



Genus: *Xanthandrus*



Xanthandrus comtus male

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Genus: *Xanthandrus* Verrall, 1901

Family: Syrphidae

Subfamily: Syrphinae

Tribe: Melanostomini

Number of species of this genus found in Europe: 3

Description

Head

The basoflagellomere is longer than wide, orange-yellow ventrally and dark brown dorsally; the arista is brown and bare. The face, frontal triangle and vertical triangle are black, and a facial knob is present. The lunule is light brown to yellow. The eye is bare.

Thorax

The mesonotum is black, with brownish to golden metallic shine. The scutellum is covered with much longer hairs than those on the mesonotum. The hair patches on the katepisternum are connected anteriorly.

Wings

The wing can be hyaline or slightly darkened in the anterior half.

Legs

Legs are simple, mostly black, with some yellow parts on femora and tibiae.

Abdomen

Broader than the scutellum, about 1.5-1.8 times longer than wide. The abdomen is black, with a pair of yellow markings (often greyish in female *X. comtus*) at least on tergites 3 and 4 (in *X. comtus*), while in females of *X. azorensis* and *X. babyssa* the abdomen is completely black.

General comments on identification to species level



Xanthandrus babyssa male habitus



Xanthandrus azorensis female abdomen



Pyrophaena granditarsis male habitus



Pyrophaena rosarum male habitus

Differential diagnosis

Xanthandrus species are road-bodied hoverflies, with a black thorax and face, and reddish-orange markings on the abdomen (at least in males). In Europe only three species are present. *Xanthandrus* species are very similar to *Pyrophaena*, with differences in the shape and colour of the abdomen: in *Xanthandrus* the abdomen is broader and shorter, about 1.5-1.8 times longer than wide, whereas in *Pyrophaena* it is more elongate and slenderer, about 2-3 times longer than wide. Furthermore, in *Xanthandrus* at least tergites 3 and 4 (in males) have pairs of rectangular yellow markings, while in *Pyrophaena* the arrangement of yellow markings on the tergites is different.

Geographical distribution and global diversity

Xanthandrus azorensis is endemic to the Azores and *X. babyssa* is endemic to Madeira, whereas *X. comtus* is distributed across Europe through European Russia to the Pacific coast.

Presence in Europe

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

Biology

Adult behaviour and flower preferences. Adults of *Xanthandrus* can be found in sheltered spots, such as forest edges or peaty wetlands (*X. azorensis*) in deciduous, broad-leaved evergreen and coniferous (*Fagus*, *Quercus*, and *Pinus*) or Laurisilva (*X. babyssa*) forests but, recently, males of *X. comtus* have been observed hovering in sun-spots (R. Morris pers. comm.). They visit flowers such as Apiaceae, Asteraceae, Euphorbiaceae, *Arbutus unedo*, *Crataegus*, *Filipendula*, *Hedera*, *Juncus*, *Leontodon*, *Lonicera*, *Mentha aquatica*, *Rosa*, *Rubus*, *Succisa* and *Viburnum tinus*.

Reproduction and larval biology. To date, only the developmental stage of *X. comtus* has been described: there are several published records of predation on gregarious lepidoptera larvae (e.g. Chapman 1906) but StN also states that it will take aphids.

Seasonal life cycle. Generally, activity of the *Xanthandrus* species was recorded from March to October. However, recent British data show that *X. comtus* is also active in

winter months (Morris & Ball, 2019).



Type species: *Musca comtus* Harris, 1780

Common names:

FI - ruutukirvarit;

SV - målblomflugor;

NB - møllblomsterfluer

List of species found in Europe:

1. *Xanthandrus azorensis* Frey, 1945
2. *Xanthandrus babyssa* (Walker, 1849)
3. *Xanthandrus comtus* (Harris, 1780)

References

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Attributions

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