



Biting midges (Diptera: Ceratopogonidae) of Poland: a checklist

Wykaz kuczmanów Polski (Diptera: Ceratopogonidae)

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ABSTRACT. With 220 species of biting midges in 21 genera, this checklist includes 13 species more than the previous one. Haematophagous biting midges feeding on mammalian and avian blood include 52 species from the genus *Culicoides* and one from *Forcipomyia*. *Ceratopogon naccinervis* BORKENT, in BORKENT & WIRTH 1997 is recorded for the first time in the Polish fauna.

KEY WORDS: faunistics, Poland, *nomina dubia*, new record

INTRODUCTION

Biting midges (Diptera: Ceratopogonidae) are small nematoceros dipterans that are common in all kinds of aquatic, semiaquatic and moist terrestrial habitats worldwide. The apneustic larvae of biting midges are easily distinguished from chironomids by the heavily sclerotized, unique pharyngeal apparatus located in the middle of the head capsule. Adult biting midges have two medial wing veins M1 and M2 and relatively short fore legs; females are usually armed with functional biting mouthparts. The antennae of males usually have long appressed plumose setae. In contrast, the median vein in adult Chironomidae is always single, the fore legs are usually long, the female mouthparts greatly reduced and the male antennae have perpendicular plumose setae (SZADZIEWSKI 2007).

Larvae of biting midges are common inhabitants of many types of aquatic and semiaquatic habitats. They live mostly in shallow waters of lakes, ponds, rivers, streams, springs, pools as well as wet margins of inland water bodies, marshes, pit bogs, wet meadows, mosses and mats of algae on soil, rocks or floating in water. In rivers largely occur the same groups of biting midges which live in lakes and ponds. It is believed that only in the subgenus *Atrichopogon* (*Psammopogon*) some rheophilic species occurring exclusively in cold streams exist (NIELSEN 1951). Biting midges of the genera *Culicoides*, *Dasyhelea*, *Forcipomyia*,

Atrichopogon and *Bezzia* are also common in saline inland or coastal habitats. For example, *Culicoides longicollis* is an aquatic halobiont, whose larvae live in filamentous algae of strongly mineralized inland small water bodies in Central Poland (SZADZIEWSKI 1983). Many biting midge species of the genera *Forcipomyia* and *Atrichopogon* and some *Culicoides* live in typical terrestrial habitats such as rotting wood, plant debris, under bark, in macrofungi, in cow and horse dung, rotting fungi and ant nests. The larvae of *Dasyhelea flavifrons*, *Culicoides semimaculatus* and *C. flavipulicaris* are typical inhabitants of tree holes and sap exuding from various trees (GLUKHOVA 1989, DOMINIAK 2012), although the latter species is also known to occur in mud rich in organic matters and watering channels (USLU & DIK 2007).

The larvae of the subfamily Ceratopogoninae are mostly predaceous, consuming eggs and larvae of chironomids, mosquitoes, trichoptera, nematodes, rotifers, annelids, protozoans and other small invertebrates. They also feed on microalgae, dead insect larvae, fungi, detritus and bacteria. The larvae of Dasyheleinae and Forcipomyiinae are saprophagous: they eat decomposed organic plant and fungal debris, as well as filamentous algae and diatoms (SZADZIEWSKI 2007).

The feeding habits of adult biting midges are highly diversified. Haematophagy and completely functional mouthparts are known only in females. Males feed only on water and sugar in flower nectar and honeydew. Both sexes of all species of *Dasyhelea* and many of *Forcipomyia* feed exclusively on flower nectar. Female biting midges consume nectar as a supplementary protein meal necessary for egg development. Some haematophagous species are capable of ovipositing the first clutch of eggs without feeding on blood (autogeny) but do require a protein meal to initiate subsequent ovarian cycles (GLUKHOVA 1989).

Females of *Culicoides* and *Forcipomyia (Lasiohelea) sibirica* (BUYANOVA, 1962) feed on the blood of mammals and birds and are often serious pests, especially in mountain areas (GLUKHOVA 1989). Another species of *Lasiohelea*, i.e. *F. (L.) velox* (WINNERTZ, 1852), is a bloodsucking parasite attacking amphibians and spreading a filarial nematode *Icosiella neglecta* (DIESING, 1851) among frogs (SZADZIEWSKI 1986). Haematophagous biting midges are vectors of pathogenic arboviruses, filarial parasites and protozoan blood parasites in frogs, birds and mammals. Some species of *Forcipomyia* and *Atrichopogon* are parasites of the larvae and adults of larger insects (butterflies, beetles, neuroptera), feeding on their haemolymph. Biting midges of the subgenus *Atrichopogon (Melohelea)* are cantharidophilous as they feed on the haemolymph of beetles producing cantharidin. Females of *Atrichopogon pavidus* are pollinivorous as they obtain proteins and fat-rich food from the pollen grains of honeysuckle (*Lonicera*). Females of other species of the subfamily Ceratopogoninae, apart from *Culicoides*, are predators on the adults of small insects, usually male chironomids and small Ephemeroptera. They inject into their prey a saliva rich in proteolytic enzymes which dissolves tissues, and then suck out the resulting digested fluid. Within the tribe Sphaeromiini, females often kill and eat males during copulation (SZADZIEWSKI et AL. 1997, BORKENT et AL. 2009).

Ceratopogonidae belong to the group of insects with a well-known evolution based on a rich fossil record (SZADZIEWSKI 1996), while the recent World fauna is also quite rich and comprises over 6 000 extant species (BORKENT 2016). Almost 600 valid species names have been reported from Europe (SZADZIEWSKI et AL. 2013).

The previous checklist of the Polish fauna contained 207 species (SZADZIEWSKI 2007). To that list we have added species from the following genera: *Alluaudomyia* (SZADZIEWSKI et AL.

2015, one species described from Poland as new to science), *Atrichopogon* (DOMINIAK et AL. 2007), *Bezzia* (DOMINIAK & SZADZIEWSKI 2008), *Ceratopogon* (DOMINIAK & SZADZIEWSKI 2008, present record), *Culicoides* (DOMINIAK & SZADZIEWSKI 2008, KIRKEBY & DOMINIAK 2014), *Dasyhelea* (DOMINIAK & SZADZIEWSKI 2008), *Forcipomyia* (DOMINIAK & MICHALCZUK 2009, ALWIN & SZADZIEWSKI 2013, DOMINIAK et AL. 2015), *Monohalea* (DOMINIAK & MICHALCZUK 2009) and *Stilobezzia* (ALWIN & SZADZIEWSKI 2012).

The present checklist of the biting midges of Poland includes 220 species in 21 genera. The species list still contains two doubtful names: *Atrichopogon longiserrus* (KIEFFER, 1921), and *Atrichopogon singularis* (KIEFFER, 1921) (*nomina dubia*), described from Polish Silesia. Their descriptions are incomplete, and the type specimens were lost during a fire in Budapest in 1956. *Ceratopogon naccinervis* BORKENT, in BORKENT & WIRTH 1997 is recorded for the first time in the Polish fauna. Poland with 220 species of biting midges reported is among the best studied countries in Europe. More species are reported only from Germany (256) and France (241). In other relatively well studied countries lower number of species is reported, for example in Estonia – 184, Czechia – 175, Great Britain – 169, and Slovakia – 137 (SZADZIEWSKI et AL. 2013).

CHECKLIST

Order Diptera LINNAEUS, 1758

Family Ceratopogonidae NEWMAN, 1834

Subfamily Forcipomyiinae LENZ, 1934

***Atrichopogon* KIEFFER, 1906 (23)**

***Atrichopogon* (*Atrichopogon* KIEFFER, 1906) (11)**

- *aethiops* (GOETGHEBUER, 1920) (*Kempia*)

- *alveolatus* NIELSEN, 1951 (*Atrichopogon*)

- *bargaensis* REMM, 1972 (*Atrichopogon*)

- *brunnipes* (MEIGEN, 1804) (*Ceratopogon*)

Syn.: *longinervis* KIEFFER, 1919; *semiensis* REMM, 1972

- *fuscus* (MEIGEN, 1804) (*Ceratopogon*)

Syn.: *fuscipes* ZETTERSTEDT, 1850; *fossicola* KIEFFER, 1922

- *infuscus* GOETGHEBUER, 1929 (*Atrichopogon*)

- *longicalcar* REMM, 1961 (*Atrichopogon*)

- *longiserrus* (KIEFFER, 1921) (*Kempia*) [*nomen dubium*]

- *minutus* (MEIGEN, 1830) (*Ceratopogon*)

Syn.: *fortiserrus* KIEFFER, 1924; *turficola* KIEFFER, 1925; *parviforceps* TOKUNAGA, 1940

- *pavidus* (WINNERTZ, 1852) (*Ceratopogon*)

Syn.: *pollinivorus* DOWNES, 1955

- *singularis* (KIEFFER, 1921) (*Kempia*) [*nomen dubium*]

***Atrichopogon* (*Lophomyidium* CORDERO, 1929) (2)**

- *fuscus* (COQUILLET, 1901) (*Ceratopogon*)

Syn.: *polydactylus* NIELSEN, 1951

- *rostratus* (WINNERTZ, 1852) (*Ceratopogon*)

Syn.: *transversalis* KIEFFER, 1918; *ventralis* KIEFFER, 1918; *homopterus* KIEFFER, 1919; *coracellus* KIEFFER, 1919; *nigriventris* KIEFFER, 1919; *putredinis* KIEFFER, 1922

Atrichopogon (Meloehalea WIRTH, 1956) (5)

- *lucorum* (MEIGEN, 1818) (*Ceratopogon*)

Syn.: *sylvaticus* WINNERTZ, 1852; *setosipennis* KIEFFER, 1911; *bidentatus* KIEFFER, 1924; *semnitidus* GOETGHEBUER, 1947

- *meloesugans* KIEFFER, 1922 (*Atrichopogon*)

- *oedemerarum* STORÅ, 1939 (*Atrichopogon*)

- *orbicularis* KIEFFER, 1919 (*Atrichopogon*)

- *winnertzi* GOETGHEBUER, 1922 (*Atrichopogon*)

Syn.: *torgnyensis* GOETGHEBUER, 1949

Atrichopogon (Psammopogon REMM, 1979) (2)

- *flaveolus* ZILAHY-SEBESS, 1936 (*Atrichopogon*)

- *muelleri* (MÜLLER, 1905) (*Ceratopogon*)

Syn.: *muelleri* KIEFFER, 1906; *cornutus* NIELSEN, 1951; *globularis* MAYER, 1934

Atrichopogon (Psilokempia ENDERLEIN, 1936) (3)

- *appendiculatus* (GOETGHEBUER, 1920) (*Kempia*)

Syn.: *armativentris* KIEFFER, 1923; *adjacens* KIEFFER, 1924

- *forcipatus* (WINNERTZ, 1852) (*Ceratopogon*)

Syn.: *silesiacus* KIEFFER, 1919; *hamifera* GOETGHEBUER, 1920

- *maculatus* (LUNDSTRÖM, 1910) (*Ceratopogon*)

Syn.: *avastensis* REMM, 1959; *hamulatus* REMM, 1971

Forcipomyia MEIGEN, 1818 (38)

Forcipomyia (Caloforcipomyia SAUNDERS, 1956) (1)

- *glauca* MACFIE, 1934 (*Forcipomyia*)

Syn.: *monilis* GOETGHEBUER, 1934; *diversipes* GOETGHEBUER, 1936; *splendida* WIRTH, 1951

Forcipomyia (Euprojoannisia BRÉTHES, 1914) (5)

- *alacris* (WINNERTZ, 1852) (*Ceratopogon*)

- *borealis* REMM, 1966 (*Forcipomyia*)

- *palustris* (MEIGEN, 1804) (*Ceratopogon*)

Syn.: *hirtipennis* MALLOCH, 1915; *turfacea* KIEFFER, 1925

- *phlebotomoides* BANGERTER, 1933 (*Forcipomyia*)

Syn.: *subsaltans* REMM, 1961

- *titillans* (WINNERTZ, 1852) (*Ceratopogon*)

Syn.: *divaricatus* WINNERTZ, 1852; *maricarmenae* SAHUQUILLO & GIL COLLADO, 1982

Forcipomyia (Forcipomyia MEIGEN, 1818) (17)

- *altaica* REMM, 1972 (*Forcipomyia*)

- *bipunctata* (LINNAEUS, 1767) (*Tipula*)

Syn.: *trichopterus* MEIGEN, 1804; *ambigua* MEIGEN, 1804; *geniculatus* GUÉRIN, 1833; *palmensis* SANTOS ABREU, 1918; *squamaticrus* KIEFFER, 1919; *tenuisquama* KIEFFER, 1924; *laguncula* KIEFFER, 1925; *flavipubens* GOETGHEBUER, 1927

- *brevipennis* (MACQUART, 1826) (*Ceratopogon*)

Syn.: *lateralis* BOUCHÉ, 1834; *specularis* COQUILLET, 1901; *coprophila* KIEFFER, 1914; *disticta* KIEFFER, 1919; *hirtidorsum* KIEFFER, 1919; *nigrimanus* KIEFFER, 1919; *bifilis* KIEFFER, 1922; *subnigra* TOKUNAGA, 1940

- *ciliata* (WINNERTZ, 1852) (*Ceratopogon*)
Syn.: *brunnipes* PERRIS, 1847; *perrisi* KIEFFER, 1901; *boleti* KIEFFER, 1901; *turfosa* KIEFFER, 1925; *canicularis* GOETGHEBUER, 1948; *zlatensis* DAMIAN-GEORGESCU, 1972
- *costata* (ZETTERSTEDT, 1838) (*Ceratopogon*)
Syn.: *piceus* WINNERTZ, 1852; *latipalpis* KIEFFER, 1901; *meinerti* KIEFFER, 1915; *corticicola* KIEFFER, 1919; *turficola* KIEFFER, 1925
- *hygrophila* KIEFFER, 1925 (*Forcipomyia*)
Syn.: *sphagnicola* KIEFFER, 1925; *occidentalis* WIRTH, 1952
- *kaltenbachi* (WINNERTZ, 1852) (*Ceratopogon*)
- *nigra* (WINNERTZ, 1852) (*Ceratopogon*)
Syn.: *sphagnorum* KIEFFER, 1925
- *nigrans* REMM, 1962 (*Forcipomyia*)
- *pallida* (WINNERTZ, 1852) (*Ceratopogon*)
- *pulchrithorax* EDWARDS, in SAUNDERS 1924 (*Forcipomyia*)
- *radicicola* EDWARDS, in SAUNDERS 1924 (*Forcipomyia*)
Syn.: *padi* REMM, 1979
- *regula* (WINNERTZ, 1852) (*Ceratopogon*)
Syn.: *metatarsis* TOKUNAGA, 1940; *longimaculata* TOKUNAGA, 1940
- *sahariensis* KIEFFER, 1923 (*Forcipomyia*)
Syn.: *armaticrus* KIEFFER, 1923; *tuzeti* HUTTEL & HUTTEL, 1952; *acanthophora* REMM, in HAVELKA 1976; *onusta* REMM, 1980
- *sphagnophila* KIEFFER, 1925 (*Forcipomyia*)
Syn.: *solonensis* WIRTH, 1951; *oreophila* REMM, 1972
- *squamigera* KIEFFER, in THIENEMANN & KIEFFER 1916 (*Forcipomyia*)
Syn.: *apricans* (KIEFFER, 1919)
- *tenuis* (WINNERTZ, 1852) (*Ceratopogon*)
- Forcipomyia (Lasiohelea KIEFFER, 1921) (2)***
- *sibirica* (BUYANOVA, 1962) (*Lasiohelea*)
- *velox* (WINNERTZ, 1852) (*Ceratopogon*)
Syn.: *halteratus* WINNERTZ, 1852; *nitens* KIEFFER, 1919; *pilosipennis* KIEFFER, 1919; *hungarica* KIEFFER, 1921; *decrescens* KIEFFER, 1924; *silesiae* KIEFFER, 1925; *montschadskyi* DZHAFAROV, 1962
- Forcipomyia (Lepidhelea KIEFFER, 1917) (1)***
- *tibialis* REMM, 1961 (*Forcipomyia*)
- Forcipomyia (Microhelea KIEFFER, 1917) (1)***
- *fuliginosa* (MEIGEN, 1818) (*Ceratopogon*)
Syn.: *villosa* ZETTERSTEDT, 1850; *crudelis* KARSCH, 1886; *hirtipes* DE MEJERE, 1907; *brevimana* LUNDSTRÖM, 1910; *inornatipennis* AUSTEN, 1912; *erucicida* KNAB, 1914; *crudelis* KNAB, 1914; *coquilletti* KIEFFER, 1917; *tropicus* KIEFFER, 1917; *obscura* SANTOS ABREU, 1918; *alboclavatus* KIEFFER, 1919; *canaliculata* GOETGHEBUER, 1920; *nilotheres* MACFIE, 1924; *ornaticrus* INGRAM & MACFIE, 1924; *atripennis* GOETGHEBUER, 1935; *auripila* GOETGHEBUER, 1935; *curtimana* GOETGHEBUER, 1935; *grisescens* GOETGHEBUER, 1935; *vicina* GOETGHEBUER, 1935; *longiradialis* TOKUNAGA, 1940; *takagii* TOKUNAGA, 1941; *wasoni* HARANT & BAUR, 1946; *brookmani* WIRTH, 1952; *santosi* REMM, 1981
- Forcipomyia (Panhelea REMM, 1980) (1)***
- *aristolochiae* (RONDANI, 1860) (*Ceratopogon*)
Syn.: *brevicubitus* GOETGHEBUER, 1920; *pontica* REMM, in REMM & ZHOGOLEV 1968

***Forcipomyia (Pterobosca) MACFIE, 1940* (1)**

- *paludis* (MACFIE, 1936) (*Pterobosca*)

***Forcipomyia (Synthyridomyia) SAUNDERS, 1956* (3)**

- *acidicola* (TOKUNAGA, 1937) (*Lasiohelea*)

Syn.: *minuta* GOETGHEBUER, 1947; *colemani* WIRTH, 1952

- *knockensis* GOETGHEBUER, 1938 (*Forcipomyia*)

Syn.: *bequaerti* GOETGHEBUER, 1942; *abludens* REMM, in REMM & ZHOGOLEV 1968

- *murina* (WINNERTZ, 1852) (*Ceratopogon*)

Syn.: *abdominalis* SANTOS ABREU, 1918; *aurosparsum* KIEFFER, 1919; *sulfurea* KIEFFER, 1923; *hirtipalpis* KIEFFER, 1924; *sate* KIEFFER, 1925; *longitarsis* TOKUNAGA, 1940; *moascari* MACFIE, 1943; *attonsa* GOETGHEBUER, 1950; *tokunagai* WIRTH, 1973; *submurina* REMM, 1980

***Forcipomyia (Thyridomyia) SAUNDERS, 1925* (3)**

- *litoraurea* (INGRAM & MACFIE, 1924) (*Lasiohelea*)

Syn.: *minutissima* REMM, 1961

- *monilicornis* (COQUILLET, 1905) (*Ceratopogon*)

Syn.: *hirta* LUNDSTRÖM, 1910; *microcera* KIEFFER, 1919; *palustris* SAUNDERS, 1925; *curticornis* GOETGHEBUER, 1933; *curticornis* GOETGHEBUER, 1949; *kabashae* DE MEILLON, 1959

- *rugosa* CHAN & LE ROUX, 1970 (*Forcipomyia*)

Syn.: *murinoides* REMM, 1971

***Forcipomyia (Trichohelea) GOETGHEBUER, 1920* (3)**

- *chaoptera* REMM, 1962 (*Forcipomyia*)

- *eques* (JOHANNSEN, 1908) (*Ceratopogon*)

Syn.: *chrysopae* MAYER, 1934; *chrysopivora* TOKUNAGA, 1939

- *tonnoiri* (GOETGHEBUER, 1920) (*Trichohelea*)

Syn.: *auronitens* KIEFFER, 1919; *papilionivora* EDWARDS, 1923; *umbellicola* REMM, 1971

Subfamily Dasyheleinae LENZ, 1934

***Dasyhelea* KIEFFER, 1911 (30)**

***Dasyhelea (Dasyhelea) KIEFFER, 1911* (6)**

- *bilineata* GOETGHEBUER, 1920 (*Dasyhelea*)

Syn.: *insignipalpis* KIEFFER, 1925; *saxicola* EDWARDS, 1929; *geleiana* ZILAHİ-SEBESS, 1931; *montana* ZILAHİ-SEBESS, 1940; *lithotelmatica* STRENZKE, 1950; *tecticola* REMMERT, 1953; *dieuzeidei* VAILLANT, 1957; *karellica* GLUKHOVA & BRODSKAYA, 1997

- *caesia* REMM, 1993 (*Dasyhelea*)

Syn.: *lugensis* BRODSKAYA, 1995

- *flavifrons* (GUÉRIN, 1833) (*Ceratopogon*)

Syn.: *obscurus* WINNERTZ, 1852; *versicolor* WINNERTZ, 1852; *dufourii* LABOULBÈNE, 1869; *hippocastani* MIK, 1888; *brevitibialis* GOETGHEBUER, 1919; *goetghebueri* KIEFFER, 1919; *lignicola* KIEFFER, 1919; *sensualis* KIEFFER, 1919; *paludicola* KIEFFER, 1925; *oppressa* THOMSEN, 1935; *septuosa* BORKENT, 1997

- *malleola* REMM, 1962 (*Dasyhelea*)

- *pallidiventris* (GOETGHEBUER, 1931) (*Tetraphora*)

Syn.: *olivacea* REMM, 1962

- *stackelbergi* REMM, 1993 (*Dasyhelea*)

***Dasyhelea (Dicryptoscena) ENDERLEIN, 1936* (6)**

- *glukhovae* BRODSKAYA, 1996 (*Dasyhelea*)
- *lucida* REMM, 1968 (*Dasyhelea*)
- *modesta* (WINNERTZ, 1852) (*Ceratopogon*)
 - Syn.: *aestivus* WINNERTZ, 1852; *longipalpis* KIEFFER, 1913; *inclusa* KIEFFER, 1918; *strobli* KIEFFER, 1919; *pratensis* GOETGHEBUER, 1920; *bihamata* KIEFFER, 1923; *moascari* MACFIE, 1943; *densipilosa* TOKUNAGA, 1963
- *notata* GOETGHEBUER, 1920 (*Dasyhelea*)
 - Syn.: *semistriata* GOETGHEBUER, 1921; *sziladyi* ZILAHY-SEBESS, 1936
- *stellata* REMM, 1968 (*Dasyhelea*)
- *thienemanni* SPÄTARU & DAMIAN-GEORGESCU, 1970 (*Dasyhelea*)
- Dasyhelea (Prokempia) KIEFFER, 1913* (3)**
- *bilobata* KIEFFER, 1915 (*Dasyhelea*)
 - Syn.: *luteiventris* GOETGHEBUER, 1934; *spiralis* REMM, 1966
- *dampfii* KIEFFER, 1925 (*Dasyhelea*)
 - Syn.: *turfacea* KIEFFER, 1925; *estonica* KIEFFER, 1925
- *flaviventris* (GOETGHEBUER, 1910) (*Culicoides*)
 - Syn.: *halobia* (KIEFFER, 1924)
- Dasyhelea (Pseudoculicoides) MALLOCH, 1915* (14)**
- *arenivaga* MACFIE, 1943 (*Dasyhelea*)
- *auli* REMM, 1962 (*Dasyhelea*)
- *bicrenata* KIEFFER, 1923 (*Dasyhelea*)
- *bifida* ZILAHY-SEBESS, 1936 (*Dasyhelea*)
 - Syn.: *excellens* BORKENT, 1997
- *calycata* REMM, 1972 (*Dasyhelea*)
- *corinneae* GOSSERIES, 1991 (*Dasyhelea*)
 - Syn.: *scutellatus* MEIGEN, 1830; *chonetus* YU & ZOU, 2006
- *flavoscutellata* (ZETTERSTEDT, 1850) (*Ceratopogon*)
- *furva* REMM, 1967 (*Dasyhelea*)
- *kyrenica* REMM, 1972 (*Dasyhelea*)
- *leptoclada* REMM, 1967 (*Dasyhelea*)
- *similaris* REMM, 1972 (*Dasyhelea*)
- *turanicola* REMM & NAZARMUKHAMEDOV, 1969 (*Dasyhelea*)
 - Syn.: *serrata* NAVAL, 1994
- *turficola* KIEFFER, 1925 (*Dasyhelea*)
 - Syn.: *grenieri* CLASTRIER, 1966; *malibui* YU, 2008
- *unguistyla* REMM, 1972 (*Dasyhelea*)
- Dasyhelea (Sebessia) REMM, 1979* (1)**
- *holosericea* (MEIGEN, 1804) (*Ceratopogon*)

Subfamily Ceratopogoninae NEWMAN, 1834

Tribe Culicoidini KIEFFER, 1911

***Culicoides* LATREILLE, 1809** (52)

Culicoides (Avaritia) FOX, 1955 (6)

- *abchazicus* DZHAFAROV, 1964 (*Culicoides*)
- *chiopterus* (MEIGEN, 1830) (*Ceratopogon*)

Syn.: *amoenus* WINNERTZ, 1852; *similis* GOETGHEBUER, 1927; *dobyi* CALLOT & KREMER, 1969

- *dewulfi* GOETGHEBUER, 1936 (*Culicoides*)
Syn.: *pseudochiopterus* DOWNES & KETTLE, 1952
- *gornostaevae* MIRZAEVA, 1984 (*Culicoides*)
- *obsoletus* (MEIGEN, 1818) (*Ceratopogon*)
Syn.: *varius* WINNERTZ, 1852; *yezoensis* MATSUMURA, 1911; *obscuripes* SANTOS ABREU, 1918; *lacteinervis* KIEFFER, 1919; *rivicola* KIEFFER, 1921; *clavatus* KIEFFER, 1921; *heterocerus* KIEFFER, 1921; *pegobius* KIEFFER, 1922; *kabyliensis* KIEFFER, 1922; *concitus* KIEFFER, 1922; *intermedius* OKADA, 1941; *sintrensis* CAMBOURNAC, 1956; *seimi* SHEVCHENKO, 1967
- *scoticus* DOWNES & KETTLE, 1952 (*Culicoides*)
- Culicoides (Beltranmyia VARGAS, 1953) (4)***
- *circumscriptus* KIEFFER, 1918 (*Culicoides*)
Syn.: *nadayanus* KIEFFER, 1918; *edwardsi* GOETGHEBUER, 1921; *algarum* KIEFFER, 1924; *salicola* KIEFFER, 1924; *pictidorsum* KIEFFER, 1924; *albonotatus* VIMMER, 1932; *albosignatus* VIMMER, 1932; *polymaculatus* VIMMER, 1932; *pulcher* ZILAH-SEBESS, 1934; *kirovabadicus* DZHAFAROV 1964; *matsuensis* LIEN, WENG & LIN, 1996; *meridionalis* XUE, LIU & YU, 2003
- *manchuriensis* TOKUNAGA, 1941 (*Culicoides*)
Syn.: *setiger* GOETGHEBUER, 1938; *goetghebueri* ARNAUD, 1956; *machardy* CAMPBELL & PELHAM-CLINTON, 1960; *ochraceimaculatus* SHEVCHENKO, 1970; *ochraceipennis* SHEVCHENKO, 1970; *mesostigma* REMM, 1971; *vistulensis* SKIERSKA, 1973
- *salinarius* KIEFFER, 1914 (*Culicoides*)
Syn.: *halobius* KIEFFER, 1914; *meinerti* KIEFFER, 1915; *punctatidorsum* KIEFFER, 1924
- *sphagnumensis* WILLIAMS, 1955 (*Culicoides*)
Syn.: *laticola* ARNAUD, 1956; *carjalaensis* GLUKHOVA, 1957
- Culicoides (Culicoides LATREILLE, 1809) (6)***
- *delta* EDWARDS, in EDWARDS et AL. 1939 (*Culicoides*)
Syn.: *lupicaris* DOWNES & KETTLE, 1952
- *flavipulicaris* DZHAFAROV, 1964 (*Culicoides*)
- *grisescens* EDWARDS, in EDWARDS et AL. 1939 (*Culicoides*)
Syn.: *remmi* DAMIAN-GEORGESCU, 1972; *arschanicus* MIRZAEVA, 1984
- *impunctatus* GOETGHEBUER, 1920 (*Culicoides*)
Syn.: *minor* TOKUNAGA, 1941
- *pulicaris* (LINNAEUS, 1758) (*Culex*)
Syn.: *setosinervis* KIEFFER, 1913; *pullatus* KIEFFER, 1915; *stephensi* CARTER, 1916; *cinerellus* KIEFFER, 1919; *quinquepunctatus* GOETGHEBUER, 1921; *flaviplumus* KIEFFER, 1924; *sawamotoi* KONO & TAKAHASI, 1940
- *punctatus* (MEIGEN, 1804) (*Ceratopogon*)
Syn.: *punctatus* LATREILLE, 1809; *ocellaris* KIEFFER, 1921; *kasachstanicus* SHAKIRZJANOVA, 1963
- Culicoides (Monoculicoides KHALAF, 1954) (6)***
- *longicollis* GLUKHOVA, 1971 (*Culicoides*)
- *nubeculosus* (MEIGEN, 1830) (*Ceratopogon*)
Syn.: *puncticollis* GOETGHEBUER, 1912; *punctaticollis* GOETGHEBUER, 1920
- *parroti* KIEFFER, 1922 (*Culicoides*)
- *puncticollis* (BECKER, 1903) (*Ceratopogon*)
Syn.: *algecirensis* STROBL, 1900; *impressus* KIEFFER, 1918; *distigma* KIEFFER, 1922; *donatieni* KIEFFER, 1922; *sciniphes* KIEFFER, 1925; *bipunctatus* VIMMER, 1932; *tripunctatus* VIMMER, 1932;

- wenigi* VIMMER, 1932; *flavitarsis* VIMMER, 1932; *griseovittatus* VIMMER, 1932; *luteosignatus* VIMMER, 1932; *vavrai* VIMMER, 1932
- *riethi* KIEFFER, 1914 (*Culicoides*)
Syn.: *cordatus* KIEFFER, 1921; *crassiforceps* KIEFFER, 1924; *gigas* ROOT & HOFFMAN, 1937
- *stigma* (MEIGEN, 1818) (*Ceratopogon*)
Syn.: *kiefferi* GOETGHEBUER, 1910; *cordiformitarsis* CARTER, 1916; *unimaculatus* GOETGHEBUER, 1920; *stigmoides* CALLOT, KREMER & DEDUIT, 1962
- Culicoides (Oecacta* POEY, 1851) (4)**
- *albicans* (WINNERTZ, 1852) (*Ceratopogon*)
- *clintoni* BOORMAN, 1984 (*Culicoides*)
- *semimaculatus* CLASTRIER, 1958 (*Culicoides*)
Syn.: *karajevi* DZHAFAROV, 1961
- *vexans* (STAEGER, 1839) (*Ceratopogon*)
Syn.: *pungens* KIEFFER, 1901; *perpungens* KIEFFER, 1919; *ajbassovi* SHAKIRZJANOVA, 1962
- Culicoides (Pontoculicoides* REMM, 1968) (2)**
- *slovacus* ORSZÁGH, 1969 (*Culicoides*)
- *tauricus* GUTSEVICH, 1959 (*Culicoides*)
- Culicoides (Sensiculicoides* SHEVCHENKO, 1977) (15)**
- *clastrieri* CALLOT, KREMER & DEDUIT, 1962 (*Culicoides*)
- *comosioculatus* TOKUNAGA, 1956 (*Culicoides*)
Syn.: *chaetophthalmus* AMOSOVA, 1957; *caucasicus* SERGEJEV, 1959; *setosus* GUTSEVICH, 1960
- *duddingstoni* KETTLE & LAWSON, 1955 (*Culicoides*)
- *festivipennis* KIEFFER, 1914 (*Culicoides*)
Syn.: *odibilis* AUSTEN, 1921; *winnertzi* EDWARDS, 1926
- *griseidorsum* KIEFFER, 1918 (*Culicoides*)
- *heliophilus* EDWARDS, 1921 (*Culicoides*)
Syn.: *latifrontis* SHAKIRZJANOVA, 1962; *kobachidzei* DZHAFAROV, 1964
- *jurensis* CALLOT, KREMER & DEDUIT, 1962 (*Culicoides*)
- *kibunensis* TOKUNAGA, 1937 (*Culicoides*)
Syn.: *cubitalis* EDWARDS, in EDWARDS et AL. 1939; *ponkikiri* KONO & TAKAHASI, 1940; *sitinoensis* OKADA, 1941
- *maritimus* KIEFFER, 1924 (*Culicoides*)
Syn.: *submaritimus* DZHAFAROV, 1962
- *pictipennis* (STAEGER, 1839) (*Ceratopogon*)
Syn.: *arcuatus* WINNERTZ, 1852; *guttularis* KIEFFER, 1919; *maculatus* ZILAH-SEBESS, 1936; *achkamalicus* DZHAFAROV, 1964; *luganicus* SHEVCHENKO, 1972
- *pseudoheliophilus* CALLOT & KREMER, 1961 (*Culicoides*)
Syn.: *albihalteratus* GOETGHEBUER, 1935
- *simulator* EDWARDS, in EDWARDS et AL. 1939 (*Culicoides*)
- *ustinovi* SCHEVCHENKO, 1962 (*Culicoides*)
- *vidourlensis* CALLOT, KREMER, MOLET & BACH, 1968 (*Culicoides*)
- *zhogolevi* REMM, in REMM & ZHOGOLEV 1968 (*Culicoides*)
- Culicoides (Silvaticulicoides* GLUKHOVA, 1977) (4)**
- *achrayi* KETTLE & LAWSON, 1955 (*Culicoides*)
- *fascipennis* (STAEGER, 1839) (*Ceratopogon*)

- Syn.: *distictus* KIEFFER, in THIENEMANN & KIEFFER 1916; *albonotatus* KIEFFER, 1918; *turficola* KIEFFER, 1925
- *pallidicornis* KIEFFER, 1919 (*Culicoides*)
 - Syn.: *susae* KIEFFER, 1919; *dileucus* KIEFFER, 1921; *brunneiscutellatus* ZILAHİ-SEBESS, 1933; *bruneoscutellatus* ZILAHİ-SEBESS, 1934; *niger* ROOT & HOFFMAN, 1937
 - *subfasciipennis* KIEFFER, 1919 (*Culicoides*)
 - Syn.: *analisis* KIEFFER, 1925
- Culicoides (Wirthomyia* VARGAS, 1973) (3)**
- *minutissimus* (ZETTERSTEDT, 1855) (*Ceratopogon*)
 - Syn.: *nanulus* KIEFFER, 1919; *albihalter* KIEFFER, 1919; *bychowskyi* DZHAFAROV, 1964; *tugaicus* DZHAFAROV, 1960
 - *reconditus* CAMPBELL & PELHAM CLINTON, 1960 (*Culicoides*)
 - *segnis* CAMPBELL & PELHAM CLINTON, 1960 (*Culicoides*)
- Unplaced species (2)**
- *cameroni* CAMPBELL & PELHAM CLINTON, 1960 (*Culicoides*)
 - *furcillatus* CALLOT, KREMER & PARADIS, 1962 (*Culicoides*)

Tribe Ceratopogonini NEWMAN, 1834

***Allohelea* KIEFFER, 1917 (1)**

- *tessellata* (ZETTERSTEDT, 1850) (*Ceratopogon*)
 - Syn.: *illustris* WINNERTZ, 1852

***Alluaudomyia* KIEFFER, 1913 (3)**

- *quadripunctata* (GOETGHEBUER, 1934) (*Culicoides*)
- *splendida* (WINNERTZ, 1852) (*Ceratopogon*)
- *wyskokensis* SZADZIEWSKI & DOMINIAK, 2015 (*Alluaudomyia*)

***Brachypogon* KIEFFER, 1899 (14)**

***Brachypogon (Brachypogon* KIEFFER, 1899) (3)**

- *beaufortanensis* DELÉCOLLE & RIEB, 1992 (*Brachypogon*)
 - Syn.: *sudowicus* SZADZIEWSKI, 2001
- *nieves* (HAVEŁKA, 1976) (*Ceratopogon*)
- *vitiosus* (WINNERTZ, 1852) (*Ceratopogon*)
 - Syn.: *minima* KIEFFER, 1924; *niger* MAYER, 1934

***Brachypogon (Isohelea* KIEFFER, 1917) (11)**

- *babiogorensis* SZADZIEWSKI, in SZADZIEWSKI et AL. 1994 (*Brachypogon*)
- *beskidicus* Krzywiński, in SZADZIEWSKI et AL. 1994 (*Brachypogon*)
- *bialoviesicus* KRZYWIŃSKI, in SZADZIEWSKI et AL. 1994 (*Brachypogon*)
- *carpaticus* SZADZIEWSKI, in SZADZIEWSKI et AL. 1994 (*Brachypogon*)
- *hudjakovi* (REMM, 1974) (*Ceratopogon*)
- *incompletus* (KIEFFER, 1925) (*Trishelea*)
 - Syn.: *thienemanni* MAYER, 1940; *lapiae* CLASTRIER, 1961; *xuguitensis* CAO & CHEN, 1984
- *nitidulus* (EDWARDS, 1921) (*Psilohelea*)
 - Syn.: *crassiforceps* KIEFFER, 1925; *turfacea* KIEFFER, 1925; *finniae* CLASTRIER, 1961
- *norvegicus* SZADZIEWSKI & HAGAN, 2000 (*Brachypogon*)
- *silecis* SZADZIEWSKI, 1990 (*Brachypogon*)

- *sociabilis* (GOETGHEBUER, 1920) (*Psilohalea*)
- *zavoicus* SZADZIEWSKI, in SZADZIEWSKI et AL. 1994 (*Brachypogon*)

***Ceratoculicoides* WIRTH & RATANAWORABHAN, 1971 (1)**

- *moravicus* KNOZ, 1987 (*Ceratoculicoides*)

Syn.: *gracilipes* REMM, 1967; *havelkai* WIRTH & GROGAN, 1988; *remmi* GOSSERIES, 1989

***Ceratopogon* MEIGEN, 1803 (4)**

- *grandiforceps* (KIEFFER, 1913) (*Dasyhelea*)

Syn.: *parvula* KIEFFER, 1925

- *lacteipennis* ZETTERSTEDT, 1838 (*Ceratopogon*)

Syn.: *edentata* EDWARDS, 1921; *sphagnicola* KIEFFER, 1924; *conjuncta* KIEFFER, 1925; *longitarsis* MAYER, 1940

- *naccinervis* BORKENT, in BORKENT & WIRTH 1997 (*Ceratopogon*)

Syn.: *crassinervis* GOETGHEBUER, 1920 (preocc.)

- *romanicus* DAMIAN-GEORGESCU, 1972 (*Ceratopogon*)

***Kolenohalea* MEILLON & WIRTH, 1981 (1)**

- *calcarata* (GOETGHEBUER, 1920) (*Monohelea*)

Syn.: *sharpi* EDWARDS, 1929; *fusca* GOETGHEBUER, 1932

***Monohelea* KIEFFER, 1917 (1)**

- *estonica* REMM, 1965 (*Monohelea*)

***Schizohalea* KIEFFER, 1917 (1)**

- *leucopeza* (MEIGEN, 1804) (*Ceratopogon*)

Syn.: *albitarsis* WIEDEMANN, 1817; *copiosus* WINNERTZ, 1852; *politus* COQUILLET, 1901; *stecki* KIEFFER, 1915; *gorana* MAYER, 1937; *xanthopeza* CLASTRIER, 1963

***Serromyia* MEIGEN, 1818 (8)**

- *atra* (MEIGEN, 1818) (*Ceratopogon*)

Syn.: *albitarsis* KIEFFER, 1919; *micronyx* KIEFFER, 1919; *spinosipes* KIEFFER, 1919; *nitens* GOETGHEBUER, 1920

- *bicolor* BORKENT, in BORKENT & BISSETT 1990 (*Serromyia*)

- *femorata* (MEIGEN, 1804) (*Ceratopogon*)

Syn.: *armatus* MEIGEN, 1818; *foersteri* MEIGEN, 1838; *flavipes* GIMMERTHAL, 1847; *flavicus* KIEFFER, 1906; *inermipes* KIEFFER, 1919

- *ledicola* KIEFFER, 1925 (*Serromyia*)

Syn.: *europaea* CLASTRIER, 1963; *macronyx* GOETGHEBUER, 1933

- *morio* (FABRICIUS, 1775) (*Culex*)

Syn.: *nudipennis* KIEFFER, 1913

- *rufitarsis* (MEIGEN, 1818) (*Ceratopogon*)

Syn.: *gelida* KIEFFER, 1925; *bispinosa* GOETGHEBUER, 1936; *dipetala* REMM, 1965

- *subinermis* KIEFFER, 1919 (*Serromyia*)

- *tecta* BORKENT, in BORKENT & BISSETT 1990 (*Serromyia*)

***Stilobezzia* KIEFFER, 1911 (3)**

***Stilobezzia (Acanthohelea)* KIEFFER, 1917 (2)**

- *gracilis* (HALIDAY, 1833) (*Ceratopogon*)

Syn.: *dorsalis* ZETTERSTEDT, 1850

- *ochracea* (WINNERTZ, 1852) (*Ceratopogon*)

Syn.: *rufithorax* KIEFFER, 1919; *scutellata* GOETGHEBUER, 1920

***Stilobezzia (Stilobezzia)* KIEFFER, 1911 (1)**

- *antennalis* (COQUILLET, 1901) (*Ceratopogon*)

Tribe Heteromyiini WIRTH, 1962

***Clinohelea* KIEFFER, 1917 (1)**

- *unimaculata* (MACQUART, 1826) (*Ceratopogon*)

Syn.: *maculipes* MEIGEN, 1830; *variegatus* WINNERTZ, 1852

Tribe Sphaeromiini NEWMAN, 1834

***Macropeza* MEIGEN, 1818 (1)**

- *albitarsis* MEIGEN, 1818 (*Macropeza*)

Syn.: *valvatus* WINNERTZ, 1852

***Mallochohelea* WIRTH, 1962 (4)**

- *inermis* (KIEFFER, 1909) (*Johannseniella*)

Syn.: *kiefferi* GOETGHEBUER, 1921

- *munda* (LOEW, 1864) (*Ceratopogon*)

Syn.: *breviforceps* KIEFFER, 1915; *dentata* KIEFFER, 1909

- *nitida* (MACQUART, 1826) (*Ceratopogon*)

Syn.: *clavicornis* KIEFFER, 1919; *longiforceps* KIEFFER, 1919

- *setigera* (LOEW, 1864) (*Ceratopogon*)

Syn.: *maihensis* REMM, 1971

***Probezzia* KIEFFER, 1906 (1)**

- *seminigra* (PANZER, 1798) (*Tipula*)

Syn.: *varipes* CURTIS, 1829; *munda* LOEW, 1869; *venustus* MEIGEN, 1818; *inflata* WINNERTZ, 1852; *spinosidorsum* KIEFFER, 1921; *borealis* CLASTRIER, 1962

***Sphaeromias* CURTIS, 1829 (2)**

- *fasciatus* (MEIGEN, 1804) (*Ceratopogon*)

Syn.: *cingulatus* MEIGEN, 1804; *albomarginatus* CURTIS, 1829; *procerus* ZETTERSTEDT, 1855; *ocularis* KIEFFER, 1924; *goetghebueri* DE MEIJERE, 1946

- *pictus* (MEIGEN, 1818) (*Ceratopogon*)

Syn.: *punctatus* MEIGEN, 1830; *elegans* WINNERTZ, 1852; *candidatus* LOEW, 1856; *miricornis* KIEFFER, 1919; *copiosa* KIEFFER, 1925; *sparus* BORKENT, in BORKENT & WIRTH 1997

Tribe Palpomyiini ENDERLEIN, 1836

***Bezzia* KIEFFER, 1899 (17)**

- *affinis* (STAEGER, 1839) (*Ceratopogon*)

- *albicornis* (MEIGEN, 1818) (*Ceratopogon*)

- Syn.: *pallidetarsatus* STROBL, 1900; *strobli* KIEFFER, 1919; *brevinervis* KIEFFER, 1919; *atrata* MACFIE, 1944
- *annulipes* (MEIGEN, 1830) (*Ceratopogon*)
Syn.: *bidentata* KIEFFER, 1901; *fossicola* KIEFFER, 1912; *ploenensis* KIEFFER, 1921; *media* KIEFFER, 1925; *phragmitis* KIEFFER, 1925; *digramma* KIEFFER, 1925; *kyotoensis* TOKUNAGA, 1939; *sicarti* CLASTRIER, 1962
 - *bicolor* (MEIGEN, 1804) (*Ceratopogon*)
Syn.: *typhae* KIEFFER, 1919; *brehmiana* KIEFFER, 1924; *algarum* ZILAHİ-SEBESS, 1930; *rufithorax* GOETGHEBUER, 1933; *copiosa* THOMSEN, 1935
 - *circumdata* (STAEGER, 1839) (*Ceratopogon*)
Syn.: *solstitialis* WINNERTZ, 1852; *hydrophila* KIEFFER, 1909; *sieberti* KIEFFER, 1921; *aquatilis* GOETGHEBUER, 1923; *stagnalis* KIEFFER, 1925
 - *coracina* (ZETTERSTEDT, 1850) (*Ceratopogon*)
Syn.: *albipes* WINNERTZ, 1852; *fusci-clava* KIEFFER, 1919
 - *elongata* ZILAHİ-SEBESS, 1940 (*Bezzia*)
 - *flavicornis* (STAEGER, 1839) (*Ceratopogon*)
Syn.: *flavipalpis* WINNERTZ, 1852; *flavipluma* KIEFFER, 1919; *spinifera* GOETGHEBUER, 1920; *spinosula* CLASTRIER, 1962
 - *kazlauskasi* REMM, 1966 (*Bezzia*)
 - *leucogaster* (ZETTERSTEDT, 1850) (*Ceratopogon*)
Syn.: *xanthocephala* GOETGHEBUER, 1911; *parvidens* KIEFFER, 1914; *picticornis* KIEFFER, 1914; *danica* KIEFFER, 1915; *grisea* KIEFFER, 1919; *brachycera* KIEFFER, 1919; *belgica* KIEFFER, 1919; *hungarica* ZILAHİ-SEBESS, 1930
 - *nigrata* CLASTRIER, 1962 (*Bezzia*)
 - *nigritula* (ZETTERSTEDT, 1838) (*Ceratopogon*)
Syn.: *tenebricosa* GOETGHEBUER, 1912; *atripes* ZILAHİ-SEBESS, 1940
 - *nobilis* (WINNERTZ, 1852) (*Ceratopogon*)
Syn.: *setulosus* LOEW, 1861; *barberi* COQUILLET, 1901; *punctata* LUNDSTRÖM, 1910; *leucosticta* KIEFFER, 1919; *cinerella* KIEFFER, 1919; *armaticrus* KIEFFER, 1919; *csikiana* KIEFFER, 1919; *chrysocoma* KIEFFER, 1922; *acanthodes* MACFIE, 1940; *atlantica* WIRTH & WILLIAMS, 1957; *nobiliformis* CLASTRIER, 1962
 - *ornata* (MEIGEN, 1830) (*Ceratopogon*)
Syn.: *vittiger* ZETTERSTEDT, 1850; *albosignata* KIEFFER, 1919
 - *rhynchostylata* REMM, 1974 (*Bezzia*)
 - *signata* (MEIGEN, 1804) (*Ceratopogon*)
Syn.: *heusdensis* GOETGHEBUER, 1935
 - *winnertziana* KIEFFER, 1919 (*Bezzia*)
Syn.: *gracilis* WINNERTZ, 1852

***Palpomyia* MEIGEN, 1818 (13)**

- *armipes* (MEIGEN, 1838) (*Ceratopogon*)
Syn.: *erythrocephala* STAEGER, 1839; *rufipectus* WINNERTZ, 1852
- *brachialis* (HALIDAY, 1833) (*Ceratopogon*)
Syn.: *longipennis* KIEFFER, 1919; *fusci-clava* KIEFFER, 1919; *nemorivaga* GOETGHEBUER, 1920
- *distincta* (HALIDAY, 1833) (*Ceratopogon*)

- Syn.: *ephippium* ZETTERSTEDT, 1855; *rubra* KIEFFER, 1919; *flaviscutellum* KIEFFER, 1919; *ruficornis* GOETGHEBUER, 1934
- *flavipes* (MEIGEN, 1804) (*Ceratopogon*)
Syn.: *hortulanus* MEIGEN, 1818; *mutabilis* CLASTRIER, 1962
 - *infuscata* KIEFFER, 1919 (*Palpomyia*)
 - *lineata* (MEIGEN, 1804) (*Ceratopogon*)
Syn.: *cinerea* MACQUART, 1826; *binotata* STAEGER, 1839; *slossonae* COQUILLET, 1905; *algarum* KIEFFER, in KIEFFER & THIENEMANN 1908; *winnertzi* KIEFFER, 1914; *illinoisensis* MALLOCH, 1914; *octasema* KIEFFER, 1914; *spinosissima* KIEFFER, 1915; *unifasciata* KIEFFER, 1922; *murina* KIEFFER, 1925; *obesa* GOETGHEBUER, 1927; *nigrotibialis* GOETGHEBUER, 1933; *pruinescens* THOMSEN, 1935; *edwardsi* DE MEIJERE, 1946; *stagnalis* CLASTRIER, 1962
 - *nigripes* (MEIGEN, 1830) (*Ceratopogon*)
Syn.: *pratensis* MEIGEN, 1830; *bryocrypta* KIEFFER, 1925
 - *praeusta* (LOEW, 1869) (*Ceratopogon*)
Syn.: *apicalis* STROBL, 1898; *terminalis* KIEFFER, 1919; *schineri* GOETGHEBUER, 1920
 - *rufipes* (MEIGEN, 1818) (*Ceratopogon*)
Syn.: *spinosior* KIEFFER, 1919; *pseudospinipes* GOETGHEBUER, 1933; *plurispinosa* CLASTRIER, 1962
 - *serripes* (MEIGEN, 1818) (*Ceratopogon*)
Syn.: *transfuga* STAEGER, 1839; *tarsata* ZETTERSTEDT, 1855; *ruficeps* KIEFFER, 1918
 - *spinipes* (MEIGEN, in PANZER 1806) (*Ceratopogon*)
Syn.: *fulva* MACQUART, 1826; *ferrugineus* MEIGEN, 1830; *parviforceps* KIEFFER, 1925
 - *tibialis* (MEIGEN, 1818) (*Ceratopogon*)
Syn.: *atripecta* KIEFFER, 1919; *laticollis* GOETGHEBUER, 1922; *nipponica* TOKUNAGA, 1939
 - *tinctipennis* KIEFFER, 1919 (*Palpomyia*)
Syn.: *obscuripennis* KIEFFER, 1919; *semifumosa* GOETGHEBUER, 1922; *adusta* KIEFFER, 1925; *nigritella* CLASTRIER, 1962

***Phaenobezzia* Haeselbarth, 1965 (1)**

- *rubiginosa* (WINNERTZ, 1852) (*Ceratopogon*)
Syn.: *glyceriae* KIEFFER, 1913; *nitidiventris* GOETGHEBUER, 1923; *radialis* GOETGHEBUER, 1936

NEW RECORD

Ceratopogon naccinervis BORKENT, in BORKENT & WIRTH 1997

Material examined. Poland, Kampinoski Park Narodowy nr Warsaw, grąd-wiąz (*Ulmus*), 16-21 May 1979, yellow pan trap, IZPAN, 2 males, deposited in the coll. of University of Gdańsk, CEIUG.

Comments. Males of the species are characteristic in having short gonocoxite, long and slender gonostylus armed with apical 2 or 3 teeth (Fig. A), apicolateral process of tergite IX long, slender and armed with 1-2 apical setae, parameres distinctly expanded in the distal half, apex pointed, aedeagus with lateral projections bearing some apical teeth (Fig. A-D). Wing length 1.30-1.32 mm, gonocoxite length 0.25-0.26 mm, gonocoxite length/head width 0.63, gonocoxite about 2.5 times longer than broad. *Ceratopogon naccinervis* belongs to the group of four very close species including also Nearctic *C. abstrusus* BORKENT & GROGAN, 1995, *C.*

arcanus BORKENT & GROGAN, 1995, and *C. inverecundus* BORKENT & GROGAN, 1995. Male genitalia of Polish specimens are exactly the same as those of *C. crassinervis* from Estonia (REMM 1974) and *C. inverecundus* from North America (BORKENT & GROGAN 1995). The species is reported from Belgium, Estonia and Turkey (BORKENT & GROGAN 1995). From Poland recorded for the first time.

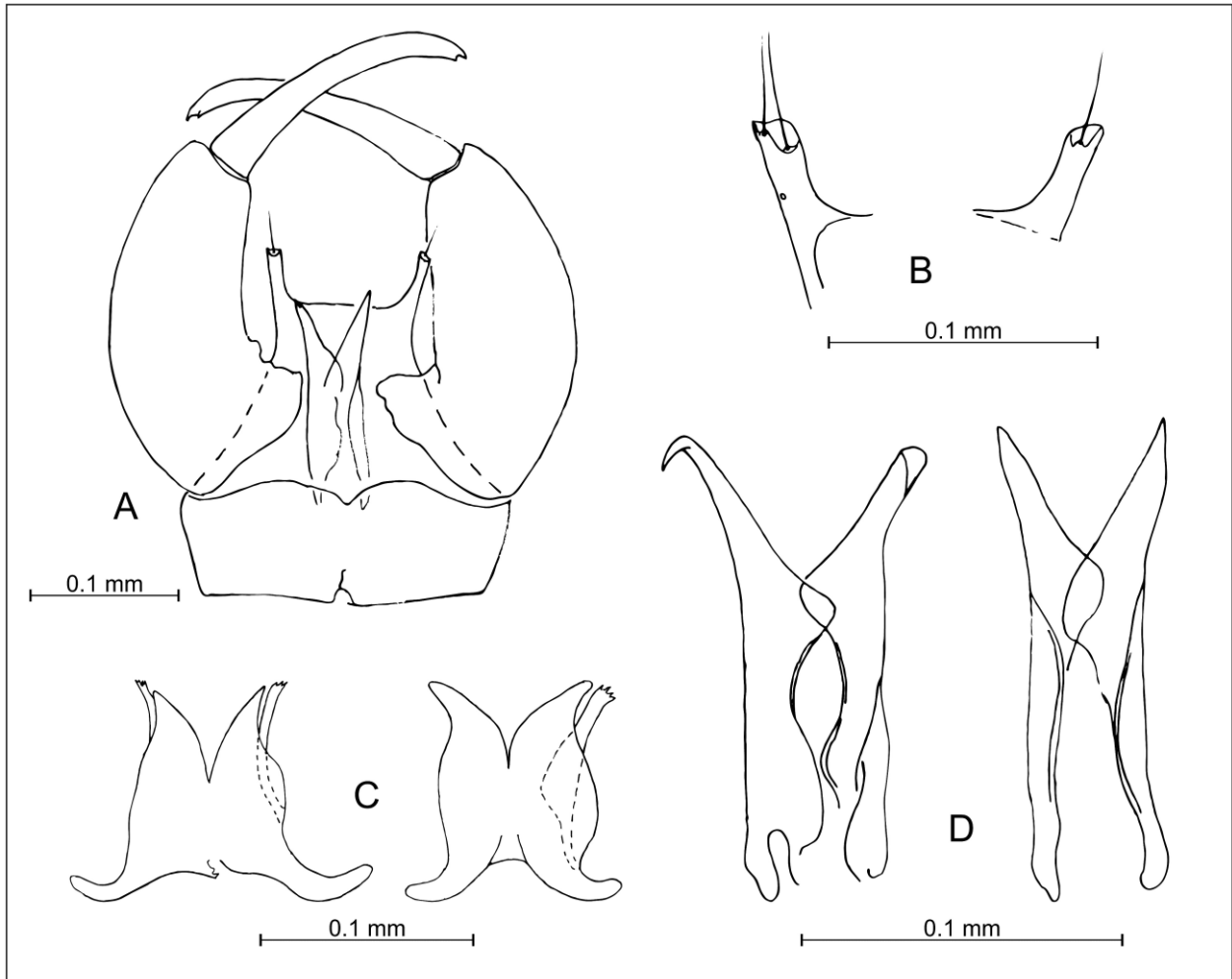


FIG. *Ceratopogon naccinervis* BORKENT, in BORKENT & WIRTH 1997: male genitalia. A – ventral aspect, aedeagus removed, B – apicolateral processes of tergite IX, C – aedeagus, D – parameres

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