

**A Name list of World
Austroconops,
Leptoconops and Forcipomyia
(subgenera Lasiohelea
and Dacnoforcipomyia)
to 1985
(Diptera : Ceratopogonidae)**

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Summary

A name list is presented of the known species of the family Ceratopogonidae (Diptera) belonging to the genera Austroconops, Leptoconops, Forcipomyia (Lasiohelea) and Forcipomyia (Dacnoforcipomyia) described up to the year 1985, together with references, type localities and depositions of the holotypes if known.

Key words : *Ceratopogonidae - Austroconops - Leptoconops - Lasiohelea - Dacnoforcipomyia - names - list.*

Résumé

LISTE DES NOMS DES *AUSTROCONOPS*, *LEPTOCONOPS* ET *FORCIPOMYIA*
(SOUS-GENRES *LASIOHELEA* ET *DACNOFORCIPOMYIA*) DU MONDE JUSQU'À L'ANNÉE 1985 (DIPTERA : CERATOPOGONIDAE) ⁽²⁾

Ce texte présente la liste des espèces connues de la famille des Ceratopogonidae (Diptera) apparentées aux genres Austroconops, Leptoconops, Forcipomyia (Lasiohelea) et Forcipomyia (Dacnoforcipomyia) décrites jusqu'à l'année 1985, avec les références des descriptions, les localités de captures des types et les lieux où sont déposés les holotypes lorsqu'ils sont connus.

Mots-clés : *Ceratopogonidae - Austroconops - Leptoconops - Lasiohelea - Dacnoforcipomyia - noms - liste.*

Introduction

Arnaud (1956) and Arnaud and Wirth (1964) have published lists of the known world species of *Culicoides* up to 1962. The present paper is an attempt to bring together

the information relating to the other genera of Ceratopogonidae which are known to suck blood and is intended to include those species described in the years up to and including 1985.

The arrangement adopted is as follows : specific

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name, name of author and year, reference with page number, genus in which taxon was originally described (if different), type locality, location of type. No account has been taken of synonymy within subgenera. The deposition of the type given is that stated in the original publication, except where this is known to have changed. Where the deposition of the type is not stated in the original description, and remains uncertain, the location is entered as « unknown ». For *Lasiohelea*, the taxa given were all originally described either as *Lasiohelea*, *Forcipomyia* subgenus *Lasiohelea* or have now been transferred to this subgenus. A list of species subsequently transferred from *Lasiohelea* to other subgenera is given separately. The subgenera of *Leptoconops* are denoted in parentheses : *Brachyconops*, (B) ; *Holoconops*, (H) ; *Leptoconops*, (L) ; *Megaconops*, (M) ; *Protoleptoconops*, (P) and *Styloconops*, (S).

The following abbreviations (where appropriate, after Heppner and Lamas, 1982) have been used for type depositories :

ANIC Australian National Insect Collection, Canberra.
 BMNH British Museum (Natural History), London.
 BPBM Bernice P. Bishop Museum, Honolulu.
 CAEU Entomological Laboratory, College of Agriculture, Ehime University, Matsuyama, Japan.
 CINZ Cawthron Institute, Nelson, New Zealand.
 CNC Canadian National Collection, Ottawa.
 CNHM Chicago Natural History Museum, Chicago.
 CPFV Catedra de Parasitologia, Facultad de Farmacia, Valencia.
 EMOM Laboratoire d'Entomologie Médicale de l'ORSTOM, Montpellier.
 FMM Laboratoire de Parasitologie, Faculté de Médecine, Montpellier.
 FSP Dept. of Parasitology, Faculty of Hygiene and Public Health, University of Sao Paulo.
 IBMC Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences, Beijing.
 IMBA Departamento de Entomologia Sanitaria, Instituto Nacional de Microbiologia, Buenos Aires, Argentina.
 IPA Institut Pasteur d'Algérie, Algiers.
 IPS Institut de Parasitologie, Université Louis Pasteur, Strasbourg.
 JHUB School of Hygiene and Public Health, Johns Hopkins University, Baltimore.
 KIUI Kyoto Imperial University, Kyoto.
 LEM Lyman Entomological Museum, McDonald College, Ste. Anne de Bellevue, Quebec, Canada.
 MHNP Museum National d'Histoire Naturelle, Paris.
 MMAL Dept. of Biology and Parasitology, Military Medical Academy, Leningrad.
 MRAC Musée Royal de l'Afrique Centrale, Tervuren.
 MSNG Museo Civico di Storia Naturale, Genoa.
 MSNM Museo Civico di Storia Naturale, Milan.
 NSMT National Science Museum, Tokyo.
 PDH Division of Malaria, Philippine Health Department, Manila.
 ROMT Royal Ontario Museum of Mineralogy, Toronto.
 SAIMR South African Institute for Medical Research, Johannesburg.
 TMB Termesztudományi Múzeum, Budapest.
 USNM United States National Museum, Washington D.C.
 ZIL Zoological Institute, Academy of Sciences, Leningrad.
 ZMH Zoologiska Museum, Helsinki.
 ZMHB Zoologisches Museum, Humboldt Universität, Berlin, D.D.R.
 ZMUA Zoologisch Museum, Universiteit van Amsterdam, Amsterdam.

ZSI Zoological Survey of India, Calcutta.

Genus *Austroconops*

mcmillani Wirth and Lee 1958 : 337. W. Australia. (ANIC)

Genus *Leptoconops*

(H) *acer* Clastrier 1973 : 911. France. (MNHP)
 (S) *albiventris* de Meijere 1915 : 98. Irian Jaya. (BMNH)
 (H) *algeriensis* Clastrier 1972 : 41. Algeria. (MNHP)
 (H) *americanus* Carter 1921 : 22. USA. (BMNH)
 (H) *amplifemorialis* Chanthawanich and Delfinado 1967 : 298. Nepal. (USNM)
 (H) *andersoni* Clastrier and Wirth 1978 : 35. USA. (USNM)
 (H) *arnaudi* Clastrier and Wirth 1978 : 29. USA. (USNM)
 (H) *asilomar* Clastrier and Wirth 1978 : 22. USA. (USNM)
 (H) *achleyi* Clastrier and Wirth 1978 : 32. USA. (USNM)
 (H) *auster* Clastrier 1981 : 91. S. Africa. (MHNP)
 (S) *australiensis* (Lee 1948 : 337). (*Styloconops*). Australia. (ANIC)
 (L) *aviarum* Gutsevich 1973 : 245. USSR. (?ZIL)
 (H) *belkini* Wirth and Atchley 1973 : 37. USA. (USNM)
 (H) *bequaerti* (Kieffer 1925 : 405). (*Holoconops*). Honduras. (unknown) [= *becquaerti*, justified emendation of original spelling]
 (L) *bezzii* (Noe 1905 : 114). (*Mycterotypus*). Italy. (probably destroyed ; neotype, NSNM, Clastrier and Coluzzi, 1973)
 (L) *bidentatus* Gutsevich 1960 : 127. USSR. (?ZIL)
 (L) *borealis* Gutsevich 1945 : 124. USSR. (MMAL)
 (L) *braziliensis* (Lutz 1913 : 66). (*Tersesthes*). Brazil. (unknown)
 (L) *bullbrookensis* Smee 1966 : 1008. Australia. (ANIC)
 (L) *bundyensis* Smee 1966 : 1007. Australia. (ANIC)
 (B) *californiensis* Wirth and Atchley 1973 : 16. USA. (USNM)
 (L) *camelorum* (Kieffer 1921 : 111). (*Tersesthes*). Algeria. (unknown ; neotype, MHNP, Szadziewski, unpublished)
 (L) *capensis* de Meillon and Hardy 1953 : 24. S. Africa. (SAIMR)
 (L) *carteri* Hoffman 1926 : 133. USA. (BMNH, USNM)
 (L) *Casali* Cavalieri and de Chiossone 1966 : 45. Argentina. (IMBA)
 (H) *catawbae* (Boesel 1948 : 69). (*Holoconops*). USA. (Boesel coll.)
 (L) *caucasicus* Gutsevich 1953 : 235. USSR. (?ZIL)
 (L) *chilensis* Forattini 1958, Rev. bras. Ent., 8 : 38. Chile. (FSP)

- (L) *chinensis* Sun 1968 : 2. China. (unknown)
 (L) *demeilloni* Clastrier and Nevill 1984 : 245. S. Africa. (MHNP)
 (H) *dissimilis* Clastrier 1975 : 605. Chad. (MNHP)
 (L) *dixi* de Meillon 1936 : 141. Namibia. (SAIMR)
 (L) *endialis* Smee 1966 : 1010. Australia. (ANIC)
 (H) *expectator* Clastrier 1972 : 39. Algeria. (MHNP)
 (L) *flaviventris* Kieffer 1917 : 190. Tunis. (unknown)
 (M) *floridensis* Wirth 1951 : 282. USA. (USNM)
 (H) *foleyi* Clastrier 1972 : 33. Algeria. (MHNP)
 (H) *foulki* Clastrier and Wirth 1978 : 38. USA. (USNM)
 (S) *freeborni* Wirth 1952 ; Univ. Calif. Publ. Ent., 9 : 115. USA. (USNM)
 (L) *fuscipennis* Clastrier, Rioux and Descous 1961 : 93. Chad. (MHNP)
 (H) *gallicus* Clastrier 1973 : 906. France. (MHNP)
 (L) *golanensis* Clastrier 1981 : 31. Israel. (MHNP)
 (L) *grandis* Carter 1921 : 12. (nomen dubium Smee 1966 : 1005). Australia. (BMNH)
 (L) *halophilus* Smee 1966 : 1010. Australia. (ANIC)
 (L) *harrisoni* de Meillon and Hardy 1953 : 22. S. Africa. (SAIMR)
 (H) *hondurensis* Hoffman 1926 : 135. Honduras. (USNM, JHUB)
 (P) *hutsoni* Clastrier 1974 : 232. Algeria. (BMNH)
 (L) *hyalinipennis* Kieffer 1918 : 33. Tunisia. (unknown)
 (L) *indicus* (Kieffer 1918 : 135). (*Schizonocops*). India. (unknown)
 (L) *inopinatus* Huttel and Huttel 1952 : 45. France. (FMM)
 (L) *interruptus* (Enderlein 1908 : 460). (*Mycterotypus*). Namibia. (unknown)
 (L) *irritans* (Noé 1905 : 118). (*Mycterotypus*). Italy. (unknown, possibly destroyed)
 (H) *kerteszi* Kieffer 1908 : 576. Egypt. (unknown)
 (H) *knowltoni* Clastrier and Wirth 1978 : 26. USA. (USNM)
 (H) *lacteipennis* Kieffer 1918 : 32. Tunis. (unknown)
 (H) *laosensis* Clastrier 1974 : 71. Laos. (MHNP)
 (H) *latibulorum* Gutsevich 1973 : 259. USSR. (?ZIL)
 (H) *laurae* (Weiss 1912 : 25). (*Mycterotypus*). Tunisia. (IPS)
 (L) *leptorhynchus* Chanthawanich and Delfinado 1967 : 295. Malaysia. (USNM)
 (H) *linleyi* Wirth and Atchley 1973 : 49. USA. (USNM)
 (L) *lisbonnei* Harant and Galan 1944 : 170. France. (unknown, possibly lost)
 (L) *longicornis* Carter 1921 : 11. Australia. (BMNH)
 (L) *longipalpis* (Kieffer 1923) : 657 (*Microconops*). Algeria. (unknown, possibly lost)
 (L) *longipalpis* Smee 1966 : 1007. (nom. preocc., see *smeei*) Australia. (ANIC)
 (L) *lucidus* Gutsevich 1964 : 192. USSR. (?ZIL)
 (S) *luteigaster* (Senior White 1929 : 1). (*Tersesthes*). India. (BMNH)
 (L) *maai* Tokunaga 1963 : 214. New Guinea. (BPBM)
 (H) *macfei* Clastrier 1972 : 28. Egypt. (BMNH)
 (L) *mackerrasae* Smee 1966 : 1006. Australia. (ANIC)
 (H) *mediterraneus* Kieffer 1921 : 264. Algeria. (unknown)
 (L) *melanderi* Wirth and Atchley 1973 : 27. USA. (USNM)
 (L) *mesopotamiensis* (Patton 1920 : 247). (*Tersesthes*). Iraq. (unknown)
 (L) *minutus* Gutsevich 1973 : 249. Turkmenistan SSR. (?ZIL)
 (L) *mohavensis* Wirth and Atchley 1973 : 29. USA. (USNM)
 (H) *montanus* Konurbaev 1965 : 132. USSR. (ZIL)
 (L) *montigena* Clastrier 1981 : 123. Israel. (MHNP)
 (S) *mooloolabaensis* (Smee 1966 : 1021). (*Styloconops*). Australia. (ANIC)
 (L) *muganicus* Dzhafarov 1961 : 67. (*bezzii* var.). USSR. (unknown)
 (S) *myersi* Tonnoir 1923 : 443. (*Acanthoconops*). New Zealand. (CINZ)
 (H) *nachitschaevanicus* Dzhafarov 1961 : 78. USSR. (unknown)
 (H) *nevilli* Clastrier 1981 : 88. S. Africa. (MHNP)
 (L) *nicolayi* de Meillon 1937 : 330. Zaire. (SAIMR)
 (L) *nigripes* Dzhafarov 1961 : 68. USSR. (unknown)
 (L) *nipponensis* Tokunaga 1937 : 262. Japan. (unknown)
 (L) *nivalis* Smee 1966 : 1012. Australia. (ANIC)
 (L) *noei* Clastrier et Coluzzi 1973 : 59. Italy. (MSNM)
 (L) *obscurus* Smee 1966 : 1014. Australia. (ANIC)
 (L) *oshimaensis* Takaoka and Hayashi 1977 : 385. (*nipponensis* ssp.) Japan. (NSMT)
 (L) *parvichela* Chanthawanich and Delfinado 1967 : 297. N. Borneo. (USNM)
 (H) *pavlovskyi* Dzhafarov 1961 : 74. USSR. (unknown)
 (H) *peneti* (Langeron 1913 : 284). (*laurae* var.) (*Mycterotypus*) Tunisia. (unknown)
 (L) *petrocchiai* Shannon and Del Ponte 1927 : 734. Argentina. (?IMBA)
 (H) *popovi* Dzhafarov 1961 : 72. (unknown)
 (S) *pseudosetosifrons* (Smee 1966 : 1023). (*Styloconops*). Australia. (ANIC)
 (H) *pugnax* Clastrier 1973 : 908. France. (MNHP)
 (H) *reesi* Clastrier and Wirth 1978 : 42. USA. (USNM)
 (L) *rhodesiensis* Carter 1921 : 14. Zambia. (BMNH)
 (L) *riverinaensis* Smee 1966 : 1009. Australia. (ANIC)
 (H) *rufiventris* (Kieffer 1923 : 658). (*Microconops*). Algeria. (unknown)
 (S) *setosifrons* (Smee 1966 : 1022). (*Styloconops*). Australia. (ANIC)

- (L) *siamensis* Carter 1921 : 20. Thailand. (BMNH)
 (L) *smeei* Wirth and Atchley 1973 : 22. Australia. (ANIC)
 (nom. nov. for *longipalpis* Smee)
 (S) *spinosifrons* (Carter 1921 : 24). (*Acanthoconops*).
 Tanzania, Zanzibar. (BMNH)
 (S) *spinosipes* Kieffer 1917 : 190. New Guinea. (unknown)
 (L) *stygius* Skuse 1889 : 288. Australia. (ANIC)
 (H) *subletti* Clastrier and Wirth 1978 : 36. USA. (USNM)
 (H) *tarimensis* Yu 1985 : 406. China. (IMBC)
 (H) *tibetensis* Lee 1979 : 104. Tibet. (unknown)
 (L) *torrens* (Townsend 1893 : 369) (*Tersesthes*). USA.
 (unknown)
 (H) *transversalis* (Kieffer 1921 : 112). (*Holoconops*).
 Tunis. (unknown)
 (L) *turkmenicus* Molotova 1967 : 627. USSR. (unknown)
 (H) *umbellifer* Clastrier 1981 : 93. S. Africa. (MHNP)
 (H) *vargasi* Clastrier and Wirth 1978 : 34. USA. (USNM)
 (L) *venezuelensis* Ortiz 1952 : 165. Venezuela. (unknown)
 (H) *vexans* (Kieffer 1921 : 110). (*Microconops*). Algeria.
 (unknown)
 (L) *wernerii* Wirth and Atchley 1973 : 34. USA. (USNM)
 (H) *whitseli* Clastrier and Wirth 1978 : 20. USA. (USNM)
 (L) *woodhilli* Lee 1948 : 334. Australia. (ANIC)
 (H) *xuthosceles* Chanthawanich and Delfinado 1967 : 299.
 Thailand. (USNM)
 (H) *yunhsienensis* Yu 1963 : 450. China. (unknown)

Genus *Forcipomyia* subgenus *Lasiohelea*

- aeschrodenta* (Yu and Liu 1981 : 61). (*Lasiohelea*). China.
 (IMBC)
agas (Rondani 1875 : 462). (*Ceratopogon*). Sarawak.
 (MSNG)
aiyuræ Debenham 1983 : 29. Papua New Guinea.
 (ANIC)
ancoriformis Tokunaga and Murachi 1959 : 226. Caroline
 Is. (USNM)
anthropophila (Harant, Huttel and Huttel 1951 : 468).
 (*Parapterobosca*). Ivory Coast. (unknown, possibly lost)
atratula Goetghebuer 1935 : 149. Zaire. (MRAC)
atrosetosa Goetghebuer 1935 : 149. Zaire. (MRAC)
attenuata Saunders 1964 : 469. Costa Rica. (CNCO)
brevisicæ Debenham 1983 : 26. Australia. (ANIC)
brevitarsata (Ingram and Macfie 1924 : 385). (*Lasiohelea*).
 Ghana. (BMNH)
bromelicola (Lutz 1914 : 84). (*Ceratopogon*). Brazil.
 (unknown)
buresschi Zilahi 1934 : 153. Bulgaria. (TMB)
caesariata Debenham 1983 : 8. Australia. (ANIC)
carolinensis (Tokunaga 1940 : 208). (*Lasiohelea*) Caroline
 Is. (KIUJ)
citowitschi Debenham 1983 : 17. Australia. (ANIC)
colom Debenham 1983 : 7. Papua New Guinea (ANIC)
cornuta Saunders 1964 : 464. Costa Rica. (CNCO)
cretea (Boesel 1937 : 46). (*Lasiohelea*). Canadian amber.
 (ROMT)
crocea Debenham 1983 : 15. New Britain. (ANIC)
cubitalis (Kieffer 1918 : 88). (*Ceratopogon*). Singapore.
 (NHMB)
cuculli Debenham 1983 : 34. Australia. (ANIC)
danica Kieffer 1915 : 280. Denmark. (unknown) [as
Lasiohelea danica in Kieffer 1925 : 408]
danxianensis (Yu and Liu 1982 : 306). (*Lasiohelea*). Chi-
 na. (IMBC)
decrescens (Kieffer 1924 : 391). (*Lasiohelea*). France.
 (unknown)
devulfi (Goetghebuer 1933 : 136). (*Lasiohelea*). Zaire.
 (MRAC)
diaoluensis (Yu and Liu 1982 : 306). (*Lasiohelea*). Chi-
 na. (IMBC)
emeishana (Yu and Liu 1982 : 300). (*Lasiohelea*). China.
 (IMBC)
equitans Edwards 1933 : 251. Borneo (BMNH, missing
 from pinned mount)
esakii (Tokunaga 1940 : 169). (*Lasiohelea*) Palau Is.
 (unknown)
fairfaxensis Wirth 1951 : 317. (*Forcipomyia* (*Euforcipomyia*))
 USA. (USNM) [transferred to *F. (Lasiohelea)* by
 Pechuman and Wirth, 1961 : 600]
fenestrarum Debenham 1983 : 25. Australia. (ANIC)
flavescens Saunders 1964 : 471. Philippines. (CNCO)
fluviatilis (Lutz 1914 : 82). (*Johannseniella*). Brazil.
 (unknown)
freyeri Stora 1936 : 32. Canary Is. (unknown)
globosa (Boesel 1937 : 47). (*Lasiohelea*). Canadian
 amber. (ROMT)
guangxiensis (Lee 1975 : 435). (*Lasiohelea*) China.
 (unknown)
halterata (Winnertz 1852 : 28). (*Ceratopogon*) Europe.
 (unknown)
hicksæ Debenham 1983 : 30. Australia. (ANIC)
hirta (Lundström 1910 : 34). (*Ceratopogon*) Finland.
 (?ZMH)
hortensis (Yu and Liu 1981 : 62). (*Lasiohelea*). China.
 (IMBC)
humilavolita (Yu and Liu 1982 : 302). (*Lasiohelea*). Chi-
 na. (IMBC)
hungaricus (Kieffer 1921 : 298). (*Ceratopogon*).
 (unknown). [new name for *nitens* Kieffer 1919]
incomposita Debenham 1983 : 20. New Ireland. (ANIC)
infans Debenham 1983 : 28. Australia. (ANIC)
intermedia Saunders 1964 : 468. Costa Rica. (CNCO)
intrepida Macfie 1936 : 228. Peru. (BMNH)
kamilaroi Debenham 1983 : 29. Australia. (ANIC)
kii (Tokunaga 1940 : 107). (*Lasiohelea*) Japan. (unknown)

- labidentis* (Yu and Zhang 1982 : 187). (*Lasiohelea*). China. (IMBC)
- latiunguis* Clastrier 1983 : 47. Seychelles. (MHNP)
- lefanui* Carter 1916 : 131. Ghana. (BMNH)
- longicornis* (Tokunaga 1940 : 103). (*Lasiohelea*). Japan. (unknown)
- longineura* Saunders 1964 : 470. Philippines. (CNCO)
- lotus* (Williston 1896 : 282). (*Ceratopogon*). St. Vincent. (BMNH)
- louriei* (Macfie 1935 : 49). (*Lasiohelea*). Brazil. (BMNH)
- lushana* (Yu and Wang 1982 : 19). (*Lasiohelea*). China. (IMBC)
- mahensis* (Kieffer 1911 : 339). (*Ceratopogon*). Seychelles. (unknown)
- minima* (Tokunaga 1940 : 104). (*Lasiohelea*) Japan. (unknown)
- ministra* Debenham 1983 : 32. Australia. (ANIC)
- minuta* (Tokunaga 1940 : 106). (*Lasiohelea*). Japan. (unknown)
- mixta* (Yu and Liu 1982 : 301). (*Lasiohelea*). China. (IMBC)
- montschadskyi* (Dzhafarov 1962 : 196). (*Lasiohelea*). Azerbajdzhan. (unknown)
- monticola* (Tokunaga 1937 : 270). (*Lasiohelea*). Japan. (unknown)
- mopsus* de Meillon and Hardy 1954 : 71. South Africa. (SAIMR)
- nanjingensis* (Yu and Wang 1982 : 20). (*Lasiohelea*). China. (IMBC)
- nemus* Debenham 1983 : 19. Australia. (ANIC)
- nhulunbuyensis* Debenham 1983 : 32. Australia. (ANIC)
- nigeriae* (Ingram and Macfie 1924 : 382). (*Lasiohelea*). Nigeria. (BMNH)
- nipponica* (Tokunaga 1940 : 102). (*Lasiohelea*). Japan. (unknown)
- nitens* (Kieffer 1919 : 20). (*Ceratopogon*). Hungary. (unknown)
- nudocula* (Tokunaga 1937 : 269). (*Lasiohelea*). Japan. (unknown)
- okadai* (Tokunaga 1939 : 370). (*Lasiohelea*). Sakhalin. (KIUJ)
- opilionivora* Lane 1947 : 159. Brazil. (FSP)
- oxyria* (Yu, Liu and Wen 1985 : 72). (*Lasiohelea*). China. (IMBC)
- pacifica* Macfie 1933 : 75. Tahiti (BMNH)
- paenedentula* Debenham 1983 : 16. Australia. (ANIC)
- parenthesis* Debenham 1983 : 24. Australia. (ANIC)
- perae* Debenham 1983 : 23. Solomon Is. (ANIC)
- perangusta* (Goetghebuer 1935 : 168). (*Dasyhelea*). Zaire. (MRAC)
- peregrinator* Debenham 1983 : 12. Australia. (ANIC)
- phototropia* (Yu and Zhang 1982 : 189). (*Lasiohelea*). China. (IMBC)
- pilosipennis* (Kieffer 1919 : 23). (*Atrichopogon*). Hungary. (?TMB, ?destroyed) [type species of *Lasiohelea*, by designation of Kieffer 1921 ; Archs Inst. Pasteur Afr. N. 1 : 115.]
- plumosa* Debenham 1983 : 9. Papua New Guinea. (ANIC)
- propria* Chan and Le Roux 1970 : 272. Malaysia. (LEMC)
- puteus* Debenham 1983 : 14. Australia. (ANIC)
- quasicornuta* Saunders 1964 : 467. Costa Rica. (CNCO)
- rastraria* Debenham 1983 : 10. Australia. (ANIC)
- richardlanei* Clastrier 1983 : 50. Seychelles. (BMNH)
- russelli* Debenham 1983 : 11. Australia. (ANIC)
- saltensis* (Cavaliere 1962 : 360). (*Lasiohelea*). Argentina. (IMBA)
- samoensis* (Edwards 1928 : 51). (*Lasiohelea*). Samoa. (BMNH)
- serridentata* Debenham 1983 : 18. Solomon Is. (ANIC)
- shannoni* (Ingram and Macfie 1931 : 171). (*Lasiohelea*). Argentina. (BMNH)
- sibirica* (Bujanova 1962 : 43). (*Lasiohelea*). USSR. (unknown)
- silesiae* (Kieffer 1925 : 49). (*Lasiohelea*). Estonia. (unknown)
- spinipenis* Tokunaga and Murachi 1959 : 227. Caroline Is. (USNM)
- squamipes* (Ingram and Macfie 1924 : 385). (*lefanui* var.). (*Lasiohelea*) ?Zanzibar. (unknown)
- squamitarsata* (Clastrier 1959 : 351). (*Lasiohelea*). Senegal. (MHNP)
- stimulans* (de Meijere 1909 : 197). (*Ceratopogon*). Sumatra. (?ZMUA)
- stylifer* (Lutz 1913 : 63). (*Centrorhynchus*). Brazil. (unknown)
- taiwana* (Shiraki 1913 : 291). (*Ceratopogon*). Taiwan. (unknown)
- thabinana* de Meillon 1959 : 6. South Africa. (?SAIMR)
- townsvillensis* (Taylor 1918 : 169). (*Culicoides*). Australia. (ANIC)
- turgeda* (Yu and Liu 1982 : 304). (*Lasiohelea*). China. (IMBC)
- uncusipenis* (Yu and Zhang 1982 : 187). (*Lasiohelea*). China. (IMBC)
- uncuspromissa* Chan and Le Roux 1970 : 276. Singapore. (LEMC)
- velox* (Winnertz 1852 : 28). (*Ceratopogon*). Europe. (unknown)
- villosa* (Macfie 1934 : 183). (*Lasiohelea*). Malaysia. (BMNH)

virgula (Yu, Liu and Wen 1985 : 73). (*Lasiohelea*). China. (unknown)
zonophalla (Yu and Liu 1982 : 305). (*Lasiohelea*). China. (IMBC)

**Genus *Forcipomyia* subgenus *Dacnoforcipomyia*
 Chan and Saunders 1965**

anabaenae (Chan and Saunders 1965 : 527). (*Dacnoforcipomyia*). Singapore. (CNCO)

Other species, not now regarded as *Forcipomyia* (*Lasiohelea*).

acidicola (Tokunaga 1937 : 455). (*Lasiohelea*). Japan. (unknown). [transferred to *F. (Trichohelea)* by Saunders 1956 : 688]

aeronautica Macfie 1935 : 265. Guyana (missing in BMNH). [transferred to *F. (Trichohelea)* by Lane 1984 : 106]

brevicosta (Clastrier 1960 : 520). (*Lasiohelea*). Congo. (MHNP). [transferred to *F. (Forcipomyia)* by Wirth *et al.* 1980 : 154]

caliginosa (Ingram and Macfie 1924 : 386). (*Lasiohelea*). Ghana. (BMNH). [transferred to *F. (Trichohelea)* by Wirth *et al.* 1980 : 158]

chrysopae Mayer 1934 : 259. Germany (unknown) [as *F. (Trichohelea) eques* in Wirth 1956 : 358]

chrysopivora (Tokunaga 1939 : 371). (*Lasiohelea*). Japan. (KIJJ) [as *F. (Trichohelea) eques* Johannsen in Wirth 1956 : 358].

crudelis Karsch 1986 : XVIII. Germany (?ZMHB) [as *Lasiohelea crudelis* in Kieffer 1925 : 408, as *F. (Microhelea) fuliginosa* in Wirth 1956 : 357]

danaisi (Floch and Abonnenc 1949 : 1). (*Lasiohelea*). Venezuela. (unknown). [transferred to *F. (Trichohelea)* by Lane 1984 : 106]

fluviatilis (Lutz 1914 : 82). (*Johannseniella*) Brazil. (unknown) [as *Lasiohelea fluviatilis* in Lane 1945 : 363 ; as *Serromyia fluviatilis* in Fox 1946 : 249 ; usually regarded as *Culicoides*]

geometrica (Clastrier 1959 : 437). (*Lasiohelea*). Reunion Is. (MHNP) [transferred to *F. (Trichohelea)* by Dessart 1963 : 66]

inconspicua (Ingram and Macfie 1924 : 391). (*Lasiohelea*). Ghana. (BMNH) [transferred to *F. (Thyridomyia)* by Wirth *et al.* 1980 : 158]

insignicornis (Macfie 1947 : 29). (*Lasiohelea*). Uganda. (BMNH) [transferred to *F. (Trichohelea)* by Wirth *et al.* 1980 : 158]

ishizuchiensis (Udaka 1959 : 18). (*Lasiohelea*) Japan. (CAEU) [transferred to *F. (Forcipomyia)* by Tokunaga 1960 : 75]

japonica (Tokunaga 1937 : 267). (*Lasiohelea*) Japan. (unknown) [transferred to *F. (Thyridomyia)* by Wirth 1973 : 357]

litoraurea (Ingram and Macfie 1924 : 389). (*Lasiohelea*). Ghana. (BMNH) [transferred to *F. (Thyridomyia)* by Wirth *et al.* 1980 : 158]

maculipes (Goetghebuer 1933 : 135). (*Lasiohelea*). Congo. (MRAC) [transferred to *F. (Caloforcipomyia)* by Dessart 1963 : 87]

maricarmenae Sahuquillo Herraiz and Gil Collado 1982 : 303. Spain. (CPFV) [not *F. (Lasiohelea)* ; probably *F. (Euprojoannisia) titillans* (Winnertz) from the published figures]

marisalae (Vattier and Adam 1966 : 305). (*Lasiohelea*) Gabon. (EMOM) [transferred to *F. (Euforcipomyia)* by Wirth *et al.* 1980 : 154]

nana Macfie 1939 : 171. Brazil (BMNH) [transferred to *F. (Thyridomyia)* by Wirth 1956 : 247]

natalia (de Meillon 1936 : 158). (*Lasiohelea*). S. Africa. (SAIMR) [as *F. (Phytohelea) bacoti* Ingram and Macfie in de Meillon and Wirth 1979 : 190]

pectinunquis (de Meijere 1923 : 138). (*Ceratopogon*). Sumatra. (unknown) [transferred to *Lasiohelea* by Macfie 1934 : 207, transferred to *F. (Neoforcipomyia)* by Tokunaga and Murachi 1959 : 200]

pennambula (Macfie 1932 : 279). (*Lasiohelea*) Maluku. (BMNH) [transferred to *F. (Trichohelea)* by Tokunaga 1959 : 295 ; transferred to *F. (Pterobosca)* by Wirth 1956 : 362]

skiaphila (Clastrier 1960 : 522). (*Lasiohelea*). Congo. (MHNP) [transferred to *F. (Thyridomyia)* by Dessart 1963 : 121]

tipulivora (Macfie 1936 : 229). (*Lasiohelea*). Irian Jaya. (BMNH) [transferred to *F. (Trichohelea)* by Tokunaga 1959-295]

vernocheti (Clastrier 1959 : 439). (*Lasiohelea*). Reunion Is. (MHNP) [transferred to *F. (Euforcipomyia)* by Wirth *et al.* 1980 : 154]

wansoni (Harant and Baur 1946 : 141). (*Lasiohelea*). Congo. (possibly lost) [as *F. (Microhelea) fuliginosa* (Meigen) in Dessart 1962 : 339]

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REFERENCES

- ARNAUD (P.H.), 1956. — The heleid genus *Culicoides* in Japan, Korea and Ryukyu Islands (Insecta : Diptera). *Microentomology*, 21 : 84-207.
- ARNAUD (P.H.) and WIRTH (W.W.), 1964. — A name list of World *Culicoides*, 1956-1962. *Proc. Ent. Soc. Wash.*, 66 : 19-32.
- BOESEL (M.W.), 1937. — Order Diptera. Family Chironomidae. in Carpenter, F.M., Folsom, J.W., Essig, E.O., Kinsey, C.T., Brues, C.T., Boesel, M.W. and Ewing, H.E., Insects and Arachnids from Canadian amber. *Univ. Toronto Stud. geol. Ser.*, 40 : 44-55.
- BOESEL (M.W.), 1948. — *Holoconops* in the Western Lake Erie region (Diptera : Heleidae). *Ohio J. Sci.*, 48 : 69-72.
- BUJANOVA (O.F.), 1962. — Description of a new species of Heleidae. *Lasiohelea sibirica* sp.n. from the Krasnoyarsk Territory. *Med. Parazit.*, 31 : 43-47. [in Russian].
- CARTER (H.F.), 1916. — On three new African midges. *Ann. trop. Med. Parasit.*, 10 : 131-138.
- CARTER (H.F.), 1921. — A revision of the genus *Leptoconops* Skusc. *Bull. ent. Res.*, 12 : 1-28.
- CAVALIERI (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 zool. lilloana*, 18 : 359-365.
- CAVALIERI (F.) and de 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 redescipcion de *L. (L.) petrocchia* Shannon y Del Ponte, 1927. *Physis B. Aires*, 26 : 43-57.
- CHAN (K.L.) and Le ROUX (E.J.), 1970. — New species of *Forcipomyia* (Diptera : Ceratopogonidae) described in all stages. *Canad. Ent.*, 102 : 271-293.
- CHAN (K.L.) and SAUNDERS (L.G.), 1965. — *Forcipomyia (Dacnoforcipomyia) anabaenae*, a new blood-sucking midge from Singapore, described in all stages (Diptera : Ceratopogonidae). *Can. J. Zool.*, 43 : 527-540.
- CHANTHAWANICH (N.) and DELFINADO (M.D.), 1967. — Some species of *Leptoconops* of the Oriental and Pacific regions. *J. Med. Ent.*, 4 : 294-303.
- CLASTRIER (J.), 1959. — Notes sur les Cératopogonidés. VII. Cératopogonidés d'Afrique Occidentale Française (4). *Arch. Inst. Pasteur Algérie*, 37 : 340-383.
- CLASTRIER (J.), 1959. — Notes sur les Cératopogonidés. VIII. Cératopogonidés de l'Île de la Réunion. *Arch. Inst. Pasteur Algérie*, 37 : 412-446.
- CLASTRIER (J.), 1960. — Notes sur les Cératopogonidés. XI — Cératopogonidés de la République du Congo (3). *Arch. Inst. Pasteur Algérie*, 38 : 510-526.
- CLASTRIER (J.), 1972. — Le genre *Leptoconops*, sous-genre *Holoconops* en Afrique du nord (Diptera, Ceratopogonidae). *Arch. Inst. Pasteur Algérie*, 50 : 23-52.
- CLASTRIER (J.), 1973. — Le genre *Leptoconops*, sous-genre *Holoconops* dans le Midi de la France. *Ann. Soc. ent. Fr. (N.S.)*, 9 : 895-920.
- CLASTRIER (J.), 1974. — *Leptoconops (Proleptoconops) hussoni* n. sg., n. sp. du Sahara Algérien septentrional (Diptera, Ceratopogonidae). *Parassitologia*, 16 : 231-238.
- CLASTRIER (J.), 1974. — *Leptoconops (Holoconops) laosensis* n. sp. du sud-est asiatique (Diptera, Ceratopogonidae). *Nouv. Rev. Ent.*, 4 : 71-74.
- CLASTRIER (J.), 1975. — Description de quelques mâles d'*Holoconops* (Dipt. Ceratopogonidae). *Ann. Soc. ent. Fr.*, 11 : 587-607.
- CLASTRIER (J.), 1981. — Description d'un nouveau *Leptoconops* d'Israel (Diptera, Ceratopogonidae). *Nouv. Rev. Ent.*, 11 : 123-126.
- CLASTRIER (J.), 1981. — Note sur deux *Leptoconops* (s. str.) du proche Orient : l'un connu, l'autre nouveau pour la science (Diptera, Ceratopogonidae). *Rev. Fr. Ent.*, (N.S.), 3 : 31-33.
- CLASTRIER (J.), 1981. — Description de trois nouveaux *Holoconops* de la République sud-africaine. *Bull. Soc. ent. France*, 86 : 87-97.
- CLASTRIER (J.), 1983. — Ceratopogonidae des Iles Seychelles (Diptera, Nematocera). *Mém. Mus. nat. Hist. nat.*, N.S., Sér. A., Zoologie, Paris, 126, 83 p.
- CLASTRIER (J.) and COLUZZI (M.), 1973. — *Leptoconops (Leptoconops) bezzii* (Noé, 1905) et *Leptoconops (Leptoconops) noei* n. sp. (Diptera, Ceratopogonidae). *Parassitologia*, 15 : 47-77.
- CLASTRIER (J.) and NEVILL (E.M.), 1984. — *Leptoconops (Leptoconops) demeilloni*, a new species from the Cape Duneveld of South Africa (Diptera, Ceratopogonidae). *J. ent. Soc. sth. Afr.*, 47 : 245-250.
- CLASTRIER (J.) and WIRTH (W.W.), 1978. — The *Leptoconops kerteszi* complex in North America (Diptera : Ceratopogonidae). USDA Tech. Bull. no. 1573, 58 p.
- CLASTRIER (J.), RIOUX (J.A.) and DESCOUS (S.), 1961. — Notes sur les Cératopogonidés XII — Cératopogonidés du Nord-Tchad. *Arch. Inst. Pasteur Algérie*, 39 : 49-98.
- DEBENHAM (M.L.), 1983. — Australian species of the blood-feeding *Forcipomyia* subgenera, *Lasiohelea* and *Dacnoforcipomyia* (Diptera : Ceratopogonidae). *Aust. J. Zool. Suppl. Ser.* no. 95, 61 p.
- MEIJERE (J.C.H. de), 1909. — Blutsaugende micro-Dipteren aus Niederländisch Ostindien. *Tijdschr. Ent.*, 52 : 191-204.
- MEIJERE (J.C.H. de), 1915. — Diptera aus Nord-Neu-Guinea. *Tijdschr. Ent.*, 58 : 98-139.
- MEIJERE (J.C.H. de), 1923. — Ceratopogon-Arten als ectoparasiten anderer Insekten. *Tijdschr. Ent.*, 66 : 137-142.
- MEILLON (B. de), 1936. — Entomological studies. Studies on insects of medical importance in South Africa. Part III. South African Ceratopogonidae. Part II. Some new and unrecorded species. *Publs Sth. Afr. Inst. med. Res.*, 7 : 141-207.
- MEILLON (B. de), 1937. — Studies on insects of medical importance from southern Africa and adjacent territories. Ceratopogonidae. I. Records and species from the Belgian Congo. *Publs Sth. Afr. Inst. med. Res.*, 7 : 328-331.
- MEILLON (B. de), 1959. — New Ceratopogonidae (Diptera : Nematocera) from Africa. *Novos Taxa ent.*, no. 13 : 3-24.
- MEILLON (B. de) and HARDY (F.), 1953. — New records and species of biting insects from the Ethiopian region. *J. ent. Soc. sth. Afr.*, 16 : 17-35.
- MEILLON (B. de) and HARDY (F.), 1954. — New records and species of biting insects from the Ethiopian region — V. *J. ent.*

- Soc. sth. Afr.*, 17 : 62-85.
- MEILLON (B. de) and WIRTH (W.W.), 1979. — A taxonomic review of the subgenus *Phytohelea* of *Forcipomyia* (Diptera : Ceratopogonidae). *Proc. Ent. Soc. Wash.*, 81 : 178-206.
- DESSART (P.), 1962. — Contribution à l'étude des Ceratopogonidae (Diptera). V. Un nouveau synonyme de *Forcipomyia fuliginosa* (Meigen 1818). *Bull. Annl. Soc. r. ent. Belg.*, 98 : 339-340.
- DESSART (P.), 1963. — Contribution à l'étude des Ceratopogonidae (Diptera). VII. Tableaux dichotomiques illustrés pour la détermination des *Forcipomyia* africains. *Mem. Inst. r. Sci. nat. Belg.*, 71 : 1-151.
- DZHAFAROV (S.M.), 1961. — Contribution to the systematics of bloodsucking flies of the genus *Leptoconops* Skuse in Transcaucasia and descriptions of new species. *Izv. Akad. Nauk azerb. SSR ser. Biol. Med. Nauk* n° 1 : 67-76. [in Russian]
- DZHAFAROV (S.M.), 1961. — Description of three species of Heleidae from Asia minor. *Izv. Akad. Nauk azerb. SSR ser. Biol. Med. Nauk* n° 10 : 75-80. [in Russian]
- DZHAFAROV (S.M.), 1962. — A new species of the genus *Lasiohelea* Kieff. (Diptera, Heleidae) from Azerbajdzhan. In a collection of articles, ed. N. Ch. Semedov, Entomol. Sbornik, Inst. Zool., Izdatel'stvo Akad. Nauk Azerbajdzhanskoi, Baku, 1 : 193-200. [in Russian]
- EDWARDS (F.W.), 1928. — Insects of Samoa. Nematocera. Insects Samoa 6, fasc. 2 : 23-108.
- EDWARDS (F.W.), 1933. — XX. Diptera Nematocera from Mount Kinabalu. *J. fed. Malay St. Mus.*, 17 : 223-296.
- ENDERLEIN (G.), 1908. — 2. Ceratopogoninae. Neue Ceratopogoninen aus Südafrika. *Denkschr. med.-naturw. Ges. Jena.*, 13 : 459-461.
- FLOCH (H.) and ABONNENC (E.), 1949. — Sur les Cératopogonides du Vénézuéla. Description de deux espèces nouvelles : *Culicoides lichyi* et *Lasiohelea danaisi*. *Archs Inst. Pasteur Guyane Terr. Inini*, publ. n° 196 : 1-5.
- FORATTINI (O.), 1958. — Nova especie de *Leptoconops* s. str. da Regiao Neotropical. *Revta bras. Ent.*, 8 : 37-41.
- FOX (I.), 1946. — A review of the species of biting midges or *Culicoides* from the Caribbean region. *Ann. entomol. Soc. Amer.*, 39 : 248-258.
- GOETGHEBUER (M.), 1933. — Ceratopogonidae et Chironomidae du Congo Belge. *Rev. Zool. Bot. Afr.*, 24 : 129-151.
- GOETGHEBUER (M.), 1935. — Cératopogonides récoltés par le Dr De Wulf au Congo Belge. *Rev. Zool. Bot. Afr.*, 27 : 145-181.
- GUTSEVICH (A.V.), 1945. — A new *Leptoconops* Skuse (Diptera, Heleidae) from USSR. *Ent. Obozr.* 28 : 124-129. [in Russian]
- GUTSEVICH (A.V.), 1953. — On the biting midges (Diptera, Heleidae) of the Eastern Transcaucasus. *Ent. Obozr.*, 33 : 233-237. [in Russian]
- GUTSEVICH (A.V.), 1960. — Blood-sucking Diptera (Heleidae) of the SSR fauna. *Opred. Faune SSSR* 72 : 130 p. [in Russian]
- GUTSEVICH (A.V.), 1964. — Biting midges of the genus *Leptoconops* (Diptera, Heleidae) in the Alma-Ata region. *Trudy Inst. Zool. Alma-Ata*, 22 : 192-196. [in Russian]
- GUTSEVICH (A.V.), 1973. — Blood-sucking midges (Ceratopogonidae). Fauna SSSR. Insects, Diptera. Acad. Sci., Leningrad, 3, pt. 5 : 269 p. [in Russian]
- HARANT (H.) and BAUR (O.), 1946. — *Lasiohelea wansonii* n. sp., Cératopogonide du Congo Belge. *Arch. Inst. Pasteur Algérie*, 24 : 141-142.
- HARANT (H.) and GALAN (G.), 1944. — Notes sur les Diptères de la région Méditerranéenne. VII. Remarques sur les *Leptoconops* : *Leptoconops lisbonneii* n. sp. *Bull. Soc. Path. exot.*, 37 : 170-172.
- HARANT (H.), HUTTEL (W.) and HUTTEL (N.), 1951. — *Parapterobosca anthropophila* nov. gen., n. sp. Cératopogonide de la Côte d'Ivoire vulnérant pour l'homme. *Ann. Parasit. hum. comp.*, 26 : 468-472.
- HEPPNER (J.B.) and LAMAS (G.), 1982. — Acronyms for world museum collections of insects, with an emphasis on Neotropical Lepidoptera. *Bull. ent. Soc. Am.*, 28 : 305-315.
- HOFFMAN (W.A.), 1926. — Two new species of American *Leptoconops* (Diptera, Chironomidae). *Bull. ent. Res.*, 17 : 133-136.
- HUTTEL (W.) and HUTTEL (N.), 1952. — A propos de *Leptoconops inopinatus*, n. sp. de la région de Montpellier. *Bull. Soc. ent. France*, 57 : 45-47.
- INGRAM (A.) and MACFIE (J.W.S.), 1924. — Notes on some African Ceratopogoninae — species of the genus *Lasiohelea*. *Ann. trop. Med. Parasit.*, 18 : 377-392.
- INGRAM (A.) and MACFIE (J.W.S.), 1931. — Ceratopogonidae. Diptera of Patagonia and South Chile. *Brit. Mus. (Nat. Hist.)*. Part 2, fasc. 4 : 155-232.
- KARSCH (B.), 1886. — *Ceratopogon crudelis*. *Berl. ent. Z.*, 30 : XVIII (Proc.).
- KIEFFER (J.J.), 1908. — Description d'une espèce nouvelle de Chironomides d'Égypte. *Annl. hist.-nat. Mus. natn. hung.*, 6 : 576-577.
- KIEFFER (J.J.), 1911. — The Percy Sladen Trust expedition to the Indian Ocean in 1905 under the leadership of Mr J. Stanley Gardiner, M.A. III. Part III no. XV — Diptera, Chironomidae der Seychellen-Inseln, aus der Sammlung von Mr H. Scott. *Trans. Linn. Soc. lond.*, 14 : 331-366.
- KIEFFER (J.J.), 1915. — Über dänische Chironomiden. *Ent. Meddr.*, 10 : 280-284.
- KIEFFER (J.J.), 1917. — Chironomides d'Australie conservés au Musée National Hongrois de Budapest. *Annl. hist.-nat. Mus. natn. hung.*, 15 : 175-228.
- KIEFFER (J.J.), 1918. — Chironomides d'Afrique et d'Asie conservés au Museum National Hongrois de Budapest. *Annl. hist.-nat. Mus. natn. hung.*, 16 : 31-136.
- KIEFFER (J.J.), 1919. — Chironomides d'Europe conservés au Musée National Hongrois de Budapest. *Annl. hist.-nat. Mus. natn. hung.*, 17 : 1-160.
- KIEFFER (J.J.), 1921. — Sur quelques Diptères piqueurs de la tribu des Ceratopogoninae. *Arch. Inst. Pasteur Afr. N.*, 1 : 107-115.
- KIEFFER (J.J.), 1921. — Nouvelles observations sur les Diptères piqueurs de la tribu des Ceratopogoninae. *Arch. Inst. Pasteur Afr. N.*, 1 : 262-268.
- KIEFFER (J.J.), 1921. — Chironomides de Courlande. *ann. Soc. Sci. Bruxelles*, 40 : 275-298.
- KIEFFER (J.J.), 1923. — Ceratopogonines recueillies au Sahara Constantinien. *Arch. Inst. Pasteur Algérie*, 1 : 654-683.
- KIEFFER (J.J.), 1924. — Quelques nouveaux chironomides piqueurs de l'Europe Centrale. *Arch. Inst. Pasteur Algérie*, 2 : 391-408.

- KIEFFER (J.J.), 1925. — Nouveaux genres et nouvelles espèces de Chironomidae piqueurs. *Arch. Inst. Pasteur Algérie*, 3 : 405-430.
- KIEFFER (J.J.), 1925. — Diptères (Nématocères piqueurs) : Chironomidae Ceratopogonidae. Faune de France 11. Le Chevalier, Paris, 139 p.
- KONURBAEV (E.O.), 1965. — Biting midges (Diptera, Heleidae) of the Issyk-kul Depression in Kirgizia. *Ent. Obozr.*, 44 : 132-140. [in Russian]
- LANE (J.), 1945. — Redescrção de Ceratopogonideos Neotropicas (Diptera : Ceratopogonidae). *Revta. Ent., Rio de J.*, 16 : 357-372.
- LANE (J.), 1947. — A biologia e taxonomia de algumas espécies dos grupos *Forcipomyia* e *Culicoides*. *Archs Fac. Hig. e Saude Publ. Univ. Sao Paulo*, 1 : 159-170.
- LANE (R.P.), 1984. — 11. Host specificity of ectoparasites midges on butterflies. Pp. 105-108 in : *The Biology of Butterflies*. Eds R.I. Vane-Wright and P.R. Ackery. Academic Press, London, 429 p.
- LANGERON (M.), 1913. — *Mycterotypus laurae*. Description d'une variété nouvelle (*M. laurae*, var. *peneti*). *Archs Parasit.*, 16 : 282-301.
- LEE (D.J.), 1948. — Australasian Ceratopogonidae (Diptera, Nematocera). Part III. The *Leptoconops* group of genera. *Proc. L. Soc. N.S.W.*, 72 : 332-338.
- LEE (T.S.), 1975. — Biting midges of Kwangtung and Kwangsi, China (Diptera : Ceratopogonidae). *Acta ent. sin.*, 18 : 433-436. [in Chinese]
- LEE (T.S.), 1979. — Biting midges of Tibet, China (Diptera : Ceratopogonidae). *Acta ent. sin.*, 22 : 98-106. [in Chinese]
- LUNDSTRÖM (C.), 1910. — Beiträge zur Kenntniss der Dipteren Finlands. VI. Chironomidae. *Acta Soc. Fauna Flora fenn.*, 34 : 1-47.
- LUTZ (A.), 1913. — Contribuição para o estudo des Ceratopogoninas hematofagos do Brazil. *Mems Inst. Oswaldo Cruz*, 5 : 45-73.
- LUTZ (A.), 1914. — Contribuição para o conhecimento das Ceratopogoninas do Brazil. *Mems. Inst. Oswaldo Cruz*, 6 : 81-99.
- MACFIE (J.W.S.), 1932. — Ceratopogonidae from the wings of dragonflies. *Tijdschr. Ent.*, 75 : 265-283.
- MACFIE (J.W.S.), 1933. — Ceratopogonidae from the Society Islands. *Bull. Bernice P. Bishop Mus.* n° 113 : 75-80.
- MACFIE (J.W.S.), 1934. — Fauna Sumatrensis. Bijdrage n° 75, Ceratopogonidae (Diptera). *Tijdschr. Ent.*, 77 : 202-231.
- MACFIE (J.W.S.), 1934. — Report on a collection of Ceratopogonidae from Malaya. *Ann. trop. Med. Parasit.*, 28 : 177-194.
- MACFIE (J.W.S.), 1934. — Report on a collection of Ceratopogonidae from Malaya. *Ann. trop. Med. Parasit.*, 28 : 279-293.
- MACFIE (J.W.S.), 1935. — Ceratopogonidae (Dipt.) from the River Amazon. *Stylops*, 4 : 49-56.
- MACFIE (J.W.S.), 1935. — A new Ceratopogonid (Dipt.) from British Guiana. *Stylops*, 4 : 265.
- MACFIE (J.W.S.), 1936. — Four species of Ceratopogonidae (Diptera) from the wings of insects. *Proc. R. ent. Soc. Lond. (B)*, 5 : 227-230.
- MACFIE (J.W.S.), 1939. — A report on a collection of Brazilian Ceratopogonidae (Dipt.): *Revta Ent. Rio de J.*, 10 : 137-219.
- MACFIE (J.W.S.), 1947. — A new species of *Lasiohelea* (Diptera, Ceratopogonidae) from Uganda. *Proc. R. ent. Soc. Lond. (B)*, 16 : 29-30.
- MAYER (K.), 1934. — *Forcipomyia (Lasiohelea) chrysopae* n. sp. und *Forcipomyia crudelis* Karsch, zwei Blutsauger an Insekten. *Arb. morph. taxon. Ent. Berl.*, 1 : 259-260.
- MOLOTOVA (L.A.), 1967. — New data on biting midges of the *Leptoconops* genus of Turkmenia (with the description of a new species). *Zool. Zh.*, 46 : 626-628. [in Russian]
- NOÉ (G.), 1905. — Un nuovo genere appartenente alla famiglia Chironomidae. *Atti Accad. naz. Lincei Rc. ser. 5*, 14 : 114-120.
- ORTIZ (I.), 1952. — Los insectos de genero *Leptoconops* Skuse, 1889 (Diptera, Ceratopogonidae) en Venezuela — descripción de una nueva especie : *Leptoconops (L.) venezuelensis* y redescrpcion de la hembra de *Leptoconops (L.) torrens* (Townsend, 1893). *Revta Sanid. Asist. soc.*, 17 : 163-171.
- PATTON (W.S.), 1920. — Some notes on the arthropods of medical and veterinary importance in Mesopotamia, and on their relation to disease. Part IV — Some Mesopotomian Nematocera of economic importance. *Indian, J. Med. Res.*, 8 : 245-252.
- PECHUMAN (L.L.) and WIRTH (W.W.), 1961. — A new record of Ceratopogonidae (Diptera) feeding on frogs. *J. Parasit.*, 47 : 600.
- RONDANI (C.), 1875. — Muscaria exotica Musei Civici Januensis observata et distincta a Prof. Camillo Rondani. Fragmentum III. *Annali Mus. civ. Stor. nat. Genova*, 7 : 421-464.
- SAHUQUILLO HERRAIZ (C.) and GIL COLLADO (J.), 1982. — Dos nuevos ceratopogonidos (Diptera, Ceratopogonidae) capturados en Valencia : *Forcipomyia (Lasiohelea) maricarmenae* nov. sp. y *Atrichopogon minutus hortensis* nov. ssp. *Eos*, 58 : 303-309.
- SAUNDERS (L.G.), 1956. — Revision of the genus *Forcipomyia* based on characters of all stages (Diptera, Ceratopogonidae). *Can. J. Zool.*, 34 : 657-705.
- SAUNDERS (L.G.), 1964. — New species of *Forcipomyia* in the *Lasiohelea* complex described in all stages (Diptera, Ceratopogonidae). *Can. J. Zool.*, 42 : 463-482.
- SENIOR WHITE (R.), 1929. — A new biting Ceratopogonine from India. *Archos Esc. méd-cir. (Nova) Goa ser. A*, fasc. 6 : 1-2.
- SHANNON (R.C.) and DEL PONTE (E.), 1927. — Cuatro notas sobre especies nuevas de Dipteros, Nematoceros, Hematofagos o no, de la Republica Argentina. *Revta. Inst. bact., B. Aires*, 4 : 724-736.
- SHIRAKI (T.), 1913. — Inquiry into harmful insects in general. Special report n° 8. Taiwan Sotokufu Noji Skikenjo Tokubetsu Hokoku : 286-297. [in Japanese and English]
- SKUSE (F.A.A.), 1889. — Diptera of Australia Pt. XI — The Chironomidae. *Proc. L. Soc. N.S.W.*, 4 : 215-311.
- SMEE (L.), 1966. — A revision of the subfamily Leptoconopinæ Noé (Diptera : Ceratopogonidae) in Australia. *Austr. J. Zool.*, 14 : 993-1025.
- STORA (R.), 1936. — Family Ceratopogonidae. Pp. 31-38 in Frey, R., *Die Dipterenfauna der Kanarischen Inseln und ihre Probleme. Commentat. biol. Helsingf.*, 6 : 1-237.
- SUN (W.K.C.), 1968. — Biting midges (Diptera : Ceratopogonidae) from Kinmen (Quemoy). *Biol. Bull. Tunghai Univ.*, 36 : 1-6.
- TAKAOKA (H.) and HAYASHI (Y.), 1977. — A new subspecies of

- the genus *Leptoconops* from Amami-Oshima, Japan (Ceratopogonidae : Diptera). *Jap. J. San. Zool.*, 28 : 385-388.
- TAYLOR (F.H.), 1918. — Studies in Phlebotomic Diptera, n° 1. New species of Simuliidae and Chironomidae. *Aust. Zool.*, 1 : 167-170.
- TOKUNAGA (M.), 1937. — Sandflies (Ceratopogonidae, Diptera) from Japan. *Tenthredo*, 1 : 233-338.
- TOKUNAGA (M.), 1937. — Supplementary report on Japanese sandflies (Ceratopogonidae, Diptera). *Tenthredo*, 1 : 455-459.
- TOKUNAGA (M.), 1939. — Three blood-sucking midges attacking lacewing flies and a lepidopterous larva. Vol. Jubil. Sadao Yoshida, 2 : 369-373.
- TOKUNAGA (M.), 1940. — Biting midges from Japan and neighbouring countries, including Micronesian Islands, Manchuria, North China and Mongolia (Diptera, Ceratopogonidae). *Tenthredo*, 3 : 101-165.
- TOKUNAGA (M.), 1940. — Biting midges from the Micronesian Islands (Diptera, Ceratopogonidae) with biological notes by Teiso Esaki. *Tenthredo*, 3 : 166-186.
- TOKUNAGA (M.), 1940. — Ceratopogonidae and Chironomidae from the Micronesian Islands. *Philipp. J. Sci.*, 71 : 205-230.
- TOKUNAGA (M.), 1959. — New Guinea biting midges. *Pacific Insects*, 1 : 177-313.
- TOKUNAGA (M.), 1960. — Notes on Biting Midges I. *Akitu*, 9 : 72-76.
- TOKUNAGA (M.), 1963. — New Guinea biting midges (Diptera : Ceratopogonidae), 3. *Pacific Insects*, 5 : 211-279.
- TOKUNAGA (M.) and MURACHI (E.K.), 1959. Insects of Micronesia. Diptera : Ceratopogonidae. *Insects Micronesia*, 12 : 103-434.
- TONNOIR (A.L.), 1923. — A new biting Ceratopogonid from New Zealand. *Bull. ent. Res.*, 14 : 443-444.
- TOWNSEND (C.H.T.), 1893. — An interesting blood-sucking gnat of the family Chironomidae. *Psyche*, 6 : 369-371.
- UDAKA (M.), 1959. — The Ceratopogonidae of the Ishizuchi Range, Shikoku, Japan (Diptera). *Trans. Shikoku ent. soc.*, 6 : 17-22.
- VATTIER (G.) and ADAM (J.P.), 1966. — Captures de Ceratopogonidae (Diptera) dans des grottes de la République Gabonaise. *Biologia Gabon.*, 2 : 295-309.
- WEISS (A.), 1912. — *Mycterotypus laurae* n. sp., Chironomide nouveau du Sud Tunisien. *Arch. Inst. Pasteur Tunis*, 1 : 25-32.
- WILLISTON (S.W.), 1896. — On the Diptera of St Vincent (West Indies). *Trans. R. ent. Soc. Lond.*, 29 : 253-308.
- WINNERTZ (J.), 1852. — Beitrag zur Kenntniss der Gattung *Ceratopogon* Meigen. *Linn. ent.*, 6 : 1-80.
- WIRTH (W.W.), 1951. — A new biting midge of the genus *Leptoconops* from Florida, with new records of other American species (Diptera, Heleidae). *Proc. Ent. Soc. Wash.*, 53 : 281-284.
- WIRTH (W.W.), 1951. — New species and records of Virginia Heleidae. *Proc. Ent. Soc. Wash.*, 53 : 313-326.
- WIRTH (W.W.), 1952. — The Heleidae of California. *Univ. Calif. Publ. Entom.*, 9 : 95-266.
- WIRTH (W.W.), 1956. — The Heleid midges involved in the pollination of rubber trees in America (Diptera, Heleidae). *Proc. Ent. Soc. Wash.*, 58 : 241-250.
- WIRTH (W.W.), 1956. — New species and records of biting midges ectoparasitic on insects (Diptera, Heleidae). *Ann. Entomol. Soc. Amer.*, 49 : 356-364.
- WIRTH (W.W.), 1965. — Family Ceratopogonidae. Pp. 121-142, in Stone, A., Sabrosky, C.W., Wirth, W.W., Foote, R.H. and Coulson, J.R., eds. Catalog of the Diptera of America North of Mexico, Agriculture Handbook n° 276, Agric. Res. Service, USDA : 1696 p.
- WIRTH (W.W.), 1973. — Family Ceratopogonidae (Heleidae). Pp. 346-348, in Delfinado, M.D. and Hardy, D.E., eds. A Catalogue of the Diptera of the Oriental Region, vol. 1 Univ. Press of Hawaii, 1 : 618 p.
- WIRTH (W.W.) and ATCHLEY (W.R.), 1973. — A review of the North American *Leptoconops* (Diptera : Ceratopogonidae). *Grad. Studies Texas Tech. Univ.* n° 5 : 1-57.
- WIRTH (W.W.) and LEE (D.J.), 1958. — Australasian Ceratopogonidae (Diptera, Nematocera). Pt. 8 : a new genus from Western Australian attacking man. *Proc. Li. Soc. N.S.W.*, 83 : 337-339.
- WIRTH (W.W.), de MEILLON (B.) and HAESELBARTH (E.), 1980. — 10. Family Ceratopogonidae. Pp. 150-174, in Crosskey, R.W., Cogan, B.H., Freeman, P., Pont, A.C., Smith, K.G.V. and Oldroyd, H., eds. Catalogue of the Diptera of the Afrotropical region. British Museum (Natural History), London : 1 437 p.
- YU (I.H.), 1963. — A new species of *Leptoconops* from China. *L. (Holoconops) yunhsienensis* (Diptera, Ceratopogonidae). *Acta zool. sin.*, 15 : 450-453. [in Chinese]
- YU (Y.X.), 1985. — Description of *Leptoconops (Holoconops) tarimensis* sp. nov. (Diptera : Ceratopogonidae). *Acta zootaxon. sin.*, 10 : 406-408. [in Chinese]
- YU (Y.X.) and LIU (K.N.), 1981. — Two new species of *Lasiohelea* from Sichuan, China (Diptera : Ceratopogonidae). *Zool. Res.*, 2 : 61-66. [in Chinese]
- YU (Y.X.) and LIU (K.N.), 1982. — Seven new species of *Lasiohelea* in China (Diptera : Ceratopogonidae). *Acta zootaxon. sin.*, 7 : 300-311. [in Chinese]
- YU (Y.X.) and WANG (T.H.), 1982. — On two new species and two new records of *Lasiohelea* from China. *Entomotaxonomia*, 4 : 19-21. [in Chinese]
- YU (Y.X.) and ZHANG (Z.C.), 1982. — Three new species of *Lasiohelea* from Minjiang River basin, Sichuan (Diptera : Ceratopogonidae). *Acta zootaxon. sin.*, 7 : 187-192. [in Chinese]
- YU (Y.X.), LIU (K.N.) and WEN (X.M.), 1985. — On two new species of *Lasiohelea* (Diptera : Ceratopogonidae). *Acta zootaxon. sin.*, 10 : 72-75. [in Chinese]
- ZILAHÍ (G.), 1934. — Beiträge zur Fliegenfauna Bugaricens. 1. Chironomiden. *Mitt. bulg. ent. Ges.*, 8 : 152-158.