136.  
<https://doi.org/10.2307/3492442>
- Beck, E.C. (1956) A new species of *Culicoides* from Florida with additional distribution data for the genus (Diptera: Heleidae). *Florida Entomologist*, 39, 133–138.  
<https://doi.org/10.2307/3492428>
- Beck, E.C. (1957) Two new species of *Culicoides* from Florida (Diptera: Heleidae). *Florida Entomologist*, 40, 103–105.  
<https://doi.org/10.2307/3492509>
- Becker, T. (1903) Ägyptische Dipteren. *Mitteilungen aus dem Zoologischen Museum*, 2, 67–195.  
<https://doi.org/10.1002/mmzn.4830020301>
- Becker, T. (1908) Dipteren der Kanarischen Inseln. *Mitteilungen aus dem Zoologischen Museum*, 4, 1–180.
- Becker, T. (1909) *Culicoides habereri* n. sp. Eine blutsaugenden Mücke aus Kamerun. *Jahreshefte des Vereins für vaterländische Naturkunde in Württemberg*, 65, 289–294, pls. 8–9. [Received at BMNH July 28].
- Bellis, G. & Dyce, A. (2011) *Marksomyia*, a new subgenus of *Culicoides* Latreille (Diptera: Ceratopogonidae) from the Australasian biogeographic region with descriptions of two new species. *Zootaxa*, 3014, 35–58.  
<https://doi.org/10.11646/zootaxa.3014.1.3>
- Bellis, G., Dyce, A., Gopurenko, D. & Mitchell, A. (2013) Revision of the Immaculatus Group of *Culicoides* Latreille (Diptera: Ceratopogonidae) from the Australasian Region with description of two new species. *Zootaxa*, 3680, 15–37.  
<https://doi.org/10.11646/zootaxa.3680.1.4>
- Bellis, G., Dyce, A., Gopurenko, D., Yanase, T., Garros, C., Labuschagne, K. & Mitchell, A. (2014) Revision of the *Culicoides* (*Avaritia*) *Imicola* complex Khamala & Kettle (Diptera: Ceratopogonidae) from the Australasian Region. *Zootaxa*, 3768, 401–427.  
<https://doi.org/10.11646/zootaxa.3768.4.1>
- Bellis, G.A., Halling, L. & Anderson, S.J. (2015) Pictorial key to adult female *Culicoides* Latreille, 1809 (Diptera: Ceratopogonidae) from the Northern Territory, Western Australia and South Australia. *Austral Entomology*, 54, 28–59.  
<https://doi.org/10.1111/aen.12099>
- Bezzi, M. (1916) *Studies in Philippine Diptera, II*. Bureau of Science, Manila, Publication, 10, 59 pp.  
<https://doi.org/10.5962/bhl.title.22023>
- Bezzi, M. (1917) Studies in Philippine Diptera, II. *Philippine Journal of Science (D)*, 12, 107–161.
- Bigot, J.M.F. (1857) Essai d'une classification générale et synoptique de l'ordre des insectes diptères. Tribu des Asilidi (mihi). *Annales de la Société Entomologique de France*, (3) 5, 517–564.
- Blech, H. & Rohlfien, K. (1987) Katalog der in den Saammlungen der Abteilung Taxonomie der Insekten des Institutes für Pflanzenschutzforschung, Bereich Eberswalde (ehemals Deutsches Entomologisches Institut), aufbewahrten Typen - XXV (Diptera: Nematocera). *Beiträge zur Entomologie*, 37, 203–258.
- Boesel, M.W. (1937) Order Diptera. Family Chironomidae. In: Carpenter, F.M., Folsom, J.W., Essig, E.O., Kinsey, A.C., Brues, C.T., Boesel, M.W. & Ewing, H.E. (Eds). *Insects and arachnids from Canadian amber*. University of Toronto Studies, Geological Series, 40, 44–55 pp.
- Boesel, M.W. (1948) *Holoconops* in the western Lake Erie region (Diptera: Heleidae). *Ohio Journal of Science*, 48, 69–72.
- Boesel, M.W. (1973) The genus *Atrichopogon* (Diptera, Ceratopogonidae) in Ohio and neighboring States. *Ohio Journal of Science*, 73, 202–215.
- Boorman, J. (1976) *Culicoides* (Diptera, Ceratopogonidae) from southern England: new records, a new species and notes on two species of doubtful British status. *Entomologist's Gazette*, 27, 99–105.
- Boorman, J. (1979) Notes on some *Culicoides* (Dipt., Ceratopogonidae) from east Africa, including a new species. *Entomologist's Monthly Magazine*, 114, 67–70.
- Boorman, J. (1984) A new species of *Culicoides* (Diptera, Ceratopogonidae) from Britain, with notes on synonymy. *Entomologist's Monthly Magazine*, 120, 163–165.
- Boorman, J. (1987) A name list of World *Austroconops*, *Leptoconops* and *Forcipomyia* (subgenera *Lasiohelea* and *Dacnoforcipomyia*) to 1985 (Diptera: Ceratopogonidae). *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie, numéro spécial 1987*, 53–62.
- Boorman, J. (1988) New species and new records of *Culicoides* (Diptera, Ceratopogonidae) from Lesbos and Rhodes, Greece. *Annales de Parasitologie Humaine et Comparée*, 63, 152–159.  
<https://doi.org/10.1051/parasite/1988632152>
- Boorman, J. (1989) *Culicoides* (Diptera, Ceratopogonidae) of the Arabian Peninsula with notes on their medical and veterinary importance. *Fauna of Saudi Arabia*, 10, 160–224.
- Boorman, J. (1990) Two new *Forcipomyia* (*Lasiohelea*) sp. (Diptera, Ceratopogonidae) from Oman. *Journal of Oman Studies*, 10, 125–130.
- Boorman, J. (1997a) Two species of Ceratopogonidae (Dipt.) new to Britain. *Entomologist's Monthly Magazine*, 133, 173–174.
- Boorman, J. (1997b) 2.21 Family Ceratopogonidae, pp. 349–368. In: *Contributions to a Manual of Palaearctic Diptera (with special reference to flies of economic importance)*. Science Herald, Budapest, Hungary. 592 pp.

- Boorman, J. & Dipeolu, O.O. (1979) A taxonomic study of adult Nigerian *Culicoides* Latreille (Diptera: Ceratopogonidae) species. *Entomological Society of Nigeria Occasional Publication*, 22, 121 pp.
- Boorman, J. & van Harten, A. (2002) Some Ceratopogonidae (Insecta: Diptera) from the Arabian Peninsula, with particular reference to the Republic of Yemen. *Fauna of Arabia*, 19, 427–462.
- Boorman, J. & Lane, R.P. (1979) A new genus and species of Ceratopogonidae (Diptera) closely related to *Culicoides* from West Africa. *Journal of Natural History*, 13, 327–332.  
<https://doi.org/10.1080/00222937900770261>
- Boorman, J., Coluzzi, M., Contini, C., Ferrarese, U., Rivosecchi, L., Rossaro, B., Sabatini A. & Wagner, R. (1995) Diptera Culicomorpha. In: Minelli, A. Ruffop, S. & La Posta, S. (Eds.), *Checklist delle specie della fauna Italiana*, 65. Calderini, Bologna, Italy. 32 pp.
- Boorman, J., Mellor, P.S. & Scaramozzino, P. (1996) A new species of *Culicoides* (Diptera, Ceratopogonidae) from Southern Italy. *Parassitologia*, 38, 501–503.
- Borkent, A. (1991) The Ceratopogonidae (Diptera) of the Galápagos Islands, Ecuador with a discussion of their phylogenetic relationships and zoogeographic origins. *Entomologica Scandinavica*, 22, 97–122.  
<https://doi.org/10.1163/187631291X00336>
- Borkent, A. (1995) *Biting Midges in the Cretaceous Amber of North America (Diptera: Ceratopogonidae)*. Leiden, The Netherlands: Backhuys Publishers, 237 pp.
- Borkent, A. (1996) Biting midges from Upper Cretaceous New Jersey Amber (Diptera: Ceratopogonidae). *American Museum Novitates*, 3159, 29 pp.
- Borkent, A. (1997a) New species of biting midges from Hawaii (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington*, 18, 84–94 [1996].
- Borkent, A. (1997b) The Ceratopogonidae (Diptera) described by Santos Abreu from the Canary Islands. *Deutsche Entomologische Zeitschrift*, 44, 3–18.  
<https://doi.org/10.1002/mmnd.4800440102>
- Borkent, A. (1997c) Upper and Lower Cretaceous Biting Midges (Ceratopogonidae: Diptera) from Hungarian and Austrian Amber and the Koonwarra Fossil Bed of Australia. *Stuttgarter Beiträge Naturkunde, Serie B.*, 249, 1–10.
- Borkent, A. (1998) A revision of *Neurobezzia* Wirth & Ratanaworabhan and *Neurohelea* Kieffer, with a description of a new genus and discussion of their phylogenetic relationships (Diptera: Ceratopogonidae). *Entomologica Scandinavica*, 29, 137–160.  
<https://doi.org/10.1163/187631298X00258>
- Borkent, A. (2000a) Biting midges (Ceratopogonidae: Diptera) from Lower Cretaceous Lebanese amber with a discussion of the diversity and patterns found in other ambers. pp. 355–451. In: Grimaldi, D. (ed.), *Studies on Fossils in Amber, with Particular Reference to the Cretaceous of New Jersey*. Backhuys Publishers, Leiden, The Netherlands, viii + 498 pp.
- Borkent, A. (2000b) Further Biting Midges (Diptera: Ceratopogonidae) from Upper Cretaceous New Jersey amber. pp. 453–472. In: Grimaldi, D. (ed.), *Studies on Fossils in Amber, with Particular Reference to the Cretaceous of New Jersey*. Backhuys Publishers, Leiden, The Netherlands, viii + 498 pp.
- Borkent, A. (2001) *Leptoconops* (Diptera: Ceratopogonidae): the earliest extant lineage of biting midge, discovered in 120–122 million-year-old Lebanese amber. *American Museum Novitates*, 3328, 1–11.  
[https://doi.org/10.1206/0003-0082\(2001\)328<0001:LDCTEE>2.0.CO;2](https://doi.org/10.1206/0003-0082(2001)328<0001:LDCTEE>2.0.CO;2)
- Borkent, A. (2004) 10. The Biting Midges, the Ceratopogonidae (Diptera). pp.113–126. In: Marquardt, W.C. (ed.), *Biology of Disease Vectors, 2<sup>nd</sup> edition*. Elsevier Academic Press, xxiii + 785 pp.
- Borkent, A. (2012) Further biting midges (Ceratopogonidae: Diptera) in Canadian Cretaceous Amber. *The Canadian Entomologist*, 144, 758–766.  
<https://doi.org/10.4039/tce.2012.83>
- Borkent, A. (2014) The pupae of the Biting Midges of the World (Diptera: Ceratopogonidae), with a generic key and analysis of the phylogenetic relationships between genera. *Zootaxa*, 3879, 1–327.  
<https://doi.org/10.11646/zootaxa.3879.1.1>
- Borkent, A. (2017) 34. Ceratopogonidae (Biting Midges). In: Kirk-Spriggs, A.H. & Sinclair, B.J. (eds), *Manual of Afrotropical Diptera. Volume 2. Nematocerous Diptera and lower Brachycera*. Suricata 5. South African National Biodiversity Institute, Pretoria, pp. 733–812.
- Borkent, A. (2018) The State of Phylogenetic Analysis: Narrow Visions and Simple Answers – Examples from the Diptera (flies). *Zootaxa*, 4374 (1), 107–143.  
<https://doi.org/10.11646/zootaxa.4374.1.7>
- Borkent, A. (2019a) The Cretaceous biting midges genera *Archiculicoides* Szadziewski, *Protoculicoides* Boesel, *Gerontodacus* Borkent and *Atriculicoides* Remm and their phylogenetic relationships, with a key to all known Cretaceous genera (Diptera: Ceratopogonidae). *American Museum Novitates*, 3921, 1–48.  
<https://doi.org/10.1206/3921.1>
- Borkent, A. (2019b) The Lower Cretaceous male of *Lebanoculicoides daheri* – belonging to the earliest lineage of biting midges (Diptera: Ceratopogonidae). *The Canadian Entomologist*, 151, 278–290.  
<https://doi.org/10.4039/tce.2019.4>
- Borkent, A. & Bissett, B. (1990) A revision of the Holarctic species of *Serromyia* Meigen (Diptera: Ceratopogonidae). *System-*



- atic Entomology*, 15, 153–217. (June 7).  
<https://doi.org/10.1111/j.1365-3113.1990.tb00311.x>
- Borkent, A. & Craig, D.A. (1999) A revision of the Neotropical genus *Baeodasymyia* Claesrier and Raccurt (Diptera: Ceratopogonidae) with a discussion of their phylogenetic relationships. *American Museum Novitates*, 3274, 1–26.
- Borkent, A. & Craig, D.A. (2004) *Austroconops* Wirth and Lee, a Lower Cretaceous genus of biting midges yet living in Western Australia: a new species, first description of the immatures and discussion of their biology and phylogeny (Diptera: Ceratopogonidae). *American Museum Novitates*, 3449, 1–67.  
[https://doi.org/10.1206/0003-0082\(2004\)449<0001:AWALAL>2.0.CO;2](https://doi.org/10.1206/0003-0082(2004)449<0001:AWALAL>2.0.CO;2)
- Borkent, A. & Forster, L. (1986) Review of the *Dasyhelea fasciigera* species group (Diptera: Ceratopogonidae) with a revision of the Nearctic species. *Canadian Journal of Zoology*, 64, 1280–1287.  
<https://doi.org/10.1139/z86-190>
- Borkent, A. & Grogan, W.L. (1995) A revision of the genus *Ceratopogon* Meigen with a discussion of phylogenetic relationships, zoogeography and biometric divergence (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington*, 15, 1–198.
- Borkent, A. & Grogan, W.L. (2009) Catalog of the New World biting midges north of Mexico (Diptera: Ceratopogonidae). *Zootaxa*, 2273, 1–48.  
<https://doi.org/10.11646/zootaxa.2273.1.1>
- Borkent, A. & Picado, A. (2004) Distinctive new species of *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Costa Rica. *Zootaxa*, 637, 1–68.  
<https://doi.org/10.11646/zootaxa.637.1.1>
- Borkent, A. & Picado, A. (2008) A revision of the Neotropical genus *Cacaohelea* Wirth and Grogan (Ceratopogonidae, Diptera). *Russian Entomological Journal*, 17, 25–36.
- Borkent, A. & Spinelli, G.R. (2000) Catalog of New World Biting Midges south of the United States (Diptera: Ceratopogonidae). *Contributions on Entomology, International*, 4, 1–107.
- Borkent, A. & Spinelli, G.R. (2007) Neotropical Ceratopogonidae (Diptera: Insecta). In: Adis, J., Arias, J.R., Rueda-Delgado, G. & Wnatzon, K.M. (Eds.), *Aquatic Biodiversity in Latin America (ABLA)*. Vol. 4. Pensoft, Sofia-Moscow, 198 pp.
- Borkent, A. & Wirth, W.W. (1997) World species of biting midges (Diptera: Ceratopogonidae). *Bulletin of the American Museum of Natural History*, 233, 257 pp.
- Borkent, A., Wirth, W.W. & Dyce, A.L. (1987) The newly discovered male of *Austroconops* (Ceratopogonidae: Diptera) with a discussion of the phylogeny of the basal lineages of the Ceratopogonidae. *Proceedings of the Entomological Society of Washington*, 89, 587–606.
- Borkent, A., Spinelli, G.R. & Grogan, W.L. (2009) Ceratopogonidae. pp. 407–435. In: Brown, B.V., Borkent, A., Cumming, J.M., Wood, D.M., Woodley, N.E. and Zumbado, M.A. (eds), *Manual of Central American Diptera: Volume 1*. NRC Research Press, Ottawa, Ontario, Canada, 714 pp.
- Borkent, A., Coram, R. & Jarzembowski, E. (2013) The oldest fossil biting midge (Diptera: Ceratopogonidae) from the Purbeck Limestone Group (Lower Cretaceous) of southern Great Britain. *Polskie Pismo Entomologiczne*, 82, 273–279.  
<https://doi.org/10.2478/v10200-012-0041-8>
- Borkent, A., Brown, B.V., Borkent, A., Adler, P.H., Amorim, D.S. de, Barber, K., Bickel, D., Boucher, S., Brooks, S.E., Burger, J., Burington, Z.L., Capellari, R.S., Costa, D.N.R., Cumming, J.M., Curler, G., Dick, C.W., Epler, J.H., Fisher, E., Gaimari, S.D., Gelhaus, J., Grimaldi, D.A., Hash, J., Hauser, M., Hippa, H., Ibáñez-Bernal, S., Jaschhof, M., Kameneva, E.P., Kerr, P.H., Korneyev, V., Korytkowski, C.A., Kung, G.A., Kvifte, G.M., Lonsdale, O., Marshall, S.A., Mathis, W., Michelsen, V., Naglis, S., Norrbom, A.L., Paiero, S., Pape, T., Pereira-Colavite, A., Pollet, M., Rochefort, S., Rung, A., Runyon, J.B., Savage, J., Silva, V.C., Sinclair, B.J., Skevington, J.H., Stireman, J.O. III, Swann, J., Vilkamaa, P., Wheeler, T., Whitworth, T., Wong, M., Wood, D.M., Woodley, N., Yau, T., Zavortink, T.J. & Zumbado, M.A. (2018) Remarkable fly (Diptera) diversity in a patch of Costa Rican cloud forest: Why inventory is a vital science. *Zootaxa*, 4402 (1), 53–90.  
<https://doi.org/10.11646/zootaxa.4402.1.3>
- Bose, M., Das Gupta, S.K. & Chaudhuri, P.K. (2002) A new biting midge of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from India. *Studia Dipterologica*, 9, 375–377.
- Bose, M., Das Gupta, S.K., Mazumdar, A. & Chaudhuri, P.K. (2003) Biting midges of the genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from India. *Tijdschrift voor Entomologie*, 146, 259–296.  
<https://doi.org/10.1163/22119434-900000126>
- Bouché, P. (1834) *Naturgeschichte der Insekten, besonders in Hinsicht ihrer ersten Zustände als Larven und Puppen*. Erste Lieferung. Berlin: Nicolai, vi + 216 pp.
- Brahma, S., Saha, P. & Hazra, N. (2016) Two new species and new records of biting midges of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from India. *Annales de la Société Entomologique de France*, 52, 233–242.  
<https://doi.org/10.1080/00379271.2016.1246073>
- Braverman, Y, Delécolle, J.-C. & Kremer, M. (1983) *Culicoides (Oeacta) hanae* (Diptera: Ceratopogonidae), a new species from Israel and Sinai. *Journal of Medical Entomology*, 20, 677–681.  
<https://doi.org/10.1093/jmedent/20.6.677>
- Breidenbaugh, M.S. & Mullens, B.A. (1999) Two new western Nearctic *Culicoides* Latreille (Diptera: Ceratopogonidae) described from all stages. *Proceedings of the Entomological Society of Washington*, 101, 149–163.

- Brèthes, J. (1912) Descripción de un nuevo género y especie nueva de Chironomidae (Dipt). *Anales del Museo Nacional de Buenos Aires*, 15, 451–453.
- Brèthes, J. (1914) Descripción de six Cécidomyidae (Dipt.) de Buenos Aires. *Anales del Museo Nacional de Buenos Aires*, 26, 151–156.
- Brahma, S. & Hazra, N. (2018) Additions to the species of *Dasyhelea* KIEFFER, 1911 (Diptera: Ceratopogonidae) from West Bengal, India. *Polish Journal of Entomology*, 87, 349–369.  
<https://doi.org/10.2478/pjen-2018-0024>
- Brahma, S., Saha, P. & Hazra, N. (2016) Two new species and new records of biting midges of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from India. *Annales de la Société Entomologique de France*, 52 (4), 233–242.  
<https://doi.org/10.1080/00379271.2016.1246073>
- Brickle, D.S. & Hagan, D.V. (1999) The *Culicoides* (Diptera: Ceratopogonidae) of Belize, Central America. *Insecta Mundi*, 13, 39–44.
- Brodskaya, N.K. (1995) A new species of biting midge of the genus *Dasyhelea* Kieff. (Diptera, Ceratopogonidae) from Lenin-grad region. *International Journal of Dipterological Research*, 6, 9–12.
- Brodskaya, N.K. (1996) A new species of biting midges of the genus *Dasyhelea* Kieffer (Diptera, Ceratopogonidae) from Kir-ghizstan. *International Journal of Dipterological Research*, 7, 193–196.
- Brown, B.V. (2005) Malaise trap catches and the crisis in Neotropical Dipterology. *American Entomologist*, 51, 180–183.  
<https://doi.org/10.1093/ae/51.3.180>
- Brown, B.V., Borkent, A., Cumming, J.M., Wood, D.M., Woodley, N.E. & Zumbado, M.A. (Eds.) (2009) *Manual of Central American Diptera*. Volume 1. National Research Council Press, Ottawa, Canada. xi + 714 pp.
- Browne, J.E. (1980) New species of biting midges of the genus *Culicoides* from Colombia and the first description of the male of *C. florenciae* (Diptera: Ceratopogonidae). *Journal of Medical Entomology*, 17, 533–544.  
<https://doi.org/10.1093/jmedent/17.6.533>
- Brunetti, E. (1912) New Oriental Diptera. *Records of the Indian Museum*, 7, 445–513.  
<https://doi.org/10.5962/bhl.part.28244>
- Brunetti, E. (1920) Catalogue of Oriental and south asiatic Nematocera. *Records of the Indian Museum*, 17, 1–300.  
<https://doi.org/10.5962/bhl.title.8563>
- Bugledich, E.-M.A. 1999. Diptera: Nematocera. In: Wells, A. & Houston, W.W.K. (Eds.). *Zoological Catalogue of Australia*. Vol. 30.1. Melbourne: CSIRO Publishing, Australia. xiii + 627 pp.
- Bullock, H.R. & Akiyama, J. (1959) A new biting midge from Japan and Korea (Diptera, Heleidae). *Japanese Journal of Sanitary Zoology*, 10, 23–26.  
<https://doi.org/10.7601/mez.10.23>
- Buyanova, O.F. (1962) Description of a new species of blood-sucking midges *Lasiohelea sibirica* sp. nov. found in the Krasnoyarsk Territory [in Russian, English summary]. *Meditinskaya Parazitologiya i Parazitarnye Bolezni*, 31, 43–47.
- Byers, G.W., Blank, F., Hanson, W.J., Beneway, D.F. & Fredrichson, R.W. (1962) Catalogue of the types in the Snow Entomological Museum. Part III (Diptera). *University of Kansas Science Bulletin*, 43, 131–181.  
<https://doi.org/10.5962/bhl.part.13345>
- Bystrak, P.G. & Messersmith, D.H. (1980) A new species of midge of the genus *Forcipomyia* Meigen (Diptera: Ceratopogoni-idae) from North America. *Proceedings of the Entomological Society of Washington*, 82, 108–116.
- Bystrak, P.G. & Wirth, W.W. (1978) The North American species of *Forcipomyia*, subgenus *Euprojoannisia* (Diptera: Cerato-pogonidae). *United States Department of Agriculture, Technical Bulletin*, 1591, 51 pp.
- Cairo, V.M.P. (1959) *Culicoides gulbenkiani*, a new species of *Culicoides* (Diptera Ceratopogonidae) in South Africa. *Onderstepoort Journal of Veterinary Research*, 28, 155–167.
- Cairo, V.M.P. (1961) Contribuição para o estudo das espécies Angolanas do género *Culicoides* Latreille, 1809 (Diptera, Cera-topogonidae). *Junta de Investigações do Ultramar, Estudos, Ensaios, e Documentos*, 86, 13–359, 59 pls.
- Callot, J. & Kremer, M. (1961a) *Culicoides riouxi* et *Culicoides pseudoheliophilus*, especes nouvelles du groupe des *Culicoides* a ailes sans taches (Diptera: Ceratopogonidae). *Annales de Parasitologie Humaine et Comparée*, 36, 677–688.  
<https://doi.org/10.1051/parasite/1961364677>
- Callot, J. & Kremer, M. (1961b) Scission de l'espèce *Culicoides truncorum* Edwards (Diptera: Ceratopogonidae) en deux es-pèces. *Bulletin de la Société de Pathologie Exotique*, 54, 389–398.
- Callot, J. & Kremer, M. (1965) Sur quelques Diptères Nématocères du Var, avec la description d'espèces nouvelles de *Culicoi-des* (Ceratopogonidés). *Annales de Parasitologie Humaine et Comparée*, 40, 329–339.  
<https://doi.org/10.1051/parasite/1965403329>
- Callot, J. & Kremer, M. (1966) *Culicoides heteroclitus* n. sp. (Diptères, Cératopogonidés). *Proceedings of the 1st International Congress of Parasitology*, 941–942.  
<https://doi.org/10.1016/B978-0-08-011427-9.50264-X>
- Callot, J. & Kremer, M. (1969a) Description de *Culicoides dobyi* n. sp. (Diptera Ceratopogonidae). *Bulletin de la Société de Pathologie Exotique*, 62, 610–613.
- Callot, J. & Kremer, M. (1969b) Description d'un Culicoïde nouveau *C. jumineri* (Dipt. Cératopogonidé) trouvé en Tunisie. *Bulletin de la Société de Pathologie Exotique*, 62, 1112–1118.
- Callot, J., Kremer, M. & Dedit, Y. (1962a) Nouvelles especes et nouvelles localisations de *Culicoides* (Diptera: Ceratopogo-

- nidae) des Ardennes, du centre de la France, du Jura Français et du Jura Suisse. *Annales de Parasitologie Humaine et Comparée*, 37, 153–171.  
<https://doi.org/10.1051/parasite/1962371153>
- Callot, J., Kremer, M. & Paradis, C. (1962b) *Culicoides furcillatus* n. sp. et *Culicoides setosus* Gutzevich, Diptères Cératopogonidés nouveaux pour la faune de France. *Bulletin de la Société de Pathologie Exotique*, 55, 771–776.
- Callot, J., Kremer, M. & Rioux, J.-A. (1963) Sur des *Culicoides* (Diptera: Ceratopogonidae) dont une espèce et une variété nouvelles du Midi de la France. *Annales de Parasitologie Humaine et Comparée*, 38, 121–129.  
<https://doi.org/10.1051/parasite/1963381121>
- Callot, J., Kremer, M., Mouchet, J. & Bach, A. (1965) Contribution à l'étude de Cératopogonidés (Diptera) de Kumba (Cameroun). Description de *C. kumbaensis* n. sp. *Bulletin de la Société de Pathologie Exotique*, 58, 536–548.
- Callot, J., Kremer, M., Rault, B. & Bach, A. (1966) Contribution à l'étude des *Culicoides* de l'Ouest de la France. *Annales de Parasitologie Humaine et Comparée*, 41, 513–521.  
<https://doi.org/10.1051/parasite/1966415513>
- Callot, J., Kremer, M., Rioux, J.-A. & Descous, S. (1967a) *Culicoides* des Pyrénées Orientales. Description de *C. caucoliberensis* n. sp. *Bulletin de la Société Zoologique de France*, 92, 827–832.
- Callot, J., Kremer, M. & Molet, B. (1967b) Cératopogonidés (Diptères) de la région éthiopienne et particulièrement d'Angola (description d'espèces et de formes nouvelles). *Publicacoes Culturais Companhia de Diamantes de Angola*, 71, 37–44.
- Callot, J., Kremer, M. & Basset, M. (1968a) *Culicoides marcleii* n. sp. et nouvelles localisations de *Culicoides* (Diptères, Cératopogonidés) de la région méditerranéenne et particulièrement d'Algérie. *Bulletin de la Société de Pathologie Exotique*, 61, 271–282.
- Callot, J., Kremer, M., Molet, B. & Bach, A. (1968b) Nouvelles espèces, nouvelles localisations de *Culicoides* (Dipt. Ceratop.) des Midi de la France. *Annales de Parasitologie Humaine et Comparée*, 43, 93–104.  
<https://doi.org/10.1051/parasite/1968431093>
- Callot, J., Kremer, M. & Bailly-Choumara, H. (1970) Description de *Culicoides coluzzii* n. sp. (Dipt., Ceratopogonidae). *Bulletin de la Société Zoologique de France*, 95, 709–718.
- Callot, J., Kremer, M. & Basset, M. (1973) *Culicoides galliardi* et *Culicoides bassetorum* espèces nouvelles (Diptères ceratopogonides) trouvées au Lesotho. *Annales de Parasitologie Humaine et Comparée*, 48, 377–386.  
<https://doi.org/10.1051/parasite/1973482377>
- Cambournac, F.J.C. (1956) *Culicoides* (Nematocera, Ceratopogonidae): sua ocorrência em Portugal - Descrição de *C. sintrensis* sp. n. *Anais do Instituto de Medicina Tropical (Lisbon)*, 13, 589–595.
- Cambournac, F.J.C. (1970a) Lista das espécies do género *Culicoides* (Nematocera, Ceratopogonidae) encontrada em Portugal. *Anais da Escola Nacional de Saúde Pública e de Medicina Tropical*, 4, 249–250.
- Cambournac, F.J.C. (1970b) *Culicoides almeidae* (Nematocera, Ceratopogonidae) sp. n.; uma nova espécie encontrada em Portugal. *Anais da Escola Nacional de Saúde Pública e de Medicina Tropical*, 4, 251–257.
- Campbell, J.A. & Pelham-Clinton, E.C. (1960) A taxonomic review of the British species *Culicoides* Latreille (Diptera, Ceratopogonidae). *Proceedings of the Royal Society of Edinburgh (B)*, 67, 181–302.  
<https://doi.org/10.1017/S0080455X00000758>
- Cao, Y.-C. & Chen, J.-Y. (1984) A new species of *Culicoides* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica*, 9, 298–300.
- Carrasco, D., Felipe-Bauer, M.L., Dumont, L.F. & D'Incao, F. (2014) Abundance of *Culicoides* (Diptera, Ceratopogonidae) species in salt marshes of the Patos Lagoon estuary, Rio Grande do Sul, Brazil: influence of climatic variables. *Pan American Journal of Aquatic Sciences*, 9, 8–20.
- Carter, H.F. (1916) On three new African midges. *Annals of Tropical Medicine and Parasitology*, 10, 131–138, pl. 3.  
<https://doi.org/10.1080/00034983.1916.11684107>
- Carter, H.F. (1919) New West African Ceratopogoninae. *Annals of Tropical Medicine and Parasitology*, 12, 289–302, pl. 8.  
<https://doi.org/10.1080/00034983.1919.11684170>
- Carter, H.F. (1921) A revision of the genus *Leptoconops*, Skuse. *Bulletin of Entomological Research*, 12, 1–28. (June).  
<https://doi.org/10.1017/S0007485300044813>
- Carter, H.F., Ingram, A. & Macfie, J.W.S. (1920) Observations on the ceratopogonine midges of the Gold Coast with descriptions of new species Part II. *Annals of Tropical Medicine and Parasitology*, 14, 211–274, pls. 7–8.  
<https://doi.org/10.1080/00034983.1920.11684236>
- Carter, H.F., Ingram, A. & Macfie, J.W.S. (1921a) Observations on the ceratopogonine midges of the Gold Coast with descriptions of new species Part III. *Annals of Tropical Medicine and Parasitology*, 14, 309–331.  
<https://doi.org/10.1080/00034983.1921.11684241>
- Carter, H.F., Ingram, A. & Macfie, J.W.S. (1921b) Observations on the ceratopogonine midges of the Gold Coast with descriptions of new species Part IV. *Annals of Tropical Medicine and Parasitology*, 15, 177–212.  
<https://doi.org/10.1080/00034983.1921.11684266>
- Causey, O.R. (1938) *Culicoides* of Siam with descriptions of new species. *American Journal of Hygiene*, 27, 399–416, 8 pls.  
<https://doi.org/10.1093/oxfordjournals.aje.a118403>
- Cavaliere, F. (1961a) Notas sobre Ceratopogonidae (Diptera, Nematocera) I. *Forcipomyia* (*Forcipomyia*) *wygodzinskyi* sp. n. para Tierra del Fuego. *Revista Sociedad de la Entomologica Argentina*, 23, 17–19.

- Cavaliere, F. (1961b) Notas sobre Ceratopogonidae (Diptera, Nematocera) II. Sobre dos nuevas especies de *Forcipomyia* para Tierra del Fuego, *Forcipomyia* (F.) *delpontei* n. sp. y F. (F.) *piroskyi*. *Acta Zoologica Lilloana*, 18, 169–175 (1962).
- Cavaliere, F. (1962) Notas sobre Ceratopogonidae (Dipt. Nematocera) III. Sobre un nuevo diptero hematofago para Argentina, *Lasiohelea saltensis* n. sp. y notas sobre las especies neotropicales de *Lasiohelea*. *Acta Zoologica Lilloana*, 18, 359–365.
- Cavaliere, F. (1966) Notas sobre Ceratopogonidae (Diptera, Nematocera) V. Descripción de una nueva especie de Venezuela: *Culicoides* (*Oecacta*) *birabeni* sp. n. *Physis*, 26, 59–63.
- Cavaliere, F. & Chiossone, I.F. (1966) Datos sobre la familia de dipteros hematofagos Leptoconopidae en la Argentina, con la descripción de *Leptoconops* (*Leptoconops*) *casali* sp. n. y la redescrípción de *L. (L.) petrocchia* Shannon y Del Ponte, 1927. *Physis*, 26, 43–57.
- Cavaliere, F. & Chiossone, I.F. (1972) Notas sobre el género *Atrichopogon* Kieffer, 1906, de la Argentina (Diptera, Ceratopogonidae). I. Consideraciones generales y descripción de *Atrichopogon delpontei* sp. nov. *Revista de la Sociedad Entomológica Argentina*, 34, 119–129.
- Cavaliere, F. & Chiossone, I.F. (1973) Notas sobre el género *Atrichopogon* Kieffer, 1906, de la Argentina (Diptera, Ceratopogonidae). II. Descripción de *Atrichopogon casali* sp. nov. *Physis*, 32, 151–159.
- Cazorla, C.G. (2013) A new species of *Stilobezzia* (Diptera: Ceratopogonidae) from northern Argentina. *Acta Entomologica Musei Nationalis Pragae*, 53, 323–327.
- Cazorla, C.G. & Spinelli, G.R. (2007) A new species of Patagonian *Stilobezzia* (*Acanthohelea*) and a redescription of *S. (A.) nigerrima* Ingram and Macfie (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society*, 133, 181–187.  
[https://doi.org/10.3157/0002-8320\(2007\)133\[181:ANSOPS\]2.0.CO;2](https://doi.org/10.3157/0002-8320(2007)133[181:ANSOPS]2.0.CO;2)
- Cazorla, C.G. & Spinelli, G.R. (2010) Four new Neotropical species of *Stilobezzia* (*Acanthohelea*) Kieffer (Diptera: Ceratopogonidae). *Zootaxa*, 2669, 45–56.  
<https://doi.org/10.11646/zootaxa.2669.1.3>
- Cazorla, C.G. & Spinelli, G.R. (2012a) A revision of the Neotropical predaceous midges allied to *Stilobezzia* (*Acanthohelea*) *edwardsi* Ingram & Macfie (Diptera: Ceratopogonidae), with a phylogenetic analysis. *Insect Systematics and Evolution*, 43, 67–97.  
<https://doi.org/10.1163/187631212X627987>
- Cazorla, C.G. & Spinelli, G.R. (2012b) A new species of the predaceous midge genus *Stilobezzia* Kieffer from the Nahuel Huapi National Park, Argentina (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina*, 71, 187–190.
- Cazorla, C.G. & Spinelli, G.R. (2014) A revision of the Patagonian predaceous midges of the subgenus *Acanthohelea* of *Stilobezzia* excluding the *S. (A.) edwardsi* group (Diptera: Ceratopogonidae). *Journal of Natural History*, 49, 155–209 (2015).  
<https://doi.org/10.1080/00222933.2014.939728>
- Cazorla, C.G. & Spinelli, G.R. (2016) Two new species of the subgenus *Acanthohelea* of *Stilobezzia* from Brazilian Amazonia (Diptera: Ceratopogonidae). *Zootaxa*, 4066 (2), 189–193.  
<https://doi.org/10.11646/zootaxa.4066.2.9>
- Cazorla, C.G., Spinelli, G.R. & Díaz, F. (2005) Two new species of the subgenus *Stilobezzia* (*Stilobezzia*) Kieffer from Peruvian Amazonia (Diptera: Ceratopogonidae). *Amazoniana*, 18, 289–297.
- Cazorla, C.G., Ronderos, M.M., Spinelli, G.R., Torreias, S.R.S. & Ferreira Kepler R.L. (2012) A new species of *Stilobezzia* Kieffer from the Neotropical Region (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 56, 399–404.  
<https://doi.org/10.1590/S0085-56262012000400002>
- Cazorla, C.G., Cardoso, E.A., & Bauer, M.L.F. (2017) Contributions to the knowledge of predaceous midges of the subgenus *Eukraiohelea* Ingram & Macfie of *Stilobezzia* Kieffer (Diptera: Ceratopogonidae), from Brazil. *Zootaxa*, 4324, 557–570.  
<https://doi.org/10.11646/zootaxa.4324.3.9>
- Cen, C.-H., Han, X.-J., Chang, Q.-Q., Duan, C., & Hou, X.-H. (2018) Sequence and analysis of rDNA-ITS1 of the genus *Culicoides* (diptera [sic]: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Zoonoses* 34, 1087–1094.
- Chan, K.L. & LeRoux, E.J. (1965) Description of *Forcipomyia* (*Neoforcipomyia*) sp. n. and redescription of *Forcipomyia* (*Neoforcipomyia*) *eques* (Johannsen) (Diptera: Ceratopogonidae), with an account of the digestive and reproductive systems. *Phytoprotection*, 46, 74–104.
- Chan, K.L. & LeRoux, E.J. (1970) New species of *Forcipomyia* (Diptera: Ceratopogonidae) described in all stages. *Canadian Entomologist*, 102, 271–293.  
<https://doi.org/10.4039/Ent102271-3>
- Chan, K.L. & LeRoux, E.J. (1971a) A new subgenus and species of midge (Diptera: Ceratopogonidae) from Singapore. *Canadian Entomologist*, 103, 271–276.  
<https://doi.org/10.4039/Ent103271-2>
- Chan, K.L. & LeRoux, E.J. (1971b) Nine new species of *Forcipomyia* (Diptera: Ceratopogonidae) described in all stages. *Canadian Entomologist*, 103, 729–762.  
<https://doi.org/10.4039/Ent103729-5>
- Chan, K.L. & LeRoux, E.J. (1971c) Phylogenetic relationships in the Forcipomyiinae (Diptera: Ceratopogonidae). *Canadian Entomologist*, 103, 1323–1335.  
<https://doi.org/10.4039/Ent1031323-9>
- Chan, K.L. & Linley, J.R. (1988) Description of *Atrichopogon wirthi* new species (Diptera: Ceratopogonidae) from leaves of the

- water lettuce (*Pistia stratiotes*) in Florida. *Florida Entomologist*, 71, 186–201.  
<https://doi.org/10.2307/3495366>
- Chan, K.L. & Linley, J.R. (1989) A new Florida species of *Forcipomyia* (*Euprojoannisia*) (Diptera: Ceratopogonidae) from leaves of the water lettuce, *Pistia stratiotes*. *Florida Entomologist*, 72, 252–262.  
<https://doi.org/10.2307/3494904>
- Chan, K.L. & Saunders, L.G. (1965) *Forcipomyia* (*Dacnoforcipomyia*) *anabaenae*, a new blood-sucking midge from Singapore, described in all stages (Diptera: Ceratopogonidae). *Canadian Journal of Zoology*, 43, 527–540.  
<https://doi.org/10.1139/z65-052>
- Chandler, P.J. (2017) An update of the 1998 checklist of Diptera of the British Isles. Available from: [http://www.dipteristsforum.org.uk/documents/BRITISH\\_ISLES\\_CHECKLIST.pdf](http://www.dipteristsforum.org.uk/documents/BRITISH_ISLES_CHECKLIST.pdf) (accessed 10 December 2018).
- Chang Q.Q., Jiang, X.H., Liu, G.P., Li, X.F. & Hou, X.H. (2017) A species checklist of the subgenus *Culicoides* (*Avaritia*) in China, with a description of a new species (Diptera, Ceratopogonidae). *ZooKeys*, 706, 117–135.  
<https://doi.org/10.3897/zookeys.706.13535>
- Chanthawanich, N. & Delfinado, M.D. (1967) Some species of *Leptoconops* of the Oriental and Pacific Regions (Diptera, Ceratopogonidae). *Journal of Medical Entomology*, 4, 294–303.  
<https://doi.org/10.1093/jmedent/4.3.294>
- Chaudhuri, P.K. & Das Gupta, S.K. (1991) *Stilobezzia szadziewskii* Chaudhuri & Das Gupta, a replacement name for *Stilobezzia falcata* Chaudhuri, Das Gupta & Sinharay (preoccupied) (Diptera: Ceratopogonidae). *Oriental Insects*, 25, 182.  
<https://doi.org/10.1080/00305316.1991.10432227>
- Chaudhuri, P.K. & Ghosh, M. (1980) Addition to the studies of genus *Alluaudomyia* Kieffer (Diptera: Ceratopogonidae) of India. *Oriental Insects*, 14, 421–424.  
<https://doi.org/10.1080/00305316.1980.10434825>
- Chaudhuri, P.K., Das Gupta, S.K. & Chaudhuri, D.K. (1972) Biting midges of the genus *Alluaudomyia* Kieffer (Diptera: Ceratopogonidae) from India. *Oriental Insects*, 6, 83–110.  
<https://doi.org/10.1080/00305316.1972.10434057>
- Chaudhuri, P.K., Das Gupta, S.K. & Sinharay, D.C. (1974) Three new species of *Stilobezzia* Kieffer (Diptera: Ceratopogonidae) from India. *Oriental Insects*, 8, 47–50.  
<https://doi.org/10.1080/00305316.1974.10434440>
- Chaudhuri, P.K., Das Gupta, S.K. & Chatterjee, A.K. (1981) *Alluaudomyia fuscitarsis* n. sp. and *Stilobezzia ensistyla* n. sp. from India (Diptera: Ceratopogonidae). *Entomologica Scandinavica*, 12, 147–150.  
<https://doi.org/10.1163/187631281794709962>
- Chen, C.-S. (1979) Descriptions of *Culicoides lieni* n. sp. and *C. hainanensis* Lee from Taiwan (Diptera: Ceratopogonidae). *Chinese Journal of Microbiology*, 12, 99–104.
- Chen, C.-S. (1983) *The genus Culicoides of Taiwan (Diptera: Ceratopogonidae)* [in Chinese]. Doctor of Agriculture thesis, Graduate School of Plant Pathology and Entomology, National Taiwan University, Taiwan, 165 pp., pls. 1–4.
- Chen, C.-S. (1988) Descriptions of four new species of *Culicoides* (Diptera: Ceratopogonidae) from Taiwan. *Chinese Journal of Entomology*, 8, 151–156.
- Chen, X.-X. (1997) *Insect biogeography*. Beijing: China Forestry Publishing House. 113pp.
- Chen, H.-Y., Liu, Y.-Q. & Yu, Y.-X. (2012) Two new biting midges of the subfamily Forcipomyiinae Lenz (Diptera: Ceratopogonidae) from China. *Zootaxa*, 3582, 33–36. [in Chinese]  
<https://doi.org/10.11646/zootaxa.3582.1.3>
- Chen, J.-L., Chen, R.-D., Liang, Z.-H., He, Z.-M. & Yu, Y.-X. (2007) Preliminary report of blood-sucking midges in Hong Kong (Diptera: Ceratopogonidae). *Acta Parasitologica et Medica Entomologica Sinica*, 14, 169–173. [in Chinese, English summary]
- Chen, K.C. (1981) A new species of *Culicoides* from Wuyi-Mountain (Diptera: Ceratopogonidae). *Entomotaxonomia*, 3, 93–94. [in Chinese, English summary]
- Chen, K.C. (1982) A preliminary survey of blood-sucking midges (Diptera: Ceratopogonidae) in Wuyi Shan Fujian. *Wuyi Science Journal*, 2, 128–131. [in Chinese, English summary]
- Chen, K.C. & Tsai, L.L. (1962) The bloodsucking midges (Ceratopogonidae) of Fukien. *Acta Entomologica Sinica*, 11, 394–400. [in Chinese, English summary]
- Chen, L., Song, Y. & Xu, S. (2008) The boundary of Palearctic and Oriental realms in western China. *Progress in Natural Science*, 18, 833–841.  
<https://doi.org/10.1016/j.pnsc.2008.02.004>
- Chen, L.-H., Ayiken & Yu, Y.-X. (2015) New species of *Leptoconops fukangensis* from Xinjiang. *Chinese Journal of Hygienic Insecticides & Equipments*, 21, 173–174. [in Chinese, English summary]
- Chen, L.-H., Ayiken & Yu, Y.-X. (2016) Description of two new species of genus *Culicoides* (Diptera: Ceratopogonidae) from Tianshan of Xinjiang, China. *Chinese Journal of Vector Biology and Control*, 27, 582–584. [in Chinese, English summary]
- Choudhuri, P.P., Bose, M., Das Gupta, S.K. & Choudhuri, P.K. (1986) *Anophelis* group of *Culicoides* Insects (Ceratopogonidae: Diptera) of India. *Burdwan University Science Journal*, 3, 52–55.
- Choufani, J., Azar, D., Perrichot, V., Soriano, C., Tafforeau, P. & Nel, A. (2011) The genus *Leptoconops* Skuse (Diptera: Cerato-

- pogonidae) in Early Cretaceous Charentese amber. *Palaeobiodiversity and Palaeoenvironments*, 91, 285–291.  
<https://doi.org/10.1007/s12549-011-0057-1>
- Choufani, J., Perrichot, V., Girard, V., Garrouste, R., Azar, D. & Nel, A. (2013) Two new biting midges of the modern type from Santonian amber of France (Diptera: Ceratopogonidae), pp. 73–95. In: Azar, D., Engel, M.S., Jarzembowski, E., Krogerman, L., Nel, A. & Santiago-Blay, J. (Eds.), *Insect evolution in an amberiferous and stone alphabet*. Proceedings of the 6th International Congress on fossil Insects, Arthropods and Amber. E.J. Brill, Leiden. viii + 201 pp.  
[https://doi.org/10.1163/9789004210714\\_007](https://doi.org/10.1163/9789004210714_007)
- Choufani, J., Perrichot, V., Azar, D. & Nel, A. (2014) New Biting Midges (Diptera: Ceratopogonidae) in Late Cretaceous Vendean amber. *Paleontological Contributions*, 10H, 34–40.  
<https://doi.org/10.17161/PC.1808.15988>
- Choufani, J., Azar, D. & Nel, A. (2015a) New biting midges from the Cretaceous amber of Lebanon (Diptera: Ceratopogonidae). *Annales de la Société Entomologique de France (N.S.): International Journal of Entomology*, 50, 272–285.  
<https://doi.org/10.1080/00379271.2014.982026>
- Choufani, J., El-Halabi, W., Azar, D. & Nel, A. (2015b) First fossil insect from Lower Cretaceous Lebanese amber in Syria (Diptera: Ceratopogonidae). *Cretaceous Research*, 54, 106–116.  
<https://doi.org/10.1016/j.cretres.2014.12.006>
- Choufani, J., Azar, D., Perrichot, V., Soriano, C., Tafforeau, P. & Nel, A. (2011) The genus *Leptoconops* Skuse (Diptera: Ceratopogonidae) in Early Cretaceous Charentese amber. *Palaeobiodiversity and Palaeoenvironments*, 91, 285–291.  
<https://doi.org/10.1007/s12549-011-0057-1>
- Chu, F.-I. (1977) New species and records of *Culicoides* (Diptera: Ceratopogonidae) from Tibet China. *Acta Entomologica Sinica*, 20, 99–105. [in Chinese, English summary]
- Chu, F.-I. (1981) On the blood-sucking midges (Diptera: Ceratopogonidae) from the coastal regions of south-eastern China. *Acta Entomologica Sinica*, 24, 307–313. [in Chinese, English summary]
- Chu, F.-I. (1983) Two new subgenera and two new species of *Culicoides* from China (Diptera: Ceratopogonidae). *Entomotaxonomia*, 5, 25–32. [in Chinese, English summary]
- Chu, F.-I. (1984) Two new names of Chinese *Culicoides* (Diptera: Ceratopogonidae). *Entomotaxonomia*, 6, 24. [in Chinese]
- Chu, F.-I. (1986) The biting midges of Cambodia, with descriptions of two new species (Diptera: Ceratopogonidae). *Entomotaxonomia*, 8, 251–261. [in Chinese, English summary]
- Chu, F.-I. & Liu, S.-C. (1978) A taxonomic study of the genus *Culicoides* (Diptera: Ceratopogonidae) of Yunan, with descriptions of five new species. *Acta Entomologica Sinica*, 21, 79–90. [in Chinese, English summary]
- Chu, F.-I., Qian, J.-Q. & Ma, D.-X. (1982) Records of biting midges collected from Xinjiang, China with descriptions of two new species (Diptera: Ceratopogonidae). *Acta Entomologica Sinica*, 25, 105–110. [in Chinese, English summary]
- Chvála, M. (2008) The types of Diptera (Insecta) described by Pater Gabriel Strobl. *Studia Dipterologica, Supplement* 17, 1–281.
- Clastrier, J. (1956) Notes sur les Cératopogonidés. I.-Quatre espèces du groupe *Forcipomyia* d'Algérie et de Tunisie. *Archives de l'Institut Pasteur d'Algérie*, 34, 496–512.
- Clastrier, J. (1957) Notes sur les Cératopogonidés. II.-Quelques *Culicoides* à ailes tachetées. *Archives de l'Institut Pasteur d'Algérie*, 35, 404–444.
- Clastrier, J. (1958a) Notes sur les Cératopogonidés. III.-*Culicoides semimaculatus* n. sp. d'Algérie. *Archives de l'Institut Pasteur d'Algérie*, 36, 55–60.
- Clastrier, J. (1958b) Notes sur les Cératopogonidés. IV.-Cératopogonidés d'Afrique Occidentale Française. *Archives de l'Institut Pasteur d'Algérie*, 36, 192–258.
- Clastrier, J. (1958c) Notes sur les Cératopogonidés. V.-Cératopogonidés d'Afrique Occidentale Française (2). *Archives de l'Institut Pasteur d'Algérie*, 36, 487–505.
- Clastrier, J. (1959a) Notes sur les Cératopogonidés. VI.-Cératopogonidés d'Afrique Occidentale Française (3). *Archives de l'Institut Pasteur d'Algérie*, 37, 167–197.
- Clastrier, J. (1959b) Notes sur les Cératopogonidés. VII.-Cératopogonidés d'Afrique Occidentale Française (4). *Archives de l'Institut Pasteur d'Algérie*, 37, 340–383.
- Clastrier, J. (1959c) Notes sur les Cératopogonidés. VIII.-Cératopogonidés de L'Ile de la Réunion. *Archives de l'Institut Pasteur d'Algérie*, 37, 412–446. (Sept.)
- Clastrier, J. (1960a) Notes sur les Cératopogonidés. IX.-Cératopogonidés de la République du Congo. *Archives de l'Institut Pasteur d'Algérie*, 38, 79–105.
- Clastrier, J. (1960b) Notes sur les Cératopogonidés. X.-Cératopogonidés de la République du Congo (2). *Archives de l'Institut Pasteur d'Algérie*, 38, 258–298.
- Clastrier, J. (1960c) Notes sur les Cératopogonidés. XI.-Cératopogonidés de la République du Congo (3). *Archives de l'Institut Pasteur d'Algérie*, 38, 510–526.
- Clastrier, J. (1961a) Notes sur les Cératopogonidés. XV.-*Ceratopogon* et *Alluaudomyia* de la Région Paléarctique. *Archives de l'Institut Pasteur d'Algérie*, 39, 401–437.
- Clastrier, J. (1961b) Le Parc National du Niokolo-Koba (Deuxième fascicule). XVII. (Diptera Ceratopogonidae). *Mémoires de l'Institut Français d'Afrique Noire*, 62, 257–272.
- Clastrier, J. (1962a) Notes sur les Cératopogonidés. XVI.-Espèces du genre *Bezzia* Kieffer ou apparentées de la région Paléarc-

- tique. *Archives de l'Institut Pasteur d'Algérie*, 40, 53–125.
- Clastrier, J. (1962b) Notes sur les Cératopogonidés de la région Paléarctique. XVII. Nouveaux *Palpomyia* Meig. et *Johannsenomyia* Mall. *Archives de l'Institut Pasteur d'Algérie*, 40, 225–288.
- Clastrier, J. (1963) Notes sur les Cératopogonidés. XVIII.-Espèces du genre *Stilobezzia* Kieffer ou Apparentées de la Région Paléarctique. *Archives de l'Institut Pasteur d'Algérie*, 41, 41–68.
- Clastrier, J. (1966) Cératopogonidés des Iles Canaries (Dipt. Nematocera). *Annales de la Société de Entomologique de France*, 2, 693–710.
- Clastrier, J. (1967) Note sur deux Cératopogonidés du Cambodge: *Styloconops spinosifrons* (Carter 1921) et *Stilobezzia chasteli* n. sp. *Bulletin de la Société Entomologique de France*, 72, 115–120.
- Clastrier, J. (1968) Deux Ceratopogonides nouveaux de la Guyane Française. *Archives de l'Institut Pasteur de la Guyane Française et de L'Inini*, 21, 85–92.
- Clastrier, J. (1971) Deux nouveaux *Culicoides* (Diptera, Ceratopogonidae) de la Guyane Française. *Annales de Parasitologie*, 46, 285–294.  
<https://doi.org/10.1051/parasite/1971466737>
- Clastrier, J. (1972a) Contribution à la faune du Congo (Brazzaville). Mission A. Descarpentries et A. Villiers. *Bulletin de l'Institut Fondamental d'Afrique Noire*, 34, 98–103.
- Clastrier, J. (1972b) *Forcipomyia* (*F.*) *squamithorax* n. sp. de la Guyane française. *Bulletin de la Société Entomologique de France*, 77, 170–176.
- Clastrier, J. (1973) Le genre *Leptoconops*, sous-genre *Holoconops* dans le midi de la France (Dipt. Ceratopogonidae). *Annales de la Société de Entomologique de France*, 9, 895–920.
- Clastrier, J. (1974a) *Leptoconops* (*Proleptoconops*) *hutsoni* n. sg., n. sp. du Sahara Algerien Septentrional (Diptera, Ceratopogonidae). *Parassitologia*, 16, 231–238.
- Clastrier, J. (1974b) *Leptoconops laoensis* n. sp. du sud-est asiatique. *Nouvelle Revue d'Entomologie*, 4, 71–74.
- Clastrier, J. (1974c) *Dasyhelea insignicornis* (Kieffer, 1913) et *Dasyhelea wirthi* nov. n. (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 4, 135.
- Clastrier, J. (1975a) Description de quelques males d'*Holoconops* (Dipt. Ceratopogonidae). *Annales de la Société de Entomologique de France*, 11, 587–607. [Received at BMNH Feb. 23, 1976].
- Clastrier, J. (1975b) Le genre *Leptoconops*, sous-genre *Holoconops* en Afrique du Nord (Diptera, Ceratopogonidae). *Archives de l'Institut Pasteur d'Algérie*, 50–51 (1972–73), 23–52. [Received at BMNH Oct. 20].
- Clastrier, J. (1976) *Alluaudomyia prima* n. sp. de la Guyane Française (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 6, 205–207.
- Clastrier, J. (1977) Description d'un nouvel *Alluaudomyia* de la République de Guinée (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 7, 345–348.
- Clastrier, J. (1978) Deux nouveaux *Alluaudomyia* de la faune française (Dipt. Ceratopogonidae). *Entomologiste*, 34, 25–31.
- Clastrier, J. (1979) Un nouvel *Atrichopogon* de la Guyane Française (Diptera: Ceratopogonidae). *Revue Française d'Entomologie*, 1, 30–32.
- Clastrier, J. (1981a) Description de trois nouveaux *Holoconops* de la République sud-africaine. *Bulletin de la Société Entomologique de France*, 86, 87–97.
- Clastrier, J. (1981b) Description d'un nouveau *Leptoconops* d'Israel (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 11, 123–126.
- Clastrier, J. (1981c) Note sur deux *Leptoconops* (*s.str.*) du procheorient: l'un connu, l'autre nouveau pour la science (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 3, 31–33.
- Clastrier, J. (1982a) Description d'une nouvelle espèce afrotropicale de *Tetrabezzia* (Diptera, Ceratopogonidae). *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 20, 307–312.
- Clastrier, J. (1982b) *Stenoxenus pastorianus* n. sp. de la République de Guinée (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 12, 293–297.
- Clastrier, J. (1983a) Description de trois nouvelles espèces afrotropicales de Ceratopogonidae (Dipt., Nematocera) revenant aux genres *Jenkinshalea* et *Neosphaeromias*. *Annales de la Société de Entomologique de France*, 19, 261–272.
- Clastrier, J. (1983b) Description de deux nouvelles espèces afrotropicales concernant les genres *Ceratobezzia* et *Clinohalea* (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 5, 19–26.
- Clastrier, J. (1983c) Ceratopogonidae des Iles Seychelles (Diptera, Nematocera). *Mémoires du Muséum National d'Histoire Naturelle, Nouvelle Série, Série A, Zoologie*, 126, 83 pp.
- Clastrier, J. (1984a) Description d'une nouvelle espèce afrotropicale de genre *Monohelea* (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie (N.S.)*, 1, 49–53.
- Clastrier, J. (1984b) *Schizonyxhelea guyana* n. g., n. sp. de la Guyane Française (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 6, 1–4.
- Clastrier, J. (1984c) Révision des espèces afrotropicales du genre *Echinohelea* (Diptera, Ceratopogonidae) avec description de trois espèces nouvelles. *Bulletin du Muséum National d'Histoire Naturelle, Paris 4th Série*, 6, 361–376.
- Clastrier, J. (1984d) Description de deux nouveaux *Stilobezzia* (Diptera, Ceratopogonidae) de la région afrotropicale. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 22, 43–49.
- Clastrier, J. (1984e) Description de trois nouveaux *Kolenohalea* (Diptera, Ceratopogonidae) de la République de Guinée. *An-*

nales de la Société de Entomologique de France, 20, 365–371.

- Clastrier, J. (1985a) Ceratopogonidae de Nouvelle-Calédonie III. Genre *Bezzia* (Diptera, Nematocera). *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 23, 45–54.
- Clastrier, J. (1985b) Ceratopogonidae de Nouvelle-Calédonie. I. Genres *Echinohelea* Macfie, *Hebetula* Wirth and Debenham, *Heterohelea* n. g. (Diptera, Nematocera). *Nouvelle Revue d'Entomologie (N.S.)*, 2, 267–275.
- Clastrier, J. (1985c) Ceratopogonidae de Nouvelle-Calédonie IV. Genre *Alluaudomyia* (Diptera, Nematocera). Description de six espèces nouvelles; simplification de l'identification des femelles. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 23, 187–210.
- Clastrier, J. (1985d) Ceratopogonidae de Nouvelle-Calédonie II. Genre *Monohelea* (Diptera, Nematocera). *Annales de Parasitologie Humaine et Comparée*, 60, 747–759.  
<https://doi.org/10.1051/parasite/1985606747>
- Clastrier, J. (1985e) Description de trois nouveaux *Stilobezzia* de la région afrotropicale dont la nervatin alaire est modifiée, apparentés à *S. differens* de Meillon (Dipt. Ceratopogonidae). *Annales de la Société de Entomologique de France*, 21, 457–465.
- Clastrier, J. (1986a) *Stilobezzia carayoni*, n. sp. de la République de Guinée (Diptera, Ceratopogonidae). *Annales de la Société de Entomologique de France*, 22, 284–285.
- Clastrier, J. (1986b) Révision des *Stilobezzia* africains décrits par M. Goetghebuer (Diptera, Ceratopogonidae). *Revue Zoologique Africaine*, 100, 363–383.
- Clastrier, J. (1986c) Description de deux nouveaux *Stilobezzia* de la République de Guinée (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 8, 63–68.
- Clastrier, J. (1987a) *Atrichopogon ornatipennis*, n. sp. de la Guyane française (Diptera, Ceratopogonidae). *Entomologiste*, 43, 271–274.
- Clastrier, J. (1987b) Ceratopogonidae de Nouvelle-Calédonie V. Genre *Atrichopogon* (Diptera, Nematocera). *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 25, 193–216.
- Clastrier, J. (1987c) Note sur deux *Atrichopogon* du Zaïre: *A. quadrisetosus* Goetghebuer et *A. yamabukiensis* n. sp. (Diptera, Ceratopogonidae). *Revue Zoologique Africaine*, 100, 423–428.
- Clastrier, J. (1988a) Description d'un genre nouveau et de trois espèces nouvelles de Ceratopogonidae africains (Dipt. Nematocera). *Bulletin de la Société Entomologique de France*, 93, 53–62.
- Clastrier, J. (1988b) Diptères Ceratopogonidae de Nouvelle-Calédonie. 6. Note sur le genre *Dasyhelea*. *Mémoires du Muséum National d'Histoire Naturelle, Série A, Zoologie*, 142, 75–82.
- Clastrier, J. (1988c) Description de cinq nouveaux *Stilobezzia* de la République de Guinée (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 5, 121–132.
- Clastrier, J. (1989a) Description de cinq nouveaux *Stilobezzia* originaires de la République de Guinée (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 11, 5–14.
- Clastrier, J. (1989b) Ceratopogonidae de Nouvelle-Calédonie. VII. Genre *Paradasyhelea* [Diptera, Nematocera]. *Revue Française d'Entomologie*, 11, 133–137.
- Clastrier, J. (1989c) Description de trois *Brachypogon* nouveaux et remarquables de la République de Guinée (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 94, 189–196.
- Clastrier, J. (1990) Description de *Stilobezzia seguyi*, n. sp. de la République de Guinée (Diptera: Ceratopogonidae). *Annales de la Société de Entomologique de France*, 26, 399–403.
- Clastrier, J. (1991a) Description de cinq nouveaux *Stilobezzia* apparentés à *S. insolita* Das Gupta & Wirth, originaires des régions afrotropicale, paléarctique et néotropicale (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 95, 297–310 (1990).
- Clastrier, J. (1991b) Description de *Forcipomyia (Dycea) madeira* n. sp. de l'Île de Madère, et présence en Finlande de *F. (Calo-forcipomyia) glauca* Macfie (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 96, 261–266.
- Clastrier, J. (1992) Description de *Palpomyia guyana* n. sp. de la Guyane française (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 14, 117–121.
- Clastrier, J. (1993a) Description de cinq espèces nouvelles de *Stilocolicoides* Wirth and Grogan originaires de l'Afrique tropicale et du département français de Vaucluse (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 10, 133–143.
- Clastrier, J. (1993b) Diptera Ceratopogonidae de Nouvelle-Calédonie. 10. Genre *Monohelea*. *Mémoires du Muséum National d'Histoire Naturelle, Série A, Zoologie*, 157, 157–164.
- Clastrier, J. & Boorman, J. (1987) Description de deux nouveaux *Leptoconops* l.s. de Bahrein. *Bulletin de la Société Entomologique de France*, 91, 293–300.
- Clastrier, J. & Coluzzi, M. (1973) *Leptoconops (Leptoconops) bezzii* (Noé, 1905) et *Leptoconops (Leptoconops) noei* n. sp. (Diptera, Ceratopogonidae). *Parassitologia*, 15, 47–77.
- Clastrier, J. & Delécolle, J.-C. (1990) Description d'un nouveau genre et de nouvelles espèces africaines des genres *Allohelea* Kieffer, *Monohelea* Kieffer, *Downshelea* Wirth & Grogan, *Boreohelea* nov. gen. (Diptera: Ceratopogonidae). *Annales de la Société de Entomologique de France*, 26, 129–157.
- Clastrier, J. & Delécolle, J.C. (1991) Diptera Ceratopogonidae de Nouvelle-Calédonie. 8. Genre *Forcipomyia*. *Mémoires du Muséum National d'Histoire Naturelle, Série A, Zoologie*, 149, 177–213.
- Clastrier, J. & Delécolle, J.C. (1993) Diptera Ceratopogonidae de Nouvelle-Calédonie. 9. Genre *Forcipomyia*, sous-genres



- Lasiohelea* et *Microhelea*. *Mémoires du Muséum National d'Histoire Naturelle, Série A, Zoologie*, 157, 131–156.
- Clastrier, J. & Delécolle, J.C. (1994) Description de *Forcipomyia (Phytohelea) musae* n. sp. de la Guyane française (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 16, 51–56.
- Clastrier, J. & Delécolle, J.C. (1996) Ceratopogonidae des îles Wallis et Futuna (Diptera). *Bulletin de la Société Entomologique de France*, 101, 289–318.
- Clastrier, J. & Delécolle, J.C. (1997) Description de *Forcipomyia (Trichohelea) roubaudi* n.sp., ectoparasite d'un Héteroptère Réduvide capturé dans la canopée de la forêt guyanaise (Diptera, Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 102, 379–383.
- Clastrier, J. & Legrand, J. (1984) *Forcipomyia (Pterobosca) pinheyi* nouvelle espèce de L'Île Maurice parasite des ailes de Libellules et nouvelles localisations du sous-genre (Diptera, Ceratopogonidae; Odonata). *Revue Française d'Entomologie*, 6, 173–180.
- Clastrier, J. & Legrand, J. (1990) *Forcipomyia (Pterobosca) incubans* (Macfie) et *F. (Trichohelea) macheti* n. sp. parasites des ailes de libellules en Guyane française (Diptera, Ceratopogonidae; Odonata). *Revue Française d'Entomologie*, 12, 167–170.
- Clastrier, J. & Legrand, J. (1991) *Forcipomyia (Trichohelea) araneivora* n. sp. ectoparasite d'une araignée habitant les monts nimba en Guinée (Diptera, Ceratopogonidae; Araneae, Araneidae). *Revue Française d'Entomologie*, 13, 155–158.
- Clastrier, J. & Nevill, E.M. (1984) *Leptoconops (Leptoconops) demeilloni*, a new species from the Cape Duneveld of South Africa (Diptera, Ceratopogonidae). *Journal of the Entomological Society of South Africa*, 47, 245–250.
- Clastrier, J. & Raccurt, C. (1979a) Quatre nouveaux *Parabozzia* de la République d'Haïti (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 9, 165–175.
- Clastrier, J. & Raccurt, C. (1979b) *Baeodasymyia modesta* n. g., n. sp. de la République d'Haïti (Diptera, Ceratopogonidae). *Annales de Parasitologie*, 54, 99–104.  
<https://doi.org/10.1051/parasite/1979541099>
- Clastrier, J. & Wirth, W.W. (1961a) Notes sur les Cératopogonidés. XIII. Cératopogonidés de la région Éthiopienne. *Archives de l'Institut Pasteur d'Algérie*, 39, 190–240.
- Clastrier, J. & Wirth, W.W. (1961b) Notes sur les Cératopogonidés. XIV. Cératopogonidés de la région Éthiopienne (2). *Archives de l'Institut Pasteur d'Algérie*, 39, 302–337.
- Clastrier, J. & Wirth, W.W. (1978) The *Leptoconops kerteszi* complex in North America (Diptera: Ceratopogonidae). *United States Department of Agriculture Technical Bulletin Number 1573*, 58 pp.
- Clastrier, J. & Wirth, W.W. (1995) Révision des *Forcipomyia* du sous-genre *Microhelea* de la région Néotropicale, parasites de phasmes (Diptera: Ceratopogonidae). *Annales de la Société Entomologique de France*, 31, 97–150.
- Clastrier, J., Rioux, J.A. & Descous, S. (1961) Notes sur les Cératopogonidés. XII.-Cératopogonidés de Nord-Tchad. *Archives de l'Institut Pasteur d'Algérie*, 39, 49–98.
- Cochrane, A.H. (1973) Two new Nearctic species of *Culicoides* (Diptera: Ceratopogonidae). *Florida Entomologist*, 56, 311–318.  
<https://doi.org/10.2307/3493810>
- Cochrane, A.H. (1974) Two new species of biting midges (Diptera: Ceratopogonidae) from North America. *Florida Entomologist*, 57, 127–135.  
<https://doi.org/10.2307/3493465>
- Cockerell, T.D.A. (1919) Insects in Burmese amber. *Entomologist*, 52, 241–243.
- Cockerell, T.D.A. (1921) LVII.-Fossil arthropods in the British Museum.-VI. Oligocene insects from Gurnet Bay, Isle of Wight. *Annals and Magazine of Natural History Ser. 9*, 7, 453–480.  
<https://doi.org/10.1080/00222932108632550>
- Colaco, A.T.F. (1946) Alguns *Culicoides* do Transval. *Annais do Instituto de Medicina Tropical*, 3, 217–266.
- Cole, F.R. & Lovett, A.L. (1921) XV. An annotated list of the Diptera (Flies) of Oregon. *Proceedings of the California Academy of Sciences (4th Ser.)*, 11(15), 197–344.  
<https://doi.org/10.5962/bhl.title.57901>
- Cooper, B.E. (1991) *Diptera types in the Canadian National Collection of Insects. Part 1. Nematocera*. Agriculture Canada, Research Branch, Publication 1845/B, iii + 113 pp.
- Coquillett, D.W. (1895) Descriptions of new genera and species. In: Johnson C.W. (Ed.), *Diptera of Florida. Proceedings of the Academy of Natural Sciences of Philadelphia*, 1895, 307–319.
- Coquillett, D.W. (1899) A new dipterous family related to the Chironomidae. *Entomological News*, 10, 60–61.
- Coquillett, D.W. (1900) Papers from the Harriman Alaska Expedition. IX. Entomological results (3): Diptera. *Proceedings of the Washington Academy of Sciences*, 2, 389–464.
- Coquillett, D.W. (1901a) New Diptera in the U.S. National Museum. *Proceedings of the United States National Museum*, 23, 593–618.  
<https://doi.org/10.5479/si.00963801.23-1225.593>
- Coquillett, D.W. (1901b) Papers from the Hopkins Stanford Galapagos Expedition, 1898–1899. II. Entomological Results (2): Diptera [sic]. *Proceedings of the Washington Academy of Sciences*, 3, 371–379.
- Coquillett, D.W. (1902a) New Diptera from North America. *Proceedings of the United States National Museum*, 25, 83–126.  
<https://doi.org/10.5479/si.00963801.25-1280.83>

- Coquillett, D.W. (1902b) Three new species of Nematoceros [sic] Diptera. *Entomological News*, 13, 84–85.
- Coquillett, D.W. (1904a) New Diptera from Central America. *Proceedings of the Entomological Society of Washington*, 6, 90–98.
- Coquillett, D.W. (1904b) New North American Diptera. *Proceedings of the Entomological Society of Washington*, 6, 166–192.
- Coquillett, D.W. (1904c) A new *Ceratopogon* from Brazil. *Journal of the New York Entomological Society*, 12, 35–36.
- Coquillett, D.W. (1905) New nematoceros Diptera from North America. *Journal of the New York Entomological Society*, 13, 56–69.
- Coquillett, D.W. (1910) The type-species of the North American genera of Diptera. *Proceedings of the United States National Museum*, 37, 499–647.  
<https://doi.org/10.5479/si.00963801.37-1719.499>
- Cordero, E.H. (1929) Contribución al estudio de los Dipteros del Uruguay, I. *Lophomyidium uruguayense* n. gen., n. sp. nueva Ceratopogonina hematófaga. *Anales del Museo de Historia Natural de Montevideo*, 3, 93–108.
- Cornet, M. (1970) Les *Culicoides* (Diptera Ceratopogonidae) de l'Ouest africain (1ère note). *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 7, 341–364.
- Cornet, M. & Brunhes, J. (1994) Révision des espèces de *Culicoides* apparentées à *C. schultzei* (Enderlein, 1908) dans la région afrotropicale (Diptera, Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 99, 149–164.
- Cornet, M. & Chateau, R. (1971) Les *Culicoides* de l'Ouest africain (2e note) Espèces apparentées à *C. similis* Carter, Ingram et Macfie, 1920 (Diptera, Ceratopogonidae). *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 8, 141–173 (1970).
- Cornet, M. & Kremer, M. (1970) Description de *Culicoides moucheti* n. sp. (Diptera, Ceratopogonidae) trouvé au Tchad, au Mali et au Sénégal. *Bulletin de la Société de Pathologie Exotique*, 63, 266–272.
- Cornet, M. & Nevill, E.M. (1979) Descriptions of the adults and pupa of *Culicoides hildae* n. sp. from the Republic of South Africa (Diptera: Ceratopogonidae). *Onderstepoort Journal of Veterinary Research*, 46, 179–184.
- Cornet, M. & Nevill, E.M. (1980) *Culicoides macintoshi* n. sp., une nouvelle espèce d'Afrique du Sud (Diptera, Ceratopogonidae), avec une note sur la taxonomie des espèces éthiopiennes à ailes sans taches. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 18, 383–389.
- Cornet, M., Nevill, E.M. & Walker, A.R. (1974) Note sur les *Culicoides* (Diptera, Ceratopogonidae) du groupe de *C. milnei* Austen, 1909, en Afrique orientale et australe. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 12, 231–242.
- Costa Lima, A. da. (1928) Ceratopogonineos ectoparasitos de phasmideos. *Memórias do Instituto Oswaldo Cruz*, Suppl. 3, 84–85, 2 pls.  
<https://doi.org/10.1590/S0074-02761928000500003>
- Costa Lima, A. da. (1937a) Chave das especies de *Culicoides* da regio neotropica (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 32, 411–422.  
<https://doi.org/10.1590/S0074-02761937000300003>
- Costa Lima, A. da. (1937b) Primeira especie americana do genero *Pterobosca* (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 32, 615–616, pls. 1–2.  
<https://doi.org/10.1590/S0074-02761937000400010>
- Crampton, G.C. (1925) A phylogenetic study of the thoracic sclerites of the non-tipuloid Nematoceros Diptera. *Annals of the Entomological Society of America*, 18, 49–69, pls. 3–7.  
<https://doi.org/10.1093/aesa/18.1.49>
- Curtis, J. (1829) *British Entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland: containing coloured figures from nature of the most rare and beautiful species and in many instances of the plants upon which they are found*. Vol. 6, pls. 242–289. London: Privately published.
- Curtis, J. (1837) *A guide to an arrangement of British insects*. Edition 2, London, 294 pp.
- Czerny, L. & Strobl, G.P. (1909) Spanische Dipteren. III. Beitrage. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien*, 59, 121–301.
- Damian-Georgescu, A. (1972) Nouvelles espèces de Ceratopogonidae (Diptera). *Revue Roumaine de Biologie, Série de Zoologie*, 17, 15–21.
- Das, N., Mazumdar, A. & Chaudhuri, P.K. (2010) Two new biting midges of *Brachypogon* Kieffer (Diptera: Ceratopogonidae) from India. *Polskie Pismo Entomologiczne*, 79, 455–461.
- Das Gupta, S.K. (1962a) Some *Culicoides* of Calcutta and the neighbouring areas. *Science and Culture*, 28, 537–539.
- Das Gupta, S.K. (1962b) *Culicoides* (Dipt., Ceratopogonidae) from suburbs of Calcutta. *Entomologist's Monthly Magazine*, 98, 253–254.
- Das Gupta, S.K. (1963) Report on a collection of Sikkim *Culicoides* (Diptera: Ceratopogonidae). *Proceedings of the Zoological Society (Calcutta)*, 16, 33–43.
- Das Gupta, S.K. & Ghosh, S.M. (1956a) Notes on *Culicoides palpifer*, a new species (Family Ceratopogonidae, Order Diptera). *Bulletin of the Calcutta School of Tropical Medicine and Hygiene*, 4, 122.
- Das Gupta, S.K. & Ghosh, S.M. (1956b) On a new blood-sucking species *Culicoides alatus*, n. sp. (Family Ceratopogonidae, Order Diptera). *Bulletin of the Calcutta School of Tropical Medicine and Hygiene*, 4, 162–163.
- Das Gupta, S.K. & Saha, N.C. (1995) A new genus of biting midges (Diptera: Ceratopogonidae) from India. *Environment and Ecology*, 13, 637–640.

- Das Gupta, S.K. & Sarkar, S. (1982) A taxonomic report on the genus *Camptopterohelea* Wirth and Hubert (Diptera, Ceratopogonidae) from India. *Journal of the Bengal Natural History Society*, 1, 68–78.
- Das Gupta, S.K. & Wirth, W.W. (1968) Revision of the Oriental species *Stilobezzia* Kieffer (Diptera, Ceratopogonidae). *United States National Museum Bulletin*, 283, 1–149.  
<https://doi.org/10.5479/si.03629236.283.1>
- Das Gupta, S.K. & Wirth, W.W. (1971) A new genus of Sphaeromiini (Diptera: Ceratopogonidae) from the Oriental Region. *Pacific Insects*, 12, 875–882.
- Das Gupta, S.K., Chaudhuri, P.K. & Sanyal, P. (1971) A taxonomic study on *Neostilobezzia* species of biting midges (Diptera: Ceratopogonidae) of Darjeeling, West Bengal. *Oriental Insects*, 5, 435–454.  
<https://doi.org/10.1080/00305316.1971.10434025>
- Das Gupta, S.K., Mazumdar, A. & Chaudhuri, P.K. (2009) Biting midges of the genus *Palpomyia* Meigen (Diptera: Ceratopogonidae) in India. *Bonner Zoologische Beiträge*, 56, 43–48. [2007]
- Debenham, M.L. (1970a) Australasian Ceratopogonidae (Diptera, Nematocera). Part XI: The Australian species of *Pellucidomyia* Macfie and a discussion of the male generic characters. *Proceedings of the Linnean Society of New South Wales*, 94, 133–138.
- Debenham, M.L. (1970b) Australasian Ceratopogonidae (Diptera, Nematocera). Part XII: The status of the genus *Heteromyia* Say in the Australian Region. *Proceedings of the Linnean Society of New South Wales*, 94, 139–144.
- Debenham, M.L. (1970c) Australasian Ceratopogonidae (Diptera, Nematocera). Part XIII: Australian and New Guinea species of *Echinohelea* Macfie. *Proceedings of the Linnean Society of New South Wales*, 94, 145–159.
- Debenham, M.L. (1970d) Australasian Ceratopogonidae (Diptera, Nematocera). Part XIV: The genus *Serromyia* Meigen. *Proceedings of the Linnean Society of New South Wales*, 94, 160–165.
- Debenham, M.L. (1971) Australasian Ceratopogonidae (Diptera, Nematocera). Part XV: The genus *Alluaudomyia* Kieffer in Australia and New Guinea. *Proceedings of the Linnean Society of New South Wales*, 96, 128–174.
- Debenham, M.L. (1972) Australian and New Guinea „Picture-wing” species of the genus *Monohelea* Kieffer (Diptera: Ceratopogonidae). *Australian Journal of Zoology, Supplementary Series*, 12, 1–40.  
<https://doi.org/10.1071/AJZS012>
- Debenham, M.L. (1973) Four New Guinea and northern Queensland species of *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) with atypical development of the thoracic setae. *Journal of the Australian Entomological Society*, 12, 68–77.  
<https://doi.org/10.1111/j.1440-6055.1973.tb02155.x>
- Debenham, M.L. (1974) A revision of the Australian and New Guinea predatory Ceratopogonidae (Diptera: Nematocera) of the tribes Heteromyiini and Sphaeromiini. *Australian Journal of Zoology, Supplementary Series*, 28, 1–92.  
<https://doi.org/10.1071/AJZS028>
- Debenham, M.L. (1979) An annotated checklist and bibliography of Australasian Region Ceratopogonidae (Diptera, Nematocera). *School of Public Health and Tropical Medicine, University of Sydney and Commonwealth Department of Health Monograph Series. Entomology Monograph* 1, xiv + 671 pp. (1978).
- Debenham, M.L. (1983) Australasian species of the blood-feeding *Forcipomyia* subgenera, *Lasiohelea* and *Dacnoforcipomyia* (Diptera: Ceratopogonidae). *Australian Journal of Zoology, Supplementary Series*, 95, 1–61.  
<https://doi.org/10.1071/AJZS095>
- Debenham, M.L. (1987a) The biting midge genus *Forcipomyia* (Diptera: Ceratopogonidae) in the Australasian Region (exclusive of New Zealand). I. Introduction, key to subgenera and the *Thyridomyia* and *Trichohelea* groups of subgenera. *Invertebrate Taxonomy*, 1, 35–119.  
<https://doi.org/10.1071/IT9870035>
- Debenham, M.L. (1987b) The biting midge genus *Forcipomyia* (Diptera: Ceratopogonidae) in the Australasian Region (exclusive of New Zealand). II. *Warmkea* and the *Caloforcipomyia* group of subgenera. *Invertebrate Taxonomy*, 1, 167–199.  
<https://doi.org/10.1071/IT9870167>
- Debenham, M.L. (1987c) The biting midge genus *Forcipomyia* (Diptera: Ceratopogonidae) in the Australasian Region (exclusive of New Zealand). III. The subgenera *Forcipomyia*, s.s. and *Lepidohelea*. *Invertebrate Taxonomy*, 1, 269–350.  
<https://doi.org/10.1071/IT9870269>
- Debenham, M.L. (1987d) The biting midge genus *Forcipomyia* (Diptera: Ceratopogonidae) in the Australasian Region (exclusive of New Zealand). IV. The subgenera allied to *Forcipomyia*, s.s. and *Lepidohelea* and the interrelationships and biogeography of the subgenera of *Forcipomyia*. *Invertebrate Taxonomy*, 1, 631–684.  
<https://doi.org/10.1071/IT9870631>
- Debenham, M.L. (1987e) Ceratopogonidae (Diptera) of the Cocos (Keeling) Islands. *Journal of the Australian Entomological Society*, 26, 347–348.  
<https://doi.org/10.1111/j.1440-6055.1987.tb01980.x>
- Debenham, M.L. (1988) *Chimaerohelea*, a new genus of Ceratopogonidae (Diptera) from North Queensland. *Invertebrate Taxonomy*, 1, 801–806 (1987). (May 19, 1988).  
<https://doi.org/10.1071/IT9870801>
- Debenham, M.L. (1989) Family Ceratopogonidae. pp. 226–251. In: Evenhuis, N.L. (ed.), *Catalog of the Diptera of the Australasian and Oceanian Regions*. Bishop Museum Special Publication 86, 1155 pp.
- Debenham, M.L. (1991) Australian and New Guinea species of the biting midge genus *Brachypogon* (Diptera: Ceratopogoni-

- dae). *Invertebrate Taxonomy*, 5, 765–806.  
<https://doi.org/10.1071/IT9910765>
- Debenham, M.L. & Wirth, W.W. (1984) Australian and New Guinea species of the *Forcipomyia* subgenus *Euprojoannisia* (Diptera: Ceratopogonidae). *Australian Journal of Zoology*, 32, 851–889.  
<https://doi.org/10.1071/ZO9840851>
- Delécolle, J.-C. 2002. Ceratopogonidae, pp. 26-33. In: Carles-Tolrá Hjorth-Andersen, M. (coordinator). Catálogo de los Díptera de España, Portugal y Andorra (Insecta). *Monographias S.E.A. Sociedad Entomológica Aragonesa* 8, 1–323.
- Delécolle, J.-C. & Braverman, Y. (1987) Description de *Serromyia mangrovi* n. sp. du Sinai (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 92, 57–65.
- Delécolle, J.-C. & Braverman, Y. (1997) A new species of *Atrichopogon* from Israel (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington*, 18, 101–107.
- Delécolle, J.-C. & Grogan, W.L. (1990) Two new species of the predaceous midge genus *Brachypogon* from Sénégal (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 7, 127–138.
- Delécolle, J.-C. & Ortega, M.D. (1998) Description d'une espèce nouvelle du genre *Culicoides* originaire d'Espagne, apparentée à *C. fagineus* Edwards, 1939 (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 15, 283–290.
- Delécolle, J.-C. & Rieb, J.-P. (1989) Description d'*Alluaudomyia altaloei* n. sp. de Savoie. Mise à jour de la liste des espèces du genre pour la faune française (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 94, 127–135.
- Delécolle, J.-C. & Rieb, J.-P. (1992) Nouvelle contribution à l'étude des Cératopogonidés de Savoie. Description de *Brachypogon (Brachypogon) beaufortanensis* n. sp. (Diptera, Nematocera). *Bulletin de la Société Entomologique de France*, 97, 33–41.
- Delécolle, J.-C. & Rieb, J.-P. (1993) Contribution à l'étude des Cératopogonidés d'Espagne. Description de *Forcipomyia (Thyridomyia) blascoi* n. sp. (Diptera, Nematocera). *Nouvelle Revue d'Entomologie*, 10, 109–120.
- Delécolle, J.-C. & Rieb, J.-P. (1994) Contribution à l'étude des Cératopogonidés de la Guadeloupe. Description de trois espèces nouvelles, appartenant aux genres *Dasyhelea* et *Atrichopogon* (Diptera, Nematocera). *Bulletin de la Société Entomologique de France*, 99, 267–279.
- Delécolle, J.-C. & Rieb, J.-P. (1995) Redescription de *Monohelea estonica* Remm, 1965, de *M. macfieii* Wirth, 1953, et de *M. floridensis* Wirth & Williams, 1964) Description d'une forme et d'une espèce nouvelle affines (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 12, 17–45.
- Delécolle, J.-C. & Schiegg, K. (1999a) Contribution à l'étude des Cératopogonidés de Suisse. II. Description de *Brachypogon (s. str.) fagicola* n. sp. (Diptera, Nematocera). *Bulletin de la Société Entomologique de France*, 104, 31–34.
- Delécolle, J.-C. & Schiegg, K. (1999b) Contribution à l'étude des Cératopogonidés de Suisse. III. Description de trois espèces nouvelles appartenant au genre *Forcipomyia* Meigen (Diptera, Nematocera). *Bulletin de la Société Entomologique de France*, 104, 381–392.
- Delécolle, J.-C., Blasco-Zumeta, J. & Rieb, J.-P. (1997) Nouvelle contribution à l'étude des Cératopogonidés d'Espagne. Description de *Homohelea iberica* n. sp., et redescription de *Palpomyia miki* Goetghebuer, 1934 et de *Culicoides brevifrontis* Smatov & Isimbekov, 1971 (Diptera, Nematocera). *Nouvelle Revue d'Entomologie*, 14, 337–351.
- Delécolle, J.-C., Raccurt, C.P. & Rebholtz, C. (1986) *Culicoides haitiensis* n. sp. et *Culicoides borinqueni* Fox et Hoffman en Haïti. I. Étude morphologique (Diptera, Ceratopogonidae). *Nouvelle Revue d'Entomologie*, 3, 107–115.
- Delécolle, J.-C., Mathieu, B. & Baldet, T. (2005) Nouvelle contribution à l'étude des *Culicoides* de Corse. II. Mise à jour de la liste des espèces, description de *C. riebi* n. sp. et redescription de *C. paradisionensis* Boorman, 1988 (Diptera, Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 110, 69–76.
- Delécolle, J.-C., Paupy, C., Rahola, N. & Mathieu, B. (2013) Description morphologique et moléculaire d'une nouvelle espèce de *Culicoides (Avaritia)* du Gabon (Diptera: Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 118, 513–519.
- Delfinado, M.D. (1961) The Philippine biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae). *Fieldiana Zoology*, 33, 627–675, pls. 8–14.  
<https://doi.org/10.5962/bhl.title.2814>
- Delfinado, M.D. & Hardy, D.E. (1971) Type specimens of Philippine Diptera. *Notulae Entomologicae*, 51, 15–32.
- Delfinado, M.D. & Hardy, D.E. (1973) *A catalog of the Oriental Region*. Volume 1. Suborder Nematocera. University of Hawaii, Honolulu, 618 pp.
- De Meijere, J.C.H. (1906) Diptera. Résultats de l'Expédition Scientifique Néerlandaise à la Nouvelle-Guinée en 1903 sous les auspices de Arthur Wichmann. *Nova Guinea*, 5, 67–99, 1 pl.
- De Meijere, J.C.H. (1907) Studien über Südasiatische Dipteren. I. *Tijdschrift voor Entomologie*, 50, 196–264.
- De Meijere, J.C.H. (1909) Blutsaugende Micro-Dipteren aus Niederländisch Ostindien. *Tijdschrift voor Entomologie*, 52, 191–204.
- De Meijere, J.C.H. (1915) Dipteren aus Nord-Neu-Guinea gesammelt von Dr. P.N. Van Kampen und K. Gjellerup in den Jahren 1910 und 1911. *Tijdschrift voor Entomologie*, 58, 98–139.
- De Meijere, J.C.H. (1923) *Ceratopogon*-Arten als Ectoparasiten anderer Insekten. *Tijdschrift voor Entomologie*, 66, 137–142.
- De Meijere, J.C.H. (1946) Zevende Supplement op de Nieuwe Naamlijst van Nederlandsche Diptera van 1898. (Eerste Supplement op mijne Naamlijst van 1939). *Tijdschrift voor Entomologie*, 87, 1–25.
- De Meillon, B. (1929) Some Ceratopogoninae from the Transvaal. *Transaction of the Entomological Society of London*, 77,

245–249.

<https://doi.org/10.1111/j.1365-2311.1929.tb00689.x>

- De Meillon, B. (1931) A new species of *Forcipomyia* (Diptera, Ceratopogonidae) from the Transvaal, with a description of its early stages. *Transaction of the Entomological Society of London*, 79, 335–340.  
<https://doi.org/10.1111/j.1365-2311.1931.tb00704.x>
- De Meillon, B. (1936) Entomological studies. Studies on insects of medical importance in South Africa - Part III. South African Ceratopogonidae. Part II. Some new and unrecorded species. *Publications of the South African Institute for Medical Research*, 7, 141–207.
- De Meillon, B. (1937a) A new *Jenskinshalea* (Dipt. Ceratopogonidae) from southern Rhodesia. *Annals of the South African Museum*, 32, 261–263.
- De Meillon, B. (1937b) Entomological studies. Studies on insects of medical importance in South Africa and adjacent territories (Part IV). 2. Records and species from South Africa. *Publications of the South African Institute for Medical Research*, 7, 332–385.
- De Meillon, B. (1938) Notes on African Ceratopogonidae (Diptera). *Proceedings of the Royal Entomological Society of London (B)*, 7, 266–270.  
<https://doi.org/10.1111/j.1365-3113.1938.tb01237.x>
- De Meillon, B. (1939a) Notes on Ceratopogonidae (Dipt. Nematocera) from southern Africa. *Journal of the Entomological Society of Southern Africa*, 1, 9–25.
- De Meillon, B. (1939b) Notes on Ceratopogonidae (Diptera Nematocera) from southern Africa - II. *Journal of the Entomological Society of Southern Africa*, 2, 7–17.
- De Meillon, B. (1939c) A new sub-genus of *Ceratopogon*. *Ruwenzori Expedition 1934–5 (British Museum of Natural History)*, 1(5), 103–107.
- De Meillon, B. (1940) Ceratopogonidae (Diptera, Nematocera) from southern Africa. *Transaction of the Royal Entomological Society of London*, 90, 455–466.  
<https://doi.org/10.1111/j.1365-2311.1940.tb01030.x>
- De Meillon, B. (1942a) New Nematocera from the Ethiopian Region. *Journal of the Entomological Society of Southern Africa*, 5, 87–98.
- De Meillon, B. (1942b) Ceratopogonidae (Dipt. Nematocera) from southern Rhodesia. *Transaction of the Rhodesia Scientific Association*, 39, 113–119.
- De Meillon, B. (1942c) *Simuliidae and Ceratopogonidae (Dipt. Nematocera) from the colony of Mocambique*. Estacao Antimalarica de Lourenco Marques, 26 pp., pls. 1–4.
- De Meillon, B. (1943) New records and new species of Nematocera (Diptera) from the Ethiopian Region. *Journal of the Entomological Society of Southern Africa*, 6, 90–113.
- De Meillon, B. (1947) New records and species of biting insects from the Ethiopian Region. II. *Journal of the Entomological Society of Southern Africa*, 10, 110–124.
- De Meillon, B. (1952) A new species of *Culicoides* (Diptera: Ceratopogonidae) from Uganda. *Proceedings of the Royal Entomological Society of London (B)*, 21, 173.  
<https://doi.org/10.1111/j.1365-3113.1952.tb01044.x>
- De Meillon, B. (1959a) Chapter XVII Diptera (Nematocera): Ceratopogonidae. pp. 325–355. In: Hanstrom, B., Brinck, P. & Rudebeck, G. (Eds.), *South African Animal Life*. Vol. 6. Stockholm: Almquist and Wiksell. 553 pp.
- De Meillon, B. (1959b) New Ceratopogonidae (Diptera: Nematocera) from Africa. *Novos Taxa Entomologicos*, 13, 3–24.
- De Meillon, B. (1960) New Ceratopogonidae (Diptera: Nematocera) from the Subsaharan Region. *Journal of the Entomological Society of Southern Africa*, 23, 403–410.
- De Meillon, B. (1961) The Madagascan Ceratopogonidae. *Revista Entomologica Mocambique*, 4, 37–64.
- De Meillon, B. & Downes, J.A. (1986) Subsaharan Ceratopogonidae (Diptera). X. Report on species collected in the Drakensberg, South Africa. *Canadian Entomologist*, 118, 141–180.  
<https://doi.org/10.4039/Ent118141-2>
- De Meillon, B. & Hardy, F. (1953) New records and species of biting insects from the Ethiopian Region - IV. *Journal of the Entomological Society of Southern Africa*, 16, 17–35.
- De Meillon, B. & Hardy, F. (1954) New records and species of biting insects from the Ethiopian Region. V. *Journal of the Entomological Society of Southern Africa*, 17, 62–85.
- De Meillon, B. & Lavoipierre, M. (1944) New records and species of biting insects from the Ethiopian Region. *Journal of the Entomological Society of Southern Africa*, 7, 38–67.
- De Meillon, B. & Wirth, W.W. (1955) A new species of *Ceratopogon* from West Africa (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 57, 275–276.
- De Meillon, B. & Wirth, W.W. (1979a) Subsaharan Ceratopogonidae (Diptera) I. A new South African species of *Mackerrassomyia* Debenham. *Journal of the Entomological Society of Southern Africa*, 42, 181–185.
- De Meillon, B. & Wirth, W.W. (1979b) Subsaharan Ceratopogonidae (Diptera) II. Ceratopogonidae taken on flowers of avocado, *Persea americana*, in South Africa. *Journal of the Entomological Society of Southern Africa*, 42, 187–189.
- De Meillon, B. & Wirth, W.W. (1979c) Subsaharan Ceratopogonidae (Diptera) III. New species and records of the genus *Fanthamia* de Meillon. *Journal of the Entomological Society of Southern Africa*, 42, 191–196.

- De Meillon, B. & Wirth, W.W. (1979d) Sub-Saharan Ceratopogonidae (Diptera) IV. *Rhinohelea*, a new subgenus of *Forcipomyia* from the south-west Cape Province, South Africa. *Annals of the Natal Museum*, 23, 881–886.
- De Meillon, B. & Wirth, W.W. (1979e) A taxonomic review of the subgenus *Phytohelea* of *Forcipomyia* (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 81, 178–206.
- De Meillon, B. & Wirth, W.W. (1980) A new subgenus of *Forcipomyia*, with descriptions of eight new species (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 82, 9–24.
- De Meillon, B. & Wirth, W.W. (1981a) Sub-Saharan Ceratopogonidae (Diptera) V. *Kolenohelea*, a new genus of African Stilobezziini. *Annals of the Natal Museum*, 24, 513–523.
- De Meillon, B. & Wirth, W.W. (1981b) Sub-Saharan Ceratopogonidae (Diptera) VI. New species and records of South African biting midges collected by A.L. Dyce. *Annals of the Natal Museum*, 24, 525–561.
- De Meillon, B. & Wirth, W.W. (1981c) Sub-Saharan Ceratopogonidae (Diptera) VII. The biting midges of the Kruger National Park, South Africa, exclusive of the genus *Culicoides*. *Annals of the Natal Museum*, 24, 563–601.
- De Meillon, B. & Wirth, W.W. (1983a) Sub-Saharan Ceratopogonidae (Diptera) IX. New species and records from southern Africa. *Annals of the Natal Museum*, 25, 347–381.
- De Meillon, B. & Wirth, W.W. (1983b) Sub-Saharan Ceratopogonidae (Diptera) XI. The genus *Serromyia* Meigen. *Annals of the Natal Museum*, 25, 383–402.
- De Meillon, B. & Wirth, W.W. (1987a) Sub-Saharan Ceratopogonidae (Diptera) XII. New species and records, mainly from South Africa. *Journal of the Entomological Society of Southern Africa*, 50, 35–74.
- De Meillon, B. & Wirth, W.W. (1987b) Sub-Saharan Ceratopogonidae (Diptera) XIII. Two new South African genera of the tribe Ceratopogonini. *Journal of the Entomological Society of Southern Africa*, 50, 383–391.
- De Meillon, B. & Wirth, W.W. (1989a) A new pollen feeding *Atrichopogon* midge from Madagascar, with notes on closely related sub-Saharan species (Diptera, Ceratopogonidae). *Revue Française d'Entomologie*, 11, 85–89.
- De Meillon, B. & Wirth, W.W. (1989b) Sub-Saharan Ceratopogonidae (Diptera) XIV. New species and records of *Forcipomyia* and *Dasyhelea*, mainly from Zimbabwe and Transvaal, South Africa. *Journal of the Entomological Society of Southern Africa*, 52, 201–221.
- De Meillon, B. & Wirth, W.W. (1991) The genera and subgenera (excluding *Culicoides*) of the Afrotropical Biting Midges (Diptera: Ceratopogonidae). *Annals of the Natal Museum*, 32, 27–147.
- De Meillon, B., Meiswinkel, R. & Wirth, W.W. (1982) Sub-Saharan Ceratopogonidae (Diptera) VIII. Seven new species from the northern Transvaal. *Journal of the Entomological Society of Southern Africa*, 45, 123–143.
- Deng, C., Zhan, G. & Yu, Y.-X. (1990) Descriptions of *Culicoides zhangmensis* sp. nov. and *Culicoides stupulosus* sp. nov. (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects, (Beijing)*, 2, 35–38. [in Chinese, English summary].
- Deng, C.Y., Liao, Z.-Y., Zhang, Y.-Z., Mo, D.-P. & Yu, Y.-X. (2011) Two new species and a new record of biting midges from Emei Mountain, China (Ceratopogonidae, Diptera). *Acta Parasitologica et Medica Entomologica Sinica*, 18, 115–119. [in Chinese, English summary].
- Dessart, P. (1961) Contribution à l'étude des Ceratopogonidae (Diptera) (II) Revision des *Forcipomyia* Congolais décrits par le Dr. Goetghebuer. *Bulletin et Annales de la Société Royale d'Entomologie de Belgique*, 97, 315–376.
- Dessart, P. (1962) Contribution à l'étude des Ceratopogonidae (Diptera) IV Les *Forcipomyia* pollinisateurs du Cacaoyer (2). *Revue de Zoologie et de Botanique Africaines*, 65, 139–148.
- Dessart, P. (1963) Contribution à l'étude des Ceratopogonidae (Diptera) VI.- Remarques sur quelques espèces du genre *Forcipomyia*. *Bulletin et Annales de la Société Royale d'Entomologie de Belgique*, 99, 182–188.
- Desvars, A., Grimaud, Y., Guis, H., Esnault, O., Allène, X., Gardès, L., Balenghien, T., Baldet, T., Delécolle, J.-C., Garros, C. (2015) First overview of the *Culicoides* Latreille (Diptera: Ceratopogonidae) livestock associated species of Reunion Island, Indian Ocean. *Acta Tropica*, 142, 5–19.  
<https://doi.org/10.1016/j.actatropica.2014.10.018>
- Díaz, F., Felipe-Bauer, M.L. & Spinelli, G.R. (2017) Two new Neotropical species of the *Dasyhelea mutabilis* group (Culicomorpha: Ceratopogonidae). *Papéis Avulsos de Zoologia (São Paulo)*, 57(2), 17–22.  
<https://doi.org/10.11606/0031-1049.2017.57.02>
- Díaz, F., Spinelli, G.R., & Ronderos, M.M. (2009) Biting Midges of the *Dasyhelea cincta* group from Patagonia (Diptera, Ceratopogonidae). *Deutsche Entomologische Zeitschrift*, 56, 149–156.  
<https://doi.org/10.1002/mmnd.200900013>
- Díaz, F., Spinelli, G.R., & Ronderos, M.M. (2010) A revision of the species allied to *Dasyhelea patagonica* Ingram and Macfie (Diptera: Ceratopogonidae). *Journal of Natural History*, 44, 2825–2849.  
<https://doi.org/10.1080/00222933.2010.512424>
- Díaz, F., Spinelli, G.R. & Ronderos, M.M. (2011) Six new species of *Dasyhelea* (Insecta, Diptera, Ceratopogonidae) from Patagonia. *Iheringia Serie Zoologia*, 101, 33–42.  
<https://doi.org/10.1590/S0073-47212011000100004>
- Díaz, F., Ronderos, M.M., Spinelli, G.R., Ferreira-Keppler, R.L. & Torreias, S.R.S. (2013) A new species of *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from Brazilian Amazonia. *Zootaxa*, 3686, 85–93.  
<https://doi.org/10.11646/zootaxa.3686.1.5>
- Díaz, F., Spinelli, G.R., Donato, M. & Ronderos, M.M. (2014a) A taxonomic revision of the Patagonian species of the *Dasyhelea*

- mutabilis* species group with a phylogenetic analysis of New World species (Diptera: Ceratopogonidae). *Journal of Natural History*, 48, 2117–2175.  
<https://doi.org/10.1080/00222933.2014.909062>
- Díaz, F., Torreias, S.R.S., Spinelli, G.R., Donato, M. & Ronderos, M.M. (2014b) A new species of *Dasyhelea* from Brazilian Amazonas and the description of the male of *D. paulistana* (Diptera: Ceratopogonidae). *Acta Entomologica Musei Nationalis Pragae*, 54, 715–728.
- Díaz, F., Spinelli, G.R. & Ronderos, M.M. (2018) Two new species of *Dasyhelea* Kieffer and the immature of *D. azteca* Huerta & Grogan from northwestern Argentina (Diptera: Ceratopogonidae). *Zoologischer Anzeiger*, 272, 6–19.  
<https://doi.org/10.1016/j.jcz.2017.11.008>
- Ding, Z. & Yu, Y.-X. (1990) Descriptions of *Lasiohelea dandongensis* sp. nov. and *Culicoides obscuratus* sp. nov. (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 53–56. [in Chinese, English summary].
- Dippolito, A., Spinelli, G.R. & Wirth, W.W. (1995) A report on a collection of Ceratopogonidae (Diptera) from Rondonia (Brazil) and Iquitos (Peru) 1. Tribes Palpomyiini and Stenoxenini. *Insecta Mundi*, 9, 53–60.
- Dominiak, P. & Alwin, A. (2013) Five new species and new records of biting midges of the genus *Dasyhelea* Kieffer from the Near East (Diptera: Ceratopogonidae). *Zootaxa*, 3683, 133–144.  
<https://doi.org/10.11646/zootaxa.3683.2.3>
- Dominiak, D. & Mathieu, B. (2015) *Serromyia diabolica*, a new biting midge species from Lebanon (Diptera: Ceratopogonidae). *Zootaxa*, 3946, 436–444.  
<https://doi.org/10.11646/zootaxa.3946.3.10>
- Dominiak, P., Alwin, A. & Gilka, W. (2014) New records of predaceous midges from the Middle East, with the description of two new species (Diptera: Ceratopogonidae). *Zootaxa*, 3753, 133–145.  
<https://doi.org/10.11646/zootaxa.3753.2.3>
- Dominiak, P., Pielowska, A. & Sontag, E. (2015) Type specimens of fossil and extant species of dipterans (Insecta: Diptera) in the collection of the Department of Invertebrate Zoology and Parasitology, University of Gdańsk (Poland). *Dipteron*, 31, 7–16.
- Dominiak, P., Szadziwski, R. & Nel, A. (2018) A new species of the haematophagous genus *Austroconops* Wirth & Lee (Diptera: Ceratopogonidae: Leptoconopinae) from middle Cretaceous amber of Charente-Maritime, France. *Cretaceous Research*, 92, 231–239.  
<https://doi.org/10.1016/j.cretres.2018.08.005>
- Dow, M.I. & Turner, E.C. (1976) A revision of the Nearctic species of the genus *Bezzia* (Diptera: Ceratopogonidae). *Occasional Papers from the Department of Entomology, Virginia Polytechnic Institute and State University, Research Division Bulletin*, 103, 162 pp.
- Dow, M.I. & Wirth, W.W. (1972) Studies on the genus *Forcipomyia*, 2. The Nearctic species of the subgenera *Thyridomyia* and *Synthyridomyia* (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America*, 65, 177–201.  
<https://doi.org/10.1093/aesa/65.1.177>
- Downes, J.A. (1955) The food habits and description of *Atrichopogon pollinivorus* sp. n. (Diptera: Ceratopogonidae). *Transactions of the Royal Entomological Society of London*, 106, 439–453.  
<https://doi.org/10.1111/j.1365-2311.1955.tb01264.x>
- Downes, J.A. (1976) A new species of *Brachypogon* (Diptera: Ceratopogonidae), the first record of the genus in Canada. *Canadian Entomologist*, 108, 1145–1151.  
<https://doi.org/10.4039/Ent1081145-11>
- Downes, J.A. (1978) Feeding and mating in the insectivorous Ceratopogoninae (Diptera). *Memoirs of the Entomological Society of Canada*, 104, 62 pp.  
<https://doi.org/10.4039/entm110104fv>
- Downes, J.A. & Kettle, D.S. (1952) Descriptions of three species of *Culicoides* Latreille (Diptera: Ceratopogonidae) new to science, together with notes on and a revised key to the British species of the *pulicaris* and *obsoletus* groups. *Proceedings of the Royal Entomological Society of London (B)*, 21, 61–78.  
<https://doi.org/10.1111/j.1365-3113.1952.tb01053.x>
- Duan, C., X.H. Jiang, X.J. Han & Hou, X.H. (2019) Description of a new species of *Forcipomyia* (*Forcipomyia*) (Diptera: Ceratopogonidae) and a key to species of the subgenus from the Chinese mainland. *Journal of Medical Entomology*, 56, 1614–1622.  
<https://doi.org/10.1093/jme/tjz108>
- Duret, J.P. & Lane, J. (1955) Novas *Heteromyia* da Argentina (Diptera. Ceratopogonidae). *Dusenya* 6, 35–40.
- Dyce, A.L. (1996) *Culicoides paragarcai*, a new *ornatus* group species from Papua New Guinea and the Solomon Islands (Diptera: Ceratopogonidae). *Australian Journal of Entomology*, 35, 313–318.  
<https://doi.org/10.1111/j.1440-6055.1996.tb01410.x>
- Dyce, A.L. & Meiswinkel, R. (1995) *Tokunagahelea*, a new subgenus of *Culicoides* Latreille (Diptera: Ceratopogonidae) from the Australasian Region with descriptions of two new species. *Invertebrate Taxonomy*, 9, 129–147.  
<https://doi.org/10.1071/IT9950129>
- Dyce, A.L. & Wirth, W.W. (1997) The *Purus* group, a newly recognised natural species-group in the genus *Culicoides* (Diptera: Ceratopogonidae), including species from Australia, New Guinea and Sulawesi. *Invertebrate Taxonomy*, 11, 575–598.

<https://doi.org/10.1071/IT96009>

- Dzhafarov, S.M. (1958) New species of biting flies (Diptera, Heleidae) from Nakhichevanskoi ASSR. *Doklady Akademii Nauk Azerbaidzhanskoi SSR*, 14, 245–248. [in Russian].
- Dzhafarov, S.M. (1959) *Culicoides flavidus*, a new species of the genus *Culicoides* Kieff. (Diptera, Heleidae) from Transcaucasia. *Entomologicheskoe Obozrenie*, 38, 470–471. [in Russian, English summary]. English translation in *Entomological Review*, 38, 421–422.
- Dzhafarov, S.M. (1960a) Fauna of bloodsucking Heleidae (Diptera) of bottomland forest in the Kura Plain, in Azerbaidjan. *Zoologicheskyy Zhurnal*, 39, 1180–1185. [in Russian, English summary].
- Dzhafarov, S.M. (1960b) Materials for the fauna of biting flies (Diptera, Heleidae) of Armenia with description of a new species. *Izvestiia Akademiia Nauk Armyan SSR*, 13, 93–98. [in Russian]
- Dzhafarov, S.M. (1961a) Contribution to the systematics of bloodsucking flies of the genus *Leptoconops* Skuse in Transcaucasia and descriptions of new species. *Izvestiia Akademiia Nauk Azerbaidzhanskoi SSR, Seriya Biologicheskikh i Meditsinskikh Nauk*, 1961 (1), 67–76. [in Russian].
- Dzhafarov, S.M. (1961b) Fauna of bloodsucking Heleidae of the genus *Culicoides* Latr. of the Alazan Valley in Azerbaijan. *Izvestiia Akademiia Nauk Azerbaidzhanskoi SSR, Seriya Biologicheskikh i Meditsinskikh Nauk*, 1961 (2), 73–76. [in Russian].
- Dzhafarov, S.M. (1961c) Description of three species of Heleidae from Asia Minor. *Izvestiia Akademiia Nauk Azerbaidzhanskoi SSR, Seriya Biologicheskikh i Meditsinskikh Nauk*, 1961(10), 75–80. [in Russian].
- Dzhafarov, S.M. (1962a) New species of bloodsucking midges (Diptera, Heleidae) from the valley of the Kura River, Transcaucasus. *Entomologicheskoe Obozrenie*, 41, 206–219. [in Russian]. Translation in *Entomological Review*, 41, 121–131.
- Dzhafarov, S.M. (1962b) Biting midges (Diptera, Heleidae) from the northeast part of Azerbaidzhan. *Entomologicheskii Sbornik. Baku: Izdatel'stvo Akademii Nauk Azerbaidzhanskoi SSR*, 1, 183–192. [in Russian].
- Dzhafarov, S.M. (1962c) A new species of Heleidae of the genus *Lasiohelea* Kieff. (Diptera) from Azerbaidzhan. *Entomologicheskii Sbornik. Baku: Izdatel'stvo Akademii Nauk Azerbaidzhanskoi SSR*, 1, 193–200. [in Russian].
- Dzhafarov, S.M. (1962d) Morphology of preimaginal phases of *Leptoconops bezzii muganicus* Dzhaf. of blood sucking sandflies (Diptera, Heleidae). *Zoologicheskyy Zhurnal*, 41, 241–246. [in Russian, English summary].
- Dzhafarov, S.M. (1963) New species of biting midges (Diptera, Heleidae) from the eastern region of Georgia (USSR). *Doklady Akademii Nauk Azerbaidzhanskoi SSR*, 19, 53–55. [in Russian].
- Dzhafarov, S.M. (1964) *Blood-sucking midges (Diptera, Heleidae) of the Transcaucasus*. Akademiya Nauk Azerbaidzhanskoi SSR, Instituta Zoologicheskiiy, 414 pp.
- Edwards, F.W. (1916) Two new Australian Diptera. *Annals and Magazine of Natural History Ser. 8*, 18, 498–502.  
<https://doi.org/10.1080/00222931609486907>
- Edwards, F.W. (1921) Diptera Nematocera from Arran and Loch Etive. *Scottish Naturalist*, 1921, 59–61, 89–92, 121–125.
- Edwards, F.W. (1922) On some Malayan and other species of *Culicoides*, with a note on the genus *Lasiohelea*. *Bulletin of Entomological Research*, 13, 161–167.  
<https://doi.org/10.1017/S0007485300028030>
- Edwards, F.W. (1923a) New and little-known [sic] nematoceros Diptera from Java. *Treubia*, 3, 180–183.
- Edwards, F.W. (1923b) New and old observations on Ceratopogonine midges attacking other insects. *Annals of Tropical Medicine and Parasitology*, 17, 19–29.  
<https://doi.org/10.1080/00034983.1923.11684346>
- Edwards, F.W. (1924) II. Chironomidae. *Records of the Indian Museum*, 26, 107–108.
- Edwards, F.W. (1926a) On the British biting midges (Diptera, Ceratopogonidae). *Transactions of the Entomological Society of London*, 74, 389–426, 2 pls.  
<https://doi.org/10.1111/j.1365-2311.1926.tb02249.x>
- Edwards, F.W. (1926b) Diptera Nematocera from the mountains of Borneo. *Sarawak Museum Journal*, 3, 243–278, pls. 9–10.
- Edwards, F.W. (1928) Nematocera. In: *Insects of Samoa and other Samoan terrestrial Arthropoda*. Part VI. Diptera. Fascicle 2. British Museum (Natural History), London, pp. 23–102.
- Edwards, F.W. (1929a) British non-biting midges (Diptera, Chironomidae). *Transactions of the Royal Entomological Society*, 77, 279–430.  
<https://doi.org/10.1111/j.1365-2311.1929.tb00692.x>
- Edwards, F.W. (1929b) Philippine nematoceros Diptera II. *Notulae Entomologicae*, 9, 1–14.
- Edwards, F.W. (1932a) Some Chironomidae (Diptera) from Barkuda Island, Chilka Lake. *Records of the Indian Museum*, 34, 177–183.
- Edwards, F.W. (1932b) Notes on Highland Diptera, with descriptions of six new species. *Scottish Naturalist*, 194, 43–52.
- Edwards, F.W. (1933a) Some Perthshire Diptera. *Scottish Naturalist*, 201, 87–92.
- Edwards, F.W. (1933b) Die Ausbeute der deutschen Chaco-Expedition 1925/26. Diptera (Fortsetzung) XXXIX–XLI. Cecidomyiidae, Chironomidae, Ceratopogonidae. *Konowia*, 12, 86–88.
- Edwards, F.W. (1933c) XX. Diptera Nematocera from Mount Kinabalu. *Journal of the Federated Malay States Museums*, 17, 223–296.
- Edwards, F.W., Oldroyd, H. & Smart, J. (1939) *British blood-sucking flies*. London: British Museum, viii + 156 pp., 45 pls.
- Egger, J. (1863) Dipterologische Beiträge. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in*



Wien, 13, 1101–1110.

- Ekrem, T., Willassen, E. & Stur, E. (2007) A comprehensive DNA sequence library is essential for identification with DNA barcodes. *Molecular Phylogenetics and Evolution*, 43, 530–542.  
<https://doi.org/10.1016/j.ympev.2006.11.021>
- Ekrem, T., Willassen, E. & Stur, E. (2010) Phylogenetic utility of five genes for dipteran phylogeny: A test case in the Chironomidae leads to generic synonymies. *Molecular Phylogenetics and Evolution*, 57, 561–571.  
<https://doi.org/10.1016/j.ympev.2010.06.006>
- Elson-Harris, M.M. & Kettle, D.S. (1985) A new species of *Paradasyhelea* Macfie (Diptera: Ceratopogonidae), with descriptions and keys to the immature stages of Australian *Paradasyhelea*. *Journal of the Australian Entomological Society*, 24, 233–240.  
<https://doi.org/10.1111/j.1440-6055.1985.tb00235.x>
- Enderlein, G. (1908) Neue Ceratopogoninen aus Südafrika. *Denkschriften der medizinisch-naturwissenschaftlichen Gesellschaft zu Jena*, 13, 459–461.
- Enderlein, G. (1912) *Paryphoconus*, eine neue Chironomiden-gattung aus Brasilien. *Stettiner entomologische Zeitung*, 73, 57–60.
- Enderlein, G. (1936) Ordnung: Zweiflügler, Diptera. Abt. 16, 259 pp. In: Brohmer, P., Ehrmann, P. & Ulmer, G. (Eds.), *Die Tierwelt Mitteleuropas 6: Insekten III Teil*. Leipzig.
- Esaki, T. (1939) Injurious arthropoda to man in mandated South Sea Islands of Japan (first report) [in Japanese]. In: *Volumen Jubilare pro Prof. Sadao Yoshida*, Osaka Natural History Society, 1939, 1, pp. 230–252.
- Evenhuis, N.L. (ed.) (1989) *Catalog of the Diptera of the Australasian and Oceanian Regions*. Bishop Museum Press, Honolulu & E.J. Brill, Leiden, 1155 pp.  
<https://doi.org/10.5962/bhl.title.49897>
- Evenhuis, N.L. (1994) *Catalogue of the fossil flies of the world (Insecta: Diptera)*. Leiden, The Netherlands: Backhuys Publishers, 600 pp.
- Evenhuis, N.L. & Pape, T. (2017) Battling the un-dead: the status of the Diptera genus-group names originally proposed in Johann Wilhelm Meigen's 1800 pamphlet. *Zootaxa*, 4275 (1), 1–74.  
<https://doi.org/10.11646/zootaxa.4275.1.1>
- Evenhuis, N.L. & Pont, A.C. (2004) The Diptera genera of Jacques-Marie-Frangile Bigot. *Zootaxa*, 751, 1–94.  
<https://doi.org/10.11646/zootaxa.751.1.1>
- Ewen, A.B. & Saunders, L.G. (1958) Contributions toward a revision of the genus *Atrichopogon* based on characters of all stages (Diptera, Heleidae). *Canadian Journal of Zoology*, 36, 671–724.  
<https://doi.org/10.1139/z58-061>
- Fabricius, J.C. (1775) *Systema entomologiae, sistens insectorum classes, ordines, genera, species adiectis synonymis, locis, descriptionibus, observationibus*. Flensburgi et Lipsiae [= Flensburg and Leipzig], 832 pp.  
<https://doi.org/10.5962/bhl.title.36510>
- Farias E.S., Pereira Júnior, A.M., Felipe-Bauer, M.L., Pessoa, F.A.C., Medeiros, J.F. & Santarém, M.C.A. (2016) *Culicoides hildebrandoi*, a new species of the reticulatus species group from the Brazilian Amazon Region (Diptera, Ceratopogonidae). *ZooKeys*, 571, 105–111.  
<https://doi.org/10.3897/zookeys.571.7341>
- Fei, S.-H. (1982) A new species of *Culicoides* from Liaoning Province (Diptera: Ceratopogonidae). *Zoological Research*, 3, 105–106. [in Chinese, English summary].
- Fei, S.-H. & Lee, T.-S. (1984a) A new species of *Culicoides* from Qinghai Province, China. *Acta Zootaxonomica Sinica*, 9, 182–183. [in Chinese, English summary].
- Fei, S.-H. & Lee, T.-S. (1984b) Description of a new species of *Culicoides* from China (Diptera: Ceratopogonidae). *Acta Entomologica Sinica*, 27, 345–347. [in Chinese, English summary].
- Felipe-Bauer, M.L. (1987) A new Neotropical *Culicoides* from Minas Gerais (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 82, 147–148.  
<https://doi.org/10.1590/S0074-02761987000100026>
- Felipe-Bauer, M.L. (2018) Two new species of *Atrichopogon* Kieffer from Acre State, Brazil (Diptera: Ceratopogonidae). *Zootaxa*, 4532, 257–265.  
<https://doi.org/10.11646/zootaxa.4532.2.5>
- Felipe-Bauer, M.L. & Lourenco-de-Oliveira, R. (1987) A new Neotropical biting midge of the *Culicoides debilipalpis* group (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 82, 149–150.  
<https://doi.org/10.1590/S0074-02761987000100027>
- Felipe-Bauer, M.L. & Quintelas, A.R. (1993a) Two new Brazilian predaceous midges of the genus *Downshelea* Wirth and Grogan (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 88, 33–38.  
<https://doi.org/10.1590/S0074-02761993000100007>
- Felipe-Bauer, M.L. & Quintelas, A.R. (1993b) *Downshelea bicornis*, a new Neotropical predaceous midge from Brazil (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 88, 185–187.  
<https://doi.org/10.1590/S0074-02761993000200002>
- Felipe-Bauer, M.L. & Quintelas, A.R. (1994) *Culicoides lobatoi*, a new Brazilian biting midge of the *Limai* group (Diptera:

- Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 89, 25–27.  
<https://doi.org/10.1590/S0074-02761994000100005>
- Felippe-Bauer, M.L. & Silva, C.S. (2008) *Downshela* (sic) *oliveirai*, a new neotropical predaceous midge from northern Brazil (Diptera: Ceratopogonidae). *Iheringia, série Zoológica*, 98, 400–403.  
<https://doi.org/10.1590/S0073-47212008000300016>
- Felippe-Bauer, M.L. & Spinelli, G.R. (1991) New Brazilian predaceous midges of the genus *Monohelea* Kieffer and redescription of *M. guaimiesi* (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 86, 201–207.  
<https://doi.org/10.1590/S0074-02761991000200009>
- Felippe-Bauer, M.L. & Spinelli, G.R. (1994) Two new Neotropical species of *Monohelea* Kieffer and *Downshelea* Wirth & Grogan (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 89, 161–165.  
<https://doi.org/10.1590/S0074-02761994000200007>
- Felippe-Bauer, M.L. & Spinelli, G.R. (1998) A new Neotropical species of *Monohelea* Kieffer from Uruguay (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 93, 63–64.  
<https://doi.org/10.1590/S0074-02761998000100012>
- Felippe-Bauer, M.L. & Spinelli, G.R. (2015) New species and new records of the predaceous midge genus *Parabezzia* Malloch (Diptera: Ceratopogonidae) from Brazil. *Zootaxa*, 3915, 390–402.  
<https://doi.org/10.11646/zootaxa.3915.3.4>
- Felippe-Bauer, M.L. & Wirth, W.W. (1987) A new *Culicoides* of the *Stigmalis* group (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 82, 415–419.  
<https://doi.org/10.1590/S0074-02761987000100026>
- Felippe-Bauer, M.L. & Wirth, W.W. (1988) *Culicoides tavaresi*, a new species from the state of Rio de Janeiro, Brazil (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 83, 261–263.  
<https://doi.org/10.1590/S0074-02761988000200019>
- Felippe-Bauer, M.L., Quintelas, A.R. & Spinelli, G.R. (1995) A new Neotropical predaceous midge, *Downshelea deani* and redescription of *Downshelea guianae* (Wirth) (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 90, 395–399.  
<https://doi.org/10.1590/S0074-02761995000300015>
- Felippe-Bauer, M.L., Veras, R.S., Castellon, E.G. & Moreira, N.A. (2000a) A new *Culicoides* from the Amazonian Region, Brazil (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 95, 35–37.  
<https://doi.org/10.1590/S0074-02762000000100004>
- Felippe-Bauer, M.L., Huerta, H. & Ibañez Bernal, S. (2000b) A new species of predaceous midge of the genus *Monohelea* Kieffer from Mexico (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 95, 815–818.  
<https://doi.org/10.1590/S0074-02762000000600011>
- Felippe-Bauer, M.L., Cáceres, A.G., Silva, C.S., Valderrama-Bazan, W. & Gonzales-Perez, A. (2003) Two new *Culicoides* of the *paraensis* species group (Diptera: Ceratopogonidae) from the Amazonian region of Peru. *Memórias do Instituto Oswaldo Cruz*, 98, 1051–1058.  
<https://doi.org/10.1590/S0074-02762003000800014>
- Felippe-Bauer, M.L., Cáceres, A.G., Silva, C.S., Valderrama-Bazan, W. & Gonzales-Perez, A. (2005) A new *Culicoides* (Diptera: Ceratopogonidae) of the subgenus *Diphaomyia* from Peru. *Memórias do Instituto Oswaldo Cruz*, 100, 51–53.  
<https://doi.org/10.1590/S0074-02762005000100010>
- Felippe-Bauer, M.L., Cáceres, A.G., Silva, C.S., Valderrama-Bazan, W., Gonzales-Perez, A. & Costa, J.M. (2008a) Description of *Culicoides pseudoheliconiae* sp. n. from Peruvian Amazon and revalidation of *Culicoides contubernalis* Ortiz & Leon (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 103, 259–262.  
<https://doi.org/10.1590/S0074-02762008005000010>
- Felippe-Bauer, M.L., Cáceres, A.G., Silva, C.S., Valderrama-Bazan, W., Gonzales-Perez, A. & Costa, J.M. (2008b) *Culicoides huaynacapaci*, a new species from Department of Cajamarca, Peru (Diptera, Ceratopogonidae). *Iheringia, série Zoológica*, 98, 308–310.  
<https://doi.org/10.1590/S0073-47212008000300003>
- Felippe-Bauer, M.L., Damasceno, C.P., Py-Daniel, V. & Spinelli, G.R. (2009) *Culicoides baniwa* sp. nov. from the Brazilian Amazon Region with a synopsis of the *hylas* species group (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 104, 851–857.  
<https://doi.org/10.1590/S0074-02762009000600005>
- Felippe-Bauer, M.L., Damasceno, C.P., Lopes da Trindade, R. & Py-Daniel, V. (2010) A new *Culicoides* (Diptera: Ceratopogonidae) of the *Reticulatus* species group from Brazilian Amazon Region. *Memórias do Instituto Oswaldo Cruz*, 105, 863–865.  
<https://doi.org/10.1590/S0074-02762010000700004>
- Felippe-Bauer, M.L., da Silva, T.N., Ribeiro, E.S. & Borkent, A. (2011) A new species of *Downshelea* Wirth & Grogan and a redescription of the male of *Downshelea cebacoi* (Lane & Wirth) (Diptera: Ceratopogonidae). *Zootaxa*, 2780, 20–28.  
<https://doi.org/10.11646/zootaxa.2780.1.2>
- Felippe-Bauer, M.L., da Silva, T.N. & Alves, J.R.C. (2012) Two new species of *Atrichopogon* Kieffer from Rio de Janeiro, Brazil (Diptera: Ceratopogonidae). *Zootaxa*, 3566, 39–50.

- Felippe-Bauer, M.L., da Silva, T.N. & Trindade, R.L. (2013) New *Culicoides* Latreille of the subgenus *Mataemyia* Vargas from Pará, Brazil (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz*, 108, 54–58.  
<https://doi.org/10.1590/S0074-02762013000100009>
- Felippe-Bauer, M.L., Cardoso, E.A. & Da Trindade, R.L. (2017) New species and new records of *Monohelea* Kieffer from eastern Amazon, Brazil (Diptera: Ceratopogonidae). *Zootaxa*, 4358, 142–160.  
<https://doi.org/10.11646/zootaxa.4358.1.6>
- Feng, Y., Liu, G.-P., Yang, W.-H., Zhang, J. & Liang, G.-D. (2018) Fauna and a new species of hematophagous midges (Diptera Ceratopogonidae) in China-Burma border [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 29, 628–630.
- Fiebrig-Gertz, C. (1928) Un Diptere ectoparasite sur un Phasme: *Ceratopogon ixodoides* n. sp. *Annales de Parasitologie Humaine et Comparée*, 6, 284–290.  
<https://doi.org/10.1051/parasite/1928063284>
- Fiedler, O.G.H. (1951) The South African biting midges of the genus *Culicoides* (Ceratopogonid., Dipt.). *Onderstepoort Journal of Veterinary Research*, 25(2), 3–33.
- Floch, H. & Abonnenc, E. (1942a) Cératopogonides hématophages de la Guyane Française. *Publication de l'Institut Pasteur de la Guyane et du Territory de L'Inini*, 37, 1–10.
- Floch, H. & Abonnenc, E. (1942b) Cératopogonidés hématophages de la Guyane Française - II. *Publication de l'Institut Pasteur de la Guyane et du Territory de L'Inini*, 49, 1–5.
- Floch, H. & Abonnenc, E. (1949) Sur les Cératopogonidés du Venezuela Description de deux especes nouvelles: *Culicoides lichyi* et *Lasiohelea danaisi*. *Publication de l'Institut Pasteur de la Guyane et du Territory de L'Inini*, 196, 1–5.
- Floch, H. & Abonnenc, E. (1950a) Ceratopogonides nouveaux du Venezuela *Culicoides lichyi* et *Lasiohelea danaisi* n. sp. *Boletim de Entomologia Venezuelana*, 8, 69–75 (1949).
- Floch, H. & Abonnenc, E. (1950b) Les *Culicoides* de la Guadeloupe. Description de *Culicoides guadeloupensis* n. sp. *Publication de l'Institut Pasteur de la Guyane et du Territory de L'Inini*, 203, 1–5.
- Foote, R.H. & Pratt, H.D. (1954) *The Culicoides of the eastern United States (Diptera, Heleidae)*. United States Department of Health, Education and Welfare, Public Health Monograph 18, 53 pp.
- Forattini, O.P. (1954a) Nova espécie de *Culicoides* (Diptera, Ceratopogonidae) do Brasil Central. *Arquivos da Faculdade de Higiene e Saúde Pública da Universidade de São Paulo*, 8, 189–192.  
<https://doi.org/10.11606/issn.2358-792X.v8i2p189-192>
- Forattini, O.P. (1954b) Nova espécie de *Culicoides* (Diptera, Ceratopogonidae) do estado de Goiaz, Brasil. *Folia Clinica et Biologica*, 21, 315–320.
- Forattini, O.P. (1956a) Nova espécie de *Culicoides* (Diptera, Ceratopogonidae) de Sao Vicente, estado de Sao Paulo, Brasil. *Arquivos da Faculdade de Higiene e Saúde Pública da Universidade de Sao Paulo*, 10, 81–84.  
<https://doi.org/10.11606/issn.2358-792X.v10i1-2p81-84>
- Forattini, O.P. (1956b) A new *Culicoides* from Panama (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 58, 35–36.
- Forattini, O.P. (1957) *Culicoides* da Regiao Neotropical (Diptera, Ceratopogonidae). *Arquivos da Faculdade de Higiene e Saúde Pública da Universidade de São Paulo*, 11, 159–526.  
<https://doi.org/10.11606/issn.2358-792X.v11i2p161-526>
- Forattini, O.P. (1958) Nova espécie de *Leptoconops* s. str. da regioa neotropical (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 8, 37–41.
- Forattini, O.P. & Lane, J. (1955) Sobre uma *Forcipomyia* que suga Phasmidæ (Diptera, Nematocera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 4, 1–6.
- Forattini, O.P. & Rabello, E.X. (1957) Dados sobre *Dasyhelea* Kieffer, 1911 do Brasil (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 7, 241–250.
- Forattini, O.P., Rabello, E.X. & Cotrim, M.D. (1971) Catálogo das coleções entomológicas da Faculdade de Saúde Pública da Universidade de São Paulo (1. Série). Ceratopogonidae, Psychodidae, Simuliidae. *Revista de Saúde Pública, São Paulo*, 5, 301–366.  
<https://doi.org/10.1590/S0034-89101971000200013>
- Fox, I. (1946a) A review of the species of biting midges or *Culicoides* from the Caribbean Region (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America*, 39, 248–258.  
<https://doi.org/10.1093/aesa/39.2.248>
- Fox, I. (1946b) Two new biting midges or *Culicoides* from western United States (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 48, 244–246.
- Fox, I. (1947) Two new Central American biting midges or *Culicoides* (Diptera: Ceratopogonidae). *Kuba*, 3, 90–91. (June).
- Fox, I. (1948) *Hoffmania*, a new subgenus in *Culicoides* (Diptera: Ceratopogonidae). *Proceedings of the Biological Society of Washington*, 61, 21–28.
- Fox, I. (1952) Six new Neotropical species of *Culicoides* (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America*, 45, 364–368.  
<https://doi.org/10.1093/aesa/45.3.364>
- Fox, I. (1955) A catalogue of the bloodsucking midges of the Americas (*Culicoides*, *Leptoconops* and *Lasiohelea*) with keys to

- the subgenera and Nearctic species, a geographic index and bibliography. *Journal of Agriculture of the University of Puerto Rico*, 39, 214–285.
- Fox, I. & Hoffman, W.A. (1944) New Neotropical biting sand flies of the genus *Culicoides* (Diptera: Ceratopogonidae). *Puerto Rico Journal of Public Health and Tropical Medicine*, 20, 108–111.
- Falaschi, R.L., Albertoni, F.F. & Fusari, L.M. (2014) A new species of *Forcipomyia* (*Microhelea*) Meigen (Insecta: Diptera: Ceratopogonidae) from the Neotropical Region. *Zootaxa*, 3878, 379–389.  
<https://doi.org/10.11646/zootaxa.3878.4.4>
- Fürst von Lieven, A. von. (1998) Functional morphology and phylogeny of the larval feeding apparatus in the Dasyheleinae and Forcipomyiinae (Diptera, Ceratopogonidae). *Deutsche Entomologische Zeitschrift*, 45, 49–64.  
<https://doi.org/10.1002/mmnd.19980450107>
- Gaddi, A.L., Spinelli, G.R. & Grogan, W.L. (2011) Two new species of the predaceous midge genus *Amerohelea* Grogan and Wirth from Argentina (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 113, 299–308.  
<https://doi.org/10.4289/0013-8797.113.3.299>
- Gangopadhyay, D. & Das Gupta, S.K. (2000) Glimpses of the biodiversity of *Culicoides* insects (Diptera: Ceratopogonidae) in India. In: Aditya, A.K. & Haldar, P. (Eds.), *Proceedings of the National Seminar on Environmental Biology*, April 3–5, 1998, pp. 123–132.
- Garrett, C.B.D. (1925) *Seventy new Diptera*. Cranbrook, British Columbia, 16 pp.
- Garros, C., Balenghien, T., Carpenter, S., Delécolle, J.C., Meiswinkel, R., Pédarrieu, A., Rakotoarivony, I., Gardes, L., Golding, N., Barber, J., Miranda, M., Borrás, D.B., Goffredo, M., Monaco, F., Pages, N., Sghaier, S., Hammami, S., Calvo, J.H., Lucientes, J., Geysen, D., De Deken, G., Monteys, V.S.I., Schwenkenbecher, J., Kampen, H., Hoffmann, B., Lehmann, K., Werner, D., Baldet, T., Lancelot, R. & Cetre-Sossah, C. (2014) Towards the PCR-based identification of Palaearctic *Culicoides* biting midges (Diptera: Ceratopogonidae): results from an international ring trial targeting four species of the subgenus *Avaritia*. *Parasites & Vectors*, 7 (1) article 223, 9 pp.  
<https://doi.org/10.1186/1756-3305-7-223>
- Gerry, B.I. (1933) Four new species of Chironomidae from the Greater Antilles. *Psyche*, 40, 94–97.  
<https://doi.org/10.1155/1933/13837>
- Ghonaim, M.F., Ibrahim, A.A. & Ali, A. (2001) A review of the genus *Forcipomyia* (Diptera: Ceratopogonidae) from Egypt with description of a new species. *Oriental Insects*, 35, 39–47.  
<https://doi.org/10.1080/00305316.2001.10417282>
- Ghosh, S., Majumdar, U., Mazumdar, A. & Chaudhuri, P.K. (2009) Biting flies of the genus *Homohhelea* of India (Diptera: Ceratopogonidae). *Folia Heyrovskyana (series A)*, 16, 91–106. (2008)
- Giebel, C.G. (1856) *Fauna der Vorwelt, mit steter Berücksichtigung der lebenden Thiere*. Monographisch dargestellt. Leipzig: F.A. Brockhaus. Zweiter Band: Gliederthiere. Erste Abtheilung. Insekten und Spinnen, 511 pp.
- Giles, F.E. & Wirth, W.W. (1982a) Three new species of *Serromyia* (Diptera: Ceratopogonidae) from Sri Lanka, with new records and a key to the Oriental and Australasian species. *Proceedings of the Entomological Society of Washington*, 84, 440–447.
- Giles, F.E. & Wirth, W.W. (1982b) New species and new collection records of Ceratopogonidae (Diptera) from Sri Lanka. *Proceedings of the Entomological Society of Washington*, 84, 822–827.
- Giles, F.E. & Wirth, W.W. (1983) Two new species of biting midges and new collection records of the genus *Culicoides* (Diptera: Ceratopogonidae) from Sri Lanka. *Proceedings of the Entomological Society of Washington*, 85, 36–40.
- Giles, F.E. & Wirth, W.W. (1984) Two new species of Oriental biting midges (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 86, 210–213.
- Giles, F.E. & Wirth, W.W. (1985) A new genus and species of biting midges (Diptera: Ceratopogonidae) and a new species of *Culicoides* from Malaysia. *International Journal of Entomology*, 27, 364–368.
- Giles, F.E. & Wirth, W.W. (1987) New species and records of New Caledonia *Alluaudomyia* (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 89, 458–467.
- Giles, F.E., Wirth, W.W. & Messersmith, D.H. (1981) Two new species of biting midges and a check list of the genus *Culicoides* (Diptera: Ceratopogonidae) from Sri Lanka. *Proceedings of the Entomological Society of Washington*, 83, 537–543.
- Gimmerthal, B.A. (1846) Acht neue, von Herrn Pastor Kawall in Kurland aufgefundene Dipteren-Arten. *Correspondenzblatt des Naturforschenden Vereins zu Riga*, 1, 102–106.
- Gimmerthal, B.A. (1847) Vierter Beitrag zur Dipterologie Russlands. *Bulletin de la Société des Naturalistes de Moscou*, 20, 142–151.
- Glick, J.I. (1990) *Culicoides* biting midges (Diptera: Ceratopogonidae) of Kenya. *Journal of Medical Entomology*, 27, 85–195.  
<https://doi.org/10.1093/jmedent/27.2.85>
- Glick, J.I. & Mullen, G.R. (1982) A new species of biting midge of the genus *Alluaudomyia* Kieffer (Diptera: Ceratopogonidae) from the southeastern United States. *Proceedings of the Entomological Society of Washington*, 84, 539–546.
- Glick, J.I. & Mullen, G.R. (1983) Two new species of *Culicoides* of the *piliferus* group (Diptera: Ceratopogonidae) from the eastern United States. *Proceedings of the Entomological Society of Washington*, 85, 377–383.
- Glukhova, V.M. (1957) Contribution to the fauna of *Culicoides* Latr. (Diptera, Heleidae) in Karelia. *Entomologischeskoe Oboz-*

- renie, 36, 248–251. [in Russian, English summary].
- Glukhova, V.M. (1971) On interspecific relations, variability and specific composition of bloodsucking midges of the *nubeculosus* group of the genus *Culicoides* (Diptera, Ceratopogonidae). *Parazitologiya*, 5, 499–511. [in Russian, English summary].
- Glukhova, V.M. (1972) On the subgeneric classification of the genus *Culicoides* (Ceratopogonidae) including the morphological characters of the preimaginal stage and the separation of new subgenera. *Trudy VII Nauchnoi Konferentsii URNOP (Ukrainskoe Respublikanskoe Nauchnoe Obshchestvo Parasitologov)*, Part 1, 212–215. [in Russian]
- Glukhova, V.M. (1973) The new species of biting midges of the genus *Culicoides* (Diptera, Ceratopogonidae) from Central Tien Shan. *Parazitologiya*, 7, 111–115. [in Russian, English summary].
- Glukhova, V.M. (1977) The subgeneric classification of the genus *Culicoides* Latreille, 1809 (Diptera, Ceratopogonidae), with a consideration of the structure of the larval phase. *Parazitologicheskii Sbornik*, 27, 112–118. [in Russian].
- Glukhova, V.M. (1979) Descriptions of new species of Ceratopogonidae (Diptera). *Entomologicheskoe Obozrenie*, 58, 161–171. [in Russian, English summary]. English translation in *Entomological Review*, 58(1), 93–99.
- Glukhova, V.M. (1989) *Blood-sucking midges of the genera Culicoides and Forcipomyia (Ceratopogonidae)*. Fauna of the USSR 139, Vol. 3(5a): 408 pp. [in Russian].
- Glukhova, V.M. (2005) *Culicoides* (Diptera: Ceratopogonidae) of Russia and adjacent lands. *International Journal of Dipterological Research*, 16, 3–75.
- Glukhova, V.M. & Braverman, Y. (1999) Review of the Palearctic desert biting midges *Culicoides langeroni* Group, with a description of a new species (Diptera: Ceratopogonidae). *Journal of Medical Entomology*, 36, 309–312.  
<https://doi.org/10.1093/jmedent/36.3.309>
- Glukhova, V.M. & Brodskaya, N.K. (1995) *Catalogue of type specimens in the collection of the Zoological Institute, Russian Academy of Sciences. Diptera. No. 4. Ceratopogonidae*. St. Petersburg: Zoological Institute, 22 pp.
- Glukhova, V.M. & Brodskaya, N.K. (1997) Description of a new species of non-blood-sucking biting midge of the genus *Dasyhelea* Kieffer (Diptera, Ceratopogonidae) from Karelia. *Entomologicheskoe Obozrenie*, 76, 443–447. English translation in *Entomological Review*, 77, 561–565.
- Glukhova, V.M. & Khabirov, Z. (1977) New species of biting midges of genus *Culicoides* from the western Pamirs. *Doklady Akademii Nauk Tadzhikskoi SSR*, 20, 50–54. [in Russian].
- Glushchenko, N.P. & Mirzaeva, A.G. (1970) A new species of biting midges of the genus *Culicoides* (Diptera, Ceratopogonidae). In: Cherepanov, A.I. (ed.), *New and little-known species of the Fauna of Siberia 3*. Novosibirsk: Nauka. Institute of Biology, USSR, Academy of Sciences, Siberian Branch, pp. 37–39 [in Russian, English summary].
- Goeldi, E. (1905) Os mosquitos no Pará. Reunião de quatro trabalhos sobre os mosquitos indigenas, principalmente as especies que molesta o homem. *Memórias do Museu Goeldi (Museu Paraense) de Historia Natural e Ethnographie*, 4, 1–154, 5 pls.  
<https://doi.org/10.5962/bhl.title.8538>
- Goetghebuer, M. (1910) Description de diptères chironomides nouveaux. *Revue Mensuelle de la Société Entomologique Namuroise*, 10, 96–97.  
<https://doi.org/10.5962/bhl.part.4695>
- Goetghebuer, M. (1911) Un chironomide nouveau de Belgique. *Bezzia xanthocephala* nov. sp. *Revue Mensuelle de la Société Entomologique Namuroise* 11, 95–97.
- Goetghebuer, M. (1912) Quelques chironomides nouveaux de Belgique. *Annales Biologie Lacustre*, 5, 204–214.
- Goetghebuer, M. (1914) Contribution à l'étude des Chironomides de Belgique. *Annales Biologie Lacustre*, 7, 165–229.
- Goetghebuer, M. (1919) Observations sur les larves et les nymphes de quelques chironomides de Belgique. *Annales Biologie Lacustre*, 9, 51–78.
- Goetghebuer, M. (1920) Ceratopogoninae de Belgique. *Mémoires du Musée Royal d'Histoire Naturelle de Belgique*, 8(3), 1–116.
- Goetghebuer, M. (1921) Chironomides de Belgique et spécialement de la zone des Flandres. *Mémoires du Musée Royal d'Histoire Naturelle de Belgique*, 8 (4), 1–208.  
<https://doi.org/10.5962/bhl.title.52331>
- Goetghebuer, M. (1922) Nouveaux matériaux pour l'étude de la faune des Chironomides de Belgique. *Annales Biologie Lacustre*, 11, 38–62.
- Goetghebuer, M. (1923) Nouveaux matériaux pour l'étude de la faune des Chironomides de Belgique. 2<sup>e</sup> note. *Annales Biologie Lacustre*, 12, 103–120.
- Goetghebuer, M. (1927a) Observations sur quelques Ceratopogonines de Belgique (Dipt. Chironom.). *Bulletin & Annales de la Société Entomologique de Belgique*, 67, 202–204.
- Goetghebuer, M. (1927b) Nouveaux matériaux pour l'étude de la faune des Chironomides de Belgique. 3<sup>e</sup> note. *Annales Biologie Lacustre*, 15, 93–104.
- Goetghebuer, M. (1929) Deux formes nouvelles de Ceratopogonidae de Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 68, 232–234.
- Goetghebuer, M. (1931) Ceratopogonidae et Chironomidae nouveaux d'Europe. *Bulletin & Annales de la Société Entomologique de Belgique*, 71, 211–218.
- Goetghebuer, M. (1932a) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe. *Bulletin & Annales de la So-*

- ciété Entomologique de Belgique, 72, 125–130.
- Goetghebuer, M. (1932b) Ceratopogonidae et Chironomidae. *Résultats Scientifiques du Voyage aux Indes Orientales Néerlandaises de LL. AA. RR. le Prince et la Princesse Léopold de Belgique*, 4 (Fasc. 7), 5–7.
- Goetghebuer, M. (1933a) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe, Deuxième Note (1). *Bulletin & Annales de la Société Entomologique de Belgique*, 72, 287–294.
- Goetghebuer, M. (1933b) Ceratopogonidae et Chironomidae de la Sibérie Orientale. *Bulletin & Annales de la Société Entomologique de Belgique*, 73, 111–120.
- Goetghebuer, M. (1933c) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe (Quatrième note). *Bulletin & Annales de la Société Entomologique de Belgique*, 73, 353–361.
- Goetghebuer, M. (1933d) Catalogue des Cératopogonides de Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 73, 363–372.
- Goetghebuer, M. (1933e) Ceratopogonidae et Chironomidae du Congo Belge. *Revue de Zoologie et de Botanique Africaines*, 24, 129–151.
- Goetghebuer, M. (1933f) 13a. Heleidae (Ceratopogonidae). In: Lindner, E. (ed.), *Die Fliegen der palaearktischen Region 3*. Stuttgart, pp. 1–48, pls. 1–6 (= Lfg. 77).
- Goetghebuer, M. (1934a) 13a. Heleidae (Ceratopogonidae). In: Lindner, E. (ed.), *Die Fliegen der palaearktischen Region 3*. Stuttgart, pp. 49–94, 129–133, pls. 7–12 (= Lfg. 78).
- Goetghebuer, M. (1934b) Ceratopogonides et Chironomides recueillis en Palestine. *Bulletin & Annales de la Société Entomologique de Belgique*, 74, 214–216.
- Goetghebuer, M. (1934c) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe (Cinquième Note). *Bulletin & Annales de la Société Entomologique de Belgique*, 74, 287–294. (Aug.).
- Goetghebuer, M. (1934d) Cératopogonides et Chironomides du Congo Belge. - 2e Note. *Revue de Zoologie et de Botanique Africaines*, 25, 191–205.
- Goetghebuer, M. (1934e) Zur Erforschung des Persischen Golfes. (Beitrag Nr. 15). Ceratopogonidae et Chironomidae. *Arbeiten über Morphologische und Taxonomische Entomologie aus Berlin-Dahlem*, 1, 36–39.
- Goetghebuer, M. (1935a) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe (6e note). *Encyclopédie Entomologique, Série B*, 8, 3–14.
- Goetghebuer, M. (1935b) Ceratopogonidae et Chironomidae récoltés pour la première fois en Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 75, 413–418.
- Goetghebuer, M. (1935c) Un *Culicoides* nouveau du Bas-Congo. *Revue de Zoologie et de Botanique Africaines*, 26, 477–478.
- Goetghebuer, M. (1935d) Cératopogonides récoltés par le Dr. De Wulf au Congo Belge. *Revue de Zoologie et de Botanique Africaines*, 27, 145–181.
- Goetghebuer, M. (1936) Nouvelle contribution à la Connaissance des Cératopogonides et des Chironomides de Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 76, 319–326.
- Goetghebuer, M. (1937) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe (7e note). *Bulletin & Annales de la Société Entomologique de Belgique*, 77, 273–280.
- Goetghebuer, M. (1938) Note sur quelques Cératopogonides de Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 78, 375–389.
- Goetghebuer, M. (1939) Cératopogonides et Chironomides recueillis en Algérie. *Bulletin & Annales de la Société Entomologique de Belgique*, 79, 59–62.
- Goetghebuer, M. (1940) Chironomides de Laponie Suédoise. *Bulletin & Annales de la Société Entomologique de Belgique*, 80, 55–72.
- Goetghebuer, M. (1941) Ceratopogonide et Chironomides nouveaux d'Allemagne. *Archiv für Hydrobiologie*, 38, 288–290.
- Goetghebuer, M. (1942) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe. *Bulletin du Musée Royal d'Histoire Naturelle de Belgique*, 18, 1–16.
- Goetghebuer, M. (1947) Description de deux Ceratopogonides nouveaux de Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 83, 228–229.
- Goetghebuer, M. (1948a) Deux Diptères nouveaux de Belgique. *Bulletin & Annales de la Société Entomologique de Belgique*, 84, 36–39.
- Goetghebuer, M. (1948b) Ceratopogonidae (Diptera Nematocera). *Exploration du Parc National Albert. Mission G. F. de Witte (1933–1935)*, Fasc. 55, 3–21.
- Goetghebuer, M. (1949) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe (Treizième note). *Bulletin Institut Royal des Sciences Naturelles de Belgique*, 25(14), 1–8.
- Goetghebuer, M. (1950) Ceratopogonidae et Chironomidae nouveaux ou peu connus d'Europe (Quatorzième note). *Bulletin Institut Royal des Sciences Naturelles de Belgique*, 26(47), 1–15.
- Goetghebuer, M. (1952) Contribution au catalogue des cératopogonides et des chironomides de Belgique. *Bulletin Institut Royal des Sciences Naturelles de Belgique*, 28(62), 1–4.
- Goetghebuer, M. (1953) Note à propos de 2 *Culicoides* (diptères) de Belgique. *Archiv für Hydrobiologie*, 48, 126–128.
- Goetghebuer, M. & Timon David, J. (1937) Contribution à l'étude des Diptères halophiles et halobies du littoral méditerranéen Chironomides et Cératopogonides de l'Îlot de Planier. *Bulletin & Annales de la Société Entomologique de Belgique*, 77, 409–416.

- González, M.C. & Goldarazena, A. (2011) *El género Culicoides en el País Vasco. Guía práctica para su identificación y control*. Euska Jaurlaritzaren Argitalpen Zerbitzu Nagusia, Vitoria-Gasteiz, 247 pp.
- Gornostaeva, R.M. (1980) *Culicoides grisescens flavus* subsp. n. (Diptera, Ceratopogonidae) - a new subspecies of biting midges. *Vestnik Zoologii*, 1980(6), 81–83. [in Russian, English summary].
- Gornostaeva, R.M. & Gachegova, T.A. (1972) A new species of midges (Diptera: Ceratopogonidae) *Culicoides filicinus*, sp. n., from Western Sayans. *Parazitologiya*, 6, 522–530. [in Russian, English summary].
- Gosseries, J. (1989) Replacement of some junior primary homonyms in the Diptera. *Insect Nomenclature*, 1(2), 1–4.
- Gosseries, J. (1991) Ceratopogonidae. In: Grootaert, P., de Bruyn, L. & de Meyer, M. (Eds.), *Catalogue of the Diptera of Belgium: 41–45*. Institut Royal des Sciences Naturelles de Belgique Documents de Travail 70, 1–338.
- Gressitt, J.L. (1962) Insects of Macquarie Island. Introduction. *Pacific Insects* 3, 905–915.
- Grogan, W.L. & Borkent, A. (1992) *Sinhalohelea*, a new genus of predaceous midge from Sri Lanka (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 94, 314–319.
- Grogan, W.L. & de Meillon, B. (1993) New *Brachypogon*, mainly from Senegal with a key to the Afrotropical species (Diptera: Ceratopogonidae). *Annales de la Société de Entomologie de France*, 29, 387–409.
- Grogan, W.L. & de Meillon, B. (1997) A new predaceous midge of the genus *Brachypogon* Kieffer from Zimbabwe (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington*, 18, 130–133 (1996).
- Grogan, W. L. & Phillips, R.A. (2008) A new species of biting midges in the subgenus *Monoculicoides* of *Culicoides* from Utah (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 110, 196–203.  
<https://doi.org/10.4289/0013-8797-110.1.196>
- Grogan, W.L. & Lysyk, T.J. (2015) A revision of the biting midges in the *Culicoides* (*Monoculicoides*) *nubeculosus-stigma* complex in North America with the description of a new species (Diptera: Ceratopogonidae). *Insecta Mundi*, 441, 1–24.
- Grogan, W.L. & Sigrist, E.A. (2007) A new Nearctic species of biting midge in the subgenus *Metaforcipomyia* Saunders of *Forcipomyia* Meigen (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 109, 530–540.
- Grogan, W.L. & Szadziewski, R. (1988) A new biting midge from Upper Cretaceous (Cenomanian) amber of New Jersey (Diptera: Ceratopogonidae). *Journal of Paleontology*, 62, 808–812.
- Grogan, W.L. & Wieners, J.A. (2006) A new species of the biting midge genus *Dasyhelea* Kieffer (Diptera : Ceratopogonidae) from the Bahamas. *Proceedings of the Entomological Society of Washington*, 108, 467–473.
- Grogan, W.L. & Wirth, W.W. (1975a) *A revision of the genus Palpomyia Meigen of northeastern North America (Diptera: Ceratopogonidae)*. Agricultural Experiment Station, University of Maryland, 875, v + 49 pp.
- Grogan, W.L. & Wirth, W.W. (1975b) A revision of the Nearctic species of *Clinohelea* Kieffer (Diptera: Ceratopogonidae). *Great Basin Naturalist*, 35, 275–287.
- Grogan, W.L. & Wirth, W.W. (1975c) A new Nearctic species of *Forcipomyia* (*Forcipomyia*) described in all stages (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 77, 466–471.
- Grogan, W.L. & Wirth, W.W. (1977a) A revision of the Nearctic species of *Parabezzia* Malloch (Diptera: Ceratopogonidae). *Journal of the Kansas Entomological Society*, 50, 49–83.
- Grogan, W.L. & Wirth, W.W. (1977b) A revision of the Nearctic species of *Jenkinshalea* Macfie (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 79, 126–141.
- Grogan, W.L. & Wirth, W.W. (1979a) The North American predaceous midges of the genus *Palpomyia* Meigen (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington*, 8, 125 pp.
- Grogan, W.L. & Wirth, W.W. (1979b) A new Neotropical genus of predaceous midges, with a key to the genera of Heteromyiini (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 81, 51–59.
- Grogan, W.L. & Wirth, W.W. (1979c) *Notiohelea*, a new genus of biting midges of the tribe Ceratopogonini from Chile (Diptera: Ceratopogonidae). *Pan-Pacific Entomologist*, 54, 283–286 (1978).
- Grogan, W.L. & Wirth, W.W. (1980a) *Nannohelea*, a new genus of biting midges of the tribe Ceratopogonini, related to *Baeohelea* Wirth and Blanton (Diptera: Ceratopogonidae). *Journal of the Kansas Entomological Society*, 53, 373–385.
- Grogan, W.L. & Wirth, W.W. (1980b) Two new species of *Macrurohelea* from Chile with a key to the Neotropical species (Diptera: Ceratopogonidae). *Pan-Pacific Entomologist*, 56, 137–143.
- Grogan, W.L. & Wirth, W.W. (1981a) A new American genus of predaceous midges related to *Palpomyia* and *Bezzia* (Diptera: Ceratopogonidae). *Proceedings of the Biological Society of Washington*, 94, 1279–1305.
- Grogan, W.L. & Wirth, W.W. (1981b) Three new Oriental species of *Jenkinshalea* Macfie (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 83, 44–51.
- Grogan, W.L. & Wirth, W.W. (1981c) New species of biting midges from the Solomon Islands (Diptera: Ceratopogonidae). *Pacific Insects*, 23, 93–100.
- Grogan, W.L. & Wirth, W.W. (1981d) A new genus of predaceous midges of the tribe Sphaeromiini from Thailand (Diptera: Ceratopogonidae). *Pacific Insects*, 23, 201–206.
- Grogan, W.L. & Wirth, W.W. (1982) A new species of *Neosphaeromias* from the Solomon Islands (Diptera: Ceratopogonidae). *Pacific Insects*, 24, 198–201.
- Grogan, W.L. & Wirth, W.W. (1983) A new afrotropical genus of the biting midge tribe Ceratopogonini (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 85, 199–204.
- Grogan, W.L. & Wirth, W.W. (1985) Two new Australian species of *Macrurohelea* with a description of the male of *M. commoni* (Diptera: Ceratopogonidae). *International Journal of Entomology*, 27, 128–135.

- Grogan, W.L. & Wirth, W.W. (1990) A new species of the minute predaceous midge genus *Nannohelea* from Sri Lanka (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 92, 347–350.
- Grogan, W.L. & Wirth, W.W. (1993) A new species of *Brachypogon* Kieffer from Zimbabwe (Diptera, Ceratopogonidae). pp. 30–33. In: Coetzee, M. (ed.), *Entomologist Extraordinary, a festschrift in honour of Botha de Meillon*. Johannesburg: South African Institute of Medical Research, 114 pp.
- Grogan, W.L., Spinelli, G.R., Ronderos, M.M. & Cazorla, C.G. (2013) The biting and predaceous midges of Guadeloupe (Diptera: Ceratopogonidae). I. Species of the subfamily Ceratopogoninae. *Insecta Mundi*, 324, 1–21.
- Grogan, W.L., Díaz, F., Spinelli, G.R. & Ronderos, M.M. (2016) The biting and predaceous midges of Guadeloupe (Diptera: Ceratopogonidae). II. Species of the subfamily Dasyheleinae. *Zootaxa*, 4184 (2), 201–254. <https://doi.org/10.11646/zootaxa.4184.2.1>
- Grogan, Jr., W.L., Howarth, F.G. & Hribar, L.H. (2017) The Afrotropical biting midge, *Forcipomyia* (*Forcipomyia*) *biannulata* (Diptera: Ceratopogonidae) established in the United States. *Bishop Museum Occasional Papers*, 119, 29–37.
- Guérin-Méneville, F.E. (1833) Notice sur les métamorphoses des Cératopogons et description de deux espèces nouvelles de ce genre, découvertes aux environs de Paris. *Annales de la Société de Entomologique de France*, 2, 161–167.
- Guo, Q., Lai, C.-C. & Yu, Y.-X. (2018) Two new species of Ceratopogonidae (Insecta: Diptera) from Tianjin. *Chinese Journal of Hygienic Insecticides & Equipments*, 24, 494–495, 498. [in Chinese, English summary].
- Gutsevich, A.V. (1945) A new *Leptoconops* Skuse (Diptera, Heleidae) from USSR. *Entomologicheskoe Obozrenie*, 28, 124–130. [in Russian, English summary]
- Gutsevich, A.V. (1952) Contribution to the fauna of sandflies of the genus *Culicoides* of the forest zone (Diptera, Heleidae). *Parazitologicheskii Sbornik Zoologicheskogo Instituta Akademii Nauk SSSR*, 14, 75–94. [in Russian].
- Gutsevich, A.V. (1953) The biting midges (Diptera, Heleidae) of eastern Trans-Caucasia. *Entomologicheskoe Obozrenie*, 33, 233–237. [in Russian].
- Gutsevich, A.V. (1959) New species of the genus *Culicoides* (Diptera, Heleidae) from the southern regions of the USSR. *Entomologicheskoe Obozrenie*, 38, 675–681. [in Russian, English summary].
- Gutsevich, A.V. (1960) Bloodsucking Diptera (Heleidae) of the USSR fauna. *Opredeliteli po faune SSSR*, 72, 1–131. [in Russian].
- Gutsevich, A.V. (1964) Bloodsucking Heleidae of the genus *Leptoconops* (Diptera, Heleidae) in the Alma-Ata region. *Trudy Instituta Zoologia. Akademiya Nauk Kazakhskoi SSR (Alma Ata)*, 22, 192–196. [in Russian].
- Gutsevich, A.V. (1966) Keys to bloodsucking midges of the genus *Culicoides* (Diptera, Ceratopogonidae) from Middle Asia. *Entomologicheskoe Obozrenie*, 45, 658–676. [in Russian, English summary]. English translation in *Entomological Review*, 45, 372–382.
- Gutsevich, A.V. (1973) *The bloodsucking midges (Ceratopogonidae)*. Fauna SSSR. Novaya seriya. No. 107. Nasekomye dvukrylye 3(5), Leningrad, Nauka, 1–270. [in Russian].
- Gutsevich, A.V. & Smatov, Z.S. (1966) New and little-known blood-sucking midges (Diptera, Ceratopogonidae) of Kazakhstan. *Trudy Instituta Zoologii Akademii Nauk Kazakhskoi SSR*, 25, 65–77. [in Russian].
- Haeselbarth, E. (1965a) *Phaenobezzia*, a new genus of biting midges (Diptera: Ceratopogonidae), with a review of the African species. *Zeitschrift für Angewandte Zoologie*, 52, 297–324.
- Haeselbarth, E. (1965b) Notes on *Bezzia nicator* de Meillon, 1959 (Diptera: Ceratopogonidae) Descriptions of two related new species from southern Africa. *Novos Taxa Entomologicos*, 40, 3–16.
- Haeselbarth, E. (1975) Zur Kenntnis von *Bezzia africana* und verwandten Gnitzen-Arten aus der Athiopischen Region (Diptera: Ceratopogonidae). *Entomologica Germanica*, 1, 352–370.
- Haeselbarth, E. (1980) *Bezzia dessarti*, eine neue Ceratopogonide aus dem Parc National des Virunga (Zaire). *Revue Zoologique Africaine*, 94, 656–658.
- Hagan, C.E. & Reye, E.J. (1986) Description of the adult, pupa and larva of *Culicoides longior* sp. n. and a redescription of *C. ornatus* Taylor (Diptera: Ceratopogonidae). *Journal of the Australian Entomological Society*, 25, 339–352. <https://doi.org/10.1111/j.1440-6055.1986.tb01129.x>
- Haliday, A.H. (1833) Catalogue of Diptera occurring about Holywood in Downshire. *Entomological Magazine*, 1, 147–180.
- Hall, D.G. (1932) A new biting *Culicoides* from saltmarshes in the southeastern states. *Proceedings of the Entomological Society of Washington*, 34, 88–89.
- Han, X., Li, X. & Hou, X. (2015) A new species of the genus *Forcipomyia* (*Lepidohelea*) (Diptera: Ceratopogonidae) in China. *Florida Entomologist*, 98, 759–761. <https://doi.org/10.1653/024.098.0254>
- Han, X.-J., Li, X.-F., Chang, Q.-Q. & Hou, X.-H. (2017) Description of a new species of *Forcipomyia* (*Euprojoannisia*) Brethes, 1914 (Diptera: Ceratopogonidae) and a key to Chinese species of the subgenus. *Entomologica Fennica*, 28, 107–112. <https://doi.org/10.33338/ef.84680>
- Han, Z.-Y., Long, C., Lv, X.-P., Cao, T.-Y., Liang, X.-Y., Wang, F.-P. & Yu, Y.-X. (2015) Two new species of *Forcipomyia* from Emei Mountains in Sichuan Province. *Chinese Journal of Hygienic Insecticides & Equipments*, 21, 616–617. [in Chinese, English summary].
- Hao, B.-S. & Yu, Y.-X. (1991) A new species and record of the genus *Alluaudomyia* from Guangxi, China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 3, 42–45. [in Chinese, English summary].
- Hao, B.-S. & Yu, Y.-X. (1998) Two new species of *Atrichopogon* (Diptera: Ceratopogonidae) from Guangxi, China. *Entomolo-*



- gia Sinica*, 5, 133–135.  
<https://doi.org/10.1111/j.1744-7917.1998.tb00310.x>
- Hao, B.-S. & Yu, Y.-X. (2001) Two new species of *Dasyhelea* from Zhuhai City, China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 12, 12–13. [in Chinese, English summary].
- Hao, B.-S. & Yu, Y.-X. (2003) *Bezzia sinica* new species from China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 14, 200–201. [in Chinese, English summary].
- Hao, B.-S., Mai, Z., Yu, Y.-X. & M. Zou. (1990) Four new species of *Culicoides* from Guangxi, China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 39–45. [in Chinese, English summary].
- Harant, H. & Baur, O. (1946) *Lasiohelea wansonii* n. sp. Cératopogonide du Congo belge. *Archives de l'Institut Pasteur d'Algérie*, 24, 141–142.
- Harant, H. & Cellier, M. (1949) Un cératopogonide nouveau (Dipt.). *Bulletin de la Société Entomologique de France*, 54, 10–11.
- Harant, H. & Galan, G. (1942a) Un nouveau cératopogonide saharien *Forcipomyia picheyrei* nov. sp. *Archives de l'Institut Pasteur d'Algérie*, 20, 135–138.
- Harant, H. & Galan, G. (1942b) Notes sur les Diptères de la région méditerranéenne IV. *Forcipomyia cattleyarum*, n. sp. *Bulletin de la Société Entomologique de France*, 47, 56–58.
- Harant, H. & Galan, G. (1943) Notes sur les Diptères de la région méditerranéenne. VI. *Forcipomyia Euzierei*, s. sp. *Bulletin de la Société Entomologique de France*, 48, 122–123.
- Harant, H. & Galan, G. (1944) Notes sur les Diptères de la région méditerranéenne VII. Remarques sur les *Leptoconops*: *Leptoconops lisbonnei* n. sp. *Bulletin de la Société de Pathologie Exotique*, 37, 170–172.
- Harant, H., Huttel, W. & Huttel, N. (1951) *Parapterobosca anthropophila* nov. gen., n. sp. Cératopogonide de la Cote d'Ivoire vulnérant pour l'homme. *Annales de Parasitologie Humaine et Comparée*, 26, 468–472.  
<https://doi.org/10.1051/parasite/1951265468>
- Harant, H., Huttel, W. & Huttel, N. (1952) Cératopogonides de la lagune de Venise (collection G. Soika). *Bulletin de la Société Entomologique de France*, 57, 11–14.
- Hardy, D.E. (1960) *Insects of Hawaii. Volume 10. Diptera: Nematocera - Brachycera (except Dolichopodidae)*. Honolulu: University of Hawaii Press, vii + 368 pp.
- Harris, T.W. (1841) *A report on the insects of Massachusetts, injurious to vegetation*. Cambridge, Massachusetts, 459 pp.
- Harrup, L.E., Bellis, G.A., Balenghien, T. & Garros, C. (2015) *Culicoides* Latreille (Diptera: Ceratopogonidae) taxonomy: current challenges and future directions. *Infections, Genetics and Evolution*, 30, 249–266.  
<https://doi.org/10.1016/j.meegid.2014.12.018>
- Harrup, L.E., Laban, S., Purse, B.V., Reddy, Y.K., Reddy, Y.N., Byregowda, S.M., Kumar, N., Purushotham, K.M., Kowalli, S., Prasad, M., Prasad, G., Bettis, A.A., De Keyser, R., Logan, J., Garros, C., Gopurenko, D., Bellis, G., Labuschagne, K., Mathieu, B. & Carpenter, S. (2016) DNA barcoding and surveillance sampling strategies for *Culicoides* biting midges (Diptera: Ceratopogonidae) in southern India. *Parasites & Vectors*, 9, 461.  
<https://doi.org/10.1186/s13071-016-1722-z>
- Havelka, P. (1974) *Palpomyia remmi* n. sp. eine Ceratopogonide aus der "Breitenbach Emergenz". *Annales de Parasitologie Humaine et Comparée*, 49, 621–629.  
<https://doi.org/10.1051/parasite/1974495621>
- Havelka, P. (1976a) Limnologische und systematische Studien an Ceratopogoniden (Diptera: Nematocera). *Beitrage zur Entomologie*, 26, 211–305.
- Havelka, P. (1976b) Ceratopogoniden-Emergenz am Breitenbach und am Rohrwiesebach (1971–1972). *Archiv für Hydrobiologie*, Suppl. 50, 54–95.
- Havelka, P. (1978a) Blütenbesuchende Ceratopogoniden (Diptera) aus der Umgebung von Tübingen. *Beitrage zur Naturkundlichen Forschung in Suedwestdeutschland*, 37, 175–179.
- Havelka, P. (1978b) *Dasyhelea erici* n. sp., eine neue Ceratopogonide aus der Teichbach-Emergenz (Diptera, Ceratopogonidae). *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen*, 30, 62–64.
- Havelka, P. 1978c. Ceratopogonidae. pp. 441–458. In: Illies, J. (Ed.), *Limnofauna Europaea*. Stuttgart, Germany, 2nd edition, xvii + 532 pp.
- Havelka, P. (1979) Situation der Ceratopogonidenforschung auf der Iberischen Halbinsel (Dipt. Ceratopogonidae). *Eos*, 53, 55–74, pl. II.
- Havelka, P. (1980) Zwei neue Gnitzen (Diptera, Ceratopogonidae) aus dem Annaberger Bach bei Bonn. *Decheniana*, 133, 86–92.
- Havelka, P. (1982) Neue Ceratopogonidenfunde von der Iberischen Halbinsel. *Eos*, 58, 47–134.
- Havelka, P. & Aguilar, M. (1999) Ceratopogonidae. pp. 33–38. In: Schumann, H., Bährmann, R. & Stark, A. (Eds). *Entomofauna Germanica 2 Checkliste der Dipteren Deutschlands. Studia dipterologica. Supplement 2*, 1–354.
- He, Y.-H. (1989) *Lasiohelea multispina* a new species and a new record species of the genus *Stenoxenus* Coquillett from China. *Journal of Navy Medicine*, (6)1, 28. [in Chinese].
- He, Y.-H. & Yu, Y.-X. (1990) Description of *Lasiohelea multispina* sp. nov. from Zhejiang Province, China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 62–64. [in Chinese, English summary].
- He, J., Liu, Z. & Yu, Y. (2017a) A new species in the genus *Palpomyia* (Diptera: Ceratopogonidae) from Qinghai Province,

- China. *Entomotaxonomia*, 39, 82–84.
- He, J., Liu, Z. & Yu, Y. (2017b) Fauna and a new species of the genus *Palpomyia* (Diptera: Ceratopogonidae) from China. *Entomotaxonomia*, 39, 265–268.
- Hendel, F. (1908) Nouvelle classification des mouches a deux ailes (Diptera L.). D'après un plan tout nouveau par J.G. Meigen, Paris, an VIII (1800 v.s.). *Mit Kommentar herausgegeben von Friedrich Hendel. Verhandlungen der K.-k. Zoologisch-Botanischen Gesellschaft in Wien*, 58, 43–69.
- Hendry, G. (2011) *Midges in Scotland*. 5th edition. Bell and Bain Ltd. Glasgow, UK. x + 85 pp.
- Herzi, A.A. & Sabatini, A. (1983) *Styloconops hamariensis* n. sp. in Somalia (Diptera, Ceratopogonidae). *Parassitologia*, 25, 67–72.
- Heyden, L., von. (1870) Fossile Dipteren aus der Braunkohle von Rott im Siebengebirge. *Palaeontographica*, 17, 237–266, pls. 44–45.
- Hochman, S.I., Marino, P.I. & Spinelli, G.R. (2017) Two new species of biting midges of the genus *Forcipomyia* Meigen from Ecuador (Diptera: Ceratopogonidae). *Annales Zoologici*, 67, 811–821.  
<https://doi.org/10.3161/00034541ANZ2017.67.4.015>
- Hoffman, W.A. (1924) *Stilobezzia mallochii* and *Atrichopogon gilva* (Dipt.: Chironomidae). *Entomological News*, 35, 282–284.
- Hoffman, W.A. (1925) A review of the species of *Culicoides* of North and Central America and the West Indies. *American Journal of Hygiene*, 5, 274–301.  
<https://doi.org/10.1093/oxfordjournals.aje.a119665>
- Hoffman, W.A. (1926a) Notes on Ceratopogoninae (Diptera). *Proceedings of the Entomological Society of Washington*, 28, 156–159.
- Hoffman, W.A. (1926b) Two new species of American *Leptoconops* (Diptera, Chironomidae). *Bulletin of Entomological Research*, 17, 133–136.  
<https://doi.org/10.1017/S0007485300019155>
- Hoffman, W.A. (1939) *Culicoides filariferus*, new species. *Puerto Rico Journal of Public Health and Tropical Medicine*, 15, 172–176.
- Hogue, C.L. & Wirth, W.W. (1968) A new Central American sand fly breeding in crab holes (Diptera, Ceratopogonidae). *Los Angeles County Museum, Contributions in Science*, 152, 1–7.
- Holmgren, A.E. & Aurivillius, C. (1883) Insecta a viris doctissimi Nordenskiöld illum ducem sequentibus in insulis Waigatsch et Novaja Semlia anno 1875 collecta. *Entomologisk Tidskrift*, 4, 139–194.
- Hong, Y.-C. (1981) *Eocene fossil Diptera in amber in Fushun coalfield*. Geological Publishing House, Peking (= Beijing), 166 pp. [in Chinese, English summary].
- Hong, Y.-C. (2002a) *Amber insects of China*. Geological Publishing House, Beijing, 653 pp. + 48 pls. [January]. [in Chinese].
- Hong, Y.-C. (2002b) *Atlas of amber insects of China*. Henan Scientific and Technological Publishing House, 394 pp. [August]
- Hong, Y.-C., Guo, X.-R. & Ren, D. (2000) A new genus - *Eopalpomyitis* gen. nov. from Eocene Fushun amber and discussion of its taxonomic position. *Acta Parasitologica et Medica Entomologica Sinica*, 7, 225–234. [in Chinese, English summary].
- Hou, X., Han, X., Lv, B. & Jiang, X. (2014) A new species of Biting Midge of the genus *Culicoides* (Diptera: Ceratopogonidae) from China. *Florida Entomologist*, 97, 98–99.  
<https://doi.org/10.1653/024.097.0113>
- Howard-Bury, C.K. (1922) *Mount Everest, the Reconnaissance, 1921*. Edward Arnold & Company, London, 356 pp.
- Howarth, F.G. (1985) Biosystematics of the *Culicoides* of Laos (Diptera: Ceratopogonidae). *International Journal of Entomology*, 27, 1–96.
- Huang, E., Cai, H.-Z., Yang, A., Lin, D., Wang, G.-H. & Yu, Y.-X. (2009) Two new species of *Atrichopogon* (Diptera: Ceratopogonidae) from China. *Oriental Insects*, 43, 365–367.  
<https://doi.org/10.1080/00305316.2009.10417595>
- Hubert, A.A. & Wirth, W.W. (1961) Key to the *Culicoides* of Okinawa and the description of two new species (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 63, 235–239.
- Hudson, G.V. (1892) *An elementary manual of New Zealand entomology. Being an introduction to the study of our native insects*. London: West, Newman (4) + 128 + (20) pp.  
<https://doi.org/10.5962/bhl.title.8441>
- Huerta, H. (2001) A new species of the genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Mexico. *Proceedings of the Entomological Society of Washington*, 103, 373–375.
- Huerta, H. (2008) Description of a new species of the genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Neotropical Mexico. *Russian Entomological Journal*, 17, 73–74.
- Huerta, H. & Borkent, A. (2005) A new species and first record of *Ceratoculicoides* Wirth and Ratanaworabhan from the Neotropical Region and new species and records of *Brachypogon* Kieffer from Mexico (Diptera: Ceratopogonidae). *Folia Entomologica Mexicana*, 44 (Supplement 1), 111–119.
- Huerta, H. & Grogan, W.L. (2006) A new species and new record of biting midges of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from Morelos and Jalisco, Mexico. *Proceedings of the Entomological Society of Washington*, 108, 892–898.
- Huerta, H. & Grogan, W.L. (2017) New species and new records of predaceous midges in the genera, *Schizonyxhelea* Clastrier

- and *Stilobezzia* Kieffer from Mexico (Diptera: Ceratopogonidae). *Zootaxa*, 4294 (4), 401–418.  
<https://doi.org/10.11646/zootaxa.4294.4.1>
- Huerta, H. & Ibanez-Bernal, S. (1996) Especie nueva de *Forcipomyia* (*Lasiohelea*) de Chiapas, Mexico (Diptera: Ceratopogonidae). *Anales del Instituto de Biología Universidad Autónoma de Mexico, Serie Zoología*, 67, 349–355.
- Huerta, H. & Ibanez-Bernal, S. (1999) A new species of *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) and new records of biting midges from the State of San Luis Potosi, Mexico. *Proceedings of the Entomological Society of Washington*, 101, 496–502.
- Huerta, H. & Spinelli, G.R. (2016) A new species of the predaceous midge genus *Brachypogon* Kieffer from the Neotropical Region and first description of the female of *Brachypogon* (*Isohelea*) *cuacuahuittlus* Huerta & Borkent (Diptera: Ceratopogonidae). *Zootaxa*, 4066 (4), 477–484.  
<https://doi.org/10.11646/zootaxa.4066.4.8>
- Huerta, H. & Spinelli, G.R. (2017) A distinctive new species of biting midge in the subgenus *Euprojoannisia* Brèthes from Mexico with new records of Neotropical species of *Forcipomyia* Meigen (Diptera: Ceratopogonidae). *Zootaxa*, 4329, 189–195.  
<https://doi.org/10.11646/zootaxa.4329.2.6>
- Huerta, H., Felipe-Bauer, M.L. & Spinelli, G.R. (2012) A new species and new records of *Downshelea* Wirth & Grogan in Neotropical Mexico (Diptera: Ceratopogonidae). *Zootaxa*, 3394, 64–68.  
<https://doi.org/10.11646/zootaxa.3394.1.7>
- Huldén, L. and L. Huldén. 2014. Checklist of the family Ceratopogonidae (Diptera) of Finland 441: 53–61.  
<https://doi.org/10.3897/zookeys.441.7742>
- Huttel, W. & Huttel, N. (1951) Les cératopogonides de la collection H. Bertrand. *Entomologiste*, 7, 98–105.
- Huttel, W. & Huttel, N. (1952a) Un cératopogonide nouveau de la région de Montpellier. *Bulletin de la Société Entomologique de France*, 57, 31–32.
- Huttel, W. & Huttel, N. (1952b) A propos de *Leptoconops inopinatus*, n. sp. de la région de Montpellier. *Bulletin de la Société Entomologique de France*, 57, 45–47.
- Huttel, W. & Huttel, N. (1952c) Un Ceratopogonidae nouveau de la région méditerranéenne (Dipt. Heleidae). *Revue Française d'Entomologie*, 19, 178–180.
- Huttel, W. & Huttel, N. (1952d) Un Cératopogonide nouveau du Soudan Français vulnérant pour l'homme (Dipt. Heleidae). *Bulletin de la Société de Pathologie Exotique*, 45, 472–474.
- Huttel, W. & Huttel, N. (1954) Un *Dasyhelea* inédit du midi de la France (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France*, 59, 39–41.
- Huttel, W., Huttel, N. & Verdier, P. (1953) A propos de deux *Culicoides* nouveaux du Gabon (Diptera Heleidae). *Annales de Parasitologie Humaine et Comparée*, 28, 98–107.  
<https://doi.org/10.1051/parasite/1953281098>
- Iches, L. (1906) Sobre cinco Dipteros nuevos del Chaco Austral. *Boletín de Ministerio de Agricultura y Ganadería, Argentina*, 6, 262–273.
- Ingram, A. & Macfie, J.W.S. (1921) West African Ceratopogoninae. *Annals of Tropical Medicine and Parasitology*, 15, 313–376.  
<https://doi.org/10.1080/00034983.1921.11684277>
- Ingram, A. & Macfie, J.W.S. (1922) West African Ceratopogoninae Part II. *Annals of Tropical Medicine and Parasitology*, 16, 243–282.  
<https://doi.org/10.1080/00034983.1922.11684316>
- Ingram, A. & Macfie, J.W.S. (1923) Notes of some African Ceratopogoninae. *Bulletin of Entomological Research*, 14, 41–74.  
<https://doi.org/10.1017/S0007485300028194>
- Ingram, A. & Macfie, J.W.S. (1924a) Notes on some African Ceratopogoninae - species of the genus *Lasiohelea*. *Annals of Tropical Medicine and Parasitology*, 18, 377–392, pl. 22.  
<https://doi.org/10.1080/00034983.1924.11684422>
- Ingram, A. & Macfie, J.W.S. (1924b) Notes on some African Ceratopogoninae - species of the genus *Forcipomyia*. *Annals of Tropical Medicine and Parasitology*, 18, 533–593.  
<https://doi.org/10.1080/00034983.1924.11684432>
- Ingram, A. & Macfie, J.W.S. (1924c) A further note on African Ceratopogoninae.- II. *Bulletin of Entomological Research*, 15, 179–184.  
<https://doi.org/10.1017/S0007485300031564>
- Ingram, A. & Macfie, J.W.S. (1925) New Ceratopogoninae from Nyasaland (Dipt.). *Bulletin of Entomological Research*, 15, 283–288.  
<https://doi.org/10.1017/S000748530004623X>
- Ingram, A. & Macfie, J.W.S. (1931a) Ceratopogonidae. *Diptera of Patagonia and South Chile*. Part II. Fasc. 4, 155–232.
- Ingram, A. & Macfie, J.W.S. (1931b) New Zealand Ceratopogonidae. *Annals of Tropical Medicine and Parasitology*, 25, 195–209.  
<https://doi.org/10.1080/00034983.1931.11684680>
- International Commission on Zoological Nomenclature (1980) Opinion 1147. Status for the purposes of type fixations of the re-

- mains of chironomid larvae (Insecta, Diptera) provided by Thienemann to Kieffer for the description of new species based on the adults reared from those larvae. *Bulletin of Zoological Nomenclature*, 37, 11–26.
- International Commission on Zoological Nomenclature (1991) Opinion 1643. *Ceratopogon puncticollis* Becker, 1903 (currently *Culicoides puncticollis*; Insecta, Diptera): given precedence over *Ceratopogon algecirensis* Strobl, 1900. *Bulletin of Zoological Nomenclature*, 48, 177–178.
- International Commission on Zoological Nomenclature (1999) International Code of Zoological Nomenclature, 4th edition. International Trust for Zoological Nomenclature, London, United Kingdom, xxix + 306 pp.
- International Commission on Zoological Nomenclature (2012) Amendment of Articles 8, 9, 10, 21 and 78 of the International Code of Zoological Nomenclature to expand and refine methods of publication. *Zootaxa*, 3450, 1–7.  
<https://doi.org/10.11646/zootaxa.3450.1.1>
- Isaev, V.A. (1988) Isolation and recognition of some subgenera of the biting midges of the genus *Culicoides* (Ceratopogonidae) with a description of a new subgenus *Stigmoculicoides*. In: *Insects - potential carriers of infectious diseases: Morphology, systematics and ecology of the dipterans*. Collected scientific works of the Ivanovo State Medical Institute, Ivanovo. pp. 14–39. [in Russian].
- Isaev, V.A. (1993) *Alluaudomyia ussurica* - a new species of the nonbloodsucking midges from Ussuri Land. *Siberian Journal of Biology*, 1993 (2), 70–72. [in Russian, English summary].
- Itoua, A. & Cornet, M. (1986) Les Ceratopogonidae (Diptera) du Mayombe congolais 3. Revue taxonomique des espèces du genre *Culicoides* Latreille, 1809. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 24, 233–250.
- Itoua, A., Cornet, M., Vattier-Bernard, G. & Trouillet, J. (1987) Les *Culicoides* (Diptera, Ceratopogonidae) de Afrique Centrale. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, numéro spécial 1987, 127–134.
- Ivanov, K.S. & Glukhova, V.M. (1967) New data on the fauna of bloodsucking midges (Diptera, Ceratopogonidae) from the coastal zone of the Primorje Territory. *Entomologicheskoe Obozrenie*, 46, 807–813. [in Russian, English summary]. English translation in *Entomological Review*, 46, 478–481.
- Iwata, M. (1935) On bloodsucking dipterous insects [in Japanese]. *Hiroshima-Konchu Dokokai Kaishi*, 2(1/2), 5–9.
- James, M.T. (1943) The genus *Culicoides* in northern Colorado (Diptera, Ceratopogonidae). *The Pan-Pacific Entomologist*, 19, 148–153.
- Jamnback, H. (1965) The *Culicoides* of New York State (Diptera: Ceratopogonidae). *New York State Museum and Science Service Bulletin*, 399, viii + 154 pp.
- Jamnback, H. & Wirth, W.W. (1963) The species of *Culicoides* related to *obsoletus* in eastern North America (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America*, 56, 185–198.  
<https://doi.org/10.1093/aesa/56.2.185>
- Jiang, X., Han, X., Liu, Q. & Hou, X. (2019) The mitochondrial genome of *Forcipomyia makanensis* (Insecta: Diptera: Ceratopogonidae). *Mitochondrial DNA, part B*, 4 (1), 344–345.  
<https://doi.org/10.1080/23802359.2018.1544048>
- Johannsen, O.A. (1907) Some new species of Kansas Chironomidae. In: Tucker, E.S. (Ed.), Some results of desultory collecting of insects in Kansas and Colorado. *Bulletin of the University of Kansas, Science Bulletin*, 4, pp. 109–112.
- Johannsen, O.A. (1908) New North American Chironomidae. In: Felt, E.P., 23rd report of the State Entomologist on injurious and other insects of the State of New York, 1907. pp. 264–285. *New York State Museum, Museum Bulletin*, 124, 5–541, 44 pls. Also published in *New York State Museum Annual Report*, (1907), 61 (Vol. 2, app. 2), 264–285, 1908.
- Johannsen, O.A. (1927a) The genus *Stenoxenus* (Chironomidae, Diptera). *Entomological News*, 38, 70–72.
- Johannsen, O.A. (1927b) *Macropeza* and its allies (Chironomidae, Diptera). *Entomologische Mitteilungen*, 16, 423–425.
- Johannsen, O.A. (1927c) A new midge injurious to pineapples (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 29, 205–208.
- Johannsen, O.A. (1932) Ceratopogoninae from the Malayan subregion of the Dutch East Indies. *Archiv für Hydrobiologie*, Suppl. 9, 403–448, pls. 4–8.
- Johannsen, O.A. (1934) New species of North American Ceratopogonidae and Chironomidae. *Journal of the New York Entomological Society*, 42, 343–352.
- Johannsen, O.A. (1938) New species of Nemocera from Puerto Rico. *Journal of Agriculture of the University of Puerto Rico*, 22, 219–225.
- Johannsen, O.A. (1943) Two new species of American Ceratopogonidae (Diptera). *Annals of the Entomological Society of America*, 36, 761–762.  
<https://doi.org/10.1093/aesa/36.4.761>
- Johannsen, O.A. (1946) Some new species of nemocerous Diptera from Guam. *Bulletin Bernice P. Bishop Museum*, 189, 187–193.
- Johannsen, O.A. (1950) A new *Pterobosca* from Florida with a key to the American species. *Florida Entomologist*, 33, 141–144.  
<https://doi.org/10.2307/3492737>
- Johnson, C.W. (1908) The Diptera of the Bahamas, with notes and description of one new species. *Psyche*, 15, 69–80.  
<https://doi.org/10.1155/1908/81853>
- Johnson, C.W. (1913) The Diptera fauna of Bermuda. *Annals of the Entomological Society of America*, 6, 443–452.  
<https://doi.org/10.1093/aesa/6.4.443>

- Jones, R.H. (1956) New species of *Culicoides* from Wisconsin. *Proceedings of the Entomological Society of Washington*, 58, 25–33.
- Jones, R.H. & Wirth, W.W. (1958) New records, synonymy and species of Texas *Culicoides* (Diptera, Heleidae). *Journal of the Kansas Entomological Society*, 31, 81–91.
- Jones, R.H. & Wirth, W.W. (1978) A new species of western *Culicoides* of the *stonei* group (Diptera: Ceratopogonidae). *Entomological News*, 89, 56–58.
- Jorgensen, N.M. (1969) The systematics, occurrence, and host preference of *Culicoides* (Diptera: Ceratopogonidae) in south-eastern Washington. *Melanderia*, 3, 1–47.
- Kalugina, N.S. (1991) New Mesozoic Simuliidae and Leptoconopidae and blood-sucking origin in lower Dipterans. *Palaeontologicheskii Zhurnal*, 1991(1), 69–80, pl. 6. English translation in *Paleontological Journal*, 25, 66–77 (1991). [in Russian, English summary].
- Kanasugi, T. (2014) Ceratopogonidae, pp. 212–236. In: Nakamura T., Saigusa, T. & Suwa, M. (Eds.), *Catalogue of the Insects of Japan Vol. 8 Diptera Pt 1: Nematocera-Brachycera Aschiza*. Entomological Society of Japan, Fukuoka, Japan. xxxii + 539 pp.
- Kanasugi, T. & Kitaoka, S. (2001) Two new species of subgenus *Avaritia* of the *Culicoides* biting midges (Diptera: Ceratopogonidae) from Japan. *Medical Entomology and Zoology*, 52, 227–229.  
<https://doi.org/10.7601/mez.52.227>
- Karsch, F. (1886) Ein neues märkisches Dipteron (*Ceratopogon crudelis* n. sp.). *Berliner Entomologische Zeitschrift*, 30, xvii–xviii.
- Ke, M.-J., Yu, Y.-X., Zhang, T.-K. & Zhang, L.-P. (2010) Investigation of midges at Zhangmu Port in Tibet and two new species of *Forcipomyia* (Diptera: Ceratopogonidae). *Chinese Journal of Health and Quarantine*, 33, 255–256. [in Chinese].
- Kettle, D.S., Elson, M.M. & Dyce, A.L. (1976) *Culicoides gladysae* sp. n. (Diptera: Ceratopogonidae) from eastern Australia, with descriptions of its larva and pupa and a re-examination of *C. mykutowyczi* Lee and Reye and *C. morensis* Lee and Reye. *Journal of the Australian Entomological Society*, 15, 173–182.  
<https://doi.org/10.1111/j.1440-6055.1976.tb01689.x>
- Kettle, D.S., Elson, M.M. & Dyce, A.L. (1952) The early stages of British biting midges *Culicoides* Latreille (Diptera: Ceratopogonidae) and allied genera. *Bulletin of Entomological Research*, 43, 421–467, pls.14–19.  
<https://doi.org/10.1017/S000748530002945X>
- Kettle, D.S. & Lawson, J.W.H. (1955) Descriptions of two species of *Culicoides* Latreille (Diptera: Ceratopogonidae) new to science. *Proceedings of the Entomological Society of London (B)*, 24, 37–47.  
<https://doi.org/10.1111/j.1365-3113.1955.tb01472.x>
- Khalaf, K.T. (1952a) The male of *Culicoides weesei* Khalaf (Heleidae, Diptera). *Journal of the Kansas Entomological Society*, 25, 44–47. (Apr.).
- Khalaf, K.T. (1952b) The *Culicoides* of the Wichita Refuge, Oklahoma. Taxonomy and seasonal incidence (Diptera, Heleidae). *Annals of the Entomological Society of America*, 45, 348–358. (June).  
<https://doi.org/10.1093/aesa/45.2.348>
- Khalaf, K.T. (1954) The speciation of the genus *Culicoides* (Diptera, Heleidae). *Annals of the Entomological Society of America*, 47, 34–51.  
<https://doi.org/10.1093/aesa/47.1.34>
- Khalaf, K.T. (1957a) Light-trap survey of the *Culicoides* of Oklahoma (Diptera, Heleidae). *American Midland Naturalist*, 58, 182–221.  
<https://doi.org/10.2307/2422369>
- Khalaf, K.T. (1957b) Heleids from Iraq, with description of new species (Diptera: Heleidae (Ceratopogonidae)). *Bulletin de la Société Entomologique d'Égypte*, 41, 335–350.
- Khalaf, K.T. (1957c) Light-trap survey of the *Culicoides* of Oklahoma (Diptera, Heleidae). *American Midland Naturalist*, 58, 182–221.  
<https://doi.org/10.2307/2422369>
- Khalaf, K.T. (1961) More *Culicoides* from Iraq (Diptera: Heleidae). *Beitrag zur Entomologie*, 11, 450–470.
- Khalaf, K.T. (1969) *Monohelea* from Mississippi and Louisiana (Diptera: Ceratopogonidae). *Journal of the Kansas Entomological Society*, 42, 406–408.
- Khamala, C.P.M. & Kettle, D.S. (1971) The *Culicoides* Latreille (Diptera: Ceratopogonidae) of East Africa. *Transactions of the Royal Entomological Society of London*, 123, 1–95.  
<https://doi.org/10.1111/j.1365-2311.1971.tb00840.x>
- Kieffer, J.J. (1899) Description d'un nouveau genre et tableau des genres européens de la famille des Chironomides (Dipt.). *Bulletin de la Société Entomologique de France*, 1899, 66–70.  
<https://doi.org/10.5962/bhl.part.8618>
- Kieffer, J.J. (1901a) Synopse des représentants européens du groupe *Ceratopogon* avec description de quelques espèces nouvelles. *Bulletin de la Société d'Histoire Naturelle de Metz*, 9, 143–165.
- Kieffer, J.J. (1901b) Zur Kenntnis der *Ceratopogon*-Larven. *Allgemeinen Zeitschrift für Entomologie*, 6, 216–219.
- Kieffer, J.J. (1906a) Diptera. Fam. Chironomidae. In: Wytsman, P. (Ed.), *Genera Insectorum*: Fasc. 42, Bruxelles. 78 pp., 4 pls.

- Kieffer, J.J. (1906b) Description de nouveaux diptères nématocères d'Europe. *Annales de la Société Scientifique de Bruxelles*, 30, 311–348.
- Kieffer, J.J. (1906c) Description d'un genre nouveau et de quelques espèces nouvelles de diptères de l'Amérique de Sud. *Annales de la Société Scientifique de Bruxelles*, 30, 349–358.
- Kieffer, J.J. (1908) Description d'une espèce nouvelle de chironomides d'Égypte. *Annales Historico-Naturales Musei Nationalis Hungarici*, 6, 576–577.
- Kieffer, J.J. (1909a) Considérations sur le genre *Stenoxenus* Coq. avec description d'une espèce nouvelle. *Annales Historico-Naturales Musei Nationalis Hungarici*, 7, 46–49.
- Kieffer, J.J. (1909b) Diagnoses de nouveaux chironomides d'Allemagne. *Bulletin de la Société d'Histoire Naturelle de Metz*, 26, 37–56.
- Kieffer, J.J. (1910) Etude sur les chironomides des Indes Orientales, avec description de quelques nouvelles espèces d'Égypte. *Memoirs of the Indian Museum*, 2, 181–242.
- Kieffer, J.J. (1911a) Description de nouveaux chironomides de l'Indian Museum de Calcutta. *Records of the Indian Museum*, 6, 113–177, pls. 6–7.  
<https://doi.org/10.5962/bhl.part.21331>
- Kieffer, J.J. (1911b) Les chironomides de (Tendipedidae) de l'Himalaya et d'Assam. *Records of the Indian Museum*, 6, 319–349. (Dec.).
- Kieffer, J.J. (1911c) The Percy Sladen Trust Expedition to the Indian Ocean in 1905. Under the leadership of Mr. J. Stanley Gardiner. Vol. 3. No. XV. - Diptera, Chironomidae der Seychellen-inseln, aus der Sammlung von Mr. H. Scott. *Transactions of the Linnean Society of London (2nd Ser.)*, 14, 331–366.  
<https://doi.org/10.1111/j.1096-3642.1911.tb00532.x>
- Kieffer, J.J. (1911d) Nouvelles descriptions de chironomides obtenus d'éclosion. *Bulletin de la Société d'Histoire Naturelle de Metz*, 27, 1–60. (Nov. 1).
- Kieffer, J.J. (1911e) Bemerkungen zur Arbeit des Herrn Dr. Speiser über die Dipteren-Gruppe der sogenannten Heleinae. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere*, 30, 509–526.
- Kieffer, J.J. (1912a) Tendipedidae (Chironomidae) (Dipt.). *Supplementa Entomologica*, 1, 27–43.
- Kieffer, J.J. (1912b) Quelques nouveaux tendipédides (Dipt.) obtenus d'éclosion (2e note). *Bulletin de la Société Entomologique de France*, 1912, 101–103.
- Kieffer, J.J. (1912c) Nouveaux Chironomides (Tendipedidae) de Ceylan. *Spolia Zeylanica*, 8, 1–24.  
<https://doi.org/10.5962/bhl.part.1526>
- Kieffer, J.J. (1913a) Nouveaux chironomides (tendipédides) d'Allemagne. *Bulletin de la Société d'Histoire Naturelle de Metz*, 28, 7–35.  
<https://doi.org/10.5962/bhl.part.16290>
- Kieffer, J.J. (1913b) Nouvelle contribution à la connaissance des tendipédides d'Allemagne. *Bulletin de la Société d'Histoire Naturelle de Metz*, 28, 37–44.
- Kieffer, J.J. (1913c) *Dasyhelea halophila* n. sp., eine neue halophile Zuckmücke. *Biologischen Centralblatt*, 33, 255–258.
- Kieffer, J.J. (1913d) Nouvelle étude sur les chironomides de l'Indian Museum de Calcutta. *Records of the Indian Museum*, 9, 119–197, pls. 11–12.
- Kieffer, J.J. (1913e) Chironomidae et Cecidomyiidae. In: Alluaud, C.A. & Jeannel, R. (Eds), *Voyage de Ch. Alluaud et R. Jeannel en Afrique Orientale (1911–1912). Resultats scientifiques. Diptera*, 5, 1–43, Paris, 351 pp.
- Kieffer, J.J. (1914a) Zwölf neue Culicoidinenarten. *Archiv für Hydrobiologie und Planktonkunde*, Supplement 2, 231–241.
- Kieffer, J.J. (1914b) South African Chironomidae (Diptera). *Annals of the South African Museum*, 10, 259–270.  
<https://doi.org/10.5962/bhl.part.9317>
- Kieffer, J.J. (1914c) Quelques nouveaux chironomides des Indes. *Records of the Indian Museum*, 10, 313–315.  
<https://doi.org/10.5962/bhl.part.5631>
- Kieffer, J.J. (1915a) Neue halophile Chironomiden. *Archiv für Hydrobiologie*, Suppl. 2, 472–482.
- Kieffer, J.J. (1915b) Neue Chironomiden aus Mitteleuropa. *Brotéria, Serie Zoologica*, 13, 65–87.
- Kieffer, J.J. (1915c) Über dänische Chironomiden. *Entomologische Meddelelser*, 10, 280–297 [280–284 published July 31; 285–297 published Dec. 31].
- Kieffer, J.J. (1916a) Tendipedides (chironomides) de Formose. *Annales Historico-Naturales Musei Nationalis Hungarici*, 14, 81–121.
- Kieffer, J.J. (1916b) Tendipedidae (Dipt.). *Supplementa Entomologica*, 5, 114–117.
- Kieffer, J.J. (1917a) Chironomides d'Australie conservés au Musée National Hongrois de Budapest. *Annales Historico-Naturales Musei Nationalis Hungarici*, 15, 175–228.
- Kieffer, J.J. (1917b) Chironomides d'Amérique conservés au Musée National Hongrois de Budapest. *Annales Historico-Naturales Musei Nationalis Hungarici*, 15, 292–364.
- Kieffer, J.J. (1918a) Chironomides d'Afrique et d'Asie conservés au Museum National Hongrois de Budapest. *Annales Historico-Naturales Musei Nationalis Hungarici*, 16, 31–136.
- Kieffer, J.J. (1918b) Beschreibung neuer, auf Lazarettsschiffen des östlichen Kriegsschauplatzes und bei Ignalino in Litauen von Dr. W. Horn gesammelter Chironomiden, mit Uebersichtstabellen einiger Gruppen von paläarktischen Arten (Dipt.). *Entomologische Mitteilungen*, 7, 35–53, 94–110, 163–170, 177–188.

- Kieffer, J.J. (1919a) Chironomides d'Europe conservés au Musée National Hongrois de Budapest. *Annales Historico-Naturales Musei Nationalis Hungarici*, 17, 1–160. (Dec. 29).
- Kieffer, J.J. (1919b) Chironomiden der Nördlichen Polarregion. *Entomologische Mitteilungen*, 8, 40–48 [Received at BMNH May 3], 110–120 [Received at BMNH Aug. 23].  
<https://doi.org/10.5962/bhl.part.27266>
- Kieffer, J.J. (1919c) Observations sur les chironomides (Dipt.) décrits par J. R. Malloch. *Bulletin de la Société Entomologique de France*, 1919, 191–194.  
<https://doi.org/10.5962/bhl.part.29619>
- Kieffer, J.J. (1921a) Chironomides nouveaux ou peu connus de la région paléarctique. *Bulletin de la Société d'Histoire Naturelle de la Moselle*, 29, 51–109.
- Kieffer, J.J. (1921b) Chironomides de l'Afrique Équatoriale. *Annales de la Société Entomologique de France*, 90, 1–56.
- Kieffer, J.J. (1921c) Description de quelques Chironomides exotiques. *Annales de la Société Scientifique de Bruxelles*, 40, 181–186.
- Kieffer, J.J. (1921d) Chironomides de Courlande. *Annales de la Société Scientifique de Bruxelles*, 40, 275–298. (June 30).
- Kieffer, J.J. (1921e) Notes synonymiques. *Bulletin de la Société Entomologique de France*, 1921, 7.
- Kieffer, J.J. (1921f) Neue Chironomiden aus Mitteleuropa. *Archiv für Hydrobiologie*, Suppl. 2, 785–808.
- Kieffer, J.J. (1921g) Chironomides des Philippines et de Formose. *Philippine Journal of Science*, 18, 557–593.
- Kieffer, J.J. (1921h) Sur quelques Diptères piqueurs de la tribu des Ceratopogoninae. *Archives de l'Institut Pasteur de l'Afrique du Nord*, 1, 107–115. (March).
- Kieffer, J.J. (1921i) Nouvelles observations sur les Diptères piqueurs de la tribu des Ceratopogoninae. *Archives de l'Institut Pasteur de l'Afrique du Nord*, 1, 262–268.
- Kieffer, J.J. (1922a) Notice sur quelques chironomides d'Amérique et de Nouvelle-Zélande. *Annales de la Société Linnéenne de Lyon*, 68, 145–148 (1921).  
<https://doi.org/10.3406/linly.1922.14601>
- Kieffer, J.J. (1922b) Étude sur les chironomides de Formose. *Annales de la Société Linnéenne de Lyon*, 68, 149–163 (1921).  
<https://doi.org/10.3406/linly.1922.14602>
- Kieffer, J.J. (1922c) Nouveaux Chironomides piqueurs habitant le Sleswig-Holstein. *Annales de la Société Scientifique de Bruxelles*, 41, 230–237.
- Kieffer, J.J. (1922d) Nouveaux Chironomides à larves aquatiques. *Annales de la Société Scientifique de Bruxelles*, 41, 355–367.
- Kieffer, J.J. (1922e) Chironomides nouveaux ou peu connus de la région Paléarctique. *Annales de la Société Scientifique de Bruxelles*, 42, 71–128.
- Kieffer, J.J. (1922f) Observations biologiques sur les Chironomides piqueurs avec descriptions de deux espèces nouvelles. *Archives de l'Institut Pasteur de l'Afrique du Nord*, 2, 387–392.
- Kieffer, J.J. (1922g) Nouveaux Chironomides piqueurs habitant l'Algérie. *Archives de l'Institut Pasteur de l'Afrique du Nord*, 2, 494–518.
- Kieffer, J.J. (1923a) Ceratopogonines recueillis au Sahara Constantinois. *Archives de l'Institut Pasteur d'Algérie*, 1, 654–683. [Received at BMNH May 5, 1924].
- Kieffer, J.J. (1923b) Chironomides piqueurs de Java. *Annales de la Société Scientifique de Bruxelles*, 43, 134–143. (Dec. 12).
- Kieffer, J.J. (1924a) Chironomides nouveaux ou rares de l'Europe centrale. *Bulletin de la Société d'Histoire Naturelle de la Moselle*, 30, 11–110.
- Kieffer, J.J. (1924b) Quelques nouveaux chironomides piqueurs de l'Europe centrale. *Archives de l'Institut Pasteur d'Algérie*, 2, 391–408.
- Kieffer, J.J. (1924c) Quelques chironomides nouveaux et remarquables du nord de l'Europe. *Annales de la Société Scientifique de Bruxelles*, 43, 390–397.
- Kieffer, J.J. (1925a) Nouveaux genres et nouvelles espèces de chironomides piqueurs. *Archives de l'Institut Pasteur d'Algérie*, 3, 405–430.
- Kieffer, J.J. (1925b) 16. Chironomiden der Hochmoore Nordeuropas und des östlichen Mitteleuropas. *Beitrage zur Kunde Estlands*, 10, 145–163.
- Kieffer, J.J. (1925c) Chironomides de la République Argentine. *Annales de la Société Scientifique de Bruxelles*, 44, 73–92.  
<https://doi.org/10.1080/00378941.1926.10833585>
- Kieffer, J.J. (1925d) Diptères (Nématocères piqueurs): Chironomidae Ceratopogoninae. *Faune de France*, 11, 1–139.
- Kieffer, J.J. (1925e) Chironomides d'Égypte (Dipt.). *Bulletin de la Société Royale Entomologique d'Égypte*, 1924, 244–312 (1924).
- Kieffer, J.J. (1927) Weitere Beiträge zur Chironomidenfauna Estlands. *Tartu Ülikooli juures oleva Loodusuuriate Seltsi aruanDED toimetanud H.G. Perlitz*, 33, 59–70 (1926).
- Kieffer, J.J. & Thienemann, A. (1908) Neue und bekannte Chironomiden und ihre Metamorphose. *Zeitschrift für Wissenschaftliche Insektenbiologie*, 4, 1–10, 33–39, 78–84, 124–128, 184–190, 214–219, 256–259, 277–286.
- Kinoshita, S. (1918) Studies on a bloodsucking *Culicoides* in Korea. *Dobutsugaki Zasshi (Zoological Magazine)*, 30, 155–160, pl. 3. [in Japanese]
- Kirk-Spriggs, A.H. & Sinclair, B.J. (Eds.) (2017) *Manual of Afrotropical Diptera. Volume 1. Introductory chapters and keys to*

- Diptera families*. Suricata 4. South African National Biodiversity Institute, Pretoria, xiii + 425 pp.
- Kitaoka, S. (1973) Descriptions of four new species and the hitherto unknown males of four species of the *Culicoides* (Diptera, Ceratopogonidae) from Amami-Oshima, Japan. *National Institute of Animal Health Quarterly*, 13, 211–219.
- Kitaoka, S. (1975) Five new species of *Culicoides* (Diptera: Ceratopogonidae) of the Nansei Islands. *National Institute of Animal Health Quarterly*, 15, 192–200.
- Kitaoka, S. (1980) Six new species and males of some species of Japanese *Culicoides* (Diptera: Ceratopogonidae). *National Institute of Animal Health Quarterly*, 20, 11–22.
- Kitaoka, S. (1983) Five new species of the genus *Culicoides* (Diptera: Ceratopogonidae) from West Malaysia. *National Institute of Animal Health Quarterly*, 23, 92–98.
- Kitaoka, S. (1984) Three new species of *Culicoides* biting midges (Diptera: Ceratopogonidae) from Japan. *Japanese Journal of Sanitary Zoology*, 35, 301–305.  
<https://doi.org/10.7601/mez.35.301>
- Kitaoka, S. (1991) Two new species of biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae) from northernmost Honshu, Japan. *Japanese Journal of Sanitary Zoology*, 42, 289–292.  
<https://doi.org/10.7601/mez.42.289>
- Kitaoka, S. (1994) Three new species of the biting midge *Forcipomyia* subgenus *Lasiohelea* from Honshu, Japan (Diptera: Ceratopogonidae). *Japanese Journal of Sanitary Zoology*, 45, 1–6.  
[https://doi.org/10.7601/mez.45.1\\_1](https://doi.org/10.7601/mez.45.1_1)
- Kitaoka, S. & Shinonaga, S. (1989) Biting midges from northern Pakistan with descriptions of three new species (Diptera: Ceratopogonidae). *Japanese Journal of Sanitary Zoology*, 40, 25–31.  
<https://doi.org/10.7601/mez.40.25>
- Kitaoka, S. & Tanaka, K. (1985) Description of seven new species of *Culicoides* (Diptera: Ceratopogonidae) from Taiwan. *Japanese Journal of Sanitary Zoology*, 36, 39–48.  
<https://doi.org/10.7601/mez.36.39>
- Kitaoka, S., Hiroyuki, T. & Choochote, W. (2005) New species and records of *Culicoides* biting midges attracted to human baits in Doi Inthanon National Park, northern Thailand (Diptera: Ceratopogonidae). *Medical Entomology and Zoology*, 56, 283–291.  
<https://doi.org/10.7601/mez.56.283>
- Kitching, R.L., Bickel, D., Creagh, A.C., Hurley, K. & Symonds, C. (2004) The biodiversity of Diptera in Old World rain forest surveys: a comparative faunistic analysis. *Journal of Biogeography*, 31, 1185–1200.  
<https://doi.org/10.1111/j.1365-2699.2004.01096.x>
- Knab, F. (1914) Ceratopogoninae sucking the blood of caterpillars. *Proceedings of the Entomological Society of Washington*, 16, 63–66.
- Knab, F. (1915) New Ceratopogoninae from Peru. *Insector Inscitiae Menstruus*, 3, 109–111.
- Knausenberger, W.I. & Wirth, W.W. (1980) A new species of *Macropesza* (Diptera: Ceratopogonidae) with biological notes on the genus. *Florida Entomologist*, 63, 127–136.  
<https://doi.org/10.2307/3494664>
- Knoz, J. (1987) Description of a new species of *Ceratoculicoides* (Diptera, Ceratopogonidae) from Czechoslovakia and review of the genus. *Acta Entomologica Bohemoslovaca*, 84, 388–392.
- Knoz, J. & Beuk, P.L.T. (2002) Family Ceratopogonidae. pp. 103–108 In: Beuk, P.L.T. (Ed.), *Checklist of the Diptera of the Netherlands*. KNNV Uitgeverij, Utrecht, Netherlands. 448 pp.
- Knoz, J. & Ratajsky, F. (1987) A contribution to the knowledge of the Czechoslovakian species of *Alluaudomyia* Kieffer (Diptera, Ceratopogonidae). *Scripta Facultatis Scientiarum Naturalium Universitatis Purkynianae Brunensis*, 17, 561–579.
- Kong, Z. & Yu, Y.-X. (1990) Description of *Culicoides qingdaoensis* sp. nov. in China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 57–58. [in Chinese, English summary].
- Kono, H. & Takahasi, H. (1940) A revision of the *Culicoides*-species of Saghalien and Hokkaido (Ceratopogonidae, Diptera). *Insecta Matsumurana*, 14, 69–77.
- Konurbajev, E.O. (1965) Biting midges (Diptera, Heleidae) of the Issyk-kul hollow in Kirghizia. *Entomologicheskoe Obozrenie*, 44, 132–140. English translation in *Entomological Review*, 44, 75–78. [in Russian].
- Kremer, M. (1972) *Culicoides* (Diptera: Ceratopogonidae) de la région éthiopienne et particulièrement d'Angola (IIe note). (Espèces nouvelles, redescription et chorologie). *Publicações culturais Companhia de Diamantes de Angola*, 84, 81–107.
- Kremer, M. & Brunhes, J. (1973) Description de *Culicoides bisolis* (Diptère: Cératopogonidè) de Madagascar. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 10, 287–290 (1972).
- Kremer, M. & Callot, J. (1961) *Culicoides musilator* n. sp. et espèces du groupe *odibilis* nouvelles pour la faune française (Diptera: Ceratopogonidae). *Annales de Parasitologie Humaine et Comparée*, 34, 689–699.  
<https://doi.org/10.1051/parasite/1961364689>
- Kremer, M. & Coluzzi, M. (1971) Description de *Culicoides malevillei* n. sp. (Diptera, Ceratopogonidae). *Parassitologia*, 13, 415–417.
- Kremer, M. & Deduit, J. (1961) Sur quelques *Culicoides* (Diptera: Ceratopogonidae) de Normandie. *Annales de Parasitologie Humaine et Comparée*, 36, 700–705.  
<https://doi.org/10.1051/parasite/1961364700>



- Kremer, M. & Nevill, E.M. (1972) Description de *Culicoides pretoriensis* et *Culicoides olysageri*, d'Afrique de sud. *Bulletin de la Société de Pathologie Exotique*, 65, 463–472.
- Kremer, M., Leberre, G. & Beaucournu-Saguez, F. (1971) Notes sur les *Culicoides* (Dipt. Ceratopogonidae) de Corse. Description de *C. corsicus* n. sp. *Annales de Parasitologie Humaine et Comparée*, 46, 653–660.  
<https://doi.org/10.1051/parasite/1971465653>
- Kremer, M., Rebholtz-Hirtzel, C. & Bailly-Choumara, H. (1975a) Quatrième contribution à l'étude faunistique des *Culicoides* (Diptera, Ceratopogonidae) du Maroc Description de *C. landauae* n. sp. (Diptera, Ceratopogonidae), redescription de *C. faghihi* Navai et d'une forme de *C. subfascipennis* Kieffer. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 13, 205–214.
- Kremer, M., C. Rebholtz-Hirtzel and J.-C. Delécolle (1975b) Etude des types de *Culicoides* (Diptera, Ceratopogonidae) de Goetghebuer et des autres Ceratopogonidae déposés au Musée de Tervuren. *Revue de Zoologie Africaine (Belgique)*, 89, 769–820.
- Kremer, M., Rebholtz-Hirtzel, C. & Delécolle, J.-C. (1976) Description d'une espèce nouvelle: *C. dubitatus* n. sp. (Diptera, Ceratopogonidae) de la région Ethiopienne. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 13, 233–236 (1975).
- Kremer, M., Delécolle, J.-C., Bailly-Choumara, H. & Chaker, E. (1979) Cinquième contribution à l'étude faunistique des *Culicoides* (Diptera, Ceratopogonidae) du Maroc Description de *C. calloti* n. sp. *Cahiers ORSTOM, Série Entomologie Médicale et Parasitologie*, 17, 195–199.
- Kremer, M., Chaker, E. & Delécolle, J.-C. (1981) Description de *Culicoides pseudolangeroni* n. sp. [Dipt. Ceratopogonidae]. *Bulletin de la Société Entomologique de France*, 86, 291–297.
- Kremer, M., Delécolle, J.-C. & Braverman, Y. (1991) A new and a redescribed species of *Culicoides* from Sinai (Diptera: Ceratopogonidae). *Israel Journal of Zoology*, 37, 151–157.
- Krivosheina, N.P. (1968) A contribution to the biology and morphology of little studied biting midges of the genus *Forcipomyia* Meigen (Diptera, Ceratopogonidae). *Zoologicheskyy Zhurnal*, 47, 578–590. [in Russian, English summary].
- Krivosheina, N.P. & Remm, R. (1974) New species of xylophilous midges (Diptera, Ceratopogonidae) from the Pomeranian SSR. In: *Insects damaging wood in forest biocoenoses in southern Pomerania. Nasekomyye, rezrushiteli drevesiny v lesnykh biotsenozakh Ivzhnogo Primor'ia (1973)*. Akademiya Nauk SSSR, Institut evoliutsionnoy morfologii i ekologii zhivotnykh, pp. 116–124. [in Russian].
- Kuhn, J., Andino, P., Calvez, R., Espinosa, R., Hamerlik, L., Vie, S., Dangles, O. & Jacobsen, D. (2011) Spatial variability in macroinvertebrate assemblages along and among neighbouring equatorial glacier-fed streams. *Freshwater Biology*, 56, 2226–2244.  
<https://doi.org/10.1111/j.1365-2427.2011.02648.x>
- Laboulbène, A. (1869) Histoire des métamorphoses du *Ceratopogon Dufouri*. *Annales de la Société de Entomologie de France*, (4) 9, 157–166, pl. 7.
- Lai, J., Zhu, W. & Yu, Y.-X. (1990) Descriptions of *Culicoides leizhouensis* sp. nov. and *C. marinus* sp. nov. in Guandong Province, China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 68–71. [in Chinese, English summary].
- Lai, C.-C., Liu, Z.-H., Fang, J.-M. & Yu, Y.-X. (2018) A new species of *Dasyhelea* from Conghua District in Guangdong Province. *Chinese Journal of Hygienic Insecticides & Equipments*, 24, 278–279. [in Chinese, English summary]
- Lalor, N.P. O'G. (1912) *Investigation of Malaria at Kyaukpkyu*. Government Printing Office, Rangoon, pp. 15–17.
- Lane, J. (1944) As Espécies Neotropicas do Genero *Clinohoelea* Kieffer, 1917. (Diptera, Ceratopogonidae). *Revista de Entomologia*, 15, 249–261.
- Lane, J. (1946a) New Neotropical Ceratopogonidae (Heleidae). (Diptera, Nematocera). *Revista de Entomologia*, 17, 202–215.
- Lane, J. (1946b) Duas espécies novas de Ceratopogonidae Brasileiros (Diptera Ceratopogonidae (Heleidae)). *Livro de Homagem a R.F. d'Almeida*, 22, 219–225.  
<https://doi.org/10.11606/issn.2358-792X.v1i2p225-240>
- Lane, J. (1947a) Espécies Brasileiras de *Stilobezzia* (Dipt. Ceratopogonidae) e *Zygoneura stonei* nov. nom (Dipt. Mycetophilidae). *Revista de Entomologia*, 18, 197–214.
- Lane, J. (1947b) Novas espécies de *Palpomyia* do Brasil (Diptera, Ceratopogonidae). *Revista de Entomologia*, 18, 438–447.
- Lane, J. (1947c) A biologia e taxonomia de algumas espécies dos grupos *Forcipomyia* e *Culicoides* (Diptera, Ceratopogonidae) (Heleidae). *Arquivos da Faculdade de Higiene e Saúde Pública da Universidade de São Paulo*, 1, 159–170.  
<https://doi.org/10.11606/issn.2358-792X.v1i1p159-170>
- Lane, J. (1948) Novas Ceratopogonidae do Brasil (Diptera, Ceratopogonidae) (Heleidae). *Arquivos da Faculdade de Higiene e Saúde Pública da Universidade de São Paulo*, 1, 225–239, Figs 1–8 (1947).  
<https://doi.org/10.11606/issn.2358-792X.v1i2p225-240>
- Lane, J. (1956a) On "*Paryphoconous*" and *Stenoxenus* (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia*, 16, 299–308.
- Lane, J. (1956b) The genus "*Macfiehelea*" Lane, 1946 (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia*, 16, 435–438.
- Lane, J. (1958) On Neotropical *Bezzia*. *Revista Brasileira de Entomologia*, 8, 25–36.
- Lane, J. (1960) Additional data on "*Palpomyia*" (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia*, 20, 381–389.

- Lane, J. (1961a) Further notes on Neotropical Ceratopogonidae (Diptera). *Revista Brasileira de Biologia*, 21, 37–44.
- Lane, J. (1961b) Insecta Amapaensia, Diptera: Ceratopogonidae and Anisopodidae. *Studia Entomologica*, 4, 449–452.
- Lane, J. (1961c) The genera *Stenoxenus* and *Paryphoconus* in the Neotropics (Diptera: Ceratopogonidae). *Studia Entomologica*, 4, 452–458.
- Lane, J. & Duret, J.P. (1954) *Clinohelea* da Argentina e do Brasil (Diptera, Ceratopogonidae). *Dusenya*, 5, 247–253.
- Lane, J. & Forattini, O.P. (1956) Neotropical *Stilobezzia* Kieffer, 1911 I. Nine new Panamanian species. (Diptera, Nematocera, Ceratopogonidae). *Revista Brasileira de Malariologiae Doenças Tropicais*, 8, 207–226.
- Lane, J. & Forattini, O.P. (1958) Neotropical *Stilobezzia* II. Fourteen new species, chiefly from Panama (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 8, 203–224.
- Lane, J. & Forattini, O.P. (1961) Neotropical *Stilobezzia*, 1911 III. Key for the the adults of this genus and description of one new species (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 10, 83–94.
- Lane, J., Forattini, O.P. & Rabello, E.X. (1955) Biologia e espécies novas de *Palpomyia* e *Stilobezzia* (Diptera, Nematocera, Ceratopogonidae). *Dusenya*, 6, 81–88.
- Lane, J. & Wirth, W.W. (1961) A new Neotropical species of *Dicrohelea* (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia*, 10, 81–82.
- Lane, J. & Wirth, W.W. (1964) The biting midge genus *Monohelea* Kieffer in the Neotropical Region (Diptera, Ceratopogonidae). *Studia Entomologica*, 7, 209–236.
- Lane, R.P. (1977) Ectoparasitic adaptations in *Forcipomyia* from butterflies with two new African species (Ceratopogonidae). *Systematic Entomology*, 2, 305–312.  
<https://doi.org/10.1111/j.1365-3113.1977.tb00379.x>
- Lane, R.P. (1983) Insects of Saudi Arabia *Culicoides* (Diptera: Ceratopogonidae) of Saudi Arabia and their potential veterinary importance. *Fauna of Saudi Arabia*, 5, 529–544.
- Lane, R.P. & Cotman, H.E. (1986) A new species of *Forcipomyia* (Diptera: Ceratopogonidae) ectoparasitic on butterflies in New Guinea. *Journal of Natural History*, 20, 617–620.  
<https://doi.org/10.1080/00222938600770411>
- Langeron, M. (1913) *Mycterotypus laurae*. Description d'une variété nouvelle (*M. laurae*, var. *peneti*). *Archives de Parasitologie (Paris)*, 16, 282–301.
- Lassen, S.B., Nielsen, S.A., Skovgard, H. & Kristensen, M. (2012) Molecular differentiation of *Culicoides* biting midges (Diptera: Ceratopogonidae) from the subgenus *Culicoides* Latreille in Denmark. *Parasitology Research*, 110, 1765–1771.  
<https://doi.org/10.1007/s00436-011-2697-5>
- Latreille, P.A. (1802) *Histoire naturelle, générale et particulière, des crustacés et des insectes. Ouvrage faisant suite à l'histoire naturelle générale et particulière, composée par Leclerc de Buffon, et rédigée par C.S. Sonnini, membre de plusieurs sociétés savantes. Tome troisième Familles naturelles des genres. "An X."* Dufart, Paris, xii + 13–467 + [1] pp.  
<https://doi.org/10.5962/bhl.title.15764>
- Latreille, P.A. (1809) *Genera crustaceorum et insectorum secundum ordinem naturalem in familias disposita, iconibus exemplisque plurimis explicata. Tomus quartus et ultimus*. A. Koenig, Parisiis et Argentorati [= Paris and Strasbourg], 399 pp.
- Latreille, P.A. (1820) *Le opere di Buffon. Nuovamente ordinate ed arricchite della sua vita di un ragguaglio dei progressi della storia naturale dal MDCCCL in poi dal Conte di Lacépède. Prima edizione Italiana adorna ni nuove e diligenti incisioni. Vol. XXXII. Storia naturale, generale e particolare de' crostacei e degl' insetti. Vol. II*. Apollo, Venezia [= Venice], 664 + [4] p.
- Lee, D.J. (1948a) Australasian Ceratopogonidae (Diptera, Nematocera). Part II. The *Leptoconops* group of genera. *Proceedings of the Linnean Society of New South Wales*, 72, 332–338 (1947).
- Lee, D.J. (1948b) Australasian Ceratopogonidae (Diptera, Nematocera). Part III. The *Bezzia* group of genera. *Proceedings of the Linnean Society of New South Wales*, 72, 339–344 (1947).
- Lee, D.J. (1948c) Australasian Ceratopogonidae (Diptera, Nematocera). Part IV. The *Stilobezzia* group of genera. *Proceedings of the Linnean Society of New South Wales*, 72, 345–356 (1947).
- Lee, D.J. (1948d) Australasian Ceratopogonidae (Diptera, Nematocera). Part V. The *Palpomyia* group of genera. *Proceedings of the Linnean Society of New South Wales*, 73, 57–70.
- Lee, D.J. (1963) Australasian Ceratopogonidae (Diptera, Nematocera). Part IX. The genus *Macrurohelea*. *Proceedings of the Linnean Society of New South Wales*, 87, 339–340.
- Lee, D.J. & Reye, E.J. (1953) Australasian Ceratopogonidae (Diptera, Nematocera). Part VI. Australian species of *Culicoides*. *Proceedings of the Linnean Society of New South Wales*, 77, 369–394.
- Lee, D.J. & Reye, E.J. (1955) Australasian Ceratopogonidae (Diptera, Nematocera). Part VII. Notes of the genera *Alluaudomyia*, *Ceratopogon*, *Culicoides* and *Lasiohelea*. *Proceedings of the Linnean Society of New South Wales*, 79, 233–246.
- Lee, D.J. & Reye, E.J. (1963) Australasian Ceratopogonidae (Diptera, Nematocera). Part X. Additional Australian species of *Culicoides*. *Proceedings of the Linnean Society of New South Wales*, 87, 352–363.
- Lee, K.M., Wirth, W.W. & Chan, K.L. (1989) A new species of *Dasyhelea* midge reared from drains in Singapore (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 91, 452–457.
- Lee, T.-S. (1974) Description of a new *Culicoides* species from Inner Mongolia, China (Diptera: Ceratopogonidae). *Acta Entomologica Sinica*, 17, 353–355. [Received at BMNH Sept. 10]. [in Chinese, Russian summary].
- Lee, T.-S. (1975) Biting midges of Kwangtung and Kwangsi, China (Diptera: Ceratopogonidae). *Acta Entomologica Sinica*, 18,

433–436. [in Chinese].

- Lee, T.-S. (1976) Ceratopogonidae. pp. 1–89. In: *The bloodsucking Ceratopogonidae, Simuliidae and Tabanidae of Northern China*. Beijing: Science Press, x + 202 pp., 5 pls. [in Chinese]
- Lee, T.-S. (1978) Diptera: Biting midges. *Chinese Economic Entomology*, 13, i–iv, 1–124. [in Chinese].
- Lee, T.-S. (1979a) Biting midges of Tibet, China (Diptera: Ceratopogonidae). *Acta Entomologica Sinica*, 22, 98–107. [in Chinese, English summary]
- Lee, T.-S. (1979b) A new species of *Culicoides* (Diptera, Ceratopogonidae) from Tibet, China. *Entomotaxonomia*, 1, 33–34. [in Chinese, English summary].
- Lee, T.-S. (1980) *Culicoides* of Yunnan Province, China (Diptera: Ceratopogonidae). *Acta Zootaxonomica Sinica*, 5, 85–88. [in Chinese, English summary].
- Lee, T.-S. (1982) Diptera: Ceratopogonidae. pp. 165–172. In: *The Series of the Comprehensive Scientific Expedition to the Qinghai-Xizang Plateau. Insects of Xizang 2*. Peking [= Beijing]: Science Press, ix + 508 pp. [in Chinese, English summary].
- Lee, T.-S. (1984) A new species of *Culicoides* from Hengduan Mountains, China (Diptera: Ceratopogonidae). *Acta Zootaxonomica Sinica*, 9, 88–89. [in Chinese, English summary].
- Lee, T.-S. (1988) Diptera: Ceratopogonidae (II). Fasc. 38. *Economic Insect Fauna of China*, 127 pp. [in Chinese].
- Lemblé, C., Messaddeq, N., Capela, R. & Kremer, M. (1990) Description de *Culicoides ribeiroi* n. sp. (Diptera, Ceratopogonidae) du Portugal. *Annales de Parasitologie Humaine et Comparée*, 65, 267–269.  
<https://doi.org/10.1051/parasite/1990655267>
- Lenz, F. (1934) 13a. Heleidae (Ceratopogonidae). pp. 95–133. In: Lindner, E. (ed.), *Die Fliegen der palaearktischen Region 3*, (Lfg. 78). Stuttgart.
- Lewis, F.B. (1956) Two new species of Ceratopogonidae (Diptera). *Psyche*, 63, 46–49.  
<https://doi.org/10.1155/1956/39053>
- Li, M., Zhang, B. & Liu, G.-P. (2011) A new species of the genus *Culicoides* (Diptera: Ceratopogonidae) from Heilongjiang province, China. *Chinese Journal of Vector Biology and Control*, 22, 363–367. [in Chinese, English summary].
- Li, S.-J. & Yu, Y.-X. (1997a) A new record and new species of *Alluaudomyia* from Henan Province, China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 8, 123–124. [in Chinese, English summary].
- Li, X.-M. & Yu, Y.-X. (1997b) A new species of *Bezzia* in China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 8, 121–122. [in Chinese, English summary].
- Li, J.-C., Li, D.-X., Nie, W.-Z., Wang, H.-J., Yu, Y.-X. & Yan, G. (2006) The composition of biting midges in Beijing and Hebei areas. *Chinese Journal of Frontier Health and Quarantine*, 29, 282–287. [in Chinese, English summary].
- Li, M.-W., Zhang, J.-R., Liang, Z.-H., Huo, M.-Y., Lai, Y.-R. & Yu, Y.-X. (2008) Preliminary report of survey of Ceratopogonidae on Lautau Island, Hong Kong (Diptera, Ceratopogonidae). *Acta Zootaxonomica Sinica*, 33, 706–708.
- Li, X.-C., Long, C., Ren, Y.-L., Yang, L., Wang, F.-P. & Yu, Y.-X. (2015) Two new species of *Dasyhelea* from Emei Mountain. *Chinese Journal of Hygienic Insecticides & Equipments*, 21, 169–170. [in Chinese, English summary].
- Liang, H.-J., Fu, Y.-Q. & Liu, G.-P. (2012) Genus *Culicoides* (Diptera: Ceratopogonidae) from Luobei port of Heilongjiang province in China: a new species and a new record in China. *Chinese Journal of Vector Biology and Control*, 23, 234–236. [in Chinese, English summary].
- Liang, H.-J., Ma, H.-X., Fu, Y.-Q. & Liu, G.-P. (2014) Catalogue of hematophagous midges in Luobei county, China: a new species and a new record of genus *Culicoides* (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 25, 552–554. [in Chinese, English summary].
- Liang, H.-J., Liu, G.-P. & Zhang, H.-Q. (2019) A new species of *Culicoides* (Diptera: Ceratopogonidae) in Luobei, Heilongjiang, China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 30, 314–316.
- Liao, Z.-Y., Wang, F.-P. & Yu, Y.-X. (2015) A new species of *Culicoides* (Diptera: Ceratopogonidae) from Emei Mountain, China. *Acta Parasitologica et Medica Entomologica Sinica*, 22, 52–53. [in Chinese, English summary]
- Lien, J.-C. (1989) Taxonomic and ecological studies on the biting midges of the subgenus *Lasiohelea*, genus *Forcipomyia* from Taiwan. *Journal of Taiwan Museum*, 42, 37–77.
- Lien, J.-C. (1991) Seven new species and four new records of *Forcipomyia* subgenus *Lasiohelea* from Taiwan (Diptera, Ceratopogonidae). *Journal of Taiwan Museum*, 44, 83–116.
- Lien, J.-C., Lin, C.-C., Weng, M.-H. & Chin, C. (1996a) Description of a new species of *Leptoconops* from Kinmen Island (Quemoy) (Diptera, Ceratopogonidae). *Chinese Journal of Parasitology*, 9, 31–38.
- Lien, J.-C., Weng, M.-H. & Lin, C.-C. (1996b) Biting midges of the genus *Culicoides* (Diptera, Ceratopogonidae) from Nankan Is. of the Matsu area, with description of two new species. *Chinese Journal of Parasitology*, 9, 17–30.
- Lien, J.-C., Weng, M.-H. & Lin, C.-C. (1997) A revision of the genus *Culicoides* of Taiwan. Part I. Subgenus *Trithecoides* (Diptera: Ceratopogonidae). *Journal of the Taiwan Museum*, 50, 155–187.
- Lien, J.-C., Lin, C.-C. & Weng, M.-H. (1998a). Description of a new species of *Leptoconops* from Taiwan, with a checklist of *Leptoconops* species hitherto recorded from China (Diptera: Ceratopogonidae). *Chinese Journal of Parasitology*, 11, 37–45.
- Lien, J.-C., Lin, C.-C. & Weng, M.-H. (1998b) A revision of the genus *Culicoides* in Taiwan. Part III. Subgenera *Culicoides* Latreille 1809, *Haemophoructus* Macfie 1925 and *Monoculicoides* Khalaf 1954 (Diptera, Ceratopogonidae). *Journal of Taiwan Museum*, 51, 33–70.
- Linnaeus, C. (1758) *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus*,

- differentiis, synonymis, locis*. 10th edition, 1, 1–824. Homiae [= Stockholm].  
<https://doi.org/10.5962/bhl.title.542>
- Linnaeus, C. (1767) *Systema naturae per regna tria naturae*. Ed. 12 (rev.), 2 (2), 533–1327. Homiae [= Stockholm].
- Linton, Y.-M, Mordue (Luntz), A.J., Cruickshank, R.H., Meiswinkel, R., Mellor, P.A. & Dallas, J.F. (2002) Phylogenetic analysis of the mitochondrial cytochrome oxidase subunit I gene of fivespecies of the *Culicoides imicola* species complex. *Medical and Veterinary Entomology*, 16, 139–146.  
<https://doi.org/10.1046/j.1365-2915.2002.00356.x>
- Liu, J.-H. (1990) Description of *Culicoides (Avaritia) nujiangensis* sp. nov. (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 59–61. [in Chinese, English summary].
- Liu, J.-H. (1995) Two new species of *Culicoides* from Hainan Province, China (Diptera: Ceratopogonidae). *Entomologia Sinica*, 2, 9–12.  
<https://doi.org/10.1111/j.1744-7917.1995.tb00017.x>
- Liu, Z.-J. (1997) A new species of *Leptoconops* (Diptera: Ceratopogonidae) from China. *Entomotaxonomia*, 19, 40–42. [in Chinese, English summary].
- Liu, C.-L. & Yu, Y.-X. (1997) A preliminary survey of *Culicoides* and a new species in Ji-Gong Mountain, China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 8, 119–120. [in Chinese, English summary].
- Liu, G.-P. (2002) A new species of *Culicoides (Oeacta)* (Diptera: Ceratopogonidae) from Heilongjiang province, China. *Entomotaxonomia*, 24, 191–193. [in Chinese, English summary].
- Liu, G.-P. & Deng, C.-Y. (2000) A new species of *Culicoides* and newly found male of *Culicoides pelius* Liu et Yu (Diptera: Ceratopogonidae) from Tibet, China. *Chinese Journal of Vector Biology and Control*, 11, 245–247. [in Chinese, English summary].
- Liu, G.-P. & Deng, C.-Y. (2010) Description of a species of *Culicoides* and a male *Culicoides ruiensis* Lee newly found from China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 21, 578–580. [in Chinese, English summary].
- Liu, G.-P. & Dong, A.-M. (2016) Description of two new species *Culicoides (Oeacta)* (Diptera: Ceratopogonidae) in China. *Chinese Journal of Vector Biology and Control*, 27, 580–581, 584. [in Chinese, English summary].
- Liu Z.-J. & Gong, Z.-W. (2003) Description of *Leptoconops (Holoconops) tuotuoheia* sp. nov. from China (Diptera, Ceratopogonidae). *Acta Zootaxonomica Sinica*, 28, 549–550.
- Liu, G.-P. & Guo, W.-Z. (2009) A new species of *Culicoides (Fastus)* (Diptera: Ceratopogonidae) from China. *Acta Parasitologica et Medica Entomologica Sinica*, 16, 50–51.
- Liu G.-P.-P. & Hao, B.-S. (2003) A new species of the genus *Culicoides (Jilinocoides)* (Diptera: Ceratopogonidae) from the Guangxi Zhuang Auton. Reg., China. *Entomologica Sinica*, 10, 139–141.  
<https://doi.org/10.1111/j.1744-7917.2003.tb00376.x>
- Liu, G.-P. & Ma, D. (2001) Description of a new species of the genus *Culicoides* (Diptera: Ceratopogonidae) from Xingjiang Uygur Aut. Reg. China. *Entomologica Sinica*, 8, 199–202.  
<https://doi.org/10.1111/j.1744-7917.2001.tb00441.x>
- Liu, G.-P. & Ma, D.-X. (2011) A new species of *Culicoides (Oeacta)* (Diptera, Ceratopogonidae) from China. *Acta Zootaxonomica Sinica*, 36, 888–889.
- Liu, S.-Z. & Qu, F.-Y. (1981) A new species of *Culicoides* from Yunnan Province, China. *Acta Zootaxonomica Sinica*, 6, 419–420. [in Chinese, English summary].
- Liu, Z.-J. & Shi, S.-Z. (2002) On a new species and a new record of biting midges (Diptera: Ceratopogonidae) from China. *Entomotaxonomia*, 24, 187–190. [in Chinese, English summary].
- Liu, G.-P. & Wu, C.-G. (2005) A new species of *Culicoides (Beltranmyia)* (Diptera: Ceratopogonidae) from China. *Chinese Journal of Vector Biology and Control*, 16, 448–449. [in Chinese, English summary].
- Liu, J.-H. & Yan, G. (1996) A new record of the genus *Monohalea* and a new species from China (Diptera: Ceratopogonidae). *Entomologia Sinica*, 3, 19–21.  
<https://doi.org/10.1111/j.1744-7917.1996.tb00397.x>
- Liu, G.-P. & Yu, Y.-X. (1990a) Three new species of blood-sucking midges in northeastern China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 14–18. [in Chinese, English summary].
- Liu, K. & Yu, Y.-X. (1990b) Four new species of *Culicoides* in Cona, Xizang, China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 19–26. [in Chinese, English summary].
- Liu, G.-P. & Yu, Y.-X. (1991) *Nemoromyia* a new Palaeactical (sic) genus of Heteromyiini (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 3, 25–29. [in Chinese, English summary].
- Liu, G.-P. & Yu, Y.-X. (1996a) Descriptions of two new species of the *pulicaris* section of the genus *Culicoides* (Diptera: Ceratopogonidae) from China. *Entomotaxonomia*, 18, 135–140. [in Chinese, English summary].
- Liu, J.-H. & Yu, Y.-X. (1996b) Descriptions of four new species of *Lasiohelea* (Diptera: Ceratopogonidae) from southwest China. *Entomotaxonomia*, 18, 49–54. [in Chinese, English summary].
- Liu, J.-H. & Yu, Y.-X. (1997) New species and new records of the genus *Forcipomyia*, subgenus *Microhelea* (Diptera: Ceratopogonidae) from China. *Entomologia Sinica*, 4, 18–29.  
<https://doi.org/10.1111/j.1744-7917.1997.tb00065.x>
- Liu, Z.-J. & Yu, Y.-X. (1998) Six new species of *Leptoconops* from China (Diptera: Ceratopogonidae). *Journal of Medical Pest*

- Control*, 14, 24–26. [in Chinese].
- Liu, Z.-J. & Yu, Y.-X. (2001) A new species and a new record of *Dasyhelea* (Diptera: Ceratopogonidae) from China. *Entomotaxonomia*, 23, 277–280. [in Chinese, English summary].
- Liu, G.-P. & Zhao, T. (1998) Two new species and three new records of the genus *Culicoides* (Diptera: Ceratopogonidae) in China. *Entomologica Sinica*, 5, 10–14.  
<https://doi.org/10.1111/j.1744-7917.1998.tb00288.x>
- Liu, G.-P. & Zhou, X. (2006) *Culicoides* (*Sinocoides*) and a new species from China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 17, 467–469. [in Chinese, English summary].
- Liu, Z.-J., Qi, F. & Yu, Y.-X. (1990a) Descriptions of two new species of biting midges from Gansu and Ningxia, China. *Acta Zootaxonomica Sinica*, 15, 218–221 (first two weeks of April). [in Chinese, English summary].
- Liu, Z.-J., Shi, S., Cao, J. & F. Qi. (1990b) *Studies of Leptoconops in Northwest China*. Scientific and Technological Press of Shanghai, China. viii [not numbered] + 55 pp. (last two weeks of April). [in Chinese].
- Liu, J.-H., Yan, G. & Liu, G.-P. (1996a) *The Biting Midge from Hainan Island*. Military Medical Science Press, Beijing. vi + 184 pp. [in Chinese, English summary].
- Liu, J.-H., Yan, G. & Yu, Y.-X. (1996b) Two new species of *Allohelea* from Hainan Province, China (Diptera: Ceratopogonidae). *Acta Zootaxonomica Sinica*, 21, 358–361. [in Chinese, English summary].
- Liu, G.-P., Wang, C. & Hao, B. (1999) Subgenus *Pontoculicoides* of *Culicoides* and one new species in China. *Zoological Studies in China*, 1999, 200–203. [in Chinese, English summary].
- Liu, J.-H., Yan, G., Liu, G.-P., Hao, B.-S., Liu, Z.-J. & Yu, Y.-X. (2001a) Forcipomyiinae of China (Diptera: Ceratopogonidae) I. General introduction and the genus *Atrichopogon* Kieffer. *Fauna of China*, 2, 5–160.
- Liu, J.-H., Yan, G., Liu, G.-P., Hao, B.-S., Liu, Z.-J. & Yu, Y.-X. (2001b) Forcipomyiinae of China (Diptera: Ceratopogonidae) II. The genus *Forcipomyia* Meigen. *Fauna of China*, 3, 3–256.
- Liu, J.-H., Tang, B.-H. & Hao, B.-S. (2002a) A new subgenus, a new species and a key to subgenera of genus *Forcipomyia*. *Acta Parasitologica et Medica Entomologica Sinica*, 9, 230–235. [in Chinese, English summary].
- Liu, Z.-J., Zhang, J.-J. & Luo, Y.-Q. (2002b) A new species and a new record of *Dasyhelea* (Diptera: Ceratopogonidae) (sic) from Qinghai Province, China. *Entomotaxonomia*, 24, 257–260. [in Chinese, English summary].
- Liu, Z.-J., Gong, Z.-W., Zhang, J.-J. & Shi, S.-Z. (2003) Two new species of *Culicoides* (Diptera, Ceratopogonidae) from China. *Acta Zootaxonomica Sinica*, 28, 359–361. [in Chinese, English summary].
- Liu, Z.-J., Zhang, J.-J. & Gong, Z.-W. (2004) Descriptions on a new species of *Leptoconops* and the male of *Leptoconops* (*Holconops*) *geermuensis* Liu et Yu (Diptera: Ceratopogonidae). *Entomotaxonomia*, 26, 49–52.
- Liu, Z.-J., Shi, S.-Z., Gong, Z.-W. & Zhang, H.-J. (2005) Description of a new species of the genus *Dasyhelea* and observations on day action rhythm of three chief species of midges (Diptera: Ceratopogonidae) in Qinghai Province, China. *Entomotaxonomia*, 27, 32–36. [in Chinese, English summary].
- Liu, G.-P., Wu, C.-G. & Wang, X.-Y. (2006) Catalogue of blood-sucking midges of Jilin Province in China with description of a new species (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 17, 318–321. [in Chinese, English summary].
- Liu, G.-P., Zhou, X. & Wu, C.-G. (2007) The Ceratopogonidae and a new species from Liaoning province in China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 18, 209–212. [in Chinese, English summary].
- Liu, Y.-Q., Chen, H.-Y. & Yu, Y.-X. (2009) A key of *Forcipomyia* [sic] (*Synthyridomyia*) with discription [sic] of a new species from China (Diptera: Ceratopogonidae). *Sichuan Journal of Zoology*, 28, 521–523. [in Chinese, English summary].
- Liu, G.-P., Ren, Q.-M. & Wang, F. (2010a) Two new species of *Culicoides* (*Fastus*) from Jilin province of China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 21, 63–64. [in Chinese, English summary].
- Liu, Y.-Q., Chen, H.-Y. & Yu, Y.-X. (2010b) A new species of *Stilobezzia* (Diptera: Ceratopogonidae) from Jinggangshan, Ji-angxi, China. *Sichuan Journal of Zoology*, 29, 572–573. [in Chinese, English summary].
- Liu, G.-P., Ren, Q.-M. & Wang, F. (2011a) *Culicoides* (*Sinocoides*) and two new species from China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 22, 257–259. [in Chinese, English summary].
- Liu, G.-P., Cao, Y.-C., Wang, X. & Chen, J.-Y. (2011b) Description of a new species and a new record of *Culicoides* (Diptera Ceratopogonidae) in China. *Acta Parasitologica et Medica Entomologica Sinica*, 18, 170–173.
- Liu, G.-P., Xing, A.-H., Ren, Q.-M., Wang, X. & Wang, F. (2011c) Catalogue and a new species of family Ceratopogonidae from Heilongjiang province in China. *Chinese Journal of Vector Biology and Control*, 22, 570–578. [in Chinese, English summary].
- Liu, Y.-Q., Chen, H.-Y. & Yu, Y.-X. (2013) A new species of subgenus *Forcipomyia* (Diptera: Ceratopogonidae) from Nanchang city, Jiangxi province, China. *Chinese Journal of Vector Biology and Control*, 24, 60–61. [in Chinese, English summary].
- Liu, Y.-Q., Chen, H.-Y. & Yu, Y.-X. (2016) Genus *Dasyhelea* Kieffer and two new species (Diptera: Ceratopogonidae) in Jiangxi province, China. *Chinese Journal of Vector Biology and Control*, 27, 498–500. [in Chinese, English summary].
- Liu, Y.-Q., Chen, H.-Y. & Yu, Y.-X. (2017a) Description of two new species in the genus *Forcipomyia* (Diptera: Ceratopogonidae) from China. *Entomotaxonomia*, 39(1), 77–81.
- Liu, G.-P., Feng, Y., Fu, S.-H., Cui, S.-H., Zhang, H.-L., Yang, W.-H. & Liang, G.-D. (2017b) Description of a new species of *Culicoides* (*Jilinocoides*) and male *Culicoides marginus* Chu, 1984 (Diptera: Ceratopogonidae) in Yunnan, China. *Acta Parasitologica et Medica Entomologica Sinica*, 24, 48–51.
- Liu, G.-P., Tian, Z.-Z., Fu, S.-H., Zhou, J.-Z., Li, Y.-Y., Wang, D.-M. & Liang, G.-D. (2017) Fauna and a new species of he-

- matophagous midges (Diptera: Ceratopogonidae) in Dejiang county, Guizhou province, China. *Chinese Journal of Vector Biology and Control*, 28, 376–378. [in Chinese, English summary].
- Liu, Y., Tao, H., Yu, Y., Yue, L., Xia, W., Zheng, W., Ma, H., Liu, X. & Chen, H. (2018) Molecular differentiation and species composition of genus *Culicoides* biting midges (Diptera: Ceratopogonidae) in different habitats in southern China. *Veterinary Parasitology*, 254, 49–57.  
<https://doi.org/10.1016/j.vetpar.2018.02.035>
- Liu, G.-P., Fan, N., Sun, D.-W., Wu, Q., Zeng, L.-H., Li, S.-G., Yang, Q.-R., Chen, Y.-L., Shi A.-J. & Liang G.-D. (2019) Species distribution and new species of hematophagous midges in three cities and counties in Hainan and a new record in China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 30, 438–441.
- Loew, H. (1850) Ueber den Bernstein und die Bernsteinfauna. *Program der Königlichen Realschule Meseritz*, 1850, 1–44.  
<https://doi.org/10.5962/bhl.title.98386>
- Loew, H. (1856) Neue Beiträge zur Kenntniss der Dipteren. Vierter Beitrag. *Program der Königlichen Realschule Meseritz*, 1856, 1–57.
- Loew, H. (1861) Diptera Americae septentrionalis indigena. *Berliner Entomologische Zeitschrift*, 5, 307–359.  
<https://doi.org/10.5962/bhl.title.9606>
- Loew, H. (1864) Ueber die in der zweiten Hälfte des Juli 1864 auf der Ziegelwiese bei Halle beobachteten Dipteren. *Zeitschrift für die Gesammten Naturwissenschaften*, 24, 377–396.
- Loew, H. (1866) Diptera Americae septentrionalis indigena. *Berliner Entomologische Zeitschrift*, 9, 127–186.  
<https://doi.org/10.1002/mmnd.18650090303>
- Loew, H. (1869a) *Beschreibungen europäischer Dipteren. Systematische Beschreibung der bekannten europäischen zweiflügeligen Insecten*. Von Johann Wilhelm Meigen. Vol. 1, Halle, xvi + 310 pp.
- Loew, H. (1869b) Ueber Dypteren der Augsburger Umgegend. *Bericht des Naturhistorischen Vereins in Augsburg*, 20, 39–59.
- Long, W.H. (1902) New species of *Ceratopogon*. *Biological Bulletin of the Marine Biological Laboratory, Woods Hole*, 3, 3–14.  
<https://doi.org/10.2307/1535522>
- Lundström, C. (1910) Beiträge zur Kenntnis der Dipteren Finlands VI. Chironomidae. *Acta Societatis pro Fauna et Flora Fennica*, 33(10), 1–46.
- Lundström, C. (1916a) Beiträge zur Kenntnis der Dipteren Finlands X. Suppl. 4. Bibionidae, Chironomidae, Tipulidae. *Acta Societatis pro Fauna et Flora Fennica*, 44(2), 1–26.
- Lundström, C. (1916b) Dipteren au Sarekgebiet. Diptera Nematocera. *Naturwissenschaftliche Untersuchungen des Sarekgebirges in Schwedisch-Lappland*, 4, 666–680.
- Lutz, A. (1913) Contribuicao para o estudo das Ceratopogoninas hematofagas do Brazil. *Memórias do Instituto Oswaldo Cruz*, 5, 45–73, pls. 6–8.  
<https://doi.org/10.1590/S0074-02761913000100005>
- Lutz, A. (1914) Contribuicao para o conhecimento das Ceratopogoninas do Brasil. *Memórias do Instituto Oswaldo Cruz*, 6, 81–99, pls. 8–9.  
<https://doi.org/10.1590/S0074-02761914000200003>
- Lynch Arribáizaga, F. (1893) Dipterologia Argentina (Chironomidae). *Boletín de la Academia Nacional de Ciencias (Cordoba)*, 13, 211–258.  
<https://doi.org/10.5962/bhl.title.10361>
- Ma, D., Xiang, C. & Yu, Y.-X. (1990) Four new species of blood-sucking midges from Xinjiang, China (Diptera: Ceratopogonidae). *Contributions to Blood-sucking Dipteran Insects (Beijing)*, 2, 46–52. [in Chinese, English summary].
- Ma, H.-J., Yan, G., Hong, X., Wu, C. & Liu, F. (2000) A preliminary survey on mosquitos and midges and a new species of biting midges from south-mountain area, Anhui Province, China. *Medical Journal of the Chinese People's Armed Police Forces*, 11, 14–16. [in Chinese].
- Macfie, J.W.S. (1924) On some Egyptian Ceratopogonidae. *Bulletin of Entomological Research*, 15, 61–67.  
<https://doi.org/10.1017/S0007485300046149>
- Macfie, J.W.S. (1925) A new blood-sucking midge from Singapore. *Bulletin of Entomological Research*, 15, 349–351.  
<https://doi.org/10.1017/S0007485300046332>
- Macfie, J.W.S. (1926) Ceratopogonidae from Dar-Es-Salaam. *Bulletin of Entomological Research*, 16, 355–357.  
<https://doi.org/10.1017/S0007485300028649>
- Macfie, J.W.S. (1932a) Ceratopogonidae from the wings of dragonflies. *Tijdschrift voor Entomologie*, 75, 265–283.
- Macfie, J.W.S. (1932b) Some new or little-known Ceratopogonidae. *Annals and Magazine of Natural History Ser. 10*, 9, 485–499.  
<https://doi.org/10.1080/00222933208673523>
- Macfie, J.W.S. (1932c) New Zealand biting midges (Diptera, Ceratopogonidae). *Annals of Tropical Medicine and Parasitology*, 26, 23–53.  
<https://doi.org/10.1080/00034983.1932.11684703>
- Macfie, J.W.S. (1933a) Ceratopogonidae from the Society Islands. *Bulletin of the Bernice P. Bishop Museum*, 113, 75–80.
- Macfie, J.W.S. (1933b) Ceratopogonidae from the Marquesas Islands. *Bulletin of the Bernice P. Bishop Museum*, 114, 93–103.
- Macfie, J.W.S. (1933c) A new species of *Culicoides* from Palestine. *Annals of Tropical Medicine and Parasitology*, 27, 79–81.

- <https://doi.org/10.1080/00034983.1933.11684740>
- Macfie, J.W.S. (1934a) Notes on Ceratopogonines (Dipt.) from Hawaii. *Stylops*, 3, 133–134.
- Macfie, J.W.S. (1934b) A new British *Forcipomyia* (Diptera, Ceratopogonidae). *Entomologist's Monthly Magazine*, 70, 144–145. (June).
- Macfie, J.W.S. (1934c) Report on a collection of Ceratopogonidae from Malaya. *Annals of Tropical Medicine and Parasitology*, 28, 177–194, 279–293. (July 12).  
<https://doi.org/10.1080/00034983.1934.11684809>
- Macfie, J.W.S. (1934d) Fauna Sumatrensis. Bijdrage No. 75, Ceratopogonidae (Diptera). *Tijdschrift voor Entomologie*, 77, 202–231. (Nov. 23).
- Macfie, J.W.S. (1935a) Ceratopogonidae (Dipt.) from the river Amazon. *Stylops*, 4, 49–56.  
<https://doi.org/10.1111/j.1365-3113.1935.tb00555.x>
- Macfie, J.W.S. (1935b) A new ceratopogonid (Dipt.) from British Guiana. *Stylops*, 4, 265.  
<https://doi.org/10.1111/j.1365-3113.1935.tb00657.x>
- Macfie, J.W.S. (1936a) Two new species of Ceratopogonidae (Diptera) from the wings of dragonflies. *Proceedings of the Royal Entomological Society of London (B)*, 5, 62–64.  
<https://doi.org/10.1111/j.1365-3113.1936.tb00597.x>
- Macfie, J.W.S. (1936b) Four species of Ceratopogonidae (Diptera) from the wings of insects. *Proceedings of the Royal Entomological Society of London (B)*, 5, 227–230.  
<https://doi.org/10.1111/j.1365-3113.1936.tb01315.x>
- Macfie, J.W.S. (1937a) Ceratopogonidae from Trinidad. *Annals and Magazine of Natural History Ser. 10*, 20, 1–18.  
<https://doi.org/10.1080/00222933708655311>
- Macfie, J.W.S. (1937b) Ceratopogonidae (Diptera) from Ethiopia and British Somaliland. *Proceedings of the Royal Entomological Society of London (B)*, 6, 73–79.  
<https://doi.org/10.1111/j.1365-3113.1937.tb00301.x>
- Macfie, J.W.S. (1937c) Notes on Ceratopogonidae (Diptera). *Proceedings of the Royal Entomological Society of London (B)*, 6, 111–118.  
<https://doi.org/10.1111/j.1365-3113.1937.tb00451.x>
- Macfie, J.W.S. (1937) Three new species of *Culicoides* (Diptera, Ceratopogonidae) from Malaya. *Annals of Tropical Medicine and Parasitology*, 31, 469–472.  
<https://doi.org/10.1080/00034983.1937.11685005>
- Macfie, J.W.S. (1938) Notes on Ceratopogonidae (Diptera). *Proceedings of the Royal Entomological Society of London (B)*, 7, 157–166.  
<https://doi.org/10.1111/j.1365-3113.1938.tb01271.x>
- Macfie, J.W.S. (1939a) 5. Ceratopogonidae. In: *Ruwenzori Expedition 1934-5* (British Museum of Natural History) 1(5), 81–102, pls. 25, 26.
- Macfie, J.W.S. (1939b) The Diptera of the Territory of New Guinea. X. Family Ceratopogonidae. *Proceedings of the Linnean Society of New South Wales*, 64, 367–368.
- Macfie, J.W.S. (1939c) A report on a collection of Brazilian Ceratopogonidae. *Revista de Entomologia*, 10, 137–219.
- Macfie, J.W.S. (1939d) A key to the species of Ceratopogonidae akin to *Macropeza* Mg. (Diptera). *Transactions of the Royal Entomological Society of London*, 89, 1–12, pl. 1.  
<https://doi.org/10.1111/j.1365-2311.1939.tb02686.x>
- Macfie, J.W.S. (1940a) Ceratopogonidae (Diptera) from north-eastern Brazil. *Proceedings of the Royal Entomological Society of London (B)*, 9, 73–79.  
<https://doi.org/10.1111/j.1365-3113.1940.tb00348.x>
- Macfie, J.W.S. (1940b) Ceratopogonidae (Diptera) from British Guiana and Trinidad. Part 1. *Proceedings of the Royal Entomological Society of London (B)*, 9, 179–186.  
<https://doi.org/10.1111/j.1365-3113.1940.tb00324.x>
- Macfie, J.W.S. (1940c) Ceratopogonidae (Diptera) from British Guiana and Trinidad. Part 2. *Proceedings of the Royal Entomological Society of London (B)*, 9, 187–195.  
<https://doi.org/10.1111/j.1365-3113.1940.tb00325.x>
- Macfie, J.W.S. (1940d) A report on a collection of Ceratopogonidae (Diptera) from British Guiana. *Entomologist's Monthly Magazine*, 76, 23–32.
- Macfie, J.W.S. (1940e) *Forcipomyia furcifera*, sp. n. (Dipt. Ceratopogonidae). *Revista de Entomologia*, 11, 920–922.
- Macfie, J.W.S. (1940f) The genera of Ceratopogonidae. *Annals of Tropical Medicine and Parasitology*, 34, 13–30.  
<https://doi.org/10.1080/00034983.1940.11685079>
- Macfie, J.W.S. (1941) Notes on Ceratopogonidae (Diptera). *Proceedings of the Royal Entomological Society of London (B)*, 10, 67–69.  
<https://doi.org/10.1111/j.1365-3113.1941.tb00696.x>
- Macfie, J.W.S. (1943a) Ceratopogonidae (Diptera) from Egypt. *Proceedings of the Royal Entomological Society of London (B)*, 12, 145–159.  
<https://doi.org/10.1111/j.1365-3113.1943.tb00763.x>

- Macfie, J.W.S. (1943b) A new species of *Dasyhelea* (Diptera) from the Bahama Islands. *Proceedings of the Royal Entomological Society of London (B)*, 12, 119–120.  
<https://doi.org/10.1111/j.1365-3113.1943.tb00756.x>
- Macfie, J.W.S. (1944a) A new species of *Homobezzia* (Diptera, Ceratopogonidae) from Egypt. *Proceedings of the Royal Entomological Society of London (B)*, 13, 125–126.  
<https://doi.org/10.1111/j.1365-3113.1944.tb00770.x>
- Macfie, J.W.S. (1944b) Ceratopogonidae collected in Trinidad from cacao flowers. *Bulletin of Entomological Research*, 35, 297–300.  
<https://doi.org/10.1017/S0007485300023427>
- Macfie, J.W.S. (1945) A new species of *Apelma* (Diptera, Ceratopogonidae) from Fiji. *Proceedings of the Royal Entomological Society of London (B)*, 14, 1–2.  
<https://doi.org/10.1111/j.1365-3113.1945.tb00001.x>
- Macfie, J.W.S. (1946) A new species of *Culicoides* (Diptera, Ceratopogonidae) from Fiji. *Proceedings of the Royal Entomological Society of London (B)*, 15, 15–16.  
<https://doi.org/10.1111/j.1365-3113.1946.tb00807.x>
- Macfie, J.W.S. (1947a) A new species of *Lasiohelea* (Diptera, Ceratopogonidae) from Uganda. *Proceedings of the Royal Entomological Society of London (B)*, 16, 29–30.  
<https://doi.org/10.1111/j.1365-3113.1947.tb00849.x>
- Macfie, J.W.S. (1947b) Ceratopogonidae from the Anglo-Egyptian Sudan. *Proceedings of the Royal Entomological Society of London (B)*, 16, 69–78.  
<https://doi.org/10.1111/j.1365-3113.1947.tb00861.x>
- Macfie, J.W.S. (1948) Some species of *Culicoides* (Diptera, Ceratopogonidae) from the state of Chiapas, Mexico. *Annals of Tropical Medicine and Parasitology*, 42, 67–87.  
<https://doi.org/10.1080/00034983.1948.11685349>
- Macfie, J.W.S. (1949) Notes on Ceratopogonidae. *Proceedings of the Royal Entomological Society of London (B)*, 18, 109–115.  
<https://doi.org/10.1111/j.1365-3113.1949.tb01431.x>
- Macfie, J.W.S. (1953) Ceratopogonidae from Costa Rica. *Beiträge zur Entomologie*, 3, 95–105.
- Macquart, J. (1826) Insectes Diptères du nord de la France. Tipulaires. *De la Société des Sciences, de l'Agriculture et des Arts, de Lille*, 1823–1824, 59–224.  
<https://doi.org/10.5962/bhl.title.8146>
- Mahe, M.-T., Yue, X.-H., Gao, Z.-G., Yu, Y.-X., Zhang, J. & Li, X.-L. (2017) Description of *Brachypogon* (*Brachypogon*) *turpanensi* (Diptera: Ceratopogonidae) new species from Xinjiang, China. *Chinese Journal of Vector Biology and Control*, 28, 64–65. [in Chinese, English summary].
- Mahe, M.-T., Zhang, J., Gao, Z.-G., Zhang, X.-B., Zhang, S. & Yu, Y.-X. (2017) One new species and one new record of *Dasyhelea* from China (Diptera: Ceratopogonidae). *Chinese Journal of Vector Biology and Control*, 29, 76–77. [in Chinese, English summary].
- Maheshwari, A. (2003) A new human blood feeding biting midge from India, Diptera: Ceratopogonidae: *Forcipomyia manasi*. *Journal of the Bombay Natural History Society*, 100, 72–77.
- Maheshwari, G. & Maheshwari, G. (2006) Dichotomous key for Himalayan Biting Midges (Diptera: Ceratopogonidae), India. *Indian Journal of Entomology*, 68, 1–22.
- Majumdar, B.C., Das Gupta, S.K. & Gangopadhyay, L. (1997) Some new species of *Hoffmania* Fox subgenus of *Culicoides* biting midges (Diptera: Ceratopogonidae) from Darjeeling. *Journal of Bengal Natural History Society*, 16, 27–34.
- Malloch, J.R. (1914a) Notes on North American Diptera, with descriptions of new species in the collection of the Illinois State Laboratory of Natural History. *Bulletin of the Illinois State Laboratory of Natural History*, 10, 213–243.
- Malloch, J.R. (1914b) Synopsis of the genus *Probezia*, with description of a new species. *Proceedings of the Biological Society of Washington*, 27, 137–139.
- Malloch, J.R. (1914c) Synopsis of North American species of the genus *Bezzia* (Chironomidae). *Journal of the New York Entomological Society*, 22, 281–285.
- Malloch, J.R. (1915a) The Chironomidae, or midges, of Illinois, with particular reference to the species occurring in the Illinois River. *Bulletin of the Illinois State Laboratory of Natural History*, 10, 275–543, 24 pls.  
<https://doi.org/10.5962/bhl.title.9255>
- Malloch, J.R. (1915b) Some additional records of Chironomidae for Illinois and notes on other Illinois Diptera. *Bulletin of the Illinois State Laboratory of Natural History*, 11, 305–363, pls. 80–84.
- Malloch, J.R. (1918a) A new species of *Hartomyia* from Illinois (Ceratopogonidae, Diptera). *Bulletin of the Brooklyn Entomological Society*, 13, 18.
- Malloch, J.R. (1918b) A new species of *Johannsenomyia* (Ceratopogonidae, Diptera). *Entomological News*, 29, 229–230.
- Malloch, J.R. (1923) A new species of *Forcipomyia* from the eastern United States (Ceratopogonidae, Diptera). *Entomological News*, 34, 4–5.
- Marino, P.I. & Spinelli, G.R. (1999a) The subgenus *Forcipomyia* (*Metaforcipomyia*) in Argentina (Diptera, Ceratopogonidae). *Iheringia, série Zoologia*, 86, 3–8.



- Marino, P.I. & Spinelli, G.R. (1999b) The species groups of the subgenus *Forcipomyia* (*Forcipomyia*) in the Neotropics, with a description of a new species of the *Genualis* group (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society*, 125, 445–452. (Dec.)
- Marino, P.I. & Spinelli, G.R. (2001a) Las especies del subgénero *Forcipomyia* (*Forcipomyia*) en la Patagonia (Diptera, Ceratopogonidae). *Revista Sociedad de la Entomologica Argentina*, 60, 99–124.  
<https://doi.org/10.4067/S0717-65382001000100003>
- Marino, P.I. & Spinelli, G.R. (2001b) El subgénero *Forcipomyia* (*Euprojoannisia*) en la Patagonia (Diptera, Ceratopogonidae). *Gayana*, 65, 11–18.  
<https://doi.org/10.4067/S0717-65382001000100003>
- Marino, P.I. & Spinelli, G.R. (2001c) Los subgéneros de *Forcipomyia*, *Thyridomyia* y *Synthyridomyia*, en la Patagonia argentina, con la descripción de *F. (S.) soibelzoni* (Diptera, Ceratopogonidae). *Neotrópica*, 47, 13–16.
- Marino, P.I. & Spinelli, G.R. (2002) A revision of the *Forcipomyia squamitibia* group in the Neotropics with the description of three new species (Diptera: Ceratopogonidae). *Insect Science and its Application, Nairobi*, 22, 307–319.  
<https://doi.org/10.1017/S1742758400020944>
- Marino, P.I. & Spinelli, G.R. (2003) The Patagonian species of the subgenus *Forcipomyia* (*Metaforcipomyia*) (Diptera: Ceratopogonidae), with a key to the New World species. *Insect Systematics and Evolution*, 34, 21–28.  
<https://doi.org/10.1163/187631203788964872>
- Marino, P.I. & Spinelli, G.R. (2004a) Further notes on the subgenus *Forcipomyia* (*Forcipomyia*) from Argentinean Patagonia (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society*, 130, 147–154.
- Marino, P.I. & Spinelli, G.R. (2004b) Descriptions of the Patagonian species of the subgenus *Trichohelea* of *Forcipomyia*, with a key to the Neotropical species (Diptera: Ceratopogonidae). *Journal of Natural History*, 38, 2251–2262.  
<https://doi.org/10.1080/00222930310001618895>
- Marino, P.I. & Spinelli, G.R. (2004c) A new species of *Atrichopogon* Kieffer from northern Argentina (Diptera: Ceratopogonidae). *Entomological News*, 114, 156–159 [2003].
- Marino, P.I. & Spinelli, G.R. (2008) Biting Midges of the *Forcipomyia* (*Forcipomyia*) *argenteola* group in southern South America, with description of a new species and a key to the Neotropical species (Diptera: Ceratopogonidae). *Revista De Biología Tropical (International Journal of Tropical Biology)*, 56, 789–794.
- Marino, P.I., Spinelli, G.R. & Cazorla, C.G. (2002) Type-specimens of Ceratopogonidae (Insecta: Diptera) in the collection of the Museo de La Plata, Argentina. Facultad de Ciencias Naturales y Museo - Universidad Nacional de La Plata. *Publicación Técnica y Didáctica*, 42, 1–37.
- Marino, P.I., Tóthová, A. & Spinelli, G.R. (2011) Two new Patagonian species of *Atrichopogon* (*Melohelea*) (Diptera: Ceratopogonidae). *Zootaxa*, 2777, 61–68.  
<https://doi.org/10.11646/zootaxa.2777.1.5>
- Marino, P.I., Díaz, F. & Ronderos, M.M. (2013) A new species of *Forcipomyia* (*Phytohelea*) from Argentina (Diptera: Ceratopogonidae). *Revista Mexicana de Biodiversidad*, 84, 818–824.  
<https://doi.org/10.7550/rmb.35015>
- Marshall, S.A., Borkent, A., Agnarsson, I., Otis, G.W., Fraser, L. & d’Etrement, D. (2015) New observations on a Neotropical termite-hunting theridiid spider: opportunistic nest raiding, prey storage, and ceratopogonid kleptoparasites. *Journal of Arachnology*, 43, 419–421.  
<https://doi.org/10.1636/0161-8202-43.3.419>
- Mathieu, B., Cetre-Sossah, C., Garros, C., Chavernac, D., Balenghien, T., Carpenter, S., Setier-Rio, M.L., Vignes-Lebbe, R., Ung, V., Candolfi, E. & Delécolle, J.-C. (2012) Development and validation of IIKC: an interactive identification key for *Culicoides* (Diptera: Ceratopogonidae) females from the Western Palaearctic Region. *Parasites & Vectors*, 5, 10.1186/1756-3305-5-137. Online version (accessed April 22, 2019)  
<https://doi.org/10.1186/1756-3305-5-137>
- Matsumura, S. (1911) Erster Beitrag zur Insekten-Fauna von Sachalin. *Journal of the College of Agriculture, Tohoku Imperial University*, 4(1), 1–145, pls. 1–2, errata.
- Matta, J.F. (1967) A new species of *Culicoides* (Diptera, Ceratopogonidae) from Honduras. *Florida Entomologist*, 50, 75–77.  
<https://doi.org/10.2307/3493213>
- Mauad, M. & Spinelli, G.R. (2011) A new species and new records of *Paryphoconus* from the Amazon region of Peru (Diptera: Ceratopogonidae). *Revista Mexicana de Biodiversidad*, 82, 485–489.  
<https://doi.org/10.22201/ib.20078706e.2011.2.496>
- Mayer, K. (1934a) Ceratopogoniden aus der Neumark. (Dipt.). *Stettiner entomologische Zeitung*, 95, 290–294.
- Mayer, K. (1934b) *Forcipomyia* (*Lasiohelea*) *chrysopae* n. sp. und *Forcipomyia crudelis* Karsch, zwei Blutsauger an Insekten. *Arbeiten über Morphologische und Taxonomische Entomologie aus Berlin-Dahlem*, 1, 259–260.
- Mayer, K. (1934c) Ceratopogoniden-Metamorphosen (C. Intermediae und C. Vermiformes) der Deutschen Limnologischen Sunda-Expedition. *Archiv für Hydrobiologie*, Suppl. 13, 166–202.
- Mayer, K. (1934d) Die Metamorphose der Ceratopogonidae (Dipt.). Ein Beitrag zur Morphologie, Systematik. Ökologie und Biologie der Jugendstadien dieser Dipterenfamilie. *Archiv für Naturgeschichte*, 3, 205–288.
- Mayer, K. (1937a) Beitrag zur Kenntnis der deutschen Ceratopogoniden. (Dipt.) IX. *Stettiner entomologische Zeitung*, 98, 301–304.

- Mayer, K. (1937b) Beobachtungen über blutsaugende Ceratopogoniden. *Arbeiten über morphologische und taxonomische Entomologie aus Berlin-Dahlem*, 4, 231–234.
- Mayer, K. (1940) Zwei neue Arten der Gattung *Helea* (Dipt. Ceratopogonidae) aus Lappland. *Zoologischer Anzeiger*, 129(5/6), 162–165.
- Mayer, K. (1955) Beitrag zur Ökologie und Morphologie afrikanischer Heleiden (Dipt.). *Archiv für Hydrobiologie*, 51, 98–117.
- Mayer, K. (1959) Zwei *Dasyhelea*-Arten aus spanischen Salzgärten (Dipt. Heleidae). *Deutsche Entomologische Zeitschrift*, 6, 96–99.  
<https://doi.org/10.1002/mmnd.19590060110>
- Mazumdar, A. & Chaudhuri, P.K. (2009) Indian species of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae). *International Journal of Dipterological Research*, 20, 191–201.
- Mazumdar, A., Chaudhuri, P.K. & Das Gupta, S.K. (2009) New insectivorous midges of the genus *Nilobezzia* Kieffer from India (Dipt., Ceratopogonidae: Sphaeromiini). *Entomologist's Monthly Magazine*, 145, 131–151.
- Mazumdar, A., Saha, N.C. & Chaudhuri, P.K. (2010) Blood sucking midges of *Leptoconops* (*Holoconops* Kieffer) (Diptera: Ceratopogonidae) from India. *Zootaxa*, 2619, 49–55.  
<https://doi.org/10.11646/zootaxa.2619.1.5>
- McDonald, J.L., Bolinguit, T. & Lu, L.C. (1973) Female *Culicoides* of Okinawa with description of new species (Diptera: Ceratopogonidae). *Journal of Medical Entomology*, 10, 633–648.  
<https://doi.org/10.1093/jmedent/10.6.633>
- McDonald, J.L. & Lu, L.C. (1972) Female *Culicoides* of Taiwan with description of new species (Diptera, Ceratopogonidae). *Journal of Medical Entomology*, 9, 396–417.  
<https://doi.org/10.1093/jmedent/9.5.396>
- Meigen, J.W. (1800) *Nouvelle classification des Mouches a deux ailes, (Diptera L.), d'après un plan tout nouveau*. Paris, 40 pp.  
<https://doi.org/10.5962/bhl.title.119764>
- Meigen, J.W. (1803) Versuch einer neuen Gattungseintheilung der europäischen zweiflügeligen Insekten. *Magazin für Insektenkunde*, 2, 259–281.
- Meigen, J.W. (1804) *Klassifikation und Beschreibung der europäischen zweiflügeligen Insekten. (Diptera Linn.)*. Erster Band. Abtheilung I, i–xxviii + 1–152 pp., pls. 1–8; Abtheilung II, i–vi + 153–314 pp., pls. 9–15. Braunschweig.
- Meigen, J.W. (1818) *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*. Vol. 1, xxxvi + 333 pp., pls. 1–11. Aachen.  
<https://doi.org/10.5962/bhl.title.13731>
- Meigen, J.W. (1830) *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*. Vol. 6, iv + 401 pp., pls. 55–66. Aachen.
- Meigen, J.W. (1838) *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*. Vol. 7, xii + 434 pp., pls. 67–74. Hamm.
- Meiswinkel, R. (1987) *Bothamia demeilloni* gen. et spec. nov. from South Africa, with comparative notes between it and the closely allied genus *Fanthamia* de Meillon (Diptera: Ceratopogonidae). *Journal of the Entomological Society of Southern Africa*, 50, 299–311.
- Meiswinkel, R. (1989) Afrotropical *Culicoides*: a redescription of *C. (Avaritia) imicola* Kieffer, 1913 (Diptera: Ceratopogonidae) with description of the closely allied *C. (A.) bolitinos* sp. nov. reared from the dung of the African Buffalo, Blue Wildebeest and cattle in South Africa. *Onderstepoort Journal of Veterinary Research*, 56, 23–39.
- Meiswinkel, R. (1991) Afrotropical *Culicoides*: *C. (Avaritia) miombo* sp. nov., a widespread species closely allied to *C. (A.) imicola* Kieffer, 1913 (Diptera: Ceratopogonidae). *Onderstepoort Journal of Veterinary Research*, 58, 155–170.
- Meiswinkel, R. (1992) Afrotropical *Culicoides*: *C. (Avaritia) loxodontis* sp. nov., a new member of the *imicola* group (Diptera: Ceratopogonidae) associated with the African Elephant in the Kruger National Park, South Africa. *Onderstepoort Journal of Veterinary Research*, 59, 145–160.
- Meiswinkel, R. (2004) Adult characters defining and separating the *Imicola* and *Orientalis* species complexes of the subgenus *Avaritia* Fox, 1955 (*Culicoides*, Diptera: Ceratopogonidae). *Veterinaria Italiana* 40, 345–351.
- Meiswinkel, R. & Dyce, A.L. (1989) Afrotropical *Culicoides*: *Synhelea* Kieffer 1925, resurrected as a subgenus to embrace 10 species (Diptera: Ceratopogonidae). *Onderstepoort Journal of Veterinary Research*, 56, 147–164.
- Meiswinkel, R. & Linton, Y.-M. (2003) Afrotropical *Culicoides* Latreille (Diptera: Ceratopogonidae): morphological and molecular description of a novel fruit-inhabiting member of the *Imicola* Complex, with a re-description of its sister species *C. (Avaritia) pseudopallidipennis* Clastrier. *Cimbebasia*, 19, 37–79.
- Meiswinkel, R., Venter, G.J., Nevill, E.M., (2004a) Vectors: *Culicoides* spp. In: Coetzer, J.A.W. & Tustin, R. (Eds.), *Infectious Diseases of Livestock, second ed.* Oxford University Press, Cape Town, pp. 93–136.
- Meiswinkel, R., Gomulski, L.M., Delécolle, J.-C., Goffredo, M. & Gasperi, G. (2004b) The taxonomy of *Culicoides* vector complexes - unfinished business. *Veterinaria Italiana*, 40, 151–159.
- Melander, A.L. & Brues, C.T. (1903) Guests and parasites of the burrowing bee *Halictus*. *Biological Bulletin of the Marine Biological Laboratory Woods Hole*, 5, 1–27.  
<https://doi.org/10.2307/1535824>

- Messersmith, D.H. (1972) A new species of *Culicoides* from Colombia (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 74, 165–169.
- Meunier, F. (1904a) *Monographie des Cecidomyidae, des Sciaridae, des Mycetophilidae et des Chironomidae de l'ambre de la Baltique*. Brussels. 264 pp. (July 9) (pp. 82–264 predate the part of the journal version which appeared as Meunier 1904b below).  
<https://doi.org/10.5962/bhl.title.8565>
- Meunier, F. (1904b) Monographie des Cecidomyidae, des Sciaridae, des Mycetophilidae et des Chironomidae de l'ambre de la Baltique (concl.). *Annales de la Société Scientifique de Bruxelles (Mém.)*, 28, 93–275. (Aug. 6).  
<https://doi.org/10.5962/bhl.title.8565>
- Meunier, F. (1912) Quelques Chironomidae du copal récent de Zanzibar et de Madagascar (Dipt.). *Bulletin de la Société Entomologique de France*, 1912, 361–366.
- Meunier, F. (1920a) Quelques insectes de l'Aquitaine de Rott, Sept-Monts (Presse rhénane) [part]. *Verslagen der Zittingen van de Wis- en Natuurkundige Afdeeling der Koninklijke Akademie van Wetenschappen van (II)*, 28, 645–655. (Also published 1920, *Proceedings, Koninklijke Akademie van Wetenschappen te Amsterdam*, 22, 727–737).
- Meunier, F. (1920b) Quelques insectes de l'Aquitaine de Rott, Sept-Monts (Presse rhénane) [concl.]. *Verslagen der Zittingen van de Wis- en Natuurkundige Afdeeling der Koninklijke Akademie van Wetenschappen van (II)*, 28, 1215–1222. (Also published 1920, *Proceedings, Koninklijke Akademie van Wetenschappen te Amsterdam*, 22, 891–898).
- Mik, J. (1888) Zur Biologie von *Ceratopogon* Mieg., nebst Beschreibung einer neuer Art dieser Gattung. *Wiener Entomologische Zeitung*, 7, 183–192.  
<https://doi.org/10.5962/bhl.part.27365>
- Minaya, G. (1978) *Dasyhelea mediomunda*, sp. n. (Diptera: Ceratopogonidae) de la costa central del Peru. *Revista Peruana de Entomologia*, 21, 79–81.
- Mirzaeva, A.G. (1964) On the fauna of bloodsucking midges from West Siberia. *Entomologicheskoe Obozrenie*, 43, 218–223. [in Russian, English summary]. English translation in *Entomological Review*, 43(1), 108–110.
- Mirzaeva, A.G. (1971) New and little-known species of midges of the genus *Culicoides* from Siberia. *Parazitologiya*, 5, 33–39. [in Russian].
- Mirzaeva, A.G. (1974) A new species of midges, *Culicoides gluchovae*, sp.n. from Transbaikalia. *Parazitologiya*, 8, 27–29. [Received at BMNH Feb. 1]. [in Russian, English summary].
- Mirzaeva, A.G. (1984a) A review of biting-midges of the subgenus *Avaritia* Fox (Diptera, Ceratopogonidae, genus *Culicoides* Latr.) from Siberia. *Entomologicheskoe Obozrenie*, 63, 365–378. [in Russian, English summary]. English translation in *Entomological Review*, 63(3), 28–43.
- Mirzaeva, A.G. (1984b) Distinguishing new species from *Culicoides grisescens* Edwards (Diptera, Ceratopogonidae) from Siberia. In: *Chlenistonogie i gel'minty (Arthropods and Helminths)*. Novosibirsk: Nauka, pp. 63–73. [in Russian].
- Mirzaeva, A.G. (1985) Description of new and one unregistered before species of the family Ceratopogonidae (Diptera) in Siberia and in the Far. In: *Sistematika i biologiya chlenistonogikh i gel'mintov, USSR*. Izdatel'stvo Nauka, Sibirskoe Otdelenie, East, pp. 97–101. [in Russian, English summary].
- Mirzaeva, A.G. (1989) *The Bloodsucking Midges of Siberia and the (Soviet) Far East*. Novosibirsk, "NAUKA", Siberian Division, 232 pp. [Published in third quarter of 1989; received at BMNH Dec. 14, 1990]. [in Russian].
- Mirzaeva, A.G. (1990) New species of *Culicoides* Latreille (Diptera, Ceratopogonidae) from the Tunkin Lowland. *Novye I maloizvetye vidy fauny Sibiri*, 21, 89–91. [in Russian]. [Received at BMNH July 17]. English translation in *Entomological Review*, 70(4), 152–153.
- Mirzaeva, A.G. & Isaev, V.A. (1990) Revision of the subgenus *Culicoides* s. str. (Diptera, Ceratopogonidae). *Novye I maloizvetye Vidy Fauny Sibiri*, 21, 92–99. [in Russian]. English translation in *Entomological Review*, 70(4), 154–160.
- Molotova, L.A. (1966) *Culicoides transcaspicus*, sp. n. (Diptera, Ceratopogonidae), a mass bloodsucker from Turkmenia. *Entomologicheskoe Obozrenie*, 45, 654–657. [in Russian]. English translation in *Entomological Review*, 45, 370–371.
- Molotova, L.A. (1967) New data on biting midges of the *Leptoconops* genus of Turkmenia (with the description of a new species). *Zoologicheskyy Zhurnal*, 46, 626–628. [in Russian, English summary].
- Moncada, L., Carrasquilla, M.C., Spinelli, G., Lotta, I. & Matta, N. (2010) Description of *Culicoides lisicarruni* (Diptera: Ceratopogonidae), a new species from Cundinamarca, Colombia. *Memórias do Instituto Oswaldo Cruz*, 105, 978–980.  
<https://doi.org/10.1590/S0074-02762010000800005>
- Morag, N., Saroya, Y., Braverman, Y., Klement, E. & Gottlieb, Y. (2012) Molecular identification, phylogenetic status, and geographic distribution of *Culicoides oxystoma* (Diptera: Ceratopogonidae) in Israel. *PLOS ONE*, 7 (3).  
<https://doi.org/10.1371/journal.pone.0033610>
- Mraz, R. (1999) Catalogue of biting midges (Diptera, Ceratopogonidae) of Slovakia. *Acta Zoologica Universitatis Comenianae* 43, 15–57.
- Mukerji, S. (1931) On a new species of *Culicoides* (*Culicoides clavipalpis* sp. nov.), with notes on the morphology of the mouthparts and male terminalia of an Indian *Culicoides*. *Indian Journal of Medical Research*, 18, 1051–1058, pl. 56.
- Müller, G.W. (1905) Die Metamorphose von *Ceratopogon mülleri* Kieffer. *Zeitschrift für Wissenschaftliche Zoologie*, 83, 224–230, pl. 7.
- Muñoz-Muñoz, F., Talavera, S., Carpenter, S., Nielsen, S.A., Werner, D. & Pagès, N. (2014) Phenotypic differentiation and phylogenetic signal of wing shape in western European biting midges, *Culicoides* spp., of the subgenus *Avaritia*. *Medical*

- and *Veterinary Entomology*, 28, 319–329.  
<https://doi.org/10.1111/mve.12042>
- Murphree, C.S. & Mullen, G.R. (1991) Comparative larval morphology of the genus *Culicoides* Latreille (Diptera: Ceratopogonidae) in North America with a key to species. *Bulletin of the Society of Vector Ecology*, 16, 269–399.
- Nandi, M. & Mazumdar, A. (2014a) Revision of the subgenus *Diphaomyia* Vargas of *Culicoides* Latreille from India with description of a new species (Diptera: Ceratopogonidae). *Zootaxa* 3793 (4), 465–474.  
<https://doi.org/10.11646/zootaxa.3793.4.5>
- Nandi, M. & Mazumdar, A. (2014b) The *chaetophthalmus* species-group of the genus *Culicoides* Latreille, 1809 (Diptera: Ceratopogonidae) from India with description of a new species. *Caucasian Entomological Bulletin* 10, 161–164.  
<https://doi.org/10.23885/1814-3326-2014-10-1-161-164>
- Nandi, M. & Mazumdar, A. (2014c) Biting midges in the *Culicoides shortti* species-group (Diptera: Ceratopogonidae) from India. *Mitteilungen internationaler entomologischer Verein* 39, 61–70.
- Nandi, M., Mazumdar, A. & Chaudhuri, P.K. (2012) Biting midges of the genus *Leehelea* Debenham (Diptera: Ceratopogonidae) in India. *Zootaxa* 3399, 53–60.  
<https://doi.org/10.11646/zootaxa.3399.1.5>
- Nandi, M., Mazumdar, A. & Chaudhuri, P.K. (2015) Ceratopogonid flies of *Culicoides* (*Trithecoides*) (Diptera: Ceratopogonidae) of Indian subcontinent. *Folia Heyrovskyana, series A*, 23, 63–76.
- Navai, S. (1971) *Culicoides* from southern part of Lut Desert, Iran with two new species (Diptera: Ceratopogonidae). *Mosquito News* 31, 199–206.
- Navai, S. (1973) *Culicoides* (Diptera: Ceratopogonidae) from the Persian Gulf area of Iran. Part I: Two new species *C. mesghalii* and *C. shahgudiani*. *Bulletin de la Société de Pathologie Exotique* 66, 195–204.
- Navai, S. (1994) Biting midges of the genus *Dasyhelea* from Afghanistan, with descriptions of new species (Diptera, Ceratopogonidae). *Deutsche Entomologische Zeitschrift* 41, 357–399.  
<https://doi.org/10.1002/mmnd.19940410207>
- Navai, S. (1997) A new species of *Brachypogon* Kieffer from Afghanistan (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington* 18, 184–188.
- Navai, S., Dominiak, P. & Szadziewski, R. (2017) Vertebrate blood-feeding biting midges of the subgenus *Lasiohelea* Kieffer of *Forcipomyia* Meigen in Europe (Diptera: Ceratopogonidae) with new synonyms. *Annales Zoologici* (Warszawa) 67, 823–835.  
<https://doi.org/10.3161/00034541ANZ2017.67.4.016>
- Neveu, A. (1977) Deux espèces nouvelles de *Neostilobezzia* Gtgh. (Diptera, Ceratopogonidae) de l'ouest des Pyrénées. *Nouvelle Revue d'Entomologie* 7, 225–234.
- Neveu, A. (1978) Une nouvelle espèce d'*Alluaudomyia* (Diptera Ceratopogonidae), de l'ouest des Pyrénées: *Alluaudomyia tiberghieni* n. sp. *Nouvelle Revue d'Entomologie* 8, 355–358.
- Newman, E. (1834) Attempted division of British insects into natural orders. *Entomological Magazine* 2, 379–431.
- Nie, W.-Z. & Yu, Y.-X. (2006) Description of a new species of foreign midge *Palpomyia exotica* sp. nov. (Diptera: Ceratopogonidae) [in Chinese]. *Chinese Journal of Vector Biology and Control* 17, 376.
- Nie, W.-Z., Li, J.-C., Li, D.-X. & Yu, Y.-X. (2003) Notes on foreign species and a new species of biting midges from Qinhuangdao Port, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 10, 236–242.
- Nie, W.-Z., Li, J.-C., Li, D.-X. & Yu, Y.-X. (2005) Report of introduced living midges and a new species of genus *Bezzia* collected from entry foreign ships in Qinhuangdao Port (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 12, 102–105.
- Nie, W.-Z., Li, J.-C., Li, D.-X., Liu, E.-D., Wang, H.-J. & Yu, Y.-X. (2007) A new species of Ceratopogonidae, *Alluaudomyia maculiabdominis* sp. nov., collected from entry ship (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 18, 475–476.
- Nie, W.-Z., Li, J.-C., Li, D.-X., Yu, Y.-X., Wang, R.-J. & Liu, E.-D. (2009) Record on introduced *Alluaudomyia* and a new species collected on entry international ships (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal of Zoology* 28, 161–163.
- Nie, W.-Z., Li, D.-W., Wang, R.-J., Liu, E.-D., Yang, C.-G., Yu, Y.-X. & Zhang, X.-L. (2012) Notes on *Bezzia lijunchengi* new species and *Bezzia albicornis* (Meigen) (Diptera: Ceratopogonidae) collected on entry international ships. *Chinese Journal of Frontier Health and Quarantine* 35, 35–37.
- Nie, W.-Z., Bo, J.-X., Yang, C.-G., Zhu, S.-Y. & Yu, Y.-X. (2015) Notes on the introduced living midges and a new species of genus *Bezzia* (Diptera: Ceratopogonidae) collected on entry ships arrived at Qinhuangdao port [in Chinese, English summary]. *Chinese Journal of Frontier Health and Quarantine* 38, 381–389.
- Nie, W.-Z., Bo, J.-X. & Yu, Y.-X. (2016) A new species of genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) collected on an entry ship [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 27, 44–45.
- Nielsen, A. (1951) Contributions to the metamorphosis and biology of the genus *Atrichogon* Kieffer (Diptera, Ceratopogonidae) with remarks on the evolution and taxonomy of the genus. *Det Kongelige Danske Videnskabernes Selskab, Biologiske Skrifter* 6(6), 1–95, pls. 1–2.
- Nielsen, S.A. (2009) Presentation of *Culicoides* (*Culicoides*) *boyi* sp. n. found in northern Jutland, Denmark. pg. 170, in: 2009

- Medreonet Proceedings, *The Revue d'Élevage et Médecine Vétérinaire des Pays Tropicaux* 62, 81–180.  
<https://doi.org/10.19182/remvt.10074>
- Nielsen, S.A. & Kristensen, M. (2011) Morphological and molecular identification of species of the *Obsoletus* groups (Diptera: Ceratopogonidae) in Scandinavia. *Parasitology Research* 109, 1133–1141.  
<https://doi.org/10.1007/s00436-011-2357-9>
- Nielsen, S.A., Kristensen, M. & Pape, T. (2015) Three new Scandinavian species of *Culicoides* (*Culicoides*): *C. boyi* sp. nov., *C. selandicus* sp. nov. and *C. kalix* sp. nov. (Diptera: Ceratopogonidae). *Biodiversity Data Journal* 3, e5823. doi: 10.3897/BDJ.3.e5823. pp. 1–19.  
<https://doi.org/10.3897/BDJ.3.e5823>
- Noè, G. (1905) Un nuovo genere appartenente alla famiglia Chironomidae. *Rendiconti, Accademia Nazionale dei Lincei* 14, 114–120.
- Noè, G. (1907) Due nuove specie di ditteri appartenenti ad un genere nuovo. *Archivio Zoologico Italiano: Pubblicato Sotto gli Auspicii Della Unione Zoologica* 3, 101–163, 2 pls.
- Oka, H. & Asahina, S. (1948) *Pterobosca* from Japan and her adjacent territories (Diptera, Ceratopogonidae). *Mushi* 18, 107–113.
- Okada, T. (1941) Biting midges collected from the northeastern district of Honsyu, Japan. *Journal of the College of Agriculture, Tokyo Imperial University* 15, 13–31.
- Okada, T. (1942) *Alluaudomyia* (Diptera, Heleidae) from Formosa with a revised key. *Transactions of the Natural History Society of Formosa* 32, 315–320.
- Orr, A.G. & Cranston, P.S. (1997) Hitchhiker or parasite? A ceratopogonid midge and its odonate host. *Journal of Natural History* 31, 1849–1858.  
<https://doi.org/10.1080/00222939700770961>
- Országh, I. (1969) New species of genus *Culicoides* Latreille, 1809 (Diptera, Ceratopogonidae). *Annotationes Zoologicae et Botanicae (Bratislava)* 59, 1–9.
- Ortiz, I. (1950a) Estudios en *Culicoides* II. Diptera, Ceratopogonidae. *Culicoides lanei* n. sp. de Panama. *Revista de Sanidad y Asistencia Social* 15, 431–433.
- Ortiz, I. (1950b) Estudios en *Culicoides* IV. Revisión de las especies americanas del sub-género *Hoffmania* Fox 1948, con la descripción de dos nuevas especies. *Revista de Sanidad y Asistencia Social* 15, 437–460.
- Ortiz, I. (1950c) Estudios en *Culicoides* V. Informes sobre una nueva especie y lista de los machos cuyas genitales son conocidas. *Revista de Sanidad y Asistencia Social* 15, 461–465.
- Ortiz, I. (1950d) Descripción de *Stilobezzia glauca venezuelensis* n. vr. y *Monohelea mayeri* n. sp. *Memorias de la Sociedad de Ciencias Naturales La Salle* 10, 199–204.
- Ortiz, I. (1951a) Estudios en *Culicoides* (Diptera, Ceratopogonidae). 6. *Culicoides bricenoi* n. sp. *Boletín del Laboratorio de la Clínica "Luis Razetti"* 11, 442–448.
- Ortiz, I. (1951b) Estudios sobre *Culicoides* (Diptera, Ceratopogonidae) VII.- *Culicoides dominicii* n. sp. y clave para el reconocimiento de las especies venezolanas. *Novedades Científicas, Contribuciones Ocasionales del Museo de Historia Natural La Salle, Serie Zoológica* 5, 1–12.
- Ortiz, I. (1951c) Estudios en *Culicoides* (Diptera, Ceratopogonidae). IX. Sobre los caracteres diferenciales entre *Culicoides paraensis* (Goeldi, 1905), *C. stellifer* (Coquillett, 1901), y *C. lanei* (Ortiz, 1950). Descripción de cuatro nuevas especies con la redescipción de algunas otras poco conocidas. *Revista de Sanidad y Asistencia Social* 16, 573–591.
- Ortiz, I. (1952a) Los insectos del genero *Leptoconops* Skuse, 1889 (Diptera, Ceratopogonidae) en Venezuela. Descripción de una nueva especie: *Leptoconops (L.) venezuelensis* y redescipcion de la hembra de *Leptoconops (L.) torrens* (Townsend, 1893). *Revista de Sanidad y Asistencia Social* 17, 163–171.
- Ortiz, I. (1952b) Apuntes en Ceratopogonidae (Diptera, Nematócera). III. Sobre una nueva especie de *Monohelea* Kieffer, 1917 (*Monohelea ocumare* n. sp.). *Revista de Sanidad y Asistencia Social* 17, 253–256.
- Ortiz, I. (1953a) Nueva contribución al conocimiento de los caracteres morfológicos externos de las hembras americanas del género *Culicoides* LTR. (Diptera, Ceratopogonidae) con una espermateca. Descripción de dos nuevas especies de Venezuela: *Culicoides transferrans* (*C. oublepharus* [sic] Ortiz, 1952) y *Culicoides mirsae*. *Revista de Sanidad y Asistencia Social* 18, 797–806.
- Ortiz, I. (1953b) Sobre una nueva especie del genero *Culicoides* (Diptera, Ceratopogonidae) proxima de *C. horticola* Lutz 1913. *Revista de Sanidad y Asistencia Social* 18, 807–812.
- Ortiz, I. (1954) Sobre dos nuevos dipteros hematofagos del genero *Culicoides* (Nematocera, Ceratopogonidae). *Archivos Venezolanos de Patología Tropical y Parasitología Médica* 2, 221–226.
- Ortiz, I. (1956) Sobre un pequeño diptero de la region del Auyantepuy. *Boletín Venezolano de Laboratorio Clínico* 1, 93–96.
- Ortiz, I. (1957) Nuevos representantes hematofagos de los generos *Culicoides* (Diptera: Ceratopogonidae) y *Simulium* (Diptera: Simuliidae) de Venezuela. *Boletín Venezolano de Laboratorio Clínico* 2, 161–168.
- Ortiz, I. (1959) Contribución al estudio de los Ceratopogónidos (Jejenes) hematofagos de Venezuela (*Leptoconops* Skuse, 1890, *Lasiohelea* Kieffer, 1921 y *Culicoides* Latreille, 1809) (Diptera: Ceratopogonidae). *Revista de Sanidad y Asistencia Social* 24, 349–369.
- Ortiz, I. (1961) Descripción de una nueva especie de *Culicoides* (*C. forattinii* sp. n.) del subgenero *Oecacta* Poey, 1851, de Venezuela. *Revista Brasileira de Entomologia* 10, 211–215.

- Ortiz, I. (1968) Los Dípteros hematofagos del género *Culicoides* en Venezuela (Diptera, Ceratopogonidae). Parte I. Hembras da una sola espermateca con la descripción de una nueva especie (*C. rodriguezi* n. sp.). *Revista del Instituto Nacional de Higiene* 1, 65–71.
- Ortiz, I. & León, L.A. (1955) Los *Culicoides* (Diptera: Ceratopogonidae) de la República del Ecuador. *Boletín de Informaciones Científicas Nacionales* 67, 564–594. (January - February).
- Ortiz, I. & Mirsa, M. (1950) Estudios en *Culicoides* (Diptera, Ceratopogonidae) VIII.- Sobre una nueva especie del grupo *haematopotus*: *Culicoides venezuelensis* n. sp. *Archivos Venezolanos de Patología Tropical y Parasitología Médica* 2, 137–143.
- Ortiz, I. & Mirsa, M. (1951) Estudios en *Culicoides*. Descripción de dos nuevas especies: *Culicoides avilaensis* y *C. discrepans*, y del macho de *C. leopoldoi* Ortiz, 1951. Redescipción de *C. limai* Barretto, 1944, *C. baueri* Hoffman 1925, *C. lichyi* Floch & Abonnenc, 1949, y *C. pusillus* Lutz, 1913. *Revista de Sanidad y Asistencia Social* 16, 593–605.
- Ortiz, I. & Mirsa, M. (1952a) *Culicoides* de Venezuela - Redescipcion de 10 especies con la descripcion de algunos sexos no conocidos. *Revista de Sanidad y Asistencia Social* 17, 257–279.
- Ortiz, I. & Mirsa, M. (1952b) Sobre las especies Americanas del género "*Culicoides*" Latr., (Diptera, Ceratopogonidae) con una espermateca. *Acta Científica Venezolana* 2, 125–128.
- Osten Sacken, C.R. (1882) Priorität oder Continuität? Ein dipterologischer Beitrag. *Wiener Entomologische Zeitung* 1, 191–193.  
<https://doi.org/10.5962/bhl.part.11158>
- Pagès, N., Muñoz-Muñoz, F., Talavera, S., Sarto, V., Lorca, C. & Núñez, J.I. (2009) Identification of cryptic species of *Culicoides* (Diptera: Ceratopogonidae) in the subgenus *Culicoides* and development of species-specific PCR assays based on barcode regions. *Veterinary Parasitology*, 165, 298–310.  
<https://doi.org/10.1016/j.vetpar.2009.07.020>
- Pakalnidkis, S., Bernotienė, R., Lutovinovas, E., Petradiūnas, A., Podeėnas, S., Rimdaiteė, J., Szther O. A. & Spungis, V. (2006) Checklist of Lithuanian Diptera. *New and rare for Lithuania insect species* 18, 13–111.
- Palmer, A.R. (1957) Miocene arthropods from the Mojave Desert, California. *Geological Survey Professional Paper*, 294-G: 237–277, pl. 34.  
<https://doi.org/10.3133/pp294G>
- Panzer, G.W.F. (1798) *Faunae insectorum germanicae initiae oder Deutschlands Insecten*. Heft 59, 24 pp., 24 pls. Nürnberg [= Nuremberg].
- Panzer, G.W.F. (1806) *Faunae insectorum germanicae initiae oder Deutschlands Insecten*. Heft 103, 24 pp., 24 pls. Nürnberg [= Nuremberg].
- Papp, L. (2001) Ceratopogonidae. pp. 74-86 In: *Checklist of the Diptera of Hungary*. Papp, L. (Ed.) Hungarian Natural History Museum, Budapest. 550 pp.
- Pappas, C.D. & Pappas, L.G. (1989) *Culicoides elemae*, a new species in the *Culicoides guttipennis* species group (Diptera: Ceratopogonidae). *Journal of the Kansas Entomological Society* 62, 228–233.
- Patton, W.S. (1913) *Culicoides kiefferi*, n. sp.: a new Indian blood-sucking midge. *Indian Journal of Medical Research* 1, 336–338, pl. 18.
- Patton, W.S. (1920) Some notes on the arthropods of medical and veterinary importance in Mesopotamia and their relation to disease. Part IV. Some Mesopotamian Nematocera of economic importance. *Indian Journal of Medical Research* 8, 245–252.
- Paul, N., Harsha, R. & Mazumdar, A. (2014a) A new species of *Palpomyia* Meigen (Diptera: Ceratopogonidae) described in all life stages from Shillong plateau, India. *Zootaxa*, 3755 (4), 368–378.  
<https://doi.org/10.11646/zootaxa.3755.4.3>
- Paul, N., Harsha, R. & Mazumdar, A. (2014b) A new species of *Forcipomyia* Meigen (Diptera: Ceratopogonidae) described with immature stages from India. *Zootaxa* 3881 (2), 165–174.  
<https://doi.org/10.11646/zootaxa.3881.2.5>
- Pérez-de la Fuente, R., Delclòs, X., Peñalver, E. & Arillo, A. (2011) Biting midges (Diptera: Ceratopogonidae) from the Early Cretaceous El Soplao amber (N Spain). *Cretaceous Research* 32, 750–761.  
<https://doi.org/10.1016/j.cretres.2011.05.003>
- Perris, E. (1847) Notes pour servir à l'histoire des *Ceratopogon*. *Annales de la Société Entomologique de France* (2)5, 555–569.
- Perris, E. (1870) Histoire des Insectes du Pin maritime. Diptères. *Annales de la Société Entomologique de France* (4)10, 135–232, pls. 1–5.
- Perruolo, G. (1990) *Culicoides* (Diptera, Ceratopogonidae) de Venezuela. Descripción de una nueva especie: *Culicoides malariologiensis* n.sp. *Boletín de la Dirección de Malariología y Saneamiento Ambiental* 28, 27–31 (1988).
- Perruolo, G. (2001) Nueva especie de *Culicoides* (Diptera: Ceratopogonidae), de la region Andina, Venezuela. *Boletín de Malariología y Saneamiento Ambiental* 41, 34–37.
- Perruolo, G. (2006a) Una nueva especie de *Culicoides* originaria de Venezuela (Diptera: Ceratopogonidae). *Boletín de Malariología y Saneamiento Ambiental* 46, 115–117.
- Perruolo, G. (2006b) *Culicoides perijaensis* nuevo *Culicoides* (Diptera: Ceratopogonidae) para Venezuela. *Kasmera*, 34, 25–30.

- Petersen, F.T., Achim, S. (2001) Ceratopogonidae. In: Petersen, F.T. & Meier, R. (Eds.), A preliminary list of the Diptera of Denmark. *Steenstrupia* 26, 136–138.
- Petrunkévitch, A. (1956) *Eohelea stridulans*, a striking example of paramorphism in a Baltic amber gnat. *Science* 123, 675.
- Petrunkévitch, A. (1957) *Eohelea stridulans*, n. gen., n. sp., a striking example of paramorphism in an amber biting-midge. *Journal of Paleontology* 31, 208–214.
- Philippi, R.A. (1865) Aufzählung der chilenischen Dipteren. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien* 15, 595–782.  
<https://doi.org/10.5962/bhl.title.9295>
- Phillips, R.A. (2015) A new species of *Culicoides* (*Selfia*) (Diptera: Ceratopogonidae) from Southeastern Utah. *Journal of Medical Entomology* 52, 842–849.  
<https://doi.org/10.1093/jme/tjv097>
- Pierce, W.D. (1966) Fossil arthropods of California. 29. Silicified Miocene pupae of ceratopogonid flies. *Bulletin of the Southern California Academy of Sciences* 65(2), 81–98.
- Pittaluga, G. (1911a) Un nuevo diptero hematofago de la costa occidental de Africa (Guinea Espanola): '*Oecacta hostilissima*', n. sp. *Boletín de la Sociedad Espanola de Biología* 1, 29–32.
- Pittaluga, G. (1911b) '*Oecacta hostilissima*' n. sp., ein neuer, blutsaugender Zweiflüger der Westküste Afrikas (Spanisch-Guinea). *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten*. Abt. 1, 59, 69–71.
- Pittaluga, G. (1912) El "Je-Jén": Un nuevo Diptero hematofago de la costa occidental de Africa (Guinea espanola). *Oecacta hostilissima*' n. sp. *Boletín de la Sociedad Española de Historia Natural* 12, 591–600, pl. 11.
- Poey, F. (1853) *Memorias sobre la historia natural de la Isla de Cuba, acompañadas de sumarios latinos y extractos en frances*. Barcelona, Habana, Vol. 1 (part 4), pp. 201–280.
- Poinar, G. (2008) *Leptoconops nosopheris* sp. n. (Diptera: Ceratopogonidae) and *Paleotrypanosoma burmanicus* gen. n., sp. n. (Kinetoplastida: Trypanosomatidae), a biting midge - trypanosome vector association from the Early Cretaceous. *Memórias do Instituto Oswaldo Cruz* 103, 468–471.  
<https://doi.org/10.1590/S0074-02762008000500010>
- Preyßler, J.D.E. (1791) Beschreibungen und Abbildungen derjenigen Insekten, welche in Sammlungen nicht aufzubewahren sind, dann aller, die noch ganz neu, und solcher, von denen wir noch keine oder doch sehr schlechte Abbildung besitzen. *Sammlung Physikalischer Aufsätze* 1, 55–151, 3 pls.
- Qu, F.-Y. & Liu, S. (1982) Two new species of *Culicoides* from Yunnan Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Zoological Research* 3, 101–103.
- Qu, F.-Y. & Wang, X.-Y. (1994) Descriptions of three new species and one new record of biting midges from southern Tibet, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Entomologica Sinica* 37, 486–493.
- Qu, F.-Y. & Ye, Q.-S. (1995a) A new species of *Culicoides* from Jilin Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 20, 95–96.
- Qu, F.-Y. & Ye, Q.-S. (1995b) Description of *Forcipomyia* (*Lasiohelea*) *hunjiangensis* sp. nov. from Jilin province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 20, 228–231.
- Qu, F.-Y., Cao, M., & Liu, R.-X. (2010) A new species of *Culicoides* (*Beltranmyia*) from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Parasitology and Parasitic Diseases* 28, 321–324.
- Rafinesque, C.S. (1815) *Analyse de la nature ou tableau de l'univers et des corps organisés. Le nature est mon guide, et Linnéus mon maitre*. Privately published, Palermo, 224 pp.  
<https://doi.org/10.5962/bhl.title.106607>
- Ramilo, D.W., Díaz, S., Pereira da Fonseca, I., Delécolle, J.-C., Wilson, A., Meireles, J., Lucientes, J., Ribeiro, R., & Boinas, F. (2012) First report of 13 species of *Culicoides* (Diptera: Ceratopogonidae) in mainland Portugal and Azores by morphological and molecular characterization. *PLOS ONE*, 7 (4), e34896.  
<https://doi.org/10.1371/journal.pone.0034896>
- Ramilo, D., Garros, C., Mathieu, B., Benedet, C., Allène, X., Silva, E., Alexandre-Pires, G., Da Fonseca, I.P., Carpenter, S., Rádrová, J. & Delécolle, J.-C. (2013) Description of *Culicoides paradoxalis* sp. nov. from France and Portugal (Diptera: Ceratopogonidae). *Zootaxa*, 3745, 243–256.  
<https://doi.org/10.11646/zootaxa.3745.2.4>
- Ratanaworabhan, N.C. & Wirth, W.W. (1972) The biting midge genus *Monohelea* Kieffer in the Oriental Region (Diptera: Ceratopogonidae). *Pacific Insects*, 14, 439–473.
- Remm, H. (1959) Estonian species of the genus *Atrichopogon* Kieffer (Diptera, Heleidae). I. Subgenus *Psilokempia* Enderlein [in Russian, English summary]. *Entomologicheskoe Obozrenie* 38, 682–692. English translation in *Entomological Review* 38, 614–623.
- Remm, H. (1961a) Three new species of the genus *Forcipomyia* Meigen (Diptera, Heleidae) in Estonia [in Russian, Estonian and English summary]. *Loodusuurijate Seltsi Aastaraamat* 53, 188–194.
- Remm, H. (1961b) Estonian species of the genus *Atrichopogon* Kieffer (Diptera, Heleidae). II. Description of three new species and key to the Estonian species of the subgenus *Atrichopogon* s. str. [in Russian, English summary]. *Entomologicheskoe Obozrenie* 40, 920–929. Translation in *Entomological Review* 40, 527–532.
- Remm, H. (1962a) The genus *Dasyhelea* Kieffer in Estonia (Diptera, Heleidae) [in Russian, English summary]. *Tartu Riikliku Ülikodi Toimetised* 120, 108–131.

- Remm, H. (1962b) A survey of species of the genus *Forcipomyia* Meigen (Diptera, Heleidae) from Estonia [in Russian, Estonian and English summary]. *Loodusuurijate Seltsi Aastaraamat* 54, 165–195.
- Remm, H. (1965) New species of biting-midges (Diptera, Heleidae) from the European part of the USSR [in Russian, English summary]. *Entomologicheskoe Obozrenie* 44, 182–188. Translation in *Entomological Review* 44, 101–103.
- Remm, H. (1966) On the Lithuanian biting midges (Diptera, Heleidae) [in Russian, English summary]. *Tartu Riikliku Ulikooli Toimetised* 180, 53–71.
- Remm, H. (1967) On the fauna of Ceratopogonidae (Diptera) in the Caucasus [in Russian]. *Tartu Riikliku Ulikooli Toimetised* 194, 3–37.
- Remm, H. (1971) On the fauna of Ceratopogonidae of South Primorye (Ussuri Land) [in Russian, English summary]. In: *Living Nature of the Far East*. Akademiia nauk Estonskoi SSR, pp. 182–220.
- Remm, H. (1972) New species of Ceratopogonidae (Diptera) from the south Siberia [in Russian, English summary]. *Tartu Riikliku Ulikooli Toimetised* 293, 62–90.
- Remm, H. (1973) 246 Ceratopogonidae Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei (Diptera). *Reichenbachia* 14, 171–186.
- Remm, H. (1974a) A review of species of the genus *Bezzia* Kieffer (Diptera, Ceratopogonidae) from the fauna of the USSR. I [in Russian, English summary]. *Entomologicheskoe Obozrenie* 53, 429–442. Translation in *Entomological Review* 53(1), 136–145.
- Remm, H. (1974b) A review of species of the genus *Bezzia* Kieffer (Diptera, Ceratopogonidae) from the USSR. II. Subgenus *Bezzia* s. str. [in Russian, English summary]. *Entomologicheskoe Obozrenie* 53, 888–902. Translation in *Entomological Review* 53(4), 113–124.
- Remm, H. (1974c) A systematic review of species of the genus *Ceratopogon* Meigen (Diptera) from USSR [in Russian, English summary]. *Tartu Riikliku Ulikooli Toimetised* 327, 23–58.
- Remm, H. (1975) On the classification of the biting midges (Diptera, Ceratopogonidae) [in Russian]. *Parazitologiya* 9, 393–397.
- Remm, H. (1976a) A synopsis of the *Palpomyia* of the USSR (Diptera, Ceratopogonidae). *Loodusuurijate Seltsi Aastaraamat* 64, 172–197.
- Remm, H. (1976b) Midges (Diptera, Ceratopogonidae) from the Upper Cretaceous fossil resins of the Khatanga depression [in Russian]. *Paleontologicheskij Zhurnal* 3, 107–116.
- Remm, H. (1979a) A new species of biting midges (Diptera, Ceratopogonidae) from Turkmenistan [in Russian]. *Trudy Vsesoyuznogo Entomologicheskogo Obshchestva* 61, 178–179.
- Remm, H. (1979b) Eesti NSV habesääsklaste (Diptera, Ceratopogonidae) fauna kataloog [in Estonian, with Russian and English summary]. In: *Dipteroloogilisi Uurimusi (Tartu)*, Eesti NSV Teaduste Akadeemia Eesti Looduseuurijate selts, pp. 40–60.
- Remm, H. (1980) New species of the family Ceratopogonidae (Diptera) from the Middle Asia [in Russian, English summary]. *Tartu Riikliku Ulikooli Toimetised* 516, 85–128.
- Remm, H. (1981) New synonyms and new names of the Palaearctic Ceratopogonidae (Diptera). *Eesti NSV Teaduste Akadeemia Toimetised* 30, 27–32.
- Remm, H. (1988a) Family Ceratopogonidae. In: Soos, A. (Ed.), *Catalogue of Palaearctic Diptera. Volume 3. Ceratopogonidae-Mycetophilidae*. Akadémiai Kiadó, Budapest, pp. 11–110.
- Remm, H. (1988b) Family Leptoconopidae. In: Soos, A. (Ed.), *Catalogue of Palaearctic Diptera. Volume 3. Ceratopogonidae-Mycetophilidae*. Akadémiai Kiadó, Budapest, pp. 110–114.
- Remm, H. (1990) A new species of the genus *Serromyia* Mg. (Diptera: Ceratopogonidae) in the USSR [in Russian, English summary]. *Tartu Riikliku Ulikooli Toimetised* 875, 4–6. (Feb. 8).
- Remm, H. (1993) New species of Ceratopogonidae (Diptera) from the CIS [in Russian, Estonian and English summaries]. *Eesti Teaduste Akadeemia Toimetised, Bioloogia* 42, 180–200.
- Remm, H. & Glukhova, V. (1971) A description of a new species of the genus *Alluaudomyia* (Diptera, Ceratopogonidae) from three stages of development. *Eesti NSV Teaduste Akadeemia Toimetised* 20, 304–310.
- Remm, H. & Nazarmukhamedov, N.A. (1969) New Heleidae species in lower course of the Amu Darya river [in Russian, English summary]. *Uzbekskii Biologicheskii Zhurnal* 13(4), 54–58.
- Remm, H. & Zhogolev, D.T. (1968) Contributions to the fauna of biting midges (Diptera, Ceratopogonidae) of the Crimea [in Russian, English summary]. *Entomologicheskoe Obozrenie* 47, 826–842. Translation in *Entomological Review* 47, 503–513.
- Remmert, H. (1953) *Dasyhelea tecticola* n. sp., eine Ceratopogonide aus Regenrinnen (Diptera: Ceratopogonidae). *Beiträge zur Entomologie* 3, 333–336.
- Ren, B. & Yu, Y.-X. (1999) A new species of the genus *Allohelea* from Qindao (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 24, 345–346
- Ren, Q.-M., Wang, F., & Liu, G.-P. (2006) A new species of *Culicoides* (*Monoculicoides*) (Diptera: Ceratopogonidae) from Jilin in China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 17, 388–389.
- Ren, Q.-M., Wang, F., Wang, X., Shao, K. and Liu, G.-P. (2016) Fauna and a new species of hematophagous midges in the borders of North Korea, Russia and China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 27, 374–377.
- Rieth, J.T. (1915) Die Metamorphose der Culicoidinen (Ceratopogoninen). *Archiv für Hydrobiologie, Suppl.* 2, 377–442. [June



8].

- Rioux, J.A., S. Descous and J. Pech. (1959) Un nouveau cératopogonide arboricole: *Culicoides haranti* n.sp. (Diptera Heleidae). *Annales de Parasitologie Humaine et Comparée* 34, 432–438.  
<https://doi.org/10.1051/parasite/1959343432>
- Rivera, J. & Currie, D.C. (2009) Identification of Nearctic black flies using DNA barcodes (Diptera: Simuliidae). *Molecular Ecology Resources* 9 (Suppl. 1), 224–236.  
<https://doi.org/10.1111/j.1755-0998.2009.02648.x>
- Roback, S.S. (1957) A new *Palpomyia* from Peru (Diptera: Heleidae). *Notulae Naturae of the Academy of Natural Sciences of Philadelphia* 297, 1–2.
- Rodriguez, M.C. de & Wirth, W.W. (1986) A new species of man-biting *Culicoides* from the high Andes of Colombia (Diptera: Ceratopogonidae). *Florida Entomologist* 69, 311–314.  
<https://doi.org/10.2307/3494934>
- Rondani, C. (1856) *Dipterologiae Italicae prodromus. Volume 1. Genera Italica ordinis Dipteriorum ordinatim disposita et distincta et in familias et stirpes aggregata*. A. Stocche, Parmae [= Parma], 228 pp.  
<https://doi.org/10.5962/bhl.title.8160>
- Rondani, C. (1857) *Dipterologiae Italicae prodromus. Volume 2. Species Italicae ordinis Dipteriorum in genera characteribus definita, ordinatim collectae, methodo analitica distinctae, et novis vel minus cognitis descriptis. Pars prima. Oestridae: Syrphidae: Conopidae*. A. Stocche, Parmae [= Parma], 264 pp.  
<https://doi.org/10.5962/bhl.title.8160>
- Rondani, C. (1860) Sugli Insetti che concorrono alla fecondazione dei semi nelle Aristolochie. *Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano* 2, 133–135.
- Rondani, C. (1869) Di alcuni insetti dipteri che aiutano le fecondazione in diversi perigonii. *Archivio per la Zoologia, l'Anatomia e la Fisiologia*, Serie 2, Bologna 1, 187–192.
- Rondani, C. (1875) *Muscaria exotica* Musei Civici januensis. Fragmentum III. Species in Insula Bonae Fortunae (Borneo), provincia Sarawak, annis 1865–68, lectae a March. J. Doria et Doct. O. Beccari. *Annali de Museo Civico di Storia Naturale di Genova* 7, 421–464.
- Ronderos, M.M. (1990a) Dos especies nuevas del genero *Culicoides* para la Argentina y Uruguay (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina* 48, 115–120.
- Ronderos, M.M. (1990b) A new species of *Leptoconops* [sic] from Argentina (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia* 34, 423–426.
- Ronderos, M.M. & Spinelli, G.R. (1992) A key to the Neotropical *Leptoconops* (Diptera: Ceratopogonidae), with the description of a new species from Argentina. *Revista de la Sociedad Entomológica Argentina* 51, 41–45.
- Ronderos, M.M. & Spinelli, G.R. (1993) Dos especies nuevas de *Leptoconops* neotropicales, y descripción del macho de *Leptoconops (Leptoconops) chilensis* (Diptera: Ceratopogonidae). *Gayana Zoologia* 57, 305–308.
- Ronderos, M.M. & Spinelli, G.R. (1994) Dos especies nuevas de *Culicoides* de la Argentina (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina* 53, 47–50.
- Ronderos, M.M. & Spinelli, G.R. (1995a) Two new Neotropical species of *Culicoides* from the Parana River Basin of Argentina and Paraguay (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society* 121, 59–63.
- Ronderos, M.M. & Spinelli, G.R. (1995b) Redescription de *Culicoides lahillei* y descripción de *Culicoides ichesi*, n. sp. de la Argentina, Paraguay y Uruguay (Diptera: Ceratopogonidae). *Neotropica* 41, 77–81.
- Ronderos, M.M. & Spinelli, G.R. (1997) *Culicoides patagoniensis* n. sp. del sur de Argentina y Chile (Diptera: Ceratopogonidae). *Gayana Zoología* 61, 33–39.
- Ronderos, M.M. & Spinelli, G.R. (1999) On the subgenus *Forcipomyia (Lasiohelea)* in the Neotropical Region (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society* 125, 151–161. (June).
- Ronderos, M.M., Díaz, F. & Spinelli, G.R. (2004) A new species of *Dasyhelea* Kieffer from Argentina described as adult and pupa (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society* 130, 193–200.
- Ronderos, M.M., Spinelli, G.R. & Borkent, A. (2012) A peculiar new species of *Stilobezzia* Kieffer breeding in bamboo internodes in northeastern Argentina (Diptera: Ceratopogonidae). *Aquatic Insects: International Journal of Freshwater Entomology* 34, 1–17.  
<https://doi.org/10.1080/01650424.2012.718079>
- Ronderos, M.M., Spinelli, G.R. & Grogan, W.L. (2017) The Neotropical species of the predaceous midge genus *Austrohelea* Wirth & Grogan (Diptera: Ceratopogonidae). *Zootaxa* 4276 (2), 255–269.  
<https://doi.org/10.11646/zootaxa.4276.2.7>
- Root, F.M. & Hoffman, W.A. (1937) The North American species of *Culicoides*. *American Journal of Hygiene* 25, 150–176, pls. 1–8.  
<https://doi.org/10.1093/oxfordjournals.aje.a118291>
- Roser, C.F.L. von. (1840) Erster Nachtrag zu dem im Jahre 1834 bekannt gemachten Verzeichnisse in Württemberg vorkommender zweiflügliger Insekten. *Correspondenzblatt des Königlich Württembergischen Landwirthschaftlichen Vereins (N.S.)* 17, 49–64.
- Rozkosny, R., Chvala, M. & Pont, A.C. (1982) Diptera described by Johann Daniel Preyßler, 1790–1793. *Scripta Facultatis Scientiarum Naturalium Universitatis Purkynianae Brunensis, Brno* 12, 349–359.

- Sabrosky, C. W. (1999) Family-group names in Diptera. *Myia* 10, 1–360.
- Saha, N.C. & Das Gupta, S.K. (1991) On new *Monohalea* biting midges (Ceratopogonidae: Diptera) from eastern India. *Journal of the Bengal Natural History Society* 10, 5–10.
- Saha, N.C. & Das Gupta, S.K. (1996) Some new Heteromyiini and Sphaeromyiini biting midges (Diptera: Ceratopogonidae) of India. *Journal of Ecobalance* 3(1), 7–11.
- Saha, N.C. & Das Gupta, S.K. (2001) The biting midges genus *Phaenobezzia* Haeselbarth in India. *Geobios (Jodhpur)* 28, 248–252.
- Saha, N.C. & Das Gupta, S.K. (2005) Two new species of the genus *Palpomyia* Meigen (Diptera: Ceratopogonidae) from lower Damodar valley of eastern India. *Geobios (Jodhpur)* 31, 61–64.
- Saha, N.C. & Das Gupta, S.K. (2006) Reporting of seven new species of biting midges under *Brachypogon* Kieffer (Diptera: Ceratopogonidae) from India. *Geobios (Jodhpur)* 33, 17–24.
- Saha, N.C. & Chaudhuri, P.K. (2011) Records of two new species of *Alluaudomyia* Kieffer (Diptera: Ceratopogonidae) from India. *International Journal of Dipterological Research* 22, 55–59.
- Saha, P. & Hazra, N. (2017) First record of an extant and new species of the genus *Serromyia* Meigen from India (Diptera: Ceratopogonidae). *Annales de la Société Entomologique de France* 54, 45–50.  
<https://doi.org/10.1080/00379271.2017.1407959>
- Saha, P. & Hazra, N. (2018) On a new species of the genus *Tetrabezzia* KIEFFER, 1917 from West Bengal, India, with a key to world species (Diptera: Ceratopogonidae). *Polish Journal of Entomology* 87, 289–298.  
<https://doi.org/10.2478/pjen-2018-0020>
- Saha, P.K., Das Gupta, S. K., Gangopadhyay, D. & Mukherjee, T. K. (2009) A morphotaxonomic study of the Indian species of *Forcipomyia* Meigen Biting Midges (Diptera: Ceratopogonidae). *Records of the Zoological Survey of India: Occasional Paper* No. 299, iv, 92 pp.
- Saha, N.C., Mazumdar, A. & Chaudhuri, P.K. (2009a) Five new species of the genus *Sphaeromyias* Curtis (Diptera: Ceratopogonidae) from India. *Journal of Asia-Pacific Entomology* 12, 285–292.  
<https://doi.org/10.1016/j.aspen.2009.07.002>
- Saha, N.C., Mazumdar, A. & Chaudhuri, P.K. (2009b) Predaceous biting midges of the genus *Bezzia* Kieffer (Diptera: Ceratopogonidae) from India. *Far Eastern Entomologist* 203, 1–17.
- Saha, N.C., Sinha, S., Das Gupta, S.K. & Sarkar, S. (1995) The *Calyptopogon* species (Ceratopogonidae, Diptera) from India. *Journal of the Bengal Natural History Society* 14, 29–34.
- Saha, P., Brahma, S. & Hazra, N. (2017) Descriptions of a new species and the pupae of two known species of *Culicoides* Latreille (Diptera: Ceratopogonidae) from India. *Annales de la Société Entomologique de France (N.S.)* 53, 413–421.  
<https://doi.org/10.1080/00379271.2017.1373259>
- Saha, P., Brahma, S. & Hazra, N. (2019) Three new species of predaceous midges *Brachypogon* Kieffer from northern plains of West Bengal, India (Diptera: Ceratopogonidae), *Oriental Insects*.  
<https://doi.org/10.1080/00305316.2019.1616000>
- Sahuquillo, C. & Gil Collado, J. (1982a) Dos nuevos Ceratopogonidos (Diptera, Ceratopogonidae) capturados en Valencia: *Forcipomyia (Lasiohelea) maricarmenae* nov. sp. y *Atrichopogon minutus hortensis* nov. ssp. *Eos* 58, 303–309.
- Sahuquillo, C. & Gil Collado, J. (1982b) Ceratopogonidae (Diptera Nematocera) de Navarra. *Revista de Sanidad e Higiene Pública* 56, 743–752.
- Salm, A. J. (1917a) Description de *Ceratopogon blanchardi* n. sp. *Bulletin de la Société Zoologique de France* 41, 106–108.  
<https://doi.org/10.5962/bhl.part.26341>
- Salm, A. J. (1917b) Nématocères hématophages de Java. *Bulletin de la Société Zoologique de France* 42, 135–139.
- Salmela, J., Siivonen, S., Dominiak, P., Haarto, A., Heller, K., Kanervo, J., Martikainen, P., Mäkilä, M., Paasivirta, L., Rinne, A., Salokannel, J., Söderman, G. & Vilkkamaa, P. (2014) Malaise-hyönteispyynti Lapin suojelualueilla 2012–2014. *Metsähalituksen luonnonsuojelujulkaisuja. Sarja A* 221, 143 pp.
- Santarém, M.C.A. & Felipe-Bauer, M.L. (2018) Brazilian species of biting midges (Diptera: Ceratopogonidae). Available from: [https://portal.fiocruz.br/sites/portal.fiocruz.br/files/documentos/brazilian\\_species\\_of\\_biting\\_midges\\_2018\\_.pdf](https://portal.fiocruz.br/sites/portal.fiocruz.br/files/documentos/brazilian_species_of_biting_midges_2018_.pdf). Accessed April 25, 2019.
- Santarém, M.C.A., da Trindade, R.L., Da Silva, T.D.N., Castellón, E.G., Patiu, C.A.M. & Felipe-Bauer, M.L. (2014) New Neotropical *Culicoides* and redescription of *Culicoides reticulatus* Lutz (Diptera: Ceratopogonidae). *Zootaxa* 3795, 255–274.  
<https://doi.org/10.11646/zootaxa.3795.3.2>
- Santarém, M.C.A., Farias, E.M. & Felipe-Bauer, M.L. (2015) *Culicoides castelloni* sp. nov. from the Brazilian Amazon Region with a revision of the *reticulatus* species group (Diptera, Ceratopogonidae). *Anais da Academia Brasileira de Ciências* (2015) 87, 955–972.  
<https://doi.org/10.1590/0001-3765201520140517>
- Santarém, M.C.A., Borkent, A., Spinelli, G. & Felipe-Bauer, M.L. (2018) New Neotropical species of *Downshelea* Wirth and Grogan and redescription of *D. multilineata* (Lutz) (Diptera: Ceratopogonidae). *Journal of Natural History* 52, 509–540.  
<https://doi.org/10.1080/00222933.2018.1437231>
- Santos Abreu, E. (1918) Ensayo de una Monografía de los Tendipedidos de las Islas Canarias. *Memorias de la Real Academia de Ciencias y Artes de Barcelona* 14(2), 159–326, 1 pl.  
<https://doi.org/10.5962/bhl.title.8537>

- Sarkar, S., Nandi, M. & Mazumdar, A. (2016) Life stages of *Stilobezzia (Stilobezzia) fuscitibia* sp. n. and *Stilobezzia (Stilobezzia) festiva* Kieffer, 1911 (Diptera: Ceratopogonidae) from India. *Aquatic Insects* 37, 21–35.  
<https://doi.org/10.1080/01650424.2015.1105376>
- Sarvašová, A., Kočišová, A., Candolfi, E. & Mathieu, B. (2017) Description of *Culicoides (Culicoides) bysta* n. sp., a new member of the Pulicaris group (Diptera: Ceratopogonidae) from Slovakia. *Parasites & Vectors* 10, 279.  
<https://doi.org/10.1186/s13071-017-2195-4>
- Sasaki, C. (1928) *Ceratopogon shimai*, a new midge affecting the domestic fowl. *Proceedings of the Imperial Academy of Japan* 3, 687–689 (1927).  
<https://doi.org/10.2183/pjab1912.3.687>
- Saunders, L.G. (1924) On the life history and the anatomy of the early stages of *Forcipomyia* (Diptera, Nemat., Ceratopogoninae). *Parasitology* 16, 164–213.  
<https://doi.org/10.1017/S0031182000020011>
- Saunders, L.G. (1925) On the life history, morphology and systematic position of *Apelma* Kieff. and *Thyridomyia* n. g. (Diptera, Nemat. Ceratopogoninae). *Parasitology* 17, 252–277.  
<https://doi.org/10.1017/S0031182000004704>
- Saunders, L.G. (1957) Revision of the genus *Forcipomyia* based on characters of all stages (Diptera, Ceratopogonidae). *Canadian Journal of Zoology* 34, 657–705 (1956).  
<https://doi.org/10.1139/z56-065>
- Saunders, L.G. (1959) Methods for studying *Forcipomyia* midges, with special reference to cacao-pollinating species (Diptera, Ceratopogonidae). *Canadian Journal of Zoology* 37, 33–51.  
<https://doi.org/10.1139/z59-005>
- Saunders, L.G. (1964) New species of *Forcipomyia* in the *Lasiohelea* complex described in all stages (Diptera, Ceratopogonidae). *Canadian Journal of Zoology* 42, 463–482.  
<https://doi.org/10.1139/z64-040>
- Say, T. (1825) *American entomology, or descriptions of the insects of North America. Volume 2*, 121 pp., pls. 19–36. Philadelphia.
- Say, T. (1829) Descriptions of North American dipterous insects. *Journal of the Academy of Natural Sciences of Philadelphia* (1829–1830) 6, 149–178.
- Schiner, I.R. (1868) Diptera. In: *Reise der österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair*. Zoologischer Theil. Zweiter Band. I. Abtheilung. B.K. Gerold's Sohn, Wien [=Vienna], vi + 388 pp.
- Schrank, F. (1803) *Fauna boica. Durchgedachte Geschichte der in Baiern einheimischen und zahmen Thiere*. Volume 3, pt. I. P. Krüll, Landshut, 272 pp.
- Schwenkenbecher, J.M., Mordue, A.J. & Piertney, S.B. (2009) Phylogenetic analysis indicates that *Culicoides dewulfi* should not be considered part of the *Culicoides obsoletus* complex. *Bulletin of Entomological Research* 99, 371–375.  
<https://doi.org/10.1017/S0007485308006391>
- Sebastiani, F., Meiswinkel, R., Gomulski, L.M., Guglielmino, C.R., Mellor, P.S., Malacrida, A.R., & Gasperi, G. (2001) Molecular differentiation of the Old World *Culicoides imicola* species complex (Diptera, Ceratopogonidae), inferred using random amplified polymorphic DNA markers. *Molecular Ecology* 10, 1773–1786.  
<https://doi.org/10.1046/j.0962-1083.2001.01319.x>
- Segerman, J. (1995) List of the type specimens of Ceratopogonidae (Diptera, Nematocera) in the Department of Medical Entomology at the South African Institute for Medical Research, Johannesburg. *Mosquito Systematics* 27, 16–26.
- Segerman, J. (1996) *A revision of the catalogue of the Ceratopogonidae of the Afrotropical Region*. Published by South African Institute for Medical Research, Johannesburg, 70 pp.
- Séguy, E. (1931a) Sur les affinité des genres *Stenoxenus* et *Macroptilum* et description d'une espèce nouvelle (Dipt. Ceratopogonidae). *Bulletin de la Société Entomologique de France* 1931, 208–210.
- Séguy, E. (1931b) Contribution à l'étude de la faune du Mozambique. Voyage de M.P. Lesne 1928–1929. 3<sup>e</sup> note. - Diptères (1<sup>re</sup> partie). *Bulletin du Muséum National d'Histoire Naturelle, Paris* (2) 2, 645–656 (1930).
- Séguy, E. (1934) Diptères d'Espagne. *Memorias de la Academia de Ciencias Exactas, Físico-Químicas y Naturales de Zaragoza* 3, 1–54.
- Séguy, E. (1941) Quelques Cératopogonides vulnérants parasites des insectes. *Revue Française d'Entomologie* 8, 82–88.
- Séguy, E. (1946) Mission de M. Risbec en Afrique occidentale. Insectes Diptères. *Encyclopédie Entomologique (B II) Dipt.* 10 (1939–1946), 9–14.
- Sen, P. & Das Gupta, S.K. (1958a) *Nilobezzia niger* sp. nov.- a new ceratopogonid midge from India. *Bulletin of the Calcutta School of Tropical Medicine and Hygiene* 5, 69.
- Sen, P. & Das Gupta, S.K. (1958b) Species complex in *Culicoides* (Diptera: Ceratopogonidae). *Bulletin of the Calcutta School of Tropical Medicine and Hygiene* 6, 163.
- Sen, P. & Das Gupta, S.K. (1959a) Studies on Indian *Culicoides* (Ceratopogonidae: Diptera). *Annals of the Entomological Society of America* 52, 617–630.  
<https://doi.org/10.1093/aesa/52.5.617>
- Sen, P. & Das Gupta, S.K. (1959b) Instances of wrong naming of *Culicoides* with necessary rectifications. *Indian Journal of*

*Entomology* 21, 65–66.

- Sen, P. & Das Gupta, S.K. (1968) On a new Forcipomyiinae, *Forcipomyia* (*Forcipomyia*) *stabilis* sp. nov., Diptera: Ceratopogonidae, from West Bengal, (India). *Bulletin of Entomological Research* 9, 95–98.
- Senior-White, R. (1929) A new biting ceratopogonine from India. *Archivos da Escola Médico-Cirurgia de (Nova) Goa, Ser. A, F* 6, 1–2, 1 pl.
- Sergejev, A.F. (1959) An introduction to the biting midge fauna of the Caucasian National Parks [in Russian]. *Trudy Kavkazskogo Gosudarstvennogo Zapovednika* 5, 202–206.
- Shakirzjanova, M.C. (1962) New species of *Culicoides* (Diptera, Heleidae) from Kazakhstan [in Russian]. *Trudy Instituta Zoologii. Akademiya Nauk Kazahskoi SSR (Alma Ata)* 18, 254–259.
- Shakirzjanova, M.C. (1963) *Bloodsucking flies of Kazakstan (Diptera, Heleidae)* [in Russian]. Akademiya Nauk Kazahskoi SSR, Instituta Zoologicheskii, 120 pp.
- Shannon, R.C. & Del Ponte, E. (1927) Cuatro notas sobre especies nuevas de Dipteros, Nematoceros, hematófagos o no, de la República Argentina. *Revista del Instituto Bacteriológico del Departamento Nacional de Higiene* 4, 724–736.
- Shen, J. & Yu, Y.-X. (1990) Description of *Lasiohelea wuyiensis* sp. nov. from Fujian Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 2, 65–67.
- Shevchenko, A.K. (1962) A new species of Heleidae found in the middle reaches of the Northern Donets [in Ukrainian, English summary]. *Dopovidi Akademiyi Nauk Ukrayins'koyi RSR* 1962(5), 673–675.
- Shevchenko, A.K. (1967) Bloodsucking midges of the genus *Culicoides* Mg. (Diptera, Ceratopogonidae) from the valley of the middle current of the Desna [in Russian, English summary]. *Entomologicheskoe Obozrenie* 46, 163–179. English translation in *Entomological Review* 46, 97–106.
- Shevchenko, A.K. (1969) New and scarcely known species of Ceratopogonidae (Diptera) from the Ukraine [in Russian, English summary]. *Vestnik Zoologii* 1969(3), 47–52.
- Shevchenko, A.K. (1970a) New species of blood-sucking biting midges (Diptera, Ceratopogonidae) from the steppe of the Ukraine [in Russian, English summary]. *Vestnik Zoologii* 1970(4), 84–85.
- Shevchenko, A.K. (1970b) New species of Ceratopogonidae of the genus *Culicoides* from the Ukraine [in Russian, English summary]. *Vestnik Zoologii* 1970(6), 8–14.
- Shevchenko, A.K. (1972) Description of two new species of blood-sucking biting midges of the genus *Culicoides* (Diptera, Ceratopogonidae) from the Ukraine [in Russian, English summary]. *Vestnik Zoologii* 1972(6), 75–78.
- Shevchenko, A.K. (1974) On the question of the subgeneric subdivision of the genus *Culicoides* Latr. (Ceratopogonidae) [in Russian]. *Vestnik Khar'kovskogo Gosudarstvennogo Universiteta* 105, Biol. 6, 109–110.
- Shevchenko, A.K. (1977) Bloodsucking midges [in Russian]. *Fauna Ukraini* 13, 1–251.
- Shevchenko, A.K. & A.S. Lisetsky. (1969) Blood-sucking biting midges (Diptera, Ceratopogonidae) in the reservation "Kedrovaya Pad'" of the Primorsky district [in Russian, English summary]. *Zoologicheskyy Zhurnal* 48, 1412–1415.
- Shiraki, T. (1913) Investigations on general injurious insects [in Japanese, English summary]. *Taiwan Sotokufu Noji Shikenjo Tokubetsu Hokoku (Special Report of the Highest Governmental Agricultural Station of Formosa)* 8, 286–297.
- Shults, P. (2015) *A study of the taxonomy, ecology, and systematics of Culicoides species (Diptera: Ceratopogonidae) including those associated with deer breeding facilities in southeast Texas*. Master's thesis, Texas A&M University, Texas, USA, xii + 134 pp.
- Shults, P., Borkent, A. & Gold, R. (2016) The pupa of *Culicoides sonorensis* Wirth and Jones (Diptera: Ceratopogonidae) - first detailed description of this stage of the Bluetongue virus vector. *Annals of the Entomological Society of America* 109, 280–318.  
<https://doi.org/10.1093/aesa/sav119>
- Sinha, S. & Das Gupta, S.K. (1992) *Monohalea unica* Sinha and Das Gupta - a new biting midge (Ceratopogonidae, Diptera) from West Bengal, India. *Journal of the Bengal Natural History Society* 11, 26–28.
- Sinha, S. & Das Gupta, S.K. (2010a) Two new species of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from the coastal regions of east Medinipur (West Bengal), India. *Journal of Natural History - Kalyani* 6, 12–16.
- Sinha, S. & Das Gupta, S.K. (2010b) New species of *Nilobezzia* Kieffer (Diptera: Ceratopogonidae) from Haldia, East Medinipur district, West Bengal, India. *Journal of Natural History - Kalyani* 6, 87–92.
- Sinha, S. & Das Gupta, S.K. (2011) Study on four new species of the genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Haldia under coastal region of east Medinipur district (West Bengal), India. *Journal of Natural History - Kalyani* 7, 29–34.
- Sinha, S., Das Gupta, S.K. & Chaudhuri, P.K. (2003a) Two new species of the genus *Stilobezzia* Kieffer, 1911 (Diptera: Ceratopogonidae) from India. *Annales Zoologici* 53, 529–532.
- Sinha, S., Das Gupta, S.K. & Chaudhuri, P.K. (2003b) Predaceous midges of the genus *Palpomyia* Meigen (Diptera: Ceratopogonidae) from West Bengal, India. *Proceedings of the Zoological Society (Calcutta)* 56(2), 75–80.
- Sinha, S., Mazumdar, A. & Chaudhuri, P.K. (2003c) Biting midges of the genus *Forcipomyia* Meigen (Diptera, Ceratopogonidae) from West Bengal, India. *Japanese Journal of Systematic Entomology* 9, 75–80.
- Sinha, S., Mazumdar, A., Das Gupta, S.K. & Chaudhuri, P.K. (2003d) Biting midges of the genus *Bezzia* Kieffer (Diptera: Ceratopogonidae) from the coastal areas of West Bengal, India. *Bangladesh Journal of Zoology* 31, 23–37.
- Sinha, S., Mazumdar, A. & Chaudhuri, P.K. (2005) New species of predaceous midges of the genus *Alluaudomyia* Kieffer, 1913 (Insecta, Diptera, Ceratopogonidae) from the coastal region of West Bengal, India. *Zoosystema* 27, 115–122.

- Skierska, B. (1973) Une nouvelle espèce du genre *Culicoides* Latr. (Diptera, Ceratopogonidae) - *Culicoides vistulensis* sp. n., trouvée dans les terrains salés de la Cote de Pologne. *Polskie Pismo Entomologiczne* 43, 289–294.
- Skuse, F. A.A. (1889) Diptera of Australia. Part VI. - The Chironomidae. *Proceedings of the Linnean Society of New South Wales* 4, 215–311, pls. 11–14.
- Smatov, Z.S. & Aldabergenov, N.K. (1973) A new species of Ceratopogonidae from Mangyslak, *Culicoides karagienses* sp. n. [in Russian]. *Izvestiia Akademiia Nauk Kazakhskoi SSR, Seriya Biologicheskikh Nauk* 1973 (5), 24–26.
- Smatov, Z.S. & Isimbekov, Z.M. (1971) New and little known species of biting midges (Diptera, Ceratopogonidae) from Kazakhstan [in Russian]. *Izvestiia Akademiia Nauk Kazakhskoi SSR, Seriya Biologicheskikh Nauk* 1971(4), 61–65.
- Smatov, Z.S. & Kravets, G.A. (1976) New species of midges (Diptera, Ceratopogonidae, *Culicoides*) from Kazakhstan [in Russian, English summary]. *Parazitologiya* 10, 282–286.
- Smee, L. (1966) A revision of the subfamily Leptoconopinae Noé (Diptera: Ceratopogonidae) in Australasia. *Australian Journal of Zoology* 14, 993–1025.  
<https://doi.org/10.1071/ZO9660993>
- Smith, R.O.A. (1929) Two species of *Culicoides* which feed on man. *Indian Journal of Medical Research* 17, 255–257, pl. 13.
- Smith, R.O.A. (1932) Two species of *Culicoides* which feed on man. *Memoirs of Indian Medical Research* 25, 180–181.
- Smith, R.O.A. & Swaminath, C.S. (1932) Notes on some *Culicoides* from Assam. *Memoirs of Indian Medical Research* 25, 182–186, 1 pl.
- Solórzano Kraemer, M.M., Kraemer, A.S., Stebner, F., Bickel, D.J. & Rust, J. (2015) Entrapment bias of arthropods in Miocene amber revealed by trapping experiments in a tropical forest in Chiapas, Mexico. *PLOS ONE* 10(3): e0118820.  
<https://doi.org/10.1371/journal.pone.0118820>
- Song, F.-C., Wang, J. & Yu, Y.-X. (2013) A new species of genus *Atrichopogon* Kieffer (Diptera: Ceratopogonidae) from Huainan area, China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 24, 444–445.
- Sontag, E. & Szadziewski, R. (2011) Biting midges (Diptera: Ceratopogonidae) in Eocene Baltic amber from the Rovno region (Ukraine). *Polskie Pismo Entomologiczne* 80, 779–800.  
<https://doi.org/10.2478/v10200-011-0058-4>
- Soria, S. & Bystrak, P.G. (1975) A new species of *Forcipomyia* (Diptera, Ceratopogonidae) described in all stages, with an account of its role as a cacao pollinator. *Revista Theobroma (Brasil)* 5(2), 3–11.
- Spataru, P. (1973) *Probezzia longisaeta* n. sp. (Diptera, Ceratopogonidae). *Comunicari si Referate Muzeul de Stiinte Naturale, Ploiesti*, 1973, 287–292.
- Spataru, P. & Damian-Georgescu, A. (1970) Metamorfoza la *Dasyhelea mayeri* n. sp. si *Dasyhelea thienemanni* n. sp. (Ceratopogonidae, Diptera). *Studii si Cercetari de Biologie, Seria Zoologie* 22, 421–431.
- Speiser, P. (1910) Beiträge zur Kenntnis der Dipteren-Gruppe Heleinae. *Zoologische Jahrbüchern, Suppl.* 12, 735–754.
- Spinelli, G.R. (1982) Cuatro especies nuevas del genero *Artichopogon* [sic] Kieffer (Diptera: Ceratopogonidae) en la Republica Argentina. *Revista de la Sociedad Entomológica Argentina* 41, 201–210.
- Spinelli, G.R. (1983a) Notas sobre Ceratopogonidae de la República Argentina (Diptera, Nematocera) II. Nuevos aportes al conocimiento del genero *Forcipomyia* Meigen. *Neotropica* 29, 121–129.
- Spinelli, G.R. (1983b) Notas sobre Ceratopogonidae (Diptera, Nematocera) de la República Argentina I. Una nueva especie del genero *Alluaudomyia* Kieffer, redescrpcion de *Dasyhelea penthesileae* Macfie, y nuevas citas para el genero *Stilobezzia* Kieffer. *Limnobiós* 2, 403–411.
- Spinelli, G.R. (1984) Notas sobre Ceratopogonidae (Diptera: Nematocera) de la República Argentina. IV. Descripción de adulto y pupa de *Neobezzia termophila* sp. nov. *Neotropica* 30, 197–200.
- Spinelli, G.R. (1988) Two new species of Neotropical *Alluaudomyia* Kieffer, 1913 (Insecta, Diptera, Ceratopogonidae [sic]). *Iheringia, Série Zoologia* 68, 129–136.
- Spinelli, G.R. (1989) *Amerohelea similis* n. sp., from Argentina and Uruguay (Diptera: Ceratopogonidae). *Revista de la Asociación de Ciencias Naturales del Litoral* 20, 25–28.  
<https://doi.org/10.14409/natura.v1i20.3572>
- Spinelli, G.R. (1990) The genus *Brachypogon* in Argentina, with a key to the Neotropical species (Diptera, Ceratopogonidae). *Revista Brasileira de Entomologia* 34, 743–755.
- Spinelli, G.R. (1996) A new species in the genus *Diaphanobezzia* from subantarctic Argentina (Diptera: Ceratopogonidae). *Neotropica* 42, 77–79.
- Spinelli, G.R. (1997) A new genus of the tribe Sphaeromiini from subantarctic Argentina and Chile related to *Mackerrasomyia* Debenham (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington* 18, 224–229.
- Spinelli, G.R. (1998) Three new species and new records of Neotropical Stenoxenini (Diptera: Ceratopogonidae). *Neotropica* 44, 51–55.
- Spinelli, G.R. & Borkent, A. (2004a) New species of Central American *Culicoides* Latreille (Diptera: Ceratopogonidae) with a synopsis of species from Costa Rica. *Proceedings of the Entomological Society of Washington* 106, 361–395.
- Spinelli, G.R. & Borkent, A. (2004b) A new species of the subgenus *Forcipomyia* (*Schizoforcipomyia*) Chan & LaRoux from the Neotropical Region (Diptera: Ceratopogonidae). *Zootaxa* 572, 1–8.  
<https://doi.org/10.11646/zootaxa.572.1.1>
- Spinelli, G.R. & Cazorla, C.G. (2004) A new species of *Brachypogon* (*Isohelea*) from arid zones of Argentina (Diptera: Ceratopogonidae). *Zootaxa* 570, 1–6.

<https://doi.org/10.11646/zootaxa.570.1.1>

- Spinelli, G.R. & Cazorla, C.G. (2006) A new predaceous midge of the *Palpomyia tibialis* group from northeastern Argentina (Diptera: Ceratopogonidae). *Revista de Biología Tropical* 54, 1067–1070.  
<https://doi.org/10.15517/rbt.v54i3.13958>
- Spinelli, G.R. & Dippolito, A. (1995) Two new Neotropical species of the *Forcipomyia* (F.) *argenteola* species group (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina* 54, 155–158.
- Spinelli, G.R. & Duret, J.P. (1993) Las especies neotropicales de *Clinohoelea* (Diptera: Ceratopogonidae). *Graellsia* 49, 39–50.
- Spinelli, G.R. & Felipe-Bauer, M.L. (1990a) Two new Neotropical species of predaceous midges of the tribe Sphaeromiini (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 85, 87–90.  
<https://doi.org/10.1590/S0074-02761990000100014>
- Spinelli, G.R. & Felipe-Bauer, M.L. (1990b) *Sphaerohelea*, a new Neotropical predaceous midge genus of the tribe Sphaeromiini (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 85, 195–198.  
<https://doi.org/10.1590/S0074-02761990000200009>
- Spinelli, G.R. & Grogan, W.L. (1984) Three new species of *Macrurohelea* from Argentina with a key to the Neotropical species (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 86, 961–967.
- Spinelli, G.R. & Grogan, W.L. (1985) *Clastrieromyia*, a new Neotropical genus of predaceous midges related to *Palpomyia* and *Bezzia* (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 87, 329–334.
- Spinelli, G.R. & Grogan, W.L. (1986) Two new species of the predaceous midge genus *Clastrieromyia* from Uruguay with a new record of *C. schnacki* for Argentina (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 88, 455–460.
- Spinelli, G.R. & Grogan, W.L. (1987) A revision of the Neotropical species of *Parabezzia* (Diptera: Ceratopogonidae). *Biología Acuática* 11, 1–45.
- Spinelli, G.R. & Grogan, W.L. (1989) Dos especies nuevas de *Palpomyia*, grupo *distincta* de la Region Neotropical (Diptera: Ceratopogonidae). *Neotropica* 35, 3–8.
- Spinelli, G.R. & Grogan, W.L. (1990) New species of predaceous midges of the tribe Ceratopogonini from subantarctic Argentina (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 92, 127–134.
- Spinelli, G.R. & Grogan, W.L. (1993) *Borkenthelea*, a new predaceous midge genus from subantarctic Argentina (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 95, 321–326.
- Spinelli, G.R. & Grogan, W.L. (1994) Two new Neotropical species of the subgenus *Isohelea* of *Brachypogon*, with the description of the female of *B. (I.) misionensis* and a key to the Neotropical species (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina* 53, 1–8.
- Spinelli, G.R. & Grogan, W.L. (1997) A new species of predaceous midge of the genus *Probezzia* Kieffer (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington* 18, 230–233.
- Spinelli, G.R. & Grogan, W.L. (1998) A revision of the Neotropical predaceous midges of *Brachypogon* (*Brachypogon*) Kieffer (Diptera: Ceratopogonidae). *Insecta Mundi* 12, 59–79.
- Spinelli, G.R. & Grogan, W.L. (1999) A new species of *Macrurohelea* Ingram and Macfie and new records of biting midges of the tribes Culicoidini and Ceratopogonini (Diptera: Ceratopogonidae) from Tierra del Fuego and the Magallanes. *Proceedings of the Entomological Society of Washington* 101, 708–713.
- Spinelli, G.R. & Grogan, W.L. (2001) A revision of the Patagonian predaceous midge genus *Borkenthelea* Spinelli and Grogan (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 103, 147–156.
- Spinelli, G.R. & Grogan, W.L. (2003) A revision of the Neotropical biting midges of the genus *Paradasyhelea* Ingram and Macfie (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 105, 568–577.
- Spinelli, G.R. & Huerta, H. (2015) Four new species of Mesoamerican biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae). *Acta Entomologica Musei Nationalis Pragae* 55, 811–824.
- Spinelli, G.R. & Marino, P.I. (1997) Two new species of the subgenus *Thyridomyia* of *Forcipomyia* from Argentina and new records of *F. (Synthyridomyia) sanctaeclarae* (Diptera: Ceratopogonidae). *Transactions of the American Entomological Society* 123, 187–190.
- Spinelli, G.R. & Marino, P.I. (2007) A new Neotropical species of *Atrichopogon* Kieffer, and a redescription of *A. casali* Cavalieri & Chiossone (Diptera: Ceratopogonidae). *Studies on Neotropical Fauna and Environment* 42, 203–209.  
<https://doi.org/10.1080/01650520601136912>
- Spinelli, G.R. & Marino, P.I. (2008) New species and records in the subgenus *Brachypogon* (*Brachypogon*) Kieffer from Peruvian Amazonia (Diptera: Ceratopogonidae). *Studies on Neotropical Fauna and Environment* 43, 117–124.  
<https://doi.org/10.1080/01650520701308767>
- Spinelli, G.R. & Martinez, M.E. (1992) The genus *Culicoides* in Uruguay (Diptera: Ceratopogonidae). *Insecta Mundi* 5, 175–179 (1991).
- Spinelli, G.R. & Rodriguez, E.A. (1999) A new species of *Dasyhelea* from Argentina described as adult, pupae and fourth instar larvae (Diptera: Ceratopogonidae). *Neotropica* 45, 59–62.
- Spinelli, G.R. & Ronderos, M.M. (1987) Notas sobre Ceratopogonidae (Diptera: Nematocera) de la Republica Argentina. V. Nuevos aportes al conocimiento del genero *Dasyhelea* Kieffer. *Neotropica* 33, 11–17.
- Spinelli, G.R. & Ronderos, M.M. (1991) Los polvorines del genero *Culicoides* en áreas de influencia de la represa de Salto Grande (Diptera: Ceratopogonidae). *Neotropica* 37, 83–94.

- Spinelli, G.R. & Ronderos, M.M. (1993) A new *Leptoconops* (*Holoconops*) from Baja California, Mexico (Diptera: Ceratopogonidae). *Pan-Pacific Entomologist* 69, 115–116.
- Spinelli, G.R. & Ronderos, M.M. (2001) First record of the genus *Bezzia* in Chile, with a description of a new species of the *venustula* group (Diptera: Ceratopogonidae). *Revista Chilena de Historia Natural* 74, 751–754.  
<https://doi.org/10.4067/S0716-078X2001000400002>
- Spinelli, G.R. & Ronderos, M.M. (2013) *Palpomyia ryszardi* sp. n. from Peru (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 82, 343–352.  
<https://doi.org/10.2478/v10200-012-0048-1>
- Spinelli, G.R. & Wirth, W.W. (1981) A new species of predaceous midge of the genus *Bezzia* Kieffer from Argentina (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina* 40, 187–192.
- Spinelli, G.R. & Wirth, W.W. (1984a) Ocho especies nuevas del genero *Culicoides* Latreille de la Region Neotropical. Primera descripcion del macho de *C. flinti* Wirth, y de la hembra de *C. lenti* Tavares y Luna Dias (Diptera: Ceratopogonidae). *Revista de la Sociedad Entomológica Argentina* 43, 171–185.
- Spinelli, G.R. & Wirth, W.W. (1984b) A review of the Neotropical predaceous midge genus *Paryphoconus* (Diptera: Ceratopogonidae). *Proceedings of the Biological Society of Washington* 97, 882–908.
- Spinelli, G.R. & Wirth, W.W. (1984c) The Neotropical predaceous midges of the genus *Alluaudomyia* (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 86, 673–702.
- Spinelli, G.R. & Wirth, W.W. (1984d) Las especies Neotropicales del genero *Dasyhelea*, grupo *cincta* (Diptera: Ceratopogonidae). *Limnobiós* 2, 586–608.
- Spinelli, G.R. & Wirth, W.W. (1986) The Neotropical species of *Phaenobezzia* (Diptera: Ceratopogonidae). *Florida Entomologist* 69, 231–236.  
<https://doi.org/10.2307/3494765>
- Spinelli, G.R. & Wirth, W.W. (1989a) Las especies Neotropicales del genero *Bezzia* (Diptera: Ceratopogonidae). II. Los grupos *nobilis* y *punctipennis*. *Revista de la Sociedad Entomológica Argentina* 45, 109–129.
- Spinelli, G.R. & Wirth, W.W. (1989b) The Neotropical predaceous midges of the genus *Bezzia* (Diptera Ceratopogonidae) Part I. The *glabra* and *brevicornis* groups. *Limnobiós* 2, 762–778.
- Spinelli, G.R. & Wirth, W.W. (1990) Neotropical predaceous midges of the genus *Bezzia* (Diptera: Ceratopogonidae) Part III. The *gibbera* group of species. *Insecta Mundi* 4, 11–32.
- Spinelli, G.R. & Wirth, W.W. (1991) The Neotropical predaceous midges of the genus *Bezzia* (Diptera: Ceratopogonidae) Part IV. The *dentifemur* and *venustula* groups. *Insecta Mundi* 5, 1–17.
- Spinelli, G. & Wolff, M. (2016) Family Ceratopogonidae. *Zootaxa* 4122 (1), 98–141.  
<https://doi.org/10.11646/zootaxa.4122.1.15>
- Spinelli, G.R., Ronderos, M.M. & Balseiro, E.G. (1989) Análisis de la actividad diaria de dipteros nematoceros en Punta Lara (Pdo. de Ensenada, Prov. de Buenos Aires). II. Ceratopogonidae, con la descripción de una especie nueva en el género *Atrichopogon*. *Limnobiós* 2, 733–737.
- Spinelli, G.R., Greiner, E.C. & Wirth, W.W. (1993) The Neotropical bloodsucking midges of the *Culicoides guttatus* group of the subgenus *Hoffmania* (Diptera: Ceratopogonidae). *Contributions of the American Entomological Institute* 27(3), 1–91.
- Spinelli, G.R., Dippolito, A. & Wirth, W.W. (1995) A report on a collection of Ceratopogonidae (Diptera) from Rondonia, Brazil. 2. Tribes Heteromuiini [sic] and Sphaeromiini. *Insecta Mundi* 9, 165–169.
- Spinelli, G.R., Ronderos, M.M., Díaz, F. & Marino, P.I. (2005) The bloodsucking biting midges of Argentina (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 100, 137–150.  
<https://doi.org/10.1590/S0074-02762005000200006>
- Spinelli, G.R., Marino, P.I. & Posadas, P. (2006) The Patagonian species of the genus *Atrichopogon* Kieffer, with a biogeographic analysis based on Forcipomyiinae (Diptera: Ceratopogonidae). *Insect Systematics and Evolution* 37, 301–324.  
<https://doi.org/10.1163/187631206788838581>
- Spinelli, G.R., Ronderos, M.M., Marino, P.I., Carrasco, D.S., & Menezes Ferreira, R.L. (2007) Description of *Culicoides* (*Metaemyia*) *felippebaueri* sp. n., *Forcipomyia musae* immatures, and occurrence of *F. genualis*, breeding in banana stems in Brazilian Amazonia (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 102, 659–669.  
<https://doi.org/10.1590/S0074-02762007000600001>
- Spinelli, G.R., Santamaría, E., Cabrera, O.L., Ronderos, M.M., & Suárez, M.F. (2009a) Five new species of *Culicoides* Latreille described from Colombia, yielding a new species list and country records (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 104, 81–92.  
<https://doi.org/10.1590/S0074-02762009000100013>
- Spinelli, G.R., Grogan, W.L. & Ronderos, M.M. (2009b) A revision of the Patagonian predaceous midges of the genus *Palpomyia* Meigen (Diptera: Ceratopogonidae). *Insect Systematics and Evolution* 40, 43–70.  
<https://doi.org/10.1163/187631209X416705>
- Spinelli, G.R., Marino, P.I. & Borkent, A. (2012a) A revision of Biting Midges of the subgenera *Forcipomyia* (*Metaforcipomyia*) and *F. (Saliohelea)* from Costa Rica (Diptera: Ceratopogonidae). *Zootaxa* 3419, 1–52.  
<https://doi.org/10.11646/zootaxa.3419.1.1>
- Spinelli, G.R., Ronderos, M.M. & Cazorla, C.G. (2012b) A new species of *Bezzia* Kieffer from Argentina (Diptera: Ceratopogonidae). *Zootaxa* 3232, 62–68.

<https://doi.org/10.11646/zootaxa.3232.1.3>

- Spinelli, G.R., Ronderos, M.M., Omad, G., Pessacq, P., & Marino, P.I. (2013a) A new species of *Bezzia* Kieffer from Argentinean Patagonia (Diptera: Ceratopogonidae). *Annales Zoologici* 63, 263–274.  
<https://doi.org/10.3161/000345413X669568>
- Spinelli, G.R., Veggiani Aybar, C., Juri, M.J.D., de Grosso, M.L., & Marino, P.I. (2013b) Two new species and new records of biting midges of the genus *Culicoides* from northwestern Argentina (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 108, 586–589.  
<https://doi.org/10.1590/S0074-02762013000500008>
- Spinelli, G.R., Borkent, A. & Ronderos, M.M. (2013c) Two new peculiar species of Neotropical *Brachypogon* Kieffer (Diptera: Ceratopogonidae). *Zootaxa* 3702, 90–96.  
<https://doi.org/10.11646/zootaxa.3702.1.6>
- Spinelli, G.R., Marino, P.I. & Huerta, H. (2015a) Revision of the Neotropical species of the subgenus *Atrichopogon* (*Psilokempia*) (Diptera: Ceratopogonidae). *Zootaxa* 4003 (1), 1–64.  
<https://doi.org/10.11646/zootaxa.4003.1.1>
- Spinelli, G.R., Ronderos, M.M. & Grogan, W.L. (2015b) A new species of predaceous midge in the Patagonian genus *Austrosphaeromyias* with a redescription of *A. chilensis* (Diptera: Ceratopogonidae). *Iheringia, Série Zoologia* 105, 94–100.  
<https://doi.org/10.1590/1678-47662015105194100>
- Spinelli, G.R., Ronderos, M.M., Donato, M. & Siri, A. (2018) *Yungahalea*, a new genus of predaceous midge from northwestern Argentina (Culicomorpha: Ceratopogonidae). *Anais da Academia Brasileira de Ciências* 90(1), 137–146.  
<https://doi.org/10.1590/0001-3765201720170079>
- Staeger, R.C. (1839) Systematisk fortegnelse over de i Danmark hidtil fundne Diptera. *Naturhistorisk Tidsskrift* 2, 549–600.
- Stam, A.B. (1964) Some new *Alluaudomyia* from the Congo Republic (Nematocera: Ceratopogonidae). *Proceedings of the Royal Entomological Society of London (B)*, 33, 193–197.  
<https://doi.org/10.1111/j.1365-3113.1964.tb01602.x>
- Statz, G. (1944) Neue Dipteren (Nematocera) aus dem Oberoligozän von Rott. VI. Familie: Tendipedidae (Zuck-oder Schwarzmücken). VII. Familie: Heleidae (Ceratopogonidae), (Gnitzen). VIII. Familie: Lycoriidae (Trauermücken). *Palaeontographica Abteilung A*, 95, 123–188, 17 pls.
- Stebner, F., Szadziewski, R., & Wang, B. (2016) Biting midges (Diptera: Ceratopogonidae) in Fushun amber reveal further biotic links between Asia and Europe during the Eocene. *Palaeontologia Electronica* 19.3.31A: 1–9.  
<https://doi.org/10.26879/597>
- Stebner, F., Szadziewski, R., Rühr, P.T., Singh, H., Hammel, J.U., Kvifte, G.M. & Rust, J. (2016) A fossil biting midge (Diptera: Ceratopogonidae) from early Eocene Indian amber with a complex pheromone evaporator. *Scientific Reports* 6, 34352.  
<https://doi.org/10.1038/srep34352>
- Stebner, F., Szadziewski, R., Singh, H., Gunkel, S. & Rust, J. (2017) Biting Midges (Diptera: Ceratopogonidae) from Cambay Amber indicate that the Eocene fauna of the Indian subcontinent was not isolated. *PLOS ONE* 12 (3).  
<https://doi.org/10.1371/journal.pone.0169144>
- Stephens, J.F. (1829a) *The nomenclature of British insects; being a compendious list of such species as are contained in the Systematic Catalogue of British Insects and forming a guide to their classification, &c. &c.* Baldwin & Cradock, London, (2) + 68 pp. (June 1)  
<https://doi.org/10.5962/bhl.title.51800>
- Stephens, J.F. (1829b) *A systematic catalogue of British insects: being an attempt to arrange all the hitherto discovered indigenous insects in accordance with their natural affinities. Volume 2*, Baldwin & Cradock, London, 388 pp. (July 15).  
<https://doi.org/10.5962/bhl.title.8987>
- Storå, R. (1936) Fam. Ceratopogonidae. In R. Frey (ed.). Die Dipterenfauna der Kanarischen Inseln und ihre Probleme: 31–38, pl.6. *Societas Scientiarum Fennica, Commentationes Biologicae* 6(1), 1–237.
- Storå, R. (1939) Mitteilungen über die Nematoceren Finnlands II. *Notulae Entomologicae* 29, 16–30.
- Storå, R. (1945) Ceratopogonidae. In: Frey, R. (Ed.), Tiergeographische Studien über die Dipterenfauna der Azoren. 1. Verzeichnis der bisher von den Azoren bekannten Dipteren. *Societas Scientiarum Fennica. Commentationes Biologicae* 8(10), 32–35.
- Strand, E. (1928) *Miscellanea nomenclatorica zoologica et paleontologica. I-II.* Archiv für Naturgeschichte (1926) Abt. A, 92(8), 30–75.
- Strandberg, J. & Johanson, K.A. (2015) New records of *Dasyhelea* Kieffer, 1911 from Sweden, with descriptions of two new species (Diptera: Ceratopogonidae). *European Journal of Taxonomy* 131, 1–22.  
<https://doi.org/10.5852/ejt.2015.131>
- Strobl, B.G. (1880) Dipterologische Funde um Seitenstetten. Ein Beitrag zur Fauna Nieder-Österreichs XIV. *Program des k.k. Ober-Gymnasiums der Benedictiner zu Seitenstetten* 1880, 1–65.
- Strobl, B.G. (1898) Fauna of Diptera of Bosnia, Herzegovina and Dalmatia [in Serbian]. *Glasnik Zemaljskog Museja u Bosni i Hercegovini* 10, 387–466, 561–616.
- Strobl, B.G. (1900) Spanische Dipteren. *Wiener Entomologische Zeitung* 19, 1–10, 61–70, 92–100, 169–174, 207–216.
- Strobl, B.G. (1906) Spanische Dipteren. II. Beitrag (1). *Memorias de la Real Sociedad Española de Historia Natural* 3, 271–422.



- Strobl, B.G. (1910) Die Dipteren von Steiermark. II Nachtrag. *Mitteilungen des Naturwissenschaftlichen Vereines für Steiermark* 46 (1909), 45–293.
- Stur, E. & Borkent, A. (2014) When DNA barcoding and morphology mesh: Ceratopogonidae diversity in Finnmark, Norway. *Zookeys* 463, 95–131.  
<https://doi.org/10.3897/zookeys.463.7964>
- Sublette, J.E. & Wirth, W.W. (1980) The Chironomidae and Ceratopogonidae (Diptera) of New Zealand's subantarctic islands. *New Zealand Journal of Zoology* 7, 299–378.  
<https://doi.org/10.1080/03014223.1980.10423791>
- Sun, H., Gong, B., Ke, M.-J., Wu, Z.-X., Guo, Q.-L. & Yu, Y.-X. (2010) Two new species of the *Dasyhelea* (Diptera: Ceratopogonidae) from Macao, China [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 17, 246–248.
- Sun, H., Ke, M.-J., Li, S.-X., Yao, R.-D. & Yu, Y.-X. (2007) A survey of the biting midges from Zhuhai area and description of a new species of the genus *Bezzia* [in Chinese]. *Chinese Journal of Frontier Health and Quarantine* 30, 232–233, 259.
- Sun, H., Ke, M.-J., Li, S.-X., Li, L.-Y., & Yu, Y.-X. (2009) Biting midges (Diptera: Ceratopogonidae) from Zhuhai, China. New species and new record of the genus *Forcipomyia* Miegen [sic] [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 16, 104–106.
- Sun, H., Yu, Y.-X. & Ke, M.-J. (2008) A new species of *Allohelea* (Diptera: Ceratopogonidae) from China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 19, 35–36.
- Sun, W.K.C. (1968) Biting midges (Diptera: Ceratopogonidae) from Kinmen (Quemoy). *Biological Bulletin of the Tunghai University* 36, 1–6.
- Swanson, D.A. & Grogan, W.L. (2011) A new predaceous midge in *Brachypogon* (*Brachypogon*) from Alabama and Florida, U.S.A. and new distribution records for *Brachypogon woodruffi* Spinelli and Grogan (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 113, 531–540.  
<https://doi.org/10.4289/0013-8797.113.4.531>
- Szadziewski, R. (1983a) Ceratopogonidae (Diptera) from Algeria. II. New species, new records and new synonymy in the genus *Forcipomyia* Meig. *Polskie Pismo Entomologiczne* 53, 363–384.
- Szadziewski, R. (1983b) Ceratopogonidae (Diptera) from Algeria. III. New species and new data on the genera *Brachypogon* Kieff. and *Alluaudomyia* Kieff. *Polskie Pismo Entomologiczne* 53, 385–399.
- Szadziewski, R. (1984a) Ceratopogonidae (Diptera) from Algeria. V. *Brachypogon* (*Isohelea*) *surae* n. sp. (Ceratopogonini). *Polskie Pismo Entomologiczne* 53, 555–558.
- Szadziewski, R. (1984b) Niezwykłe narządy strydulacyjne u eocenkich muchówek z rodziny Ceratopogonidae (Diptera). *Wiadomości Entomologiczne* 5(1–2), 37–40.
- Szadziewski, R. (1985a) A review of the Palaearctic *Dasyhelea* (*Pseudoculicoides*) species of the *johannseni* group, with a description of two new species (Diptera, Ceratopogonidae). *Polskie Pismo Entomologiczne* 55, 79–98.
- Szadziewski, R. (1985b) Biting midges of the genus *Eohelea* Petrunkevitch (Insecta, Diptera, Ceratopogonidae) from Baltic amber (in the collection of the Museum of the Earth). *Prace Muzeum Ziemi* 37, 123–130.
- Szadziewski, R. (1988) Biting midges (Diptera, Ceratopogonidae) from Baltic amber. *Polskie Pismo Entomologiczne* 58, 3–283 (March 15).
- Szadziewski, R. (1990a) Biting midges (Insecta: Diptera: Ceratopogonidae) from Sakhalin amber. *Prace Muzeum Ziemi* 41, 77–81.
- Szadziewski, R. (1990b) *Brachypogon* (*Isohelea*) *silecis*, a new species from Poland (Diptera, Ceratopogonidae). *Acta Zoologica Cracoviensia* 33, 485–488.
- Szadziewski, R. (1992a) Ceratopogonidae (Diptera) from Algeria. VII. *Stilobezzia* and *Kolenohelea*. *Acta Universitatis Nicolai Copernici Biologia* 39, 83–95.
- Szadziewski, R. (1992b) A new biting midge of genus *Jenskinshalea* from the Democratic People's Republic of Korea (Diptera, Ceratopogonidae). *Acta Universitatis Nicolai Copernici Biologia* 39, 77–82.
- Szadziewski, R. (1993) Biting midges (Diptera, Ceratopogonidae) from Miocene Saxonian amber. *Acta Zoologica Cracoviensia* 35, 603–656.
- Szadziewski, R. (1996) Biting midges from Lower Cretaceous amber of Lebanon and Upper Cretaceous Siberian amber of Taimyr (Diptera, Ceratopogonidae). *Studia Dipterologica* 3, 23–86.
- Szadziewski, R. (1998a) A new species of the predaceous midge genus *Metahelea* from Baltic amber (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 67, 245–253.
- Szadziewski, R. (1998b) Ceratopogonidae. In: Merz, B., Bächli, G., Haenni, J.-P. & Gonseth, Y. (Eds). Diptera - checklist. *Fauna Helvetica* 1, 102–104.
- Szadziewski, R. (2000a) Biting midges (Diptera: Ceratopogonidae) from the Lower Cretaceous amber of Jordan. *Polskie Pismo Entomologiczne* 69, 251–256.
- Szadziewski, R. (2000b) A new species of *Dasyhelea* from the Canary Islands (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 69, 477–481.
- Szadziewski, R. (2001) A new species of the genus *Brachypogon* from Poland (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 70, 211–214.
- Szadziewski, R. (2004) Biting midges (Diptera: Ceratopogonidae) from Burmese amber, Myanmar. *Journal of systematic pal-*

- aeontology* 2, 115–123.  
<https://doi.org/10.1017/S1477201904001178>
- Szadziewski, R. (2005) The first fossil species in the predaceous midge tribe Sphaeromiini (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 74, 363–368.
- Szadziewski, R. (2017) Biting midges (Diptera: Ceratopogonidae) as indicators of biostratigraphy, ecological reconstructions and identification of amber deposits. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, 107, 219–230.  
<https://doi.org/10.1017/S1755691017000378>
- Szadziewski, R. & Arillo, A. (1998) Biting midges (Diptera: Ceratopogonidae) from the Lower Cretaceous amber from Alava, Spain. *Polskie Pismo Entomologiczne* 67, 291–298.
- Szadziewski, R. & Arillo, A. (2003) The oldest fossil record of the extant subgenus *Leptoconops* (*Leptoconops*) (Diptera: Ceratopogonidae). *Acta Zoologica Cracoviensia* 46, 271–275.
- Szadziewski, R. & Borkent, A. (2003) New synonyms, combinations and records of biting midges (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 72, 249–260.
- Szadziewski, R. & Dominiak, P. (2015) *Afrostilobezzia*, a new genus of predatory biting midges from the Afrotropical Region (Diptera: Ceratopogonidae). *Zootaxa* 3941 (3), 445–453.  
<https://doi.org/10.11646/zootaxa.3941.3.11>
- Szadziewski, R. & Dominiak, P. (2019) Haematophagous biting midges of the extant genus *Culicoides* Latreille (Diptera: Ceratopogonidae) evolved during the mid-Cretaceous. *Zootaxa* 4688 (4), 535–548.  
<https://doi.org/10.11646/zootaxa.4688.4.5>
- Szadziewski, R. & Grogan, W.L. (1994) Biting midges from Dominican amber. I. A new fossil species of *Baeodasymyia* (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 96, 219–229.
- Szadziewski, R. & Grogan, W.L. (1997) Biting midges from Dominican amber. II. Species of the tribes Heteromyiini and Palpomyiini (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington* 18, 254–260.
- Szadziewski, R. & Grogan, W.L. (1998a) Biting midges from Dominican amber. III. Species of the tribes Culicoidini and Ceratopogonini (Diptera: Ceratopogonidae). *Insecta Mundi* 12, 39–52.
- Szadziewski, R. & Grogan, W.L. (1998b) Biting midges from Dominican amber. IV. Species of the tribes Dasyheleini and Forcipomyiini (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 67, 255–290.
- Szadziewski, R. & Hagan, D.V. (2000) Two new species of biting midges from Norway (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 69, 459–464.
- Szadziewski, R. & Havelka, P. (1984) A review of the Palaearctic biting midges of the subgenus *Brachypogon* (s. str.) (Diptera, Ceratopogonidae). *Polskie Pismo Entomologiczne* 54, 341–358.
- Szadziewski, R. & Poinar, G.O. (2005) Additional biting midges (Diptera: Ceratopogonidae) from Burmese amber. *Polskie Pismo Entomologiczne* 74, 349–362.
- Szadziewski, R. & Schlüter, T. (1992) Biting midges (Diptera: Ceratopogonidae) from Upper Cretaceous (Cenomanian) amber of France. *Annales de la Société de Entomologique de France* 28, 73–81.
- Szadziewski, R. & Sontag, E. (2013) A new species of *Forcipomyia* from Paleocene Sakhalin amber (Diptera: Ceratopogonidae). *Polskie Pismo Entomologiczne* 82, 59–62.  
<https://doi.org/10.2478/v10200-012-0023-x>
- Szadziewski, R. & Wirth, W.W. (1983) Ceratopogonidae (Diptera) from Algeria I. *Parabezzia grogani*, n. sp. (Stilobezziini). *Proceedings of the Entomological Society of Washington* 85, 359–361.
- Szadziewski, R., Kaczorowska, E. & Krzywinski, J. (1994) The predaceous midges of the subgenus *Isohelea* of *Brachypogon* in Poland (Diptera, Ceratopogonidae). *Acta Zoologica Cracoviensia* 37, 1–32.
- Szadziewski, R., Gwizdalska-Kentzer, M. & Gilka, W. (2011) Order Diptera, family Ceratopogonidae. *Arthropod Fauna of the UAE* 4, 636–653.
- Szadziewski, R., Borkent, A. & Dominiak, P. (2013) Ceratopogonidae. In: de Jong, H. & Pape, T. (Eds.), *Fauna Europaea: Diptera: Nematocera*. Fauna Europaea version 2.6.2.  
<http://www.faunaeur.org>. Accessed April 22, 2019.
- Szadziewski, R., Dominiak, P. & Filatov, S. (2015a) Two new species of predatory biting midges of the genus *Alluaudomyia* from Europe and the Canary Islands (Diptera: Ceratopogonidae). *Zootaxa* 4039 (2), 345–358.  
<https://doi.org/10.11646/zootaxa.4039.2.8>
- Szadziewski, R., Gilka, W. & Urbanek, A. (2015b) A blood sucking biting midge from Upper Cretaceous Burmese amber with a key to the determination of fossil species in the relictual genus *Leptoconops* Skuse (Diptera: Ceratopogonidae). *Cretaceous Research* 54, 255–259.  
<https://doi.org/10.1016/j.cretres.2014.12.013>
- Szadziewski, R., Ross, A. & Gilka, W. (2015c) Further records of biting midges (Diptera: Ceratopogonidae) from Upper Cretaceous Burmese amber (Myanmar). *Cretaceous Research* 52, 556–561.  
<https://doi.org/10.1016/j.cretres.2014.02.005>
- Szadziewski, R., Arillo, A., Urbanek, A. & Sontag, E. (2016a) Biting midges of the extinct genus *Protoculicoides* Boesel from Lower Cretaceous amber of San Just, Spain and new synonymy in recently described fossil genera (Diptera: Ceratopogonidae). *Cretaceous Research* 58, 1–9.

<https://doi.org/10.1016/j.cretres.2015.09.016>

- Szadziowski, R., Filatov, S. & Dominiak, P. (2016b) A redescription of *Culicoides griseidorsum* Kieffer, 1918, with comments on subgeneric position of some European taxa (Diptera: Ceratopogonidae). *Zootaxa* 4107 (3), 413–422.  
<https://doi.org/10.11646/zootaxa.4107.3.9>
- Takahashi, S. (1958) Notes on some biting midges in the Niigata-Yamagata district (Ceratopogonidae, Diptera). *Acta Medica et Biologica* 6, 111–117.
- Takahashi, H. (1941) Notes on some species of the genus *Culicoides* from Manchoukuo with description of a new species (Ceratopogonidae, Diptera). *Insecta Matsumurana* 15, 80–85.
- Takaoka, H. & Hayashi, Y. (1977) A new subspecies of the genus *Leptoconops* from Amami-Oshima, Japan (Ceratopogonidae: Diptera). *Japanese Journal of Sanitary Zoology* 28, 385–388.  
<https://doi.org/10.7601/mez.28.385>
- Talavera, S., Muñoz-Muñoz, F., Verdún, M. & Pagés, N. (2017) Morphology and DNA barcoding reveal three species in one: description of *Culicoides cryptipulicaris* sp. nov. and *Culicoides quasipulicaris* sp. nov. in the subgenus *Culicoides*. *Medical and Veterinary Entomology* 31, 178–191.  
<https://doi.org/10.1111/mve.12228>
- Tapia, L., Sánchez, T., Baylón, M., Jara, E., Arteaga, C., Maceda, D. & Salvatierra, A. (2018) Invertebrados bentónicos como bioindicadores de calidad de agua en Lagunas Altoandinas del Perú. *Ecología Aplicada*, 17(2), 149–163.  
<https://doi.org/10.21704/rea.v17i2.1235>
- Tavares, O. & Luna Dias, A.P. (1980) Quatro novas espécies do genero *Culicoides* Latreille, 1809, do Estado do Rio de Janeiro, Brasil (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia* 40, 393–399.  
<https://doi.org/10.1590/S0074-02761980000100002>
- Tavares, O. & Ruiz, R.A. (1980) Sobre duas espécies novas do genero *Culicoides* Latreille, 1809, do Brasil (Diptera, Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 75, 27–32.  
<https://doi.org/10.1590/S0074-02761980000100002>
- Tavares, O. & Silva Pereira, A.J. (1978) Duas espécies novas do genero *Monohelea* Kieffer, 1917, do Estado do Rio de Janeiro, Brasil (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia* 38, 157–160.
- Tavares, O. & de Souza, M.A. (1978) Sobre tres espécies novas do genero *Culicoides* Latreille, 1809 do Brasil (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia* 38, 619–624.
- Tavares, O. & de Souza, M.A. (1979) Sobre algumas espécies do genero *Culicoides* Latreille, 1809 do Estado do Rio de Janeiro, Brasil (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia* 39, 611–613.
- Tavares, O. & de Souza, M.A. (1980) Duas espécies novas do genero *Monohelea* Kieffer, 1917, do Estado do Rio de Janeiro, Brasil (Diptera, Ceratopogonidae). *Revista Brasileira de Biologia* 40, 95–100.
- Tay, W.T., Kerr, P.J. & Jermini, L.S. (2016) Population genetic structure and potential incursion pathways of the Bluetongue Virus vector *Culicoides brevitarsis* (Diptera: Ceratopogonidae) in Australia. *PLOS ONE*, 11 (1).  
<https://doi.org/10.1371/journal.pone.0146699>
- Taylor, F.H. (1913) Report of the entomologist. *Report of the Australian Institute of Tropical Medicine* 1911, 49–74, 3 pls.
- Taylor, F.H. (1918) Studies in phlebotomic Diptera, No. 1. New species of Simuliidae and Chironomidae. *Australian Zoologist* 1, 167–170.
- Thienemann, A. (1915) Zur Kenntnis der Salzwasser-Chironomiden. *Archiv für Hydrobiologie*, Supplement 2, 443–471.
- Thienemann, A. (1919) Die Chironomidenfauna Westfalens (Beiträge zur Kenntnis der westfälischen Süßwasserfauna. VII). *Jahresbericht des Westfälischen Provinzial-Vereins für Wissenschaft und Kunst (Zoologische Sektion)* 46, 19–63.
- Thienemann, A. (1925) Dipteren aus den Salzgewässern von Oldesloe. *Mitteilungen der Geographischen Gesellschaft und des Naturhistorischen Museums in Lübeck (2 Ser.)* 31, 102–126.
- Thienemann, A. (1926) Hydrobiologische Untersuchungen an Quellen. VII. Insekten aus norddeutschen Quellen mit besonderer Berücksichtigung der Dipteren. *Deutsche Entomologische Zeitschrift* (1926) 1, 1–50.  
<https://doi.org/10.1002/mmnd.192619260102>
- Thienemann, A. (1950) Lunzer Chironomiden. Ergebnisse von Untersuchungen der stehenden Gewässer des Lunzer Seengebietes (Niederösterreich). *Archiv für Hydrobiologie*, Suppl. 18, 1–202.
- Thienemann, A. & Kieffer, J. J. (1916) Schwedische Chironomiden. *Archiv für Hydrobiologie und Planktonkunde*, Suppl. 2, 483–554, pls. 17–18.
- Thomsen, L.C. (1935) New species of New York State Ceratopogonidae. *Journal of the New York Entomological Society* 43, 283–297.
- Thomson, C.G. (1868) Diptera. Species novae descriptae. In: *Kongliga Svenska Fregatten Eugenies Resa Omkring Jorden*. Zoologi I: Insecta, pp. 443–617.
- Tokunaga, M. (1932) A new biting midge from Japan (Diptera, Ceratopogonidae) with anatomical notes on the larval head-capsule and mouth-parts. *Transactions of the Kansai Entomological Society* 3, 1–12.
- Tokunaga, M. (1937a) Sand flies (Ceratopogonidae, Diptera) from Japan. *Tenthredo* 1, 233–338.
- Tokunaga, M. (1937b) Supplementary report on Japanese sand flies (Ceratopogonidae, Diptera). *Tenthredo* 1, 455–459, pl. 42
- Tokunaga, M. (1939a) Japanese biting midges of *Bezzia* and *Palpomyia* (Ceratopogonidae, Diptera). *Tenthredo* 2, 273–313.
- Tokunaga, M. (1939b) Three blood-sucking midges attacking lace-wing flies and a lepidopterous larva. *Osaka Natural History Society, Volumen Jubilar Pro Prof. Sadao Yoshida* 2, 369–373.

- Tokunaga, M. (1940a) Ceratopogonidae and Chironomidae from the Micronesian Islands. *Philippine Journal of Science* 71, 205–226, 229–230, pls. 1–3. (Feb. 20).
- Tokunaga, M. (1940b) Chironomoidea from Japan (Diptera), XII New or little-known Ceratopogonidae and Chironomidae. *Philippine Journal of Science* 72, 255–311, pls. 1–4.
- Tokunaga, M. (1940c) Biting midges from Japan and neighbouring countries, including Micronesian Islands, Manchuria, North China and Mongolia (Diptera, Ceratopogonidae). *Tenthredo* 3, 58–100. (May 31).
- Tokunaga, M. (1940d) Biting midges from Japan and neighbouring countries, including Micronesian Islands, Manchuria, North China and Mongolia (Diptera, Ceratopogonidae). *Tenthredo* 3, 101–165. (Dec. 5).
- Tokunaga, M. (1940e) Biting midges from the Micronesian Islands (Diptera, Ceratopogonidae) with biological notes by Teiso Esaki. *Tenthredo* 3, 166–186, pl. 6. (Dec. 5).
- Tokunaga, M. (1941a) Biting ceratopogonid midges from the Caroline Islands. *Annotationes Zoologicae Japonenses* 20, 109–117, pl. 8.
- Tokunaga, M. (1941b) Biting midges from Manchuria (Ceratopogonidae, Diptera). *Insecta Matsumurana* 15, 89–102, pl. 1.
- Tokunaga, M. (1950) Culicoid flies from Kyushu, Japan (Ceratopogonidae, Diptera). *Japanese Journal of Sanitary Zoology* 1, 64–67.  
<https://doi.org/10.7601/mez.1.64>
- Tokunaga, M. (1951) Some Javanese biting midges (Ceratopogonidae, Diptera). *Scientific Reports of the Saikyo University, Agriculture* 1, 101–110.
- Tokunaga, M. (1955) Notes on the biting midges from Japan and Korea (Heleidae or Ceratopogonidae, Diptera). *Scientific Reports of the Saikyo University, Agriculture* 7, 1–8.
- Tokunaga, M. (1956) Notes on Japanese biting midges (Heleidae or Ceratopogonidae). *Scientific Reports of the Saikyo University, Agriculture* 8, 112–123. (Sept.).
- Tokunaga, M. (1958) A new *Dasyhelea* - species from Korea (Diptera: Heleidae). *Akitu* 7, 75–78.
- Tokunaga, M. (1959) New Guinea biting midges (Diptera: Ceratopogonidae). *Pacific Insects* 1, 177–314.
- Tokunaga, M. (1960a) Supplementary study on Japanese biting midges, with a description of a new species (Diptera: Ceratopogonidae). *Scientific Reports of the Saikyo University, Agriculture* 12, 71–75.
- Tokunaga, M. (1960b) Notes on biting midges I. *Akitu* 9, 72–76.
- Tokunaga, M. (1961a) Notes on biting midges II. *Kontyu* 29, 180–185.
- Tokunaga, M. (1961b) Notes on biting midges III. *Publications of the Entomological Laboratory, Osaka Prefecture University* 6, 115–122.
- Tokunaga, M. (1961c) Parasitic biting midges of dragonflies from New Caledonia (Diptera: Ceratopogonidae). *Bulletin of the Osaka Museum of Natural History* 13, 1–4.
- Tokunaga, M. (1962a) Biting midges of the Ryukyu Islands (Diptera: Ceratopogonidae). *Pacific Insects* 4, 153–217.
- Tokunaga, M. (1962b) Biting midges of the genus *Culicoides* from New Guinea (Diptera: Ceratopogonidae). *Pacific Insects* 4, 457–516.
- Tokunaga, M. (1962c) Notes on biting midges. IV. *Scientific Reports of the Kyoto Prefectural University, Agriculture* 14, 51–56, 1 pl.
- Tokunaga, M. (1963a) New Guinea biting midges (Diptera: Ceratopogonidae), 3. *Pacific Insects* 5, 211–279.
- Tokunaga, M. (1963b) Supplementary study to New Guinea biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae). *Plant Protection Bulletin* 5, 119–143.
- Tokunaga, M. (1963c) Some Japanese biting midges breeding in paddy-field water (Diptera, Ceratopogonidae). *Scientific Reports of the Kyoto Prefectural University, Agriculture* 15, 37–49.
- Tokunaga, M. (1964a) Biting midges of the genus *Ceratopogon* from New Guinea (Diptera: Ceratopogonidae). *Pacific Insects* 6, 292–299.
- Tokunaga, M. (1964b) Insects of Campbell Island. Diptera: Ceratopogonidae. *Pacific Insects Monograph* 7, 289–291.
- Tokunaga, M. (1966a) Biting midges of the Palpomyiinae from New Guinea (Diptera: Ceratopogonidae). *Pacific Insects Monograph* 8, 101–152.
- Tokunaga, M. (1966b) Some Nematocerous Diptera of the North-East of Afghanistan. *Report of the Kyoto University Scientific Expedition to Karakoram and Hindukush* 8, 273–286.
- Tokunaga, M. (1972) Japanese biting midges of the genus *Alluaudomyia* (Diptera, Ceratopogonidae). *Phytopathologist and Entomologist, National Taiwan University* 2, 14–19.
- Tokunaga, M. (1977) Revision on the New Guinea species of *Culicoides* biting midges (Diptera: Ceratopogonidae). *Osaka Aoyama Junior College Memoir* 5, 35–47.
- Tokunaga, M. & Esaki, T. (1936) A new biting midge from the Palau Islands, with its biological notes. *Mushi* 9, 55–58.
- Tokunaga, M. & Murachi, E.K. (1959) Insects of Micronesia. Diptera: Ceratopogonidae. *Insects of Micronesia* 12(3), 103–434. (Nov. 6).
- Tokunaga, M. & Shogaki, Y. (1953) A new species of biting midge from Japan (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 55, 286–288.
- Tonnoir, A. L. (1924) A new biting ceratopogonid from New Zealand. *Bulletin of Entomological Research* 14, 443–444.  
<https://doi.org/10.1017/S0007485300045697>
- Tóthová, A., Spinelli, G.R. & Marino, P.I. (2009) A new Nearctic species of *Atrichopogon* (*Meleohelea* sic) and a redescription

- of *Atrichopogon (M.) chilensis* Ingram & Macfie (Diptera: Ceratopogonidae). *Zootaxa* 2023, 47–54.  
<https://doi.org/10.11646/zootaxa.2023.1.3>
- Townsend, B.C. & Boorman, J.P.T. (1990) Ceratopogonidae pp. 16–34. *In*: Townsend, B.C., Chainey, J.E., Crosskey, R.W., Pont, A.C., Lane, R.P., Boorman, J.P.T. & Lowry, C.A. (Eds.), A catalogue of the types of bloodsucking flies. *Occasional Papers on Systematic Entomology* 7, 1–371.
- Townsend, C.H.T. (1893) An interesting blood-sucking gnat of the family Chironomidae. *Psyche* 6, 369–371.  
<https://doi.org/10.1155/1893/58983>
- Trindade, R.L. da & Felipe-Bauer, M.L. (2011a) Two new biting midges from Para, Brazil (Diptera: Ceratopogonidae). *Memórias do Instituto Oswaldo Cruz* 106, 61–64.  
<https://doi.org/10.1590/S0074-02762011000100010>
- Trindade, R.L. da & Felipe-Bauer, M.L. (2011b) *Culicoides parauapebensis*, a new species of the subgenus *Hoffmania* Fox from northern Brazil (Diptera: Ceratopogonidae). *Zootaxa* 2999, 42–44.  
<https://doi.org/10.11646/zootaxa.2999.1.4>
- Udaka, M. (1959) The Ceratopogonidae of the Ishizuchi Range, Shikoku, Japan (Diptera). *Transactions of the Shikoku Entomological Society* 6(2), 17–22, pl. 1.
- Utmar, J.A. & Wirth, W.W. (1976) A revision of the new world species of *Forcipomyia*, subgenus *Caloforcipomyia* (Diptera: Ceratopogonidae). *Florida Entomologist* 59, 109–133.  
<https://doi.org/10.2307/3493959>
- Vaillant, F. (1954) Deux Cératopogonides nouveaux a larves madicoles [Diptera]. *Revue Francaise d'Entomologie* 21, 227–231.
- Vaillant, F. (1956) Recherches sur la faune madicole (hygroptérique S.L.) de France, de Corse et d'Afrique du Nord. *Mémoires du Muséum national d'histoire naturelle: Zoologie* 11, 1–258.
- Vaillant, F. (1957) Deux Ceratopogonidae nouveaux de l'Algerie. *Bulletin des Travaux Publiés par la de la Station d'Aquiculture et de Pêche de Castiglione, (N.S.)* 1958(9), 263–274.
- Vargas, L. (1949) *Culicoides travisi* Vargas. n.n. *Revista del Instituto de Salubridad y Enfermedades Tropicales* 10, 233–234.
- Vargas, L. (1953a) *Beltranmyia* n. Subgen. de *Culicoides* (Insecta: Heleidae). *Revista del Instituto de Salubridad y Enfermedades Tropicales* 13, 33–36.
- Vargas, L. (1953b) *Culicoides wirthomyia* n. sp. y *Culicoides stigmalis* Wirth, 1952 (Insecta, Diptera). *Revista del Instituto de Salubridad y Enfermedades Tropicales* 13, 227–233.
- Vargas, L. (1954) Dos nuevas especies de *Culicoides* Mexicanos (Diptera, Heleidae). *Revista del Instituto de Salubridad y Enfermedades Tropicales* 14, 25–32.
- Vargas, L. (1955) *Culicoides neghmei* n. sp. *Boletín del Laboratorio de la Clínica "Luis Razetti"* 43, 673–676.
- Vargas, L. (1960) The subgenera of *Culicoides* of the Americas (Diptera, Ceratopogonidae). *Revista de Biología Tropical* 8, 35–47.
- Vargas, L. (1973) *Wirthomyia*, a new subgenus of *Culicoides* (Diptera: Ceratopogonidae). *Mosquito News* 33, 112–113.
- Vargas, L. & Kremer, M. (1972) *Callotia* n. subg. of *Culicoides* (Diptera, Ceratopogonidae). *Mosquito News* 32, 242–243.
- Vargas, L. & Wirth, W.W. (1955) *Culicoides blantoni* n. sp. (Diptera, Heleidae). *Revista del Instituto de Salubridad y Enfermedades Tropicales* 15, 33–35.
- Vattier, G. (1964) *Dasyhelea adami* sp. n. (Diptera, Ceratopogonidae) morphologie et biologie. *Bulletin de la Société de Pathologie Exotique* 57, 1159–1177.
- Vattier, G. & Adam, J.P. (1966a) Capture de Ceratopogonidae (Diptera) dans des grottes de la République Gabonaise. *Biologia Gabon* 2, 295–309.
- Vattier, G. & Adam, J.P. (1966b) Les Ceratopogonidae (Diptera) des grottes de la République du Congo (Brazzaville). *Annales de Spéléologie* 21, 711–773.
- Venter, G.J., Majatladi, D.M., Labuschagne, K., Boikanyo, S.N.B. & Morey, L. (2012) The attraction range of the Onderstepoort 220 V light trap for *Culicoides* biting midges as determined under South African field conditions. *Veterinary Parasitology* 190, 222–229.  
<https://doi.org/10.1016/j.vetpar.2012.05.019>
- Vimmer, A. (1928) Nové Palestinské druhy se sberu Bodenheimerova. *Casopis Ceskoslovenske Spolecnosti Entomologicke* 25, 55–60.
- Vimmer, A. (1932) Nové druhy podceledi Ceratopogoninae (Tendipedidae-Dipt.) ze sberu Bodenheimerova. *Sbornik Entomologickeho Oddeleni pri Zoologických Sbirkách Narodního Musea v Praze* 10, 130–144.
- Vitale, G.C., Wirth, W.W. & Aitken, T.H.G. (1981) New species and records of *Culicoides* reared from arboreal habitats in Panama, with a synopsis of the *debilipalpis* group (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 83, 140–159.
- Wada, Y. (1979) The *segnis* group of *Culicoides* Latreille from Japan, with description of a new species (Diptera: Ceratopogonidae). *Tropical Medicine* 21, 197–210.
- Wada, Y. (1986) Revision of the *claggi* group of the genus *Culicoides* distributed in Japan, with description of a new species (Diptera: Ceratopogonidae). *Japanese Journal of Sanitary Zoology* 37, 141–152.  
<https://doi.org/10.7601/mez.37.141>
- Wada, Y. (1990) The *verbosus* group of the genus *Culicoides* Latreille (Diptera: Ceratopogonidae) in Japan, with descriptions of

- three new species and one hitherto unknown male. *Tropical Medicine* 32, 49–72.
- Walker, F. (1848) *List of the specimens of Dipterous Insects in the collection of the British Museum. Part I.* British Museum, London, 229 pp.
- Walker, F. (1856a) *Insecta Britannica. Diptera. Vol. 3.* Reeve and Benham, London, xxiv + 352 pp.
- Walker, F. (1856b) Volume 1. Diptera. pp. 415–474, In: *Insecta Saundersiana: or characters of undescribed insects in the collection of William Wilson Saunders, Esq., F.R.S., F.L.S., &c.* Van Voorst, London, 474 pp.  
<https://doi.org/10.5962/bhl.title.66010>
- Walley, G.S. (1932) A new species of *Forcipomyia* (Dipt.; Chironomidae). *Canadian Entomologist* 64, 165–166.  
<https://doi.org/10.4039/Ent64165-7>
- Waltl, J. (1835) Neue Arten von Diptern [sic] aus der Umgegend von München, benannt und beschrieben von Meigen, aufgefunden von Dr. J. Waltl. *Fauna* 2, 66–72.
- Waltl, J. (1837) Neue Gattungen von Mücken bei Passau. *Isis (Oken's)* 1837, 279–283.
- Wang, C. & Liu, G. (1999) Sucking-blood midges and description of one new species of Heilongjiang Province in China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 10, 325–329.
- Wang, H., Zan, D. & Yu, Y.-X. (1990) Two new species of Ceratopogonidae from Hainan Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 2, 72–76.
- Wang, C.-C., Tan, R.-Q., & Yu, Y.-X. (2009) A new species of *Brachypogon* from Hainan, with a list of the Chinese species (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 16, 181–183.
- Wang, C.-C., Tan, R.-Q., & Yu, Y.-X. (2011a) A new species of the genus *Monohelea* from China (Diptera, Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 36, 973–975.
- Wang, C.-C., Chen, X.-H., Tan, R.-Q., Qi, X. & Yu, Y.-X. (2011b) Four new species of Genus *Lasiohelea* Kieffer from Hainan Province [in Chinese, English summary]. *Chinese Journal of Hygienic Insecticides & Equipments* 17, 274–276.
- Wang, C.-C., Tan, R.-Q., Chen, S.-H., & Yu, Y.-X. (2012a) *Sinicohelea*, a new genus [sic] of biting midges of the subfamily Ceratopogoninae (Diptera: Ceratopogonidae) from Hainan Province [sic], China. *Acta Parasitologica et Medica Entomologica Sinica* 19, 42–45.
- Wang, C.-C., Chen, X.-H., Tan, R.-Q., & Yu, Y.-X. (2012b) Two New Species of *Culicoides* from Mt. Bawangling, Hainan, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal of Zoology* 31, 283–284, 1 pl.
- Wang, F., Huang, E., Zhang, L., Yu, Y. & Guan, X. (2013) Two new species of biting midges (Diptera: Ceratopogonidae) from China. *Oriental Insects* 47, 194–198.  
<https://doi.org/10.1080/00305316.2013.871814>
- Wang, F., Huang, E., Zhang, L.L., Yu, Y., Guan, X., & Ouyang, M.A. (2015) Two new species of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from China. *Oriental Insects* 48, 312–315 (2014).  
<https://doi.org/10.1080/00305316.2015.1013180>
- Wasmann, E. (1893) Eine myrmecophile *Ceratopogon-Larve*. *Wiener Entomologische Zeitung* 12, 277–279.
- Waugh, W.T. & Wirth, W.W. (1976) A revision of the genus *Dasyhelea* Kieffer of the eastern United States north of Florida (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America* 69, 219–247.  
<https://doi.org/10.1093/aesa/69.2.219>
- Webb, D.W. (1980) Primary insect types in the Illinois Natural History Survey Collection, exclusive of the Collembola and Thysanoptera. *Illinois Natural History Survey Bulletin* 32, 55–191.
- Weiss, A. (1912) *Mycterotypus lauræ* n. sp. Chironomide nouveau du Sud-Tunésien. *Archives de l'Institut Pasteur Tunis* 1, 24–31.
- Wen, X., Zhang, Z., Liu, K. & Yu, Y.-X. (1991) Four new species of genus *Brachypogon* from west area of Sichuan Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 3, 30–41.
- Wen, L.-H, Cao, Y.-C. & Liu, G.-P. (2017) A new species of *Culicoides* (*Beltranmyia*) (Diptera: Ceratopogonidae) from Liaoning province, China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 28, 476–477, 483.
- Westwood, J.O. (1840) Order XIII. Diptera Aristotle (Antliata Fabricius. Halteriptera Clairv.). In his: *An introduction to the modern classification of insects; founded on the natural habits and corresponding organisation of the different families. Synopsis of the genera of British insects.* London, 125–154.  
<https://doi.org/10.5962/bhl.title.12455>
- Weyenbergh, H. (1883) Die Gattung *Didymophleps* m. *Stettiner entomologische Zeitung* 1883, 108–111.  
<https://doi.org/10.1002/mmnd.47918830214>
- Wiedemann, C.R.W. (1817) Neue Zweiflügler (Diptera Linn.) aus der Gegend um Kiel. *Zoologisches Magazin* 1, 61–86.
- Wiedemann, C.R.W. (1824) *Munus rectoris in Academia Christiana Albertina aditurus analecta entomologica ex Museo Regio Havnensi maxime congesta profert iconibusque illustrat.* Kiliae [= Kiel]. 60 pp.  
<https://doi.org/10.5962/bhl.title.77322>
- Williams, R.W. (1955) Two new species of *Culicoides* from Cheboygan County, Michigan (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington* 57, 269–274.
- Williams, R.W. (1956) The biting midges of the genus *Culicoides* found in the Bermuda Islands (Diptera, Heleidae) I. A description of *C. bermudensis* n. sp. with a key to the local fauna. *Journal of Parasitology* 42, 297–300.  
<https://doi.org/10.2307/3274857>

- Williams, R.W. (1957) Two new species of *Alluaudomyia* from Cheboygan County, Michigan, with a note on the synonymy of *parva* and *downesi* (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington* 58, 327–331 (1956).
- Williston, S.W. (1896) On the Diptera of St. Vincent (West Indies). *Transactions of the Entomological Society of London* 1896, 253–446, pls. 8–14.  
<https://doi.org/10.1111/j.1365-2311.1896.tb00965.x>
- Williston, S.W. (1900) Supplement (Part), In: Godman, F.D. & Salvin, O. (Eds.), *Biologia Centrali-Americana. Zoologia-Insecta-Diptera, Volume 1*. London, 217–248.
- Williston, S.W. (1907) Dipterological Notes. *Journal of the New York Entomological Society* 15, 1–2.
- Winnertz, J. (1852) Beitrag zur Kenntniss der Gattung *Ceratopogon* Meigen. *Linnaea Entomologica*, 6, 1–80.  
<https://doi.org/10.5962/bhl.title.14229>
- Wirth, W.W. (1951a) The genus *Culicoides* in Alaska (Diptera, Heleidae). *Annals of the Entomological Society of America*, 44, 75–86.  
<https://doi.org/10.1093/aesa/44.1.75>
- Wirth, W.W. (1951b) The genus *Probezzia* in North America (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington*, 53, 25–34.
- Wirth, W.W. (1951c) A new biting midge of the genus *Leptoconops* from Florida, with new records of other American species (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington* 53, 281–284.
- Wirth, W.W. (1951d) New species and records of Virginia Heleidae (Diptera). *Proceedings of the Entomological Society of Washington*, 53, 313–326.
- Wirth, W.W. (1952a) The Heleidae of California. *University of California Publications in Entomology*, 9, 95–266.
- Wirth, W.W. (1952b) Los insectos de las Islas Juan Fernandez. 7. Heleidae and Tendipedidae (Diptera). *Revista Chilena de Entomología*, 2, 87–104.
- Wirth, W.W. (1952c) The genus *Alluaudomyia* Kieffer in North America (Diptera, Heleidae). *Annals of the Entomological Society of America*, 45, 423–434.  
<https://doi.org/10.1093/aesa/45.3.423>
- Wirth, W.W. (1952d) Two new species of anthropophilic *Culicoides* from Guatemala (Diptera: Heleidae). *Journal of Parasitology*, 38, 245–247.  
<https://doi.org/10.2307/3274042>
- Wirth, W.W. (1953a) Biting midges of the heleid genus *Stilobezzia* in North America. *Proceedings of the United States National Museum*, 103, 57–85.  
<https://doi.org/10.5479/si.00963801.103-3316.57>
- Wirth, W.W. (1953b) American biting midges of the heleid genus *Monohalea*. *Proceedings of the United States National Museum*, 103, 135–154.  
<https://doi.org/10.5479/si.00963801.103-3320.135>
- Wirth, W.W. (1955) Three new species of *Culicoides* from Texas (Diptera, Heleidae). *Journal of the Washington Academy of Sciences*, 45, 355–359.
- Wirth, W.W. (1956a) New species and records of biting midges ectoparasitic on insects (Diptera, Heleidae). *Annals of the Entomological Society of America*, 49, 356–364.  
<https://doi.org/10.1093/aesa/49.4.356>
- Wirth, W.W. (1956b) The biting midges ectoparasitic on blister beetles (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington*, 58, 15–23.
- Wirth, W.W. (1956c) The heleid midges involved in the pollination of rubber trees in America (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington*, 58, 241–250.
- Wirth, W.W. (1959a) *Pachyhelea*, a new genus of American Ceratopogonidae related to *Palpomyia* (Diptera). *Bulletin of the Brooklyn Entomological Society*, 54, 50–52.
- Wirth, W.W. (1959b) New species and records of Heleidae from Brazil (Diptera). *Deutsche Entomologische Zeitschrift*, 6, 234–237.  
<https://doi.org/10.1002/mmnd.4800060123>
- Wirth, W.W. (1960) The genus *Pellucidomyia* Macfie (Diptera, Ceratopogonidae). *Bulletin of the Brooklyn Entomological Society*, 55, 1–3.
- Wirth, W.W. (1962) A reclassification of the *Palpomyia-Bezzia-Macropeza* groups and a revision of the North American Sphaeromiini (Diptera, Ceratopogonidae). *Annals of the Entomological Society of America*, 55, 272–287.  
<https://doi.org/10.1093/aesa/55.3.272>
- Wirth, W.W. (1964) A new species and new records of African Ceratopogonidae (Dipt.). *Stuttgarter Beiträge zur Naturkunde*, 134, 1–3.
- Wirth, W.W. (1965a) A new *Johannsenomyia* from Brazil (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 67, 4.
- Wirth, W.W. (1965b) A revision of the genus *Parabezzia* Malloch (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 67, 215–230.
- Wirth, W.W. (1965c) Two new species of *Macrurohelea* from Chile (Diptera, Ceratopogonidae). *Pan-Pacific Entomologist*, 41, 46–50.

- Wirth, W.W. (1965d) Family Ceratopogonidae. In: Stone, A., Sabrosky, C. W., Wirth, W.W., Foote, R.H. & Coulson, J.R. (Eds.), *A Catalog of the Diptera of America North of Mexico*. United States Department of Agriculture, Agricultural Research Service, Agriculture Handbook 276, pp. 121–142.
- Wirth, W.W. (1966) A new Jamaican blood-sucking midge from lacewings (Diptera, Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 68, 29–32.
- Wirth, W.W. (1969) New species and records of Galapagos Diptera. *Proceedings of the California Academy of Sciences*, 36, 571–594.
- Wirth, W.W. (1970) The Neotropical *Forcipomyia* midges of the subgenus *Thyridomyia* Saunders (Diptera, Ceratopogonidae). *Studia Entomologica*, 13, 429–440.
- Wirth, W.W. (1971a) Six new North American species of *Probezzia* (Diptera: Ceratopogonidae), with biological notes and a key to species. *Annals of the Entomological Society of America*, 64, 729–739.  
<https://doi.org/10.1093/aesa/64.3.729>
- Wirth, W.W. (1971b) A review of the "Stick-ticks", Neotropical biting midges of the *Forcipomyia* subgenus *Microhelea* parasitic on walking stick insects (Diptera: Ceratopogonidae). *Entomological News*, 82, 229–245.
- Wirth, W.W. (1972) The Neotropical *Forcipomyia* (*Microhelea*) species related to the caterpillar parasite *F. fuliginosa* (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America*, 65, 564–577.  
<https://doi.org/10.1093/aesa/65.3.564>
- Wirth, W.W. (1973) Family Ceratopogonidae. In: Delfinado, M.C. & Hardy, D.E. (Eds.), *A Catalog of the Oriental Region: Volume 1. Suborder Nematocera*. University of Hawaii, Honolulu, pp. 346–388
- Wirth, W.W. (1974) Family Ceratopogonidae. In: *A Catalog of the Diptera of the Americas south of the United States, Fasc. 14*, Museu de Zoologia, Secretaria da Agricultura, São Paulo, 89 pp.
- Wirth, W.W. (1976a) A new species and new records of *Dasyhelea* from the Tonga Islands and Samoa (Diptera: Ceratopogonidae). *Proceedings of the Hawaiian Entomological Society*, 22, 381–383.
- Wirth, W.W. (1976b) *Forcipomyia pictoni* Macfie and descriptions of two new related species from Florida (Diptera: Ceratopogonidae). *Florida Entomologist*, 59, 77–84.  
<https://doi.org/10.2307/3493176>
- Wirth, W.W. (1976c) New names for North American Ceratopogonidae (Diptera). *Proceedings of the Entomological Society of Washington*, 78, 15.
- Wirth, W.W. (1977) A new *Culicoides* biting midge from California (Diptera: Ceratopogonidae). *Pan-Pacific Entomologist*, 53, 53–55.
- Wirth, W.W. (1978) New species and records of intertidal biting midges of the genus *Dasyhelea* Kieffer from the Gulf of California (Diptera: Ceratopogonidae). *Pacific Insects*, 18, 191–198.
- Wirth, W.W. (1980a) A new species and corrections in the *Atrichopogon* midges of the subgenus *Melohelea* attacking blister beetles (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 82, 124–139.
- Wirth, W.W. (1981) *Paradasyhelea harrisoni* n. sp. from the Auckland Islands and additional records of subantarctic Ceratopogonidae. *New Zealand Journal of Zoology*, 8, 383–386.  
<https://doi.org/10.1080/03014223.1981.10430617>
- Wirth, W.W. (1982a) The cacao-pollinating midges of the *Forcipomyia argenteola* group (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 84, 568–585.
- Wirth, W.W. (1982b) New species of Neotropical *Culicoides* (Diptera: Ceratopogonidae). *Florida Entomologist*, 65, 248–253.  
<https://doi.org/10.2307/3494284>
- Wirth, W.W. (1983a) The North American species of the *cockerelli* and *dorsasetula* groups of the predaceous midge genus *Bezzia*, subgenus *Homobezzia* (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 85, 762–782.
- Wirth, W.W. (1983b) The North American predaceous midges of the *Bezzia bicolor* group (Diptera: Ceratopogonidae). *Florida Entomologist*, 66, 292–310.  
<https://doi.org/10.2307/3494125>
- Wirth, W.W. (1987) A new species of *Dasyhelea* (Diptera: Ceratopogonidae) from rock pools in the southwestern United States. *Journal of the North American Benthological Society*, 6, 72–76.  
<https://doi.org/10.2307/1467526>
- Wirth, W.W. (1990) The biting midges of Aldabra Atoll, Indian Ocean (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington*, 92, 230–247.
- Wirth, W.W. (1991a) The predaceous midge genus *Allohelea* Kieffer in the western hemisphere (Diptera: Ceratopogonidae). *Florida Entomologist*, 74, 491–505.  
<https://doi.org/10.2307/3495403>
- Wirth, W.W. (1991b) New and little-known species of *Forcipomyia* (Diptera: Ceratopogonidae) associated with cocoa pollination in Brazil. *Proceedings of the Entomological Society of Washington*, 93, 163–175.
- Wirth, W.W. (1992) A new genus of Ceratopogonini (Diptera: Ceratopogonidae) from Brazil. *Proceedings of the Entomological Society of Washington*, 94, 276–281.
- Wirth, W.W. (1994a) The subgenus *Atrichopogon* (*Lophomyidium*) with a revision of the Nearctic species (Diptera: Ceratopogonidae). *Insecta Mundi*, 8, 17–36.



- Wirth, W.W. (1994b) New species and records of predaceous midges of the genus *Probezzia* from Florida and Alabama (Diptera: Ceratopogonidae). *Florida Entomologist*, 77, 136–145.  
<https://doi.org/10.2307/3495880>
- Wirth, W.W. (1994c) The western hemisphere species of the predaceous midge genus *Echinohelea*, with descriptions of six new species (Diptera: Ceratopogonidae). *Insecta Mundi*, 8, 227–242.
- Wirth, W.W. & Arnaud, P.H. (1969) Polynesian biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae). *Pacific Insects*, 11, 507–520.
- Wirth, W.W. & Atchley, W.R. (1973) *A review of the North American Leptoconops (Diptera: Ceratopogonidae)*. Graduate Studies Texas Tech University, Texas (5), 57 pp.
- Wirth, W.W. & Barreto, P. (1978) New species of *Culicoides* biting midges (Diptera: Ceratopogonidae) from Colombia. *Journal of Medical Entomology*, 14, 553–564.  
<https://doi.org/10.1093/jmedent/14.5.553>
- Wirth, W.W. & Beaver, R.A. (1979) The *Dasyhelea* biting midges living in pitchers of *Nepenthes* in southeast Asia (Diptera, Ceratopogonidae). *Annales de la Société Entomologique de France*, 15, 41–52.
- Wirth, W.W. & Blanton, F.S. (1953a) Studies in Panama *Culicoides* (Diptera: Heleidae): I, Descriptions of six new species. *Journal of the Washington Academy of Sciences*, 43, 69–77.
- Wirth, W.W. & Blanton, F.S. (1953b) Studies in Panama *Culicoides* (Diptera, Heleidae). II. Descriptions of six additional new species. *Journal of Parasitology*, 39, 229–236.  
<https://doi.org/10.2307/3273942>
- Wirth, W.W. & Blanton, F.S. (1953c) Studies in Panama *Culicoides* (Diptera, Heleidae). III. A new species related to *phlebotomus* (Williston). *Entomological News*, 64, 113–120.
- Wirth, W.W. & Blanton, F.S. (1955a) Studies in Panama *Culicoides* (Diptera, Heleidae) IV. Descriptions of three new species. *Bulletin of the Brooklyn Entomological Society*, 50, 100–106. (October).
- Wirth, W.W. & Blanton, F.S. (1955b) Studies in Panama *Culicoides* (Diptera, Heleidae) V. Descriptions of three new species of the subgenus *Oeacta* Poey. *Bulletin of the Brooklyn Entomological Society*, 50, 121–127.
- Wirth, W.W. & Blanton, F.S. (1956a) A new species of salt-marsh sand fly from Florida, the Bahamas, Panama and Ecuador: its distribution and taxonomic differentiation from *Culicoides furens* (Poey) (Diptera, Heleidae). *Florida Entomologist*, 39, 157–162.  
<https://doi.org/10.2307/3492592>
- Wirth, W.W. & Blanton, F.S. (1956b) Studies in Panama *Culicoides* VII. The species of the *pulicaris* and *cova-garciai* groups (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington*, 58, 211–227.
- Wirth, W.W. & Blanton, F.S. (1956c) Studies in Panama *Culicoides* (Diptera, Heleidae). IX. Two new species related to *leoni* Barbosa and *reevesi* Wirth. *Bulletin of the Brooklyn Entomological Society*, 51, 45–52.
- Wirth, W.W. & Blanton, F.S. (1959) Biting midges of the genus *Culicoides* from Panama (Diptera: Heleidae). *Proceedings of the United States National Museum* 109, 237–482.  
<https://doi.org/10.5479/si.00963801.109-3415.237>
- Wirth, W.W. & Blanton, F.S. (1966) A new day-biting sand fly from the southeastern States (Diptera, Ceratopogonidae). *Florida Entomologist* 49, 279–281.  
<https://doi.org/10.2307/3493890>
- Wirth, W.W. & Blanton, F.S. (1967) The North American *Culicoides* of the *guttipennis* group (Diptera: Ceratopogonidae). *Florida Entomologist* 50, 207–232.  
<https://doi.org/10.2307/3493303>
- Wirth, W.W. & Blanton, F.S. (1968a) A revision of the Neotropical biting midges of the *hylas* group of *Culicoides* (Diptera: Ceratopogonidae). *Florida Entomologist* 51, 201–215.  
<https://doi.org/10.2307/3493420>
- Wirth, W.W. & Blanton, F.S. (1968b) A new *Culicoides* from Guyana (Diptera: Ceratopogonidae). *Florida Entomologist* 51, 251–252.  
<https://doi.org/10.2307/3493427>
- Wirth, W.W. & Blanton, F.S. (1969a) New species and records of *Culicoides* from western North America. *Proceedings of the Entomological Society of Washington* 71, 556–567.
- Wirth, W.W. & Blanton, F.S. (1969b) North America [sic] *Culicoides* of the *pulicaris* group (Diptera: Ceratopogonidae). *Florida Entomologist* 52, 207–243.  
<https://doi.org/10.2307/3493875>
- Wirth, W.W. & Blanton, F.S. (1969c) A new Nearctic species of the genus *Paradasyhelea* Macfie. *Pan-Pacific Entomologist* 45, 97–100.
- Wirth, W.W. & Blanton, F.S. (1970a) New genera of Neotropical Ceratopogonidae (Diptera). *Florida Entomologist* 53, 7–14.  
<https://doi.org/10.2307/3493107>
- Wirth, W.W. & Blanton, F.S. (1970b) New species of Neotropical *Culicoides* (Diptera: Ceratopogonidae). *Florida Entomologist* 53, 39–45.  
<https://doi.org/10.2307/3493115>
- Wirth, W.W. & Blanton, F.S. (1970c) Notes on *Brachypogon* Kieffer (Diptera, Ceratopogonidae), a new species and two new

- Neotropical genera of the tribe Ceratopogonini. *Florida Entomologist* 53, 93–104.  
<https://doi.org/10.2307/3493452>
- Wirth, W.W. & Blanton, F.S. (1970d) A review of the *Culicoides Nigrigenus* group, with two new species (Diptera: Ceratopogonidae). *Entomological News* 81, 141–151.
- Wirth, W.W. & Blanton, F.S. (1971a) New Neotropical sandflies of the *Culicoides debilipalpis* group (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 73, 34–43.
- Wirth, W.W. & Blanton, F.S. (1971b) New western *Culicoides* of the *stonei* group. *Journal of the Kansas Entomological Society* 44, 459–467.
- Wirth, W.W. & Blanton, F.S. (1971c) New species and synonymy of Florida *Culicoides* (Diptera: Ceratopogonidae). *Florida Entomologist* 54, 73–78.  
<https://doi.org/10.2307/3493791>
- Wirth, W.W. & Blanton, F.S. (1972a) *Lanehelea*, a new Neotropical genus of Sphaeromiini (Diptera: Ceratopogonidae). *Studia Entomologica* 15, 433–438.
- Wirth, W.W. & Blanton, F.S. (1972b) A new Patagonian biting midge of the the genus *Monohelea*, *Isthmohelea* (Diptera: Ceratopogonidae). *Florida Entomologist* 55, 173–176.  
<https://doi.org/10.2307/3493142>
- Wirth, W.W. & Blanton, F.S. (1973) A review of the maruins or biting midges of the genus *Culicoides* (Diptera: Ceratopogonidae) in the Amazon Basin. *Amazoniana* 4, 405–470.
- Wirth, W.W. & Blanton, F.S. (1974a) A new Florida sand fly closely related to *Culicoides haematopotus* Malloch (Diptera: Ceratopogonidae). *Florida Entomologist* 57, 23–26.  
<https://doi.org/10.2307/3493825>
- Wirth, W.W. & Blanton, F.S. (1974b) New synonymy and a correction in the *Culicoides piliferus* group (Diptera: Ceratopogonidae). *Florida Entomologist* 57, 71–75.  
<https://doi.org/10.2307/3493835>
- Wirth, W.W. & Blanton, F.S. (1978) Two new species of Neotropical *Culicoides* (Diptera: Ceratopogonidae). *Pan-Pacific Entomologist* 54, 236–240.
- Wirth, W.W. & Castner, J.L. (1990) New Neotropical species of "Stick-tick" (Diptera: Ceratopogonidae) from katydids. *Florida Entomologist* 73, 157–160.  
<https://doi.org/10.2307/3495341>
- Wirth, W.W. & Debenham, M.L. (1977) *Hebetula*, a new genus of the predaceous midge tribe Sphaeromiini (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 79, 281–283.
- Wirth, W.W. & Delfinado, M.D. (1964) Revision of the Oriental species of *Alluaudomyia* Kieffer (Diptera, Ceratopogonidae). *Pacific Insects* 6, 599–648.
- Wirth, W.W. & Dow, M.I. (1971) Studies on the genus *Forcipomyia* III. *Blantonia*, a new subgenus in the *Trichohelea* complex (Diptera: Ceratopogonidae). *Florida Entomologist* 54, 289–295.  
<https://doi.org/10.2307/3493588>
- Wirth, W.W. & Dow, M.I. (1972) Studies on the genus *Forcipomyia* 4. *Rhynchoforcipomyia*, a new Neotropical subgenus in the *Trichohelea* complex (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America* 65, 862–872.  
<https://doi.org/10.1093/aesa/65.4.862>
- Wirth, W.W. & Giles, F.E. (1990) New species and records of predaceous midges from Fiji (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 92, 444–460.
- Wirth, W.W. & Grogan, W.L. (1977) Taxonomic notes on the genus *Heteromyia* Say and a new species from Nicaragua (Diptera: Ceratopogonidae). *Florida Entomologist* 60, 177–185.  
<https://doi.org/10.2307/3493901>
- Wirth, W.W. & Grogan, W.L. (1979) Natural history of Plummers Island, Maryland. XXIV. Biting midges (Diptera: Ceratopogonidae). 2. The species of the tribes Heteromyiini and Sphaeromiini. *Proceedings of the Biological Society of Washington* 91, 847–903.
- Wirth, W.W. & Grogan, W.L. (1981) Natural History of Plummer's Island, Maryland XXV. Biting midges (Diptera: Ceratopogonidae). 3. The species of the tribe Stilobezziini. *Bulletin of the Biological Society of Washington* 5, 1–102.
- Wirth, W.W. & Grogan, W.L. (1982) The predaceous midges of the genus *Phaenobezzia* in North America (Diptera: Ceratopogonidae). *Memoirs of the Entomological Society of Washington* 10, 179–192.
- Wirth, W.W. & Grogan, W.L. (1983) The Nearctic species of the *Bezzia bivittata* group (Diptera: Ceratopogonidae). *Proceedings of the Biological Society of Washington* 96, 489–523.
- Wirth, W.W. & Grogan, W.L. (1988) *The predaceous midges of the world (Diptera: Ceratopogonidae; Tribe Ceratopogonini)*. Flora and Fauna Handbook 4. E. J. Brill, Leiden, New York, København, Köln, xv + 160 pp.
- Wirth, W.W. & Howarth, F.G. (1982) The "*Forcipomyia ingrami*" complex in Hawaii (Diptera: Ceratopogonidae). *Proceedings of the Hawaiian Entomological Society* 24, 127–151.
- Wirth, W.W. & Hubert, A.A. (1959) *Trithecooides*, a new subgenus of *Culicoides* (Diptera, Ceratopogonidae). *Pacific Insects* 1, 1–38.
- Wirth, W.W. & Hubert, A.A. (1960a) Ceratopogonidae (Diptera) reared from cacti, with a review of the *copiosus* group of *Culicoides*. *Annals of the Entomological Society of America* 53, 639–658.

<https://doi.org/10.1093/aesa/53.5.639>

- Wirth, W.W. & Hubert, A.A. (1960b) *Camptopterohelea* a new genus of Ceratopogonidae from the Philippines (Diptera). *Fiel-diana, Zoology* 42, 89–91.  
<https://doi.org/10.5962/bhl.title.2868>
- Wirth, W.W. & Hubert, A.A. (1961) New species and records Taiwan *Culicoides* (Diptera: Ceratopogonidae). *Pacific Insects* 3, 11–26.
- Wirth, W.W. & Hubert, A.A. (1962) The species of *Culicoides* related to *piliferus* Root and Hoffman in eastern North America (Diptera, Ceratopogonidae). *Annals of the Entomological Society of America* 55, 182–195.  
<https://doi.org/10.1093/aesa/55.2.182>
- Wirth, W.W. & Hubert, A.A. (1972) A new Oriental species of *Culicoides* breeding in tree rot cavities (Diptera: Ceratopogoni-dae). *Journal of the Washington Academy of Sciences* 62, 41–42.
- Wirth, W.W. & Hubert, A.A. (1989) The *Culicoides* of Southeast Asia (Diptera: Ceratopogonidae). *Memoirs of the American Entomological Institute* 44, i–iv, 1–508.
- Wirth, W.W. & Jones, R.H. (1956) Three new North American species of tree-hole *Culicoides* (Diptera, Heleidae). *Proceedings of the Entomological Society of Washington* 58, 161–168.
- Wirth, W.W. & Jones, R.H. (1957) The North American subspecies of *Culicoides variipennis* (Diptera, Heleidae). *United States Department of Agriculture Technical Bulletin* 1170, iii + 35 pp.
- Wirth, W.W. & Lee, D.J. (1958) Australasian Ceratopogonidae (Diptera, Nematocera). Part VIII: A new genus from Western Australia attacking man. *Proceedings of the Linnean Society of New South Wales* 83, 337–339.
- Wirth, W.W. & Lee, D.J. (1959) The genus *Paradasyhelea* Macfie, with descriptions of two new species from eastern Australia (Diptera: Ceratopogonidae). *Bulletin of the Brooklyn Entomological Society* 54, 114–121.
- Wirth, W.W. & Lee, D.J. (1967) New species of *Culicoides* from high altitudes in the Colombian Andes (Diptera: Ceratopogo-nidae). *Proceedings of the United States National Museum* 124, 1–22.  
<https://doi.org/10.5479/si.00963801.124-3626.1>
- Wirth, W.W. & Linley, J.R. (1990) Description of *Dasyhelea chani* new species (Diptera: Ceratopogonidae) from leaves of the water lettuce (*Pistia stratiotes*) in Florida [sic]. *Florida Entomologist* 73, 273–279.  
<https://doi.org/10.2307/3494811>
- Wirth, W.W. & Messersmith, D.H. (1971) Studies on the genus *Forcipomyia*. 1. The North American parasitic midges of the subgenus *Trichohelea* (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America* 64, 15–26.  
<https://doi.org/10.1093/aesa/64.1.15>
- Wirth, W.W. & Messersmith, D.H. (1977) Notes on the biting midges of the Seychelles (Diptera: Ceratopogonidae). *Proceed-ings of the Entomological Society of Washington* 79, 293–309.
- Wirth, W.W. & de Moraes, A.P.A. (1979) New records and new species of biting midges from salt marshes in California and Mexico (Diptera: Ceratopogonidae). *Pan-Pacific Entomologist* 55, 287–298.
- Wirth, W.W. & Morris, C. (1985) The taxonomic complex, *Culicoides variipennis*. In: *Bluetongue and related orbiviruses*. Alan R. Liss, Inc., New York, pp. 165–175.
- Wirth, W.W. & Mullens, B.A. (1992) *Culicoides boydi* (Diptera: Ceratopogonidae): a potential vector of Hemorrhagic Disease Viruses to Desert Bighorn Sheep in southern California. *Journal of Medical Entomology* 29, 1006–1010.  
<https://doi.org/10.1093/jmedent/29.6.1006>
- Wirth, W.W. & Ratanaworabhan, N.C. (1971a) *Ceratoculicoides*, a new genus related to *Ceratopogon* Meigen (Diptera: Cera-topogonidae). *Proceedings of the Entomological Society of Washington* 73, 170–177.
- Wirth, W.W. & Ratanaworabhan, N.C. (1971b) Notes on Neotropical *Pellucidomyia* (Diptera, Ceratopogonidae). *Annals of the Entomological Society of America* 64, 446–448.  
<https://doi.org/10.1093/aesa/64.2.446>
- Wirth, W.W. & Ratanaworabhan, N.C. (1972a) *Neobezzia*, a new Neotropical biting midge genus of the tribe Sphaeromiini (Diptera: Ceratopogonidae). *Journal of the Kansas Entomological Society* 45, 476–490.
- Wirth, W.W. & Ratanaworabhan, N.C. (1972b) A new genus of biting midge from California related to *Neurohelea* Kieffer (Diptera, Ceratopogonidae). *Pan-Pacific Entomologist* 48, 244–245.
- Wirth, W.W. & Ratanaworabhan, N.C. (1972c) A revision of the tribe Stenoxenini (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America* 65, 1368–1388.  
<https://doi.org/10.1093/aesa/65.6.1368>
- Wirth, W.W. & Ratanaworabhan, N.C. (1972d) Notes on the genus *Macropeza* Meigen and description of a new species from Florida (Diptera: Ceratopogonidae). *Florida Entomologist* 55, 213–217.  
<https://doi.org/10.2307/3493147>
- Wirth, W.W. & Ratanaworabhan, N.C. (1973) *Pseudostilobezzia*, a new genus of biting midge from Viet Nam (Diptera: Cera-topogonidae). *Proceedings of the Entomological Society of Washington* 75, 177–179.
- Wirth, W.W. & Ratanaworabhan, N.C. (1976) A new species of parasitic midge (*Forcipomyia* (*Pterobosca*)) from Aldabra, with descriptions of its presumed larva and pupa and systematic notes on the subgenera of *Forcipomyia* (Ceratopogonidae). *Systematic Entomology* 1, 241–245.  
<https://doi.org/10.1111/j.1365-3113.1976.tb00044.x>
- Wirth, W.W. & Ratanaworabhan, N.C. (1978) Studies on the genus *Forcipomyia*. V. Key to subgenera and description of a

- new subgenus related to *Euprojoannisia* Brethes (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 80, 493–507.
- Wirth, W.W. & Ratanaworabhan, N.C. (1981a) The Oriental species of the genus *Dibezzia* Kieffer (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 83, 287–295.
- Wirth, W.W. & Ratanaworabhan, N.C. (1981b) New species and records of predaceous midges (Diptera: Ceratopogonidae) from rice paddies in Thailand. *Pacific Insects* 23, 396–431.
- Wirth, W.W. & Ratanaworabhan, N.C. (1992) Two new Oriental species of *Atrichopogon* related to *A. jacobsoni* (Diptera: Ceratopogonidae). *Oriental Insects* 26, 265–274.  
<https://doi.org/10.1080/00305316.1992.10432254>
- Wirth, W.W. & Ratanaworabhan, N.C. (1993) The Oriental biting midges of the genus *Atrichopogon* related to *Dolichohelea polita* Edwards (Diptera: Ceratopogonidae). *Oriental Insects* 27, 317–334.  
<https://doi.org/10.1080/00305316.1993.10432283>
- Wirth, W.W. & Rowley, W.A. (1971) A revision of the *palmerae* group of the genus *Culicoides*. *Journal of the Kansas Entomological Society* 44, 153–171.
- Wirth, W.W. & Soria, S.J. (1975) A new Neotropical *Forcipomyia* midge closely related to *F. (F.) genualis* (Loew) (Diptera: Ceratopogonidae). *Revista Theobroma* 5, 19–27.
- Wirth, W.W. & Soria, S.J. (1980) Studies on the genus *Forcipomyia* VI. The Neotropical species of the subgenus *Warmkea* (Diptera: Ceratopogonidae). *Revista Theobroma* 9, 137–161.
- Wirth, W.W. & Spinelli, G.R. (1992) Immature stages of *Forcipomyia seminole* Wirth and a related new Neotropical species (Diptera: Ceratopogonidae). *Florida Entomologist* 75, 349–356.  
<https://doi.org/10.2307/3495856>
- Wirth, W.W. & Spinelli, G.R. (1993a) The American species of the *annulatipes* group of the subgenus *Lepidohelea*, genus *Forcipomyia* (Diptera: Ceratopogonidae). *Insecta Mundi* 6, 109–125. (1992)
- Wirth, W.W. & Spinelli, G.R. (1993b) The North American species of the *Forcipomyia (Lepidohelea) bicolor* subgroup (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 95, 611–634.
- Wirth, W.W. & Wada, Y. (1979) Two new species of the genus *Camptopterohelea* Wirth and Hubert from southeast Asia (Diptera: Ceratopogonidae). *Proceedings of the Entomological Society of Washington* 81, 345–351.
- Wirth, W.W. & Waugh, W.T. (1976) Five new Neotropical *Dasyhelea* midges (Diptera: Ceratopogonidae) associated with culture of Cocoa. *Studia Entomologica* 19, 223–236.
- Wirth, W.W. & Williams, R.W. (1957) The biting midges of the Bermuda Islands, with descriptions of five new species. *Proceedings of the Entomological Society of Washington* 59, 5–14.
- Wirth, W.W. & Williams, R.W. (1964) New species and records of North American *Monohelea* (Diptera: Ceratopogonidae). *Annals of the Entomological Society of America* 57, 302–310.  
<https://doi.org/10.1093/aesa/57.3.302>
- Wirth, W.W., de Meillon, B. & Haeselbarth, E. (1980) 10. Family Ceratopogonidae. In: Crosskey, R.W. (Ed.), *Catalogue of the Diptera of the Afrotropical Region*. British Museum (Natural History), London, pp. 150–174.
- Wu, C.-G. & Liu, G.-P. (2018) Classification of *Culicoides (Sinocoides)* and a new species from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 29, 290–292.
- Wu, J.-H., Liu, J., & Yu, Y.-X. (2011) Species list of the genus *Stilobezzia* (Diptera: Ceratopogonidae) from China and description of a new species [in Chinese, English summary]. *Sichuan Journal of Zoology* 30, 45–46, 1 pl.
- Wu, D., Liu, G.-P., Sun, J.-F., Tan, Q.-Q., Zhang, X., Zhang, H., Zhou, H.-Q. & Liang, G.-D. (2018) A new species and a new record of hematophagous midges (Diptera: Ceratopogonidae) from Guangdong province, China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 29, 287–289.
- Wu, C.-G., Jiao, D. & Liu, G.-P. (2019) Fauna and a new species of hematophagous midges (Diptera: Ceratopogonidae) in Heihe, Heilongjiang province, China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 30, 75–77.
- Xu, T. & Yu, Y.-X. (1989) Description of *Leptoconops (Holoconops) shangweni* sp. nov. (Diptera: Ceratopogonidae) [in Chinese]. *Acta Veterinaria et Zootechnica Sinica* 20, 276–277.
- Xue, J. & Yu, Y.-X. (1991) A new species of *Culicoides* from Qufu City, Shandong Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 3, 53–56.
- Xue, J. & Yu, Y.-X. (1998) A new species of *Forcipomyia (Microhelea)* from Shandong Province, China (Diptera: Ceratopogonidae). *Entomologica Sinica* 5, 317–319.  
<https://doi.org/10.1111/j.1744-7917.1998.tb00327.x>
- Xue, J. & Yu, Y.-X. (2002) A new species and a new record of *Dasyhelea* from Yutai, Shandong, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 13, 39–40.
- Xue, J., Kong, F.-J. & Yu, Y.-X. (1992) Two new species of *Culicoides* from Qufu, Shandong, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Parasitic Disease Control* 5, 52–53.
- Xue, J., Liu, G.-P. & Yu, Y.-X. (2003) A study of the morphological variability and description of three subspecies of *Culicoides circumscriptus* Kieffer in different areas of China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 10, 105–112.
- Yamashita, J., Kitamura, Y. & Nakamura, R. (1957) Studies on "kasen" of horses in Hokkaido IV. Researches on the punkies in

- Hokkaido with description of a new species. *Japanese Journal of Veterinary Research* 5(3), 89–96, 1 pl.
- Yan, H.-H. & Yu, Y.-X. (2008) A new species of *Dasyhelea* Kieffer from Shanxi, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal of Zoology* 27, 481–482.
- Yan, G. & Yu, Y.-X. (1999) A new species and a new record of *Atrichopogon* (*Lophomyidium*) (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 24, 100–102.
- Yan, G. & Yu, Y.-X. (2000) A systemetic (sic) and 2 new species of *Atrichopogon* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 11, 401–404.
- Yang, D., Li, Z. & Liu, Q.-F. (in press) *Species catalogue of China. Vol. 2. Animals, Insecta (V), Diptera (I): Nematocera*. Science Press, Beijing.
- Yan, G., Zhang, Y. & Yu, Y.-X. (1995) Five new species of the genus *Atrichopogon* from Tibet, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Epidemiology* 1, 96–103.
- Yang, J., Li, M., & Liu, G.-P. (2011) A new species of bloodsucking midge from Heilongjiang province of China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 22, 154–157.
- Yang, J., Liu, G.-P. & Yang, F. (2016) Fauna and a new species of bloodsucking midges in Hongxing volcano lava area, Heilongjiang province [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 27, 46–49.
- Yang, T. & Yu, Y.-X. (2017) *Lasiohelea tianmushana* Yu & Yang (Diptera: Ceratopogonidae), a new species from western Tianmu Mountain, Zhejiang, China. *Journal of Entomological Science* 52, 436–444.  
<https://doi.org/10.18474/JES17-206E.1>
- Yang, Q.-G., He, D.-Y., Zhang, L., Qiu, W.-Y., & Yu, Y.-X. (2017) Two new species of *Dasyhelea* from Changzhou City, Jiangsu Province, China [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 24, 52–55.
- Yao, W. P. (1964) A new species of *Culicoides* Latreille *Culicoides mongolensis* sp. n. [in Chinese, English summary]. *Acta Entomologica Sinica* 13, 287–291.
- Yildirim A., Dik, B., Duzlu, O., Onder, Z., Ciloglu, A., Yetismis, G. & Inci, A. (2019) Genetic diversity of *Culicoides* species within the *Pulicaris* complex (Diptera: Ceratopogonidae) in Turkey inferred from mitochondrial COI gene sequences. *Acta Tropica* 190, 380–388.  
<https://doi.org/10.1016/j.actatropica.2018.12.005>
- Yin, X.-P., Tian, Y.-H. & Yu, Y.-X. (2013) Three new records and two new species in the genus *Forcipomyia* from Xinjiang, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 20, 47–52.
- Ysmar, M. & Yu, Y.-X. (2003) A new species and two new recorded species of *Dasyhelea* (Diptera: Ceratopogonidae) (sic) from Xinjiang, China [in Chinese, English summary]. *Endemic Diseases Bulletin* 18, 52–54.
- Yu, Y.-X. (1963) A new species of *Leptoconops* from China L. (*Holoconops*) *yunhsienensis* (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zoologica Sinica* 15, 450–452.
- Yu, Y.-X. (1981) A preliminary survey of the biting midges of the Ningxia area and description of a new species of *Culicoides* [in Chinese]. *Ningxia Journal of Agricultural Science and Technology* 5, 30–31.
- Yu, Y.-X. (1982) Chapter III. The identification of important biting midges of China [in Chinese]. In: *Manual of Important Chinese Insect Vectors of Animal Disease*,. People's Health Publishing House, Beijing, pp. 178–224, 945–951. (Aug.)
- Yu, Y.-X. (1985) Description of *Leptoconops* (*Holoconops*) *tamimensis* sp. nov. (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 10, 406–408.
- Yu, Y.-X. (1988) Descriptions of new species of Ceratopogonidae (Diptera) in China [in Chinese, English summary]. *Contributions to blood-sucking Diptera insects, China Public Health, Supplement* 2, 127–140.
- Yu, Y.-X. (1989a) Two new species of *Stilobezzia* in China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 14, 475–481.
- Yu, Y.-X. (1989b) Description and observation on the flight activity of *Leptoconops* (*Holoconops*) *binangulus* sp. nov. (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Entomologica Sinica* 32, 97–100.
- Yu, Y.-X. (1991) Replace the homonym with the new names for tow [sic] species of *Culicoides* (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 3, 52.
- Yu, Y.-X. (1995) A new genus of Heteromyiini (Diptera: Ceratopogonidae) from China [in Chinese, English summary]. *Entomotaxonomia* 17, 287–289.
- Yu, Y.-X. (1997) A new species of *Leptoconops* midge from Wudang Mountain, Hubei Province, China (Diptera: Ceratopogonidae). *Entomologia Sinica* 4, 56–58.  
<https://doi.org/10.1111/j.1744-7917.1997.tb00072.x>
- Yu, Y.-X. (1999) A new species of *Alluaudomyia* from Beijing (Diptera: Ceratopogonidae). *Acta Zootaxonomica Sinica* 24, 220–221.
- Yu, Y.-X. (2000a) Description of *Lasiohelea nepala* sp. nov. (Diptera: Ceratopogonidae). *Entomologia Sinica* 7, 12–14.  
<https://doi.org/10.1111/j.1744-7917.2000.tb00334.x>
- Yu, Y.-X. (2000b) Two new species of *Bezzia* and renamed for two species of midges (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 11, 161–163.
- Yu, Y.-X. (2001) Tow (sic) new species and some new recores (sic) of biting midges from Hong Kong, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 8, 159–163.
- Yu, Y.-X. (2003a) A new species of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae) from Vietnam. *Entomologia Sinica*

10, 69–71.

<https://doi.org/10.1111/j.1744-7917.2003.tb00367.x>

- Yu, Y.-X. (2003b) First record of *Sinhalohelea* (Diptera: Ceratopogonidae) in China with description of a new species [in Chinese, English summary]. *Entomotaxonomia* 25, 201–203.
- Yu, Y.-X. (2006) *Leptoconops hongkongensis* new species Hongkong, China (Diptera: Ceratopogonidae) [in Chinese]. *China Nature* 2, 36.
- Yu, Y.-X. (2008) Notes on a new species of *Dasyhelea* and a new record of *Stilobezzia* (Diptera: Ceratopogonidae) species [in Chinese, English summary]. *Sichuan Journal of Zoology* 27, 165–166.
- Yu, Y.-X. (2019) *Important blood-sucking midges (Diptera: Ceratopogonidae) of China* [in Chinese]. Science Press, Beijing, x + 198 pp.
- Yu, Y.-X. & Huang, Y.-Y. (2006) New species and records of biting midges from Macau (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 13, 47–50.
- Yu, Y.-X. & Liu, G.-P. (1987) Description of *Lasiohelea zhenbaodaensis* sp. nov. from Heilongjiang Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 12, 83–86.
- Yu, Y.-X. & Liu, J.-H. (1999) Descriptions of *Forcipomyia longiseta* sp. nov. and *F. onustus* sp. nov. (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 10, 246–247.
- Yu, Y.-X. & Liu, J.-H. (2000a) A new subgenus and two new species of *Forcipomyia* (Diptera: Ceratopogonidae) from China [in Chinese, English summary]. *Entomotaxonomia* 22, 48–52.
- Yu, Y.-X. & Liu, J.-H. (2000b) Two new species of *Lasiohelea* (Diptera: Ceratopogonidae) from Hainan, China [in Chinese, English summary]. *Entomotaxonomia* 22, 125–128.
- Yu, Y.-X. & Liu, K.-N. (1981) Two new species of *Lasiohelea* from Sichuan, China (Diptera, Ceratopogonidae) [in Chinese, English summary]. *Zoological Research* 2, 61–66.
- Yu, Y.-X. & Liu, K.-N. (1982a) *A study of Lasiohelea in China (Diptera: Ceratopogonidae)* [in Chinese]. Scientific Press, Beijing, ii + 84 pp. (Jan.).
- Yu, Y.-X. & Liu, K.-N. (1982b) Seven new species of *Lasiohelea* in China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 7, 300–311. (July).
- Yu, Y.-X. & Liu, K.-N. (1990) Eight new species of *Culicoides* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 2, 1–13.
- Yu, Y.-X. & Liu, K.-N. (1991) A survey on Ceratopogonidae from Wudangshan Mountain Hubei Province, China, with description of two new species (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 3, 46–51.
- Yu, Y.-X. & Liu, K.-N. (1995) Two new species of *Atrichopogon* from Sichuan (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal Zoology* 14, 47–49.
- Yu, Y.-X. & Ma, D. (1998) Two new species of *Dasyhelea* (Diptera: Ceratopogonidae) from Tianshan Mountain, Xinjiang, China [in Chinese, English summary]. *Entomotaxonomia* 20, 273–276.
- Yu, Y.-X. & Maha, M. (1998) A new species of the genus *Forcipomyia* (*Phytohelea*) from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 9, 205–206.
- Yu, Y.-X. & Shen, J.-Z. (1998) A new species of the genus *Phaenobezzia* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 23, 62–64.
- Yu, Y.-X. & Song, F.-C. (2008) A new subgenus, two new species of *Forcipomyia* from China (Diptera, Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 33, 793–795.
- Yu, Y.-X. & Wang, T. (1982) On two new species and two new records of *Lasiohelea* from China [in Chinese, English summary]. *Entomotaxonomia* 4, 19–21. (June).
- Yu, Y.-X. & Wirth, W.W. (1997) *Lasiohelea of Southeast Asia (Diptera: Ceratopogonidae)*. Military Medical Science Press, Beijing, China, xiv + 88 pp.
- Yu, Y.-X. & Xu, Z.-F. (2000) A new record and a new species of the genus *Forcipomyia* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 25, 449–451.
- Yu, Y.-X. & Yuan, M.-Z. (2007) *Stilobezzia chlorogastrula* sp. nov. (Diptera: Ceratopogonidae) from Hong Kong, China [in Chinese]. *China Nature* 2007(1), 76.
- Yu, Y.-X. & Yan, G. (2002) A new generic record and a new species of Ceratopogonidae from China (Diptera) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 9, 168–171.
- Yu, Y.-X. & Yan, G. (2003) A new species of the Asian predaceous midge genus *Pseudostilobezzia* Wirth and Ratanaworabhan (Diptera: Ceratopogonidae) from Hainan, China. *Proceedings of the Entomological Society of Washington* 105, 238–239.
- Yu, Y.-X. & Yan, G. (2004) Two new species of *Allohelea* from Fujian, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 11, 36–39.
- Yu, Y.-X. & Yan, G. (2005) A new species of *Stilobezzia* from in Vietnam (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 12, 168–170.
- Yu, Y.-X. & Yan, G. (2007) Three new species of *Lasiohelea* from Malaysia (Diptera: Ceratopogonidae). *Acta Parasitologica et Medica Entomologica Sinica* 14, 45–47.
- Yu, Y.-X. & Yan, G. (2010) Two new species of biting midges (Diptera: Ceratopogonidae) from Yunnan Province, China [in Chinese, English summary]. *Sichuan Journal of Zoology* 29, 200–202.

- Yu, Y.-X. & Yan, G. (2013) A new species description and other biting midges in the shaded area [in Chinese, English summary]. *Chinese Journal of Hygienic Insecticides & Equipments* 19, 59–61.
- Yu, Y.-X. & Yan, G. (2015) New species of genus *Dasyhelea* (Diptera) (sic): Ceratopogonidae [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 22, 198–204.
- Yu, Y.-X. & Zhang, Z.-C. (1982) Three new species of *Lasiohelea* from Minjiang River Basin, Sichuan (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 7, 187–192. (Apr.).
- Yu, Y.-X. & Zhang, Z.-C. (1996) A new species of the genus *Clinohelea* (Diptera: Ceratopogonidae) from China [in Chinese, English summary]. *Entomotaxonomia* 18, 294–296.
- Yu, Y.-X. & Zhang, Z.-C. (1997) A new species and a new record of *Nilobezzia* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 22, 307–311.
- Yu, Y.-X. & Zou, M.-J. (1988) Description of *Atrichopogon* (*Psilokempia*) *pallidicillus* sp. nov. and their intersex (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 13, 85–87.
- Yu, Y.-X., Liu, K.-N. & Wen, X.-M. (1985) On two new species of *Lasiohelea* (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 10, 72–75.
- Yu, Y.-X., Song, J.-Z., Li, Z.-C. & Liu, K.-N. (1986) Three new species of *Culicoides* from Sichuan, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 11, 209–213.
- Yu, Y.-X., Liu, J.-H., Liu, G.-P., Liu, Z.-J., Hao, B.-S., Yan, G. & Zhao, T.-S. (2005a) *Ceratopogonidae of China, Insecta, Diptera* [in Chinese]. Volumes 1–2. Military Medical Science Press, Beijing, 1699 pp.
- Yu, Y.-X., J.-H. Liu, G.-P. Liu, Z.-J. Liu, B.-S. Hao, G. Yan and T.-S. Zhao (2005b) *Catalogue and keys of Chinese Ceratopogonidae (Insecta, Diptera)* [in Chinese]. Military Medical Science Press, Beijing, viii + 187 pp.
- Yu, Y.-X., Yuan, M.-Z., Chen, M.-L., Zeng, Z.-X. & Yan, S.-M. (2006) New species and new record of *Dasyhelea* from Hong Kong (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal of Zoology* 25, 687–689.
- Yu, Y.-X., Chen, J.-L., Chen, R.-D., Liang, Z.-H., & Pan, Y.-N. (2007a) Two new species of genus *Bezzia* Kieffer from Hongkong, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal of Zoology* 26, 487–488.
- Yu, Y.-X., Liang, M.-Y., Chen, J.-L., He, Z.-M., & Su, B.-R. (2007b) Three new species of genus *Forcipomyia* (Diptera, Ceratopogonidae) from Hongkong, China [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 32, 486–489.
- Yu, Y.-X., Huang, E.-J., Wang, G.-H., Nie, W.-Z., & Liu, E.-D. (2009) A first record and a new species of *Brachypogon* Kieffer in China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Parasitologica et Medica Entomologica Sinica* 16, 47–49.
- Yu, Y.-X., Yan, G., Liu, G.-P. & Liu, Z.-J. (2013) A new species and three new record species of biting midges from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 38, 372–376.
- Yu, J., Shi, Q.-M., Chen, M.-M., Liang, D., Wang, F.-P., Yu, Y.-X & Fan, Q.-S. (2015a) A list and a new species of genus *Forcipomyia* from Sichuan [in Chinese, English summary]. *Chinese Journal of Hygienic Insecticides & Equipments* 21, 509–510, 514.
- Yu, J., Deng, C.-Y., Shi, Q.-M., Chen, M.-M., Wang, F.-P., Yu, Y.-X. & Fan, Q.-S. (2015b) A list and a new species of genus *Dasyhelea* (Diptera: Ceratopogonidae) from Yunnan, China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 26, 303–305.
- Yu, J., Wang, F.-P., Shi, Q.-M., Chen, M.-M., Yu, Y.-X., Zhang, F.-Q. & Fan, Q.-S. (2015c) A new species and a new record of midges from Anning, Yunnan (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 26, 498–499.
- Zetterstedt, J.W. (1838) Dipterologis Scandinaviae. Sect. 3: Diptera, pp. 477–868. In his: *Insecta Lapponica*. Lipsiae [=Leipzig], vi + 1,140 pp.
- Zetterstedt, J.W. (1850) Diptera Scandinaviae. *Disposita et descripta* 9, 3367–3710. Lundae (= Lund).
- Zetterstedt, J.W. (1855) Diptera Scandinaviae. *Disposita et descripta* 12: Suppl. 3, v–xx + 4547–4942. Lundae (= Lund).
- Zhang, Y, Deng, C., Xue, Q. & Yu, Y.-X. (1990) Descriptions of four new species of *Culicoides* in Zayü, Xizang, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 2, 27–34.
- Zhang, Y.-Z., Xue, Q.-L., Deng, C.-Y. & Yu, Y.-X. (2004) Two new species of *Alluaudomyia* (Diptera: Ceratopogonidae) from Xizang AR, China [in Chinese, English summary]. *Sichuan Journal of Zoology* 23, 317–318.
- Zhang, Z. & Yu, Y.-X. (1996) Two new species of *Dasyhelea* (Diptera: Ceratopogonidae) from Sichuan, China [in Chinese, English summary]. *Entomotaxonomia* 18, 201–204.
- Zhao, Y. & Liu, G.-P. (2012) A new species of *Culicoides* (*Oecacta*) (Diptera: Ceratopogonidae) in China [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 23, 324–325.
- Zhao, T. & Yu, Y.-X. (1997) Two new species of *Dasyhelea* from Kunming, Yunnan Province, China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Sichuan Journal of Zoology* 16, 6–7.
- Zhogolev, D.T. (1969) A new species of midges (Diptera, Ceratopogonidae) from Taizhikistan [in Russian]. *Izvestia Akademii Nauk Tadzhikskoi SSR, Otelenie Biologicheskoe* 1969(2), 114–116.
- Zhogolev, D.T. (1973) The new species of biting midges of the genus *Culicoides* from the West Pamir [in Russian]. *Parazitologiya* 7, 185–186.
- Zhou, J.-C. & Lee, T.-S. (1984a) Two new species of *Culicoides* from China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Acta Entomologica Sinica* 27, 221–225.
- Zhou, J.-C. & Lee, T.-S. (1984b) Descriptions of three new species of the genus *Culicoides* from Sichuan Province, China (Dip-

- tera: Ceratopogonidae) [in Chinese, English summary]. *Acta Zootaxonomica Sinica* 9, 293–297.
- Zhou, X. & Liu, G.-P. (2015) *Culicoides (Fastus)* including a new species in China (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Chinese Journal of Vector Biology and Control* 26, 62–64.
- Zilahi-Sebess, G. (1930a) Tanulmány a Kövágóörsi Dasyhelearól. *Doktori értekezés. Közlemények a Debreceni Tisza István Tudomány Egyetem Allattani Intézetéből* 2, 1–16.
- Zilahi-Sebess, G. (1930b) Két új Chironomida-faj a Balaton vidékéről. Zwei neue Chironomidenarten aus dem Balatongebiet. *Arbeiten des Ungarischen Biologischen ForschungsInstitutes, Tihany* 3, 186–205.
- Zilahi-Sebess, G. (1931) Anabiotische Dipteren. *Archiv für Hydrobiologie* 23, 310–329.
- Zilahi-Sebess, G. (1933) Unsere blutsaugenden Chironomiden. *Allattani Közlemények a.k.m. Természettudományi Tarsulat Allattani Szakosztályának Folyoirata* 30(3–4), 146–151.
- Zilahi-Sebess, G. (1934) Beiträge zur Fliegenfauna Bulgariens. I. Chironomiden. *Bulletin de la Société Entomologique de Bulgarie* 8, 152–158.
- Zilahi-Sebess, G. (1936a) A Balton partvidék Heleidai. *Arbeiten des Ungarischen Biologischen ForschungsInstitutes* 8, 196–206.
- Zilahi-Sebess, G. (1936b) Die Heleiden-Fauna von Szeged und Umgebung. *Acta Biologica Szeged Universitát* 4, 39–45.
- Zilahi-Sebess, G. (1940) Magyarország Heleidai. *Folia Entomologica Hungarica* 5, 10–133, 3 pls.
- Zilahi-Sebess, G. (1941) *Atrichopogon biroi* n. sp., eine neue Heleiden-Art aus Tunis. *Folia Entomologica Hungarica* 6, 83–86.
- Zou, M. & Yu, Y.-X. (1991) A description of *Forcipomyia (F.) lochmocola* sp. nov. (Diptera: Ceratopogonidae) [in Chinese, English summary]. *Contributions to Blood-sucking Dipteran Insects (Beijing)* 3, 57–63.



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