



Genus: *Lapposyrphus*



Lapposyrphus lapponicus habitus male

(© Sander Bot)

Genus: *Lapposyrphus* Dušek & Láska, 1967

Family: Syrphidae

Subfamily: Syrphinae

Tribe: Syrphini

Number of species of this genus found in Europe: 1

Description

Head

The face is rather narrow occupying about 43% of the width of the head. It is yellow with a brown to black median stripe that is as broad as 1/5 to 1/3 of the width of the face and overlaps the facial tubercle below the antennal sockets. The face is usually yellow haired but often also partly black haired especially on the facial tubercle. The oral margin is brown to black or yellowish to fully yellow laterally. The eyes are virtually bare without a distinct area of enlarged facets on the dorsal half of the eye. The frontal triangle is yellow often with a brown semicircular line behind the lunule and intensively silvery dusted on the yellow ground colour above the brown line. The angle of approximation of the eyes is up to 90°. The antenna is short, brown, but often almost yellow below, with an oval basoflagellomere that is only slightly (about 1.1 times) longer than high.

Thorax

The black scutum is rather shiny with a weak bluish green sheen. It is covered with whitish yellow hairs and is obscurely yellowish brown margined from the postalar callus to the notopleuron, but is black posteriorly behind the postpronotum. The dull yellow scutellum is covered mostly with black hairs on the disc and with longer yellow and black hairs on the margins. The yellow hairs are usually confined to the lateral corners. The pleuron is completely black. The anterior anepisternum, meron and metepisternum are bare. The metasternum is bare and the upper and lower katepisternal hair patches are rather separated.

Wings

The wing is hyaline with partly reduced microtrichia, about 80 to 90 % of the surface of the cell bm is bare and an inconspicuous to large bare area is present on the alula. The

wing membrane outside of vein M_1 and crossvein $dm-m$ is broad and slightly undulating. Vein R_{4+5} is strongly curved so that its hypothetical tangent at the inflection point clearly intersects vein R_{2+3} . The surface of the lower lobe of the calypter is without long erect hairs.

Legs

The dull yellow legs are simple and have the front and mid femora brownish black for the basal 1/10 to 1/3 of their length; the hind femur is usually brownish black for the basal 3/4 of its length or it is entirely yellow even if slightly brownish in some parts. The hind tibia sometimes has a brownish ring in the middle. Tarsi are also often partly brownish from above, especially tarsomeres 2-4. The long posterior hairs on the front femur are all yellow or a few of them are black on the yellow posterior part of the femur.

Abdomen

Tergite 2 has a pair of broadly separated yellow bars that usually do not overlap the lateral margins of the tergite. Tergites 3 and 4 each have a pair of yellow bars distinctly separated in the midline by black, with each bar exhibiting a concave anterior margin. In addition, the antero-lateral extremities of these yellow bars show a clear tendency to reach the lateral margins of the tergites. Tergite 5 has a broad black band that is usually broadly connected with the black lateral margins of the tergite.

General comments on identification to species level

Differential diagnosis

The genus *Lapposyrphus* comprises rather robust average sized hoverflies with virtually bare eyes, with only a partly obscurely brown-margined shiny to subshiny black scutum and a black and oval abdomen with extensive transverse yellow markings. The surface of the lower lobe of the calypter is without long erect hairs and the abdomen is flattened with a distinct marginal sulcus from close to the middle of tergite 2 to the

apex of tergite 5. This sulcus is black haired including on any margins of the tergites that are yellow which is the same as in the related genera *Eupeodes* and *Scaeva* and in contrast to most of the other genera of Syrphini, e.g. *Syrphus*, *Epistrophe* and *Parasyrphus*. The wing membrane outside of vein M_1 and crossvein dm-m is broad and usually slightly undulating which is also similar to the related genera *Scaeva*, *Eupeodes* and *Ischiodon*. Superficially, specimens of *Lapposyrphus* are particularly similar to a species of *Eupeodes* which have a pair of yellow bars on tergites 3 and 4 separated by black in the midline and with the lateral margins of tergite 5 black. However, in contrast to all *Eupeodes* species, *Lapposyrphus* has a bare metasternum and the vein R_{4+5} is strongly curved with its hypothetical tangent at the inflection point clearly intersecting vein R_{2+3} . The bare metasternum and strongly curved vein R_{4+5} are also found in the genus *Scaeva* but, in contrast to this genus, *Lapposyrphus* has bare eyes with a narrow (less than 90°) angle of approximation of the eyes.



Lapposyrphus lapponicus male
habitus



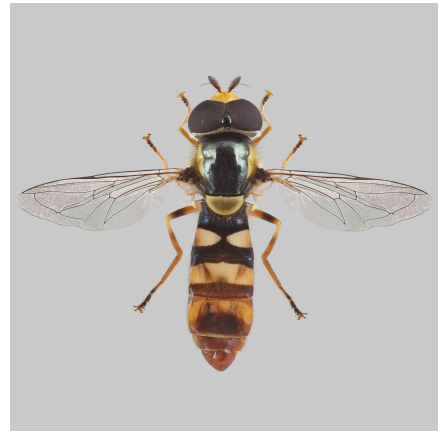
Lapposyrphus
lapponicus metasternum



Scaeva selenitica male habitus



Eupeodes luniger male habitus



Ischiodon aegyptius male habitus

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Geographical distribution and global diversity

Only 2 species are consigned to this genus in the Holarctic region. The first has a wide Holarctic distribution and the second species is known from the Western Nearctic (Vockeroth 1969 and 1992).

Presence in Europe

Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Moldova, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russian Federation - European Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom.

Biology

Lapposyrphus contains primarily arboreal species although the adults are capable flyers, vagrants and even have a pronounced migratory behaviour. The larvae are active predators of various adelgids and aphids on a wide range of deciduous and coniferous trees and shrubs (Rojo et al. 2003, Bartsch et al. 2009b, Vockeroth 1992).



Type species: *Scaeva lapponica* Zetterstedt, 1838

List of species found in Europe:

1. *Lapposyrphus lapponicus* (Zetterstedt, 1838)

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