Pollinator Academy

Genus: *Syrphocheilosia*

Syrphocheilosia claviventris male

Genus: *Syrphocheilosia* Stackelberg, 1964

Family: Syrphidae

Subfamily: Syrphinae

Tribe: Bacchini

Number of species of this genus found in Europe: 1

Description

Head

The face is black, with a facial tubercle, and with mixed black and white hairs. The face is sub-shiny. The lateral margins of the face are almost parallel. The frons is black haired, these hairs are 2 to 3 times longer as the facial hairs. The lunule is black. The ocellar triangle is occupying almost the entire vertex, it is black and it is black haired. The eye is bare, the male is holoptic, the eye contiguity is about half as long as the length of the frons. The female is dichoptic. The antenna is black, the basoflagellomere is shorter than high, and it is almost circular. The arista is short, with short adpressed hairs that are less than twice as long as the aristal width.

Thorax

The thorax is entirely black, and it is sub-shiny with mixed, short black and yellow semi-erect hairs. The male also has scattered black hairs intermixed that are 2 to 3 times longer than the whitish hairs. The postpronotum is bare. The proepimeron, the posterior anepisternum, and the anepimeron are hairy. The dorsal and ventral part of the katepisternum each with a hair patch, these hair patches are not connected. The scutellum has mixed short black and white hairs. The metasternum is bare.

Wings

The wing membrane is entirely microtrichose, and the membrane is pale-brown infuscated, with a weak vena spuria. The pterostigma is brownish. The crossvein r-m is placed in the basal 1/3 of

cell dm. The vein R_{4+5} straight, and the vein M_1 is perpendicular to vein R_{4+5}. The wing cell r_1 is open. The calypter and haltere are greyish.

Legs

The legs are black and slender, and they are whitish haired. The tarsi have whitish-yellow bristles on the ventral side.

Abdomen

The abdomen is black, it is sub-shiny and covered in short white hairs. The male abdomen is very slightly constricted between tergite 2 and 3, whereas it is clearly constricted in the female. The abdomen is without a marginal groove.

Syrphocheilosia claviventris female abdomen

Syrphocheilosia claviventris female head lateral

Syrphocheilosia claviventris male antenna

General comments on identification to species level

Differential diagnosis

The genus *Syrphocheilosia* belongs to the subfamily Syrphinae, and like other genera in this subfamily it has a bare postpronotum and in the male there are five pre-genital tergites visible in a dorsal view. *Syrphocheilosia* strongly resembles the genus *Cheilosia* in having an entirely bronze-black and shiny body and with the presence of a facial tubercle. But *Cheilosia* belongs to the subfamily Eristalinae which have a hairy postpronotum and four pre-genital tergites that are visible in the male in a dorsal view.

Within the subfamily Syrphinae several genera comprise species which are entirely or almost entirely black-bodied. *Syrphocheilosia* males can be differentiated from these black species belonging to the genera *Melanostoma*, *Platycheirus*, *Rohdendorfia*, *Spazigaster* and *Xanthandrus* by the following characteristics: the scutum of *Syrphocheilosia* is coarsely punctured. The scutum is weakly and not coarsely punctured in *Melanostoma*, *Platycheirus* and *Xanthandrus*. The legs of *Syrphocheilosia* are entirely black and slender throughout, without any modifications in shape or hairs on any of the legs. This is unlike in *Platycheirus* were the front legs are usually modified in shape and/or hairs, and in *Spazigaster* were the hind tibia is modified in shape. The arista of *Syrphocheilosia* is short haired (less than twice the aristal width) like in *Melanostoma* and *Platycheirus*, whereas it is bare in *Rohdendorfia* and *Xanthandrus*. The arista of *Spazigaster* is long-haired, with hairs more than twice as long as aristal width. In *Syrphocheilosia* the abdomen is short and entirely black. In the female the abdomen is trapezoid shaped. In *Spazigaster* the abdomen is black, elongated and constricted between the tergites 2 and 3, and in the female the abdomen is extensively red coloured. In *Rohdendorfia* the abdomen is slender and with orange-yellow markings in the male and female, and in *Xanthandrus* the abdomen is broadly oval and mostly with smaller or larger orange-brown markings in the male and female. *Melanostoma* and *Platycheirus* have an abdomen that is typically with grey, orange or yellow markings in males and females.

Geographical distribution and global diversity

This is a Palaearctic genus, in Europe it is restricted to the high mountains of the Alps and into the Balkan peninsula. It is widespread in the Alps in (sub)alpine meadows between 1000 and 2600 metres altitudes, and it occurs locally in the Bulgarian mountains. Outside of Europe, it is recorded from Turkey, the Transcaucasus and north Caucasus.

Presence in Europe

Austria, Bulgaria, France, Germany, Italy, Liechtenstein, Switzerland.

Biology

Adult behaviour and flower preferences. *Syrphocheilosia* lives close to flushes and streamlets in unimproved, calcareous and non-calcareous montane and alpine grasslands from the top of the *Picea* zone to above 2500 meters. In mid-summer it is regularly found to be the dominant hoverfly in high alpine non-calcareous grazed meadows. It has been recorded from *Anemone ranunculoides*, *Caltha palustris*, *Cardamine amara*, *Helianthus* spp., *Potentilla grandiflora* and *Ranunculus* spp.

Reproduction and larval biology. The immature stages are unknown.

Type species: *Syrphocheilosia aterrima* Stackelberg, 1964

List of species found in Europe:

1. *Syrphocheilosia claviventris* (Strobl, 1909)

References

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