

Family MUSCIDAE

Muscidae, some of which are commonly known as house flies or stable flies, are worldwide in distribution and contain almost 4,000 described species in over 100 genera. The family contains some of the best known Diptera species due to their synanthropy. However, not all are synanthropic. Adults of extant forms can be predaceous, haematophagous, saprophagous, or feed on a number of types of plant and animal exudates. They can be attracted to various substances including sugar, filth, sweat, and blood. Larvae occur in various habitats including decaying vegetation, dry and wet soil, nests of insects and birds, fresh water, and carrion. They can be predaceous, coprophagous, or saprophagous.

Seven species in 6 described genera have been recorded from the fossil record. The only known amber representative of this family is an undetermined specimen recorded from the Oligocene/Miocene amber of the Dominican Republic by Poinar (1992: 187). An unnamed specimen of either the subfamily Mydaeinae or Phaoniinae from the Pliocene/Pleistocene deposits of Tôgô, Japan was described and illustrated by Fujiyama & Iwao (1975: 45). Further undetermined material of this family was recorded by Séguy (1937: 30) from the Miocene of Austria and from the Miocene deposits of Radobaj, Croatia and Gabbro, Italy by Handlirsch (1907c: 1032, 1033). Undetermined copal material was recorded by Handlirsch (1907c: 1137) from the Holocene of Benin.

Lambrecht (1980: 369) estimated that the family Muscidae originated as long ago as the Permian, although no fossil record exists for the family any older than the Eocene.

Genus ACANTHOMYITES Cockerell

ACANTHOMYITES Cockerell, 1921*b*: 33. Type species: *Acanthomyites aldrichi* Cockerell, 1921, by original designation.

aldrichi Cockerell, 1921*b*: 33. NE: USA (Eocene) [C].

Genus MESEMBRINA Meigen

***MESEMBRINA** Meigen, 1826: 10. Type species: *Musca meridiana* Linnaeus, 1758, by subsequent designation of Westwood (1840: 141).

***meridiana** Linnaeus, 1758: 595 (*Musca*). PA: "Europe"; LU (Holocene) [K].

Genus MUSCA Linnaeus

***MUSCA** Linnaeus, 1758: 589. Type species: *Musca domestica* Linnaeus, 1758, by designation of I.C.Z.N. (1925:1).

Unidentified sp.—PA: Poland (Pleistocene) [C] (Lomnicki, 1894: 99).

Genus OPHYRA Robineau-Desvoidy

***OPHYRA** Robineau-Desvoidy, 1830: 516. Type species: *Ophyra nitida* Robineau-Desvoidy, 1830 [= *Musca ignava* Harris, 1780], by subsequent designation of Rondani (1866a: 70).

vetusta Melander, 1949: 49. NE: USA (Oligocene) [C].

Genus PALEOSTOMOXYS Townsend

PALEOSTOMOXYS Townsend, 1921: 133. Type species: *Paleostomoxys giebelii* Townsend, 1921, by monotypy.

giebelii Townsend, 1921: 133. [PA: "Europe"] (Undetermined Tertiary) [C].
[Type locality not given in original description; mentioned later in Townsend (1942: 9).]

Genus PYRELLIA Robineau-Desvoidy

***PYRELLIA** Robineau-Desvoidy, 1830: 462. Type species: *Pyrellia vivida* Robineau-Desvoidy, 1830, by subsequent designation of Townsend (1916: 8).

viridissima Meunier, 1908g: 253. AF: Tanzania (Pleistocene/Holocene) [K].

Unplaced Species of MUSCIDAE

maculipennis Théobald, 1937a: 354 (*Hydrotaea*). PA: France (Oligocene) [C].