

Carnidae

Jens-Hermann Stuke (1998 Checklist: László Papp)

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Diagnosis: Very small (1.0-2.5 mm), mainly black flies; head with large frontal triangle; anterior two orbital setae inclinate, posterior orbital setae latero-clinate; frons usually with a pair of interfrontal setae; postocellar setae parallel or divergent; several strong pseudovibrissae; deep antennal fovea; palpi small. Costa with humeral and subcostal break, not deeply notched; subcosta complete, very short. Tibiae without dorsal preapical setae; ventral intersegmental membrane of abdomen with setae. Male postabdomen variable and species specific. Female postabdomen telescoping; cerci fused.

Biology: Larvae of *Meoneura* and *Hemeromyia* have been reared from bird nests, animal droppings, carrion, fungi or decaying plant material. Details of larval development are almost unknown to date. Adults are often found near larval substrates but have also been found visiting flowers. However, most specimens are found by sweeping and detailed observations of adults are rare. *Carnus hemapterus* is specialised on larval development in bird nests and has been recorded from a wide range of bird species. The larvae of *Carnus* feed mainly on blood from the nestlings' skin. Adults lose their wings when they have colonised suitable nests.

Nomenclature and classification: According to Brake (2011).

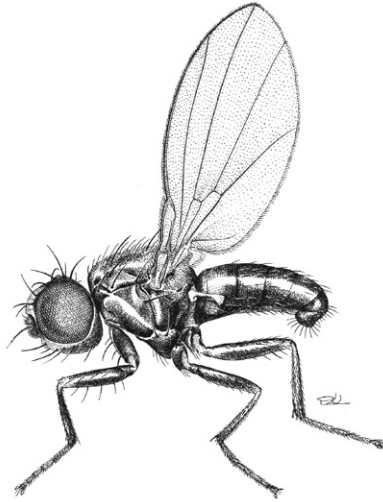
Number of species: CH: 28 (1998 Checklist: 19),
BE: > 3, CZ: 24, DE: 21, IT: 23, NL: > 7, UK: 13, Europe: 57, World: 159.

Level of faunistic knowledge in Switzerland: Excellent.

General references: Collin (1930) [key], Hennig (1937) [general introduction], Papp (1978, 1998) [keys, general introduction], Stuke & Bächli (2015) [key], Stuke & Freidberg (2017) [keys].

References to the Swiss fauna: Büttiker (1969, 1975), Büttiker & Aeschlimann (1974), Grimaldi (1997), Merz (2012), Merz et al. (2002), Papp (1985, 1997, 1998), Rezbanyai-Reser & Birrer (2005), Roulin (1999), Roulin et al. (2001), Stuke & Bächli (2015), Stuke & Freidberg (2017), Wegelin (1933).

Meoneura flavifacies,
male (CMPD3, p.211).



Checklist

Carnus Nitzsch, 1818

- *hemapterus* Nitzsch, 1818 L

Hemeromyia Coquillett, 1902

- *longirostris* Carles-Tolrá, 1992 !

Meoneura Rondani, 1856

- *alphabetica* Carles-Tolrá & Ventura, 2002 !
- *alpina* Hennig, 1948 !
- *atoma* L. Papp, 1981 !
- *elongella* (Zetterstedt, 1838) ! N1
- *exigua* Collin, 1930 !
- *falcata* L. Papp, 1997 !
- *flavifacies* Collin, 1930 !
- *flavifrons* L. Papp, 1981 !
- *freta* Collin, 1937 !
- *glaberrima* Becker, 1907 ! N2
- = *neglecta* Collin, 1930
- *helvetica* L. Papp, 1997 !
- *lacteipennis* (Fallén, 1823) !
- *lamellata* Collin, 1930 L
- *longifurca* L. Papp, 1997 !
- *milleri* Gregor, 1973 !
- *minutissima* (Zetterstedt, 1860) !
- *moravica* Gregor & L. Papp, 1981 !
- *neottiophila* Collin, 1930 !
- *obscurella* (Fallén, 1823) !

- *occulta* Stuke, 2015 !
- *pappi* Stuke, 2015 !
- *prima* (Becker, 1903) !
- *pseudoflavifacies* L. Papp, 1997 ! N3
= *carpathica pseudoflavifacies* L. Papp, 1997
- *triangularis* Collin, 1930 !
- *vagans* (Fallén, 1823) !
- *ziegleri* Stuke, 2015 !

Notes

- N1 *Meoneura elongella*: the status of this Scandinavian species in Central Europe remains unsolved. Only a female specimen exists from Switzerland, and its identity cannot be assigned unambiguously (Stuke & Barták 2019).
- N2 Ozerov (1994) synonymised *Meoneura neglecta* with *M. glaberrima*.
- N3 *Meoneura pseudoflavifacies* is a valid species, not a subspecies as originally proposed. Only *M. pseudoflavifacies* is known from Switzerland, not *M. carpathica*.

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