

Checklists

Trichoceridae

Ewa Krzemińska (1998 Checklist: Jaroslav Starý & Ewa Krzemińska)

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Diagnosis: Small to medium (3.5-12.0 mm) crane-fly-like nematocerous flies, sexual dimorphism indistinct; females are usually larger than males. Body colour from reddish to black, setosity scarce. Antennae usually long, reaching behind thorax if bent backwards, with 13 flagellomeres; scape and pedicel round; palpi usually as long as head, 5-segmented; first segment very small and barely visible. Tibial spurs 1:2:2. Wing longer than body. Pattern of venation consistent throughout the family; cross vein sc-r about middle of wing; cross vein r-r, R_{2+3+4} and R_{2+3} present; dM_{1+2} present; m-cu at fork of M_{3+4} , A_2 well developed, short to medium, in *Cladoneura* as long as that of some Limoniidae. Three ocelli present; eyes with microtrichia between ommatidia.

Biology: Trichoceridae, or winter gnats, are known for their autumn-winter appearance; several species fly till late spring. Males of most species form characteristic swarms over vegetation; females are usually observed flying just above soil and seeking place for ovipositing. In winter they are commonly met on snow, and hatching may occur also throughout winter. Saprophytous and/or coprophytous larvae of *Trichocera* spend summer in diapause buried deep in soil. Species of *Cladoneura* appear in summer.

Nomenclature and classification: According to Fauna Europaea (Krzemińska 2013), with addition of a fourth subgenus to *Trichocera*: *T. (Staryia)* Krzemińska & Gorzka 2016, with 12 species (Krzemińska 2020).

Number of species: CH: 34 (1998 Checklist: 21),

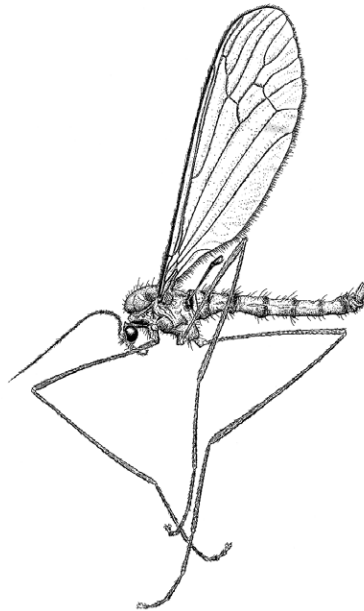
CZ: 30, DE: 18, FI: 14, FR: 10, GB: 10, HU: 21, LT: 12, PL: 30, RO: 16, SE: 22, SK: 32, Europe: 55, World: ~180.

Level of faunistic knowledge in Switzerland: Good.

General references: Dahl (1965, 1969, 1970) [behaviour, adaptations], Dahl & Alexander (1976) [world catalogue of Trichoceridae to 1976], Dahl & Krzemińska (1997) [general biology], Hågvar & Krzemińska (2008) [biology, life under snow], Krzemińska & Gorzka (2016) [ventral receptacle in *Staryia*], Krzemińska et al. (2009) [evolution, phylogeny], Starý (1999) [key to *saltator* related species].

References to the Swiss fauna: Krzemińska (2000, 2013, 2021) [Fauna Europaea], Starý (2000), Starý & Krzemińska (1998, 2000), Starý & Martinovský (1996), Starý & Podenas (1995).

Trichocera annulata,
male (CMPD2, p.228).



Checklist

Cladoneura Scudder, 1864 N1

- *hirtipenne* (Siebke, 1863) !

Trichocera Meigen, 1803

(*Metatrachocera* Dahl, 1966)

- *candida* Dahl, 1976 !

- *forcipula* Nielsen, 1920 !

- *lutea* Becher, 1886 !

= *stecki* Bangerter, 1948

- *ticina* Starý & Podenas, 1995 !

(*Saltrichocera* Krzemińska, 2002)

- *alpina* Starý, 2000 ! N2

- *annulata* Meigen, 1818 !

- *antennata* Starý, 1999 ! [1]

- *brevis* Krzemińska, 2002 ! [2]

- *dahlae* Mendl, 1971 !

- *hirta* Starý & Martinovský, 1996 ! [3]

- *implicata* Dahl, 1976 !

- *maculipennis* Meigen, 1818 !

- *michali* Krzemińska, 1999 ! [4]

- *montium* Starý, 2001 ! [5]

- *mutica* Dahl, 1966 !

- *obtusa* Starý & Martinovský, 1996 !

- *pappi* Krzemińska, 2003 ! [6]

- *parva* Meigen, 1804 !

- *pubescens* Starý & Martinovský, 1996 ! [7]

- *recondita* Starý, 2000 ! N2
- *regelationis* (Linnaeus, 1758) !
- *rufescens* Edwards, 1921 !
- *rufulenta* Edwards, 1938 !
- *saltator* (Harris, 1776) !
- *simonyi* Mik, 1886 ! N3
 - = *tenuistylus* Starý & Geiger, 1995 N4
- *sparsa* Starý & Martinovský, 1996 !
- *thaleri* Starý, 2000 ! [8]
- (*Staryia* Krzemińska & Gorzka, 2016)
 - *altipons* Starý, 1998 ! [9]
 - *dufourii* Krzemińska, 2020 ! [10]
 - *geigeri* Starý & Krzemińska, 2000 ! N5
- (*Trichocera* s.str.)
 - *hiemalis* (De Geer, 1776) !
 - *inexplorata* (Dahl, 1967) !
 - *major* Edwards, 1921 !

Notes

- N1 *Diazosma* is a younger synonym of *Cladoneura* Scudder.
 N2 Specimens of *Trichocera alpina* and *T. recondita* are listed in Starý (2000), including paratypes.
 N3 *Trichocera simonyi* is listed in Krzemińska (2000).
 N4 *Saltrichocera tenuistylus* was synonymised with *Saltrichocera simonyi* by Krzemińska (2000).
 N5 *Trichocera geigeri* was transferred from *Trichocera* (*Trichocera*) to *T. (Staryia)*.

Species records

- [1] ZH, Birmensdorf, Pt 676, 13.10.1980, 676 m., leg. Christophe Dufour (MHNN)
 [2] UR, Altdorf, 9.1983, leg. Ladislaus Rezbanyai-Reser
 [3] NE, Couvet, 26-27.10.1984, 780 m., leg. J-P. Jeanneret (MHNN)
 [4] NE, Rochefort 780 m, 29.11.1982, 780 m., leg. Christophe Dufour (MHNN)
 [5] LU, Rigi, 10.1980, leg. Christophe Dufour (MHNN)
 [6] TI, Generoso, 9.9.1970, leg. Ladislaus Rezbanyai-Reser
 [7] NE, Rochefort Château 780 m, 3.11.1982, 780 m., leg. Christophe Dufour (MHNN)
 [8] TI, Osco, Nei Pini, 24.9.1992, 2016 m., leg. Willy Geiger (MHNN)
 [9] ZH, Birmensdorf, Pt 676, 13.10.1980, 676 m., leg. Christophe Dufour (MHNN)
 [10] ZH, Birmensdorf, Pt 676, 13.10.1980, 676 m., leg. Christophe Dufour (MHNN)

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