

Family NEMESTRINIDAE

The family Nemestrinidae, commonly called tangle-veined flies, is a virtually cosmopolitan group of brachycerous flies consisting of about 300 species in over 20 genera. Adults of extant forms can be found hovering, feeding on flowers or resting in the sun. Larvae are internal parasites of either grasshoppers or scarabeid beetles and usually take one year to develop. The first instar is planidial and searches out the host. Larvae pass through 4 instars before pupating.

The fossil record of Nemestrinidae show them to be well diversified by the Jurassic. They may well have originated in the Triassic. Rohdendorf (1968) reviewed the Jurassic forms of the family, chiefly from fossils in the Karatau of Kazakhstan.

Ref.: Bequaert & Carpenter (1936, review of Florissant types); Bequaert (1947, world fossil catalog); Rohdendorf (1968, review of Jurassic taxa); Bernardi (1973, world genera, classification).

Genus ARCHINEMESTRIUS Rohdendorf

ARCHINEMESTRIUS Rohdendorf, 1968: 181. Type species: *Archinemestrius karatavicus* Rohdendorf, 1968, by original designation.

karatavicus Rohdendorf, 1968: 181. PA: Kazakhstan (Upper Jurassic) [C].

Genus EOHIRMONEURA Rohdendorf

EOHIRMONEURA Rohdendorf, 1968: 187. Type species: *Eohirmoneura carpenteri* Rohdendorf, 1968, by original designation.

carpenteri Rohdendorf, 1968: 188. PA: Kazakhstan (Upper Jurassic) [C].

Genus HIRMONEURA Meigen

***HIRMONEURA** Meigen, 1820: 132. Type species: *Hirmoneura obscura* Wiedemann in Meigen, 1820, by monotypy.

***HERMONEURA** Philippi, 1865: 655 (unjustified emendation of *Hirmoneura* Blanchard). Type species: *Hirmoneura obscura* Wiedemann in Meigen, 1820, automatic.

HIRMONEURITES Cockerell, 1910c: 283. Type species: *Hirmoneurites willistoni* Cockerell, 1910, by monotypy.

willistoni Cockerell, 1910c: 283 (*Hirmoneurites*). NE: USA (Oligocene) [C].

Genus NEORHYNCHOCEPHALUS Lichtwardt

***NEORHYNCHOCEPHALUS** Lichtwardt, 1909: 512. Type species: *Rhynchocephalus volaticus* Williston, 1883, by subsequent designation of Bequaert (1930: 287).

melanderi Cockerell, 1908c: 311 (*Hirmoneura*). NE: USA (Oligocene) [C].

occultator Cockerell, 1908e: 254 (*Hirmoneura*). NE: USA (Oligocene) [C].

vulcanicus Cockerell, 1908c: 311 (*Hirmoneura*). NE: USA (Oligocene) [C].

Genus PROHIRMONEURA Handlirsch

PROHIRMONEURA Handlirsch, 1906a: 633. Type species: *Prohirmoneura jurassica* Handlirsch, 1906, by monotypy.

jurassica Handlirsch, 1906a: 633. PA: Germany (Upper Jurassic) [C].

Genus PROSOECA Schiner

***PROSOECA** Schiner, 1867: 311 [1868: 112]. Type species: *Nemestrina westermanni* Wiedemann, 1821, by original designation.

PALEMBOLUS Scudder, 1878b: 526. Type species: *Palembolus florigerus* Scudder, 1878, by monotypy.

PALOMBOLUS, error for *Palembolus*.

florigera Scudder, 1878b: 528 (*Palembolus*). PA: USA (Oligocene) [C].

Genus PROTONEMESTRIUS Rohdendorf

PROTONEMESTRIUS Rohdendorf, 1968: 182. Type species: *Protonemestrius martynovi* Rohdendorf, 1968, by original designation.

bequaerti Rohdendorf, 1968: 239. PA: Kazakhstan (Upper Jurassic) [C].

handlirschi Rohdendorf, 1968: 184. PA: Kazakhstan (Upper Jurassic) [C].

longinasus Rohdendorf, 1968: 184. PA: Kazakhstan (Upper Jurassic) [C].

martynovi Rohdendorf, 1968: 183. PA: Kazakhstan (Upper Jurassic) [C].

Genus SINONEMESTRIUS Hong & Wang

SINONEMESTRIUS Hong & Wang, 1990: 149. Type species: *Sinonemestrius tuanwangensis* Hong & Wang, 1990, by original designation.

tuanwangensis Hong & Wang, 1990: 150. PA: China (Upper Jurassic) [C].

anwangensis. Incorrect original spelling of *tuanwangensis* (Hong & Wang, 1990: 188).

Questionably Placed in NEMESTRINIDAE

Genus RHAGIONEMESTRIUS Ussatchev

RHAGIONEMESTRIUS Ussatchev, 1968: 621 (381). Type species: *Rhagionemestrius rapidus* Ussatchev, 1968, by original designation.

rapidus Ussatchev, 1968: 621 (381). PA: Kazakhstan (Upper Jurassic) [C].