

## Anthomyzidae

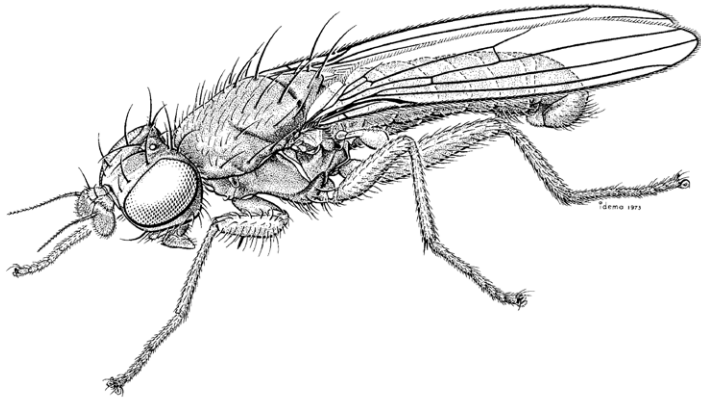
Jindřich Roháček (1998 Checklist: Jindřich Roháček)

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**Diagnosis:** Body minute to small (1.3-4.5 mm), slender and usually elongate, yellow to blackish brown. Wings normally narrow elongate, only terricolous species sometimes brachypterous, stenopterous or apterous; legs slender and short. Antenna more or less geniculate; arista dorsobasal, short-pubescent to pectinate; ocelli and ocellar setae present, postverticals small, convergent to crossed (rarely absent), 1-3 reclinate orbitals, usually preceded by 1-2 setulae, vibrissa present. Thorax without anepimeral (pteropleural) setulae, fore femur with ctenidial spine that can be secondarily absent (in some genera). Wing membrane unicolourous or dark ornamented; C usually with only subcostal break; Sc distally fused with  $R_1$  and forming a preapical kink on it; anal vein abbreviated, not reaching wing margin. Tibiae lacking dorsopreapical setae. Male terminalia characterised by a complex folding apparatus between the aedeagal complex and hypandrium; hypandrium frame-like, closed also posteriorly; phallopodeme with a robust ventral fulcrum movably connected with the hypandrium anteriorly; distiphallus bifid from its base to form a (usually voluminous) membraneous saccus and a slender sclerotised filum. Female postabdomen with tergite 6 and sternite 6 similar to those of the 5<sup>th</sup> segment. Tergite 7 (large) and sternite 7 (small) separate or fused to form conical tergo sternum. Female genital chamber usually with paired internal sclerites and single medial annular sclerite; unpaired ventral receptacle present but often small, submembranous to duct-like. Spermathecae (1+1) globular to elongately pyriform, with various surface structures. Tergite 10 and sternite 10 present but small. Cerci usually discrete and with rich setosity. For more detail on the morphology of adults and immatures see Roháček (2006, 2009) and Roháček & Barber (2016).

**Biology:** Adult Anthomyzidae are largely found in wetland habitats, for example damp meadows, marshes, peat-bogs and humid deciduous or mixed forests with rich herbaceous undergrowth. Larvae are (micro) phytosaprophagous to partly phytophagous, feeding on decaying plant tissues between the leaf sheaths of the tillers of grasses, sedges and other larger graminoids. Therefore, they prefer host plants damaged by phytophagous insects or other plant diseases. There are also some species with larvae mining soft tissues of dicotyledonous plants, or even ferns and horsetails; only (three known) species of *Fungomyza* Roháček, 1999 develop in decaying sporocarps of fungi. For more detail about life-history and biology of European Anthomyzidae, see Roháček (2006, 2009, 2013).

**Nomenclature and classification:** The recent progress in the knowledge of the phylogenetic relationships of (mainly Holarctic) Anthomyzidae (see Roháček 2006, 2009, Roháček & Tóthová 2014, Roháček & Barber 2016, Roháček et al. 2019) has also impacted the classification (chiefly generic affiliation) and nomenclature of some European species. The nomenclature follows the last Palearctic checklist of Anthomyzidae given by Roháček (2009: 105) because the more recent changes did not affect the European taxa of the family.



*Anthomyza collini*,  
male (MND2, p.887 as *A. gracilis*).

**Number of species:** CH: 15 (1998 Checklist: 11),  
AT: 12, CZ: 20, DE: 18, FR: 12, IT: 15, UK: 21, Europe: 33, World: 151.

**Level of faunistic knowledge in Switzerland:** Relatively good; 5 additional species of the family can be expected, so up to 20 species are estimated to occur in Switzerland.

**General references:** Roháček (2006, 2009).

**References to the Swiss fauna:** Roháček (1996, 1998, 1999, 2006, 2009, 2013), Merz (2012), Merz et al. (2002, 2006), Bächli et al. (2014).

## Checklist

*Anagnota* Becker, 1902

- *bicolor* (Meigen, 1838) ! N1

*Anthomyza* Fallén, 1810

- *anderssoni* Roháček, 1984 ! N2

- *clara* Roháček, 2006 !

- *collini* Andersson, 1976 !

- *dissors* Collin, 1944 !

- *gracilis* Fallén, 1823 !

- *macra* Czerny, 1928 !

- *neglecta* Collin, 1944 !

- *pallida* (Zetterstedt, 1838) !

- *pleuralis* Czerny, 1928 !

- Arganthomyza* Roháček, 2009  
 - *socculata* (Zetterstedt, 1847) ! N3
- Fungomyza* Roháček, 1999  
 - *albimana* (Meigen, 1830) ! N3
- Paranthomyza* Czerny, 1902  
 - *nitida* (Meigen, 1838) !
- Stiphrosoma* Czerny, 1928  
 - *sabulosum* (Haliday, 1837) !
- Typhamyza* Roháček, 1992  
 - *bifasciata* (Wood, 1911) !

## Notes

- N1 Presence of *Anagnota bicolor* confirmed for Switzerland in Merz et al. (2001).  
 N2 Presence of *Anthomyza anderssoni* confirmed for Switzerland in Roháček (2009).  
 N3 *Arganthomyza socculata* and *Fungomyza albimana* were recorded in the 1998 Checklist as *Anthomyza* sp.

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