



Genus: *Arctosyrphus*



Arctosyrphus willingii female (© Sander Bot, licensed to the EU under CC-BY-NC 4.0)

Genus: *Arctosyrphus* Frey, 1928

Family: Syrphidae

Subfamily: Eristalinae

Tribe: Eristalini

Number of species of this genus found in Europe: 1

Description

Head

The face is concave below the antennal insertion and extended anteriorly and ventrally (conically pointed), with an ill-defined facial tubercle. Its colour is black with dense white dust laterally and below antennal insertions, forming a medial shiny black stripe that does not reach the antennal insertions, and it has long white hairs laterally and at the level of the antennal insertions. The face is also shiny black on the anteroventral area between face and gena. The gena is black, dusted grey and it has long white to yellow hairs. The frons is black, slightly dusted grey with long erect black and yellow hairs on anterior 1/2, but it is bare on posterior 1/2. The lunule is yellowish, shiny. The vertical triangle has long black and yellow hairs; and the ocellar triangle is broad. The eyes are dichoptic and bare. The occiput is black, dusted grey with yellow and black hairs. The antennal scape and pedicel are black, and the basoflagellomere is dark brown and squarish; the arista is brown and pubescent (with very short hairs, shorter than the width of the arista's base).

Thorax

The scutum is black and slightly dusted grey, with long erect yellow hairs with a few brown hairs. The postpronotum has yellow and black hairs. The scutellum is black with long erect yellow hairs and lacks a subscutellar fringe. The pleuron is black, slightly dusted grey and has long erect yellow and black hairs. The metasternum has long hairs. The plumule and haltere are brownish and the calypters are white.

Wings

It is hyaline, entirely microtrichose and some veins are yellow and others are brown in colour. The wing vein R_{4+5} is deeply looped and the pterostigma is short crossvein-like. The cell r_1 is open to the wing margin.

Legs

The legs are mostly black and mostly yellow-haired, but with some black hairs. The femora have a patch of black setae antero-basally. The hind leg femur is thickened, and the hind leg tibia has an antero-basal ridge with black setae on basal 1/2.

Abdomen

Black in colour, shiny and punctate, except for tergite 1 that is dusted grey. It has long white hairs on the lateral margins that may form patches, but has short black hairs medially, except for tergite 4 that has long white hairs on the posterior margin. The sternites are black, slightly dusted grey and with long white hairs.

General comments on identification to species level

Differential diagnosis

The only species of the genus, *Arctosyrphus willingii*, is quickly recognized by the long black face, ventrally produced, and dusted white laterally. It has the thorax and abdomen black with white hairs, together with a deeply looped wing vein R_{4+5} .

It differs from *Eurimyia lineata* by the facial and abdominal colouration (the face is yellow and the abdomen has yellow spots in *Eurimyia*) and from the *Helophilus* species by the short crossvein-like pterostigma (which is long in *Helophilus*) and the absence of yellow markings on tergite 2 (*Helophilus* species have yellow markings on tergite 2).



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

Geographical distribution and global diversity


There is only one species, which is widely distributed from northern parts of European Russia through Siberia, Canada and North Dakota (U.S.A.).

Presence in Europe

Russian Federation - European Russia.

Biology

Arctosyrphus inhabits tundra wetlands, prairie sloughs or swamps, and sedge meadows.

 **Type species:** *Arctosyrphus nitidulus* Frey, 1918

List of species found in Europe:

1. *Arctosyrphus willingii* (Smith, 1912)
-

References

Bei-Bienko, G. Y., & Steyskal, G. C. (Eds.). (1969) Keys to the insects of the European Part of the USSR. Volume 5. Diptera and Siphonaptera, Part 2. Institute of Zoology, Academy of Sciences, USSR, No. 103.

Skevington, J. H., Locke, M. M., Young, A. D., Moran, K., Crins, W. J. & Marshall, S. A. (2019) *Field Guide to the Flower Flies of Northeastern North America*. Princeton Field Guides, Princeton University Press, 511 pp.

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.

Speight, M. C. D. (2020) *StN keys for the identification of the genera of European Syrphidae (Diptera) 2020*. Syrph the Net, the database of European Syrphidae. Syrph the Net publications, Dublin, 105: 46.

Violovich, N. A. (1986) Siberian Syrphidae (Diptera). *Verslagen en Technische Gegevens*. Institute of Taxonomic Zoology, Amsterdam, 228 pp.

Attributions

This factsheet was created by Taxo-Fly and is one of the outputs from a network of European Initiatives dedicated to pollinators, such as the EU Pollinator Monitoring Scheme (EUPoMS), the Preparatory Action for EU Pollinator Monitoring Scheme and Indicators (SPRING project), the Horizon 2020 Europe research projects (POSHBEE, SAFEGUARD), and European National action plans for pollinators.

Authors

Photographs: Sander Bot (Taxo-Fly team)

Text: Ximo Mengual (Taxo-Fly team)

Reviewer: Francis Gilbert (Taxo-Fly team)

License

The content of this factsheet is licensed under a Creative Commons Attribution-ShareAlike ([CC BY-SA](#)).

Image rights

Most images created under the Taxo-Fly project have an open Creative Commons license ([CC BY 4.0](#)). However, some images are licensed to the European Union and shared under the Creative Commons license Attribution-NonCommercial 4.0 International ([CC-BY-NC 4.0](#)). This is indicated in the image caption.

