



Genus: *Mesembrius*



Mesembrius peregrinus male (© Sander Bot, licensed to the EU under CC-BY-NC 4.0)

Genus: *Mesembrius* Rondani, 1857

Family: Syrphidae

Subfamily: Eristalinae

Tribe: Eristalini

Number of species of this genus found in Europe: 1

Description

Head

The basoflagellomere is about as long as wide, and is dark brown; the arista is bare; the face and frons are yellow, completely covered with whitish-yellow dust and with pale-yellow hairs; the genae are black; the vertex is black, completely dusted and covered with black hairs; the occiput is covered with gray dust and yellow hairs; the eyes are bare; males are holoptic.



Mesembrius peregrinus male (© Sander Bot, licensed to the EU under CC-BY-NC 4.0)

Thorax

The mesonotum is black, covered with yellow hairs, and has two distinct medial and two lateral longitudinal grey dust stripes; the scutellum is mostly yellow, covered with intermixed yellow and black long hairs; the pleuron is black and covered with grey dust; the hairs on the pleuron are yellow and with a strongly twisted apex; the barette has hairs.

Wings

The wing veins are basally yellow to light yellow, while apically they are dark brown; vein R_{4+5} is strongly sinuate.

Legs

All femora are black, except for the yellow knees; the fore and mid leg tibiae are yellow, while the hind leg tibia is all-black; the fore and mid leg tarsi are mainly yellow, while the hind leg tarsus is black; the tarsus on the front leg is flattened and broader than on other legs; the hind leg femur apicoventrally has black bristle-like hairs of various lengths; the hind leg basitarsus ventrally has with globuliferous hairs.



Mesembrius peregrinus hind leg (© Sander Bot, licensed to the EU under CC-BY-NC 4.0)

Genitalia

No relevance of genitalia parts as diagnostic characters.

General comments on identification to species level

Abdomen

The tergites are black; tergites 2 and 3 each have a pair of large lateral orange-yellow markings; tergites 3 and 4 have a gray-dusted band on the posterior half; hairs on the tergites are mostly yellow, except the black hairs on the posterior margins of tergites; the sternites are mostly dark brown and covered with yellow long hairs.



Eurimyia lineata male



Anasimyia contracta male



Helophilus hybridus female



Parhelohpilus versicolor
male

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Geographical distribution and global diversity

Mesembrius peregrinus is widespread in central and southern countries in Europe, from the Ukraine to the European Russia, to Israel, and outside Europe it can be found from the Caucasus eastward through southern parts of the Palearctic to the Pacific and northern China.

Presence in Europe

Austria, Bulgaria, Czech Republic, France, Germany, Greece, Hungary, Italy, Montenegro, Poland, Romania, Russian Federation - European Russia, Serbia, Slovakia, Slovenia, Switzerland, Ukraine.

Biology

Adult behaviour and flower preferences

This species can be found in wetlands and other freshwater habitats such as temporary pools in humid, seasonally-flooded, unimproved grasslands and slightly brackish waters.

Reproduction and larval biology

The developmental stages have not yet been described, and are not fully understood but the larva is known to be saprophagous.

Seasonal life cycle

The adults can be seen between May and September around flowers as *Euphorbia*, *Paliurus spina-christi* and some umbellifers.

 **Type species:** *Helophilus peregrinus* Loew, 1846

List of species found in Europe:

1. *Mesembrius peregrinus* (Loew, 1846)

References

Aracil, A., Rojo, S. & Perez, C. (2021). *Mesembrius peregrinus*. *The IUCN Red List of Threatened Species* 2021: e.T149163667A152281562.

Speight, M.C.D. (2020) *Species accounts of European Syrphidae*. Vol. 104. M. C. D. Speight, E. Castella, J.-P. Sarthou, and C. Vanappelghem (Eds). Syrph the Net publications, Dublin, 314 p.

Van Veen, M.P. (2004). *Hoverflies of northwest Europe: identification keys to the Syrphidae*. KNNV Publishing, Utrecht, The Netherlands, 254 pp.

Attributions

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