Pollinator Academy

Genus: *Brachypalpoides*

Brachypalpoides lentus male habitus (© Sander Bot, licensed to the EU under CC-BY-NC 4.0)

Genus: *Brachypalpoides* Hippa, 1978

Family: Syrphidae

Subfamily: Eristalinae

Tribe: Milesiini

Number of species of this genus found in Europe: 1

Description

Head

In front view more or less elliptical to subtriangular or cordate, about as broad as or slightly broader than thorax. Face non-carinate, in profile deeply and angularly concave, lower part produced less in contrast to the strongly developed frontal region. Face evenly pollinose; black. Eyes bare, no enlarged facets. Antennae drooping, short to somewhat elongate, segment 3 rounded, a bit longer than wide. Eyes large, cheeks and postocular orbits thus rather narrow, in male holoptic. Frons of female at level of posterior ocelli 1/5-1/6 of width of head.

Thorax

Mesonotum with the surface smooth shiny to semishiny, slightly pollinose over whole surface. Hairs on scutum are short, pale with some black hairs intermixed. Scutellum 1.5-2 times as broad as long, surface and hairs like on the posterior part of scutum, scutellum with subscutellar fringe. Katatergite simple. Metasternum pubescent, simple.

Wings

As long or longer than abdomen, rather narrow. Wing hyaline, but usually slightly infuscated in the apical half. Vein r-m rather long, ending on discal cell at the middle. Cell cup with a hang vein at posterior apical corner.

Legs

No modifications on the legs, simple. Hind femur somewhat enlarged, with an apicoventral spinose ridge. Basal part of hind femur with long white hairs. Hairy fringes of the tibiae are weak and developed only on the apical retrolateral surfaces of the front and middle tibiae. Hind tibia only slightly arcuate. Legs completely black.

Abdomen

Abdomen about as long as scutum and scutellum together, parallel-sided. Tergite 4 without distinctly depressed apical part. Surface of tergites fairly smooth, semi-shiny throughout. Abdomen partly black, tergites 2 and 3 and sometimes also tergite 4 (in female) largely reddish. Hairs on abdominal tergites 2 and 3 long, pale.

Genitalia

The outer lateral surface of the dorsal lobe of the surstyli is not depressed in the middle, and the ventral lobe is only slightly constricted basally, tergite 9 is rather simple. There is no tendency to anterior bifurcation of the hypandrium, the inner lateral ventral lobe of the lateral arms of the hypandrium is prominent and the ejaculatory apodeme is simple.

General comments on identification to species level

Medium- to large-sized elongate species with strongly produced frons, deeply concave simple face, pubescent metasternum and characteristic male genitalia. Only one European species, *Brachypalpoides lentus* (Meigen, 1822).

Differential diagnosis

Probably only to be confused with *Chalcosyrphus piger* (Fabricius, 1794). In comparison with that species Brachypalpoides has longer legs and hind femur is less thickened. The scutum is shiny, in *C. piger* it is matt. The legs of *Brachypalpoides* are black. Tergites 2 and 3, and base of tergite 4 in female are red, tip of abdomen black. Other Xylotini with red on the abdomen have partly yellow legs, while the legs of *Brachypalpoides* are completely black.

Chalcosyrphus piger male habitus (© Sander Bot, licensed to the EU under CC-BY-NC 4.0)

Geographical distribution and global diversity

Found from Scandinavia to the Pyrenees and central Spain; Ireland through central Europe into European parts of Russia; southern Europe eastwards to the former Yugoslavia and Greece and into Asia Minor.

Biology

The preferred environment of this species is forest with over-mature trees; especially *Fagus, Picea* and *Quercus* and including evergreen oak forest (Speight 2020). Adult have been seen on foliage of bushes, such as *Rubus fruticosus*, at the edge of forest clearings and on the ground near fallen and felled trees. A teneral specimen, not capable yet of flying, was observed on a *Populus*-trunk (Reemer et al. 2009). Flowers visited include umbellifers, *Crataegus spp., Galium spp., Rubus idaeus, Sorbus aucuparia.* The flight period of this species is from April to June, and July at higher altitudes.

The larvae are undescribed, but the species has been bred from damp, fungus-riddled rotten wood within the trunk base of an old, living *Fagus* and is included in the keys provided by Rotheray (1994), where it is distinguished from larvae of related genera and its fore body is figured. Larvae have also been found beneath the bark of Picea, by Kassebeer (1993).

Type species: *Xylota lenta* Meigen, 1822

Common names:
ENG – Leafwalkers;
FIN – veripuuharit;
SWE - mulmblomflugor

List of species found in Europe:

1. *Brachypalpoides lentus* (Meigen, 1822)

References

Bartsch, H., Binkiewicz, E., Radén, A. & Nasibov, E. (2009). B*lomflugor: Syrphinae. Nationalnyckeln till Sveriges flora och flora*, DH53a. Artdatabanken, SLU, Uppsala.

Hippa, H. (1978). Classification of Xylotini (Diptera, Syrphidae). *Acta Zoologica Fennica* 156: 1-153.

IUCN. 2021. The IUCN Red List of Threatened Species. Version 2021-2. Available at: www.iucnredlist.org. (Accessed: 04 September 2021).

Kormann, K. (1988). Schwebfliegen Mitteleuropas: Vorkommen, Bestimmung, Beschreibung. *Ecomed*: 1-176.

Radenković, S., Nedeljković, Z., Ricarte, A., Vujić, A. and Šimić, S. (2013). The saproxylic hoverflies (Diptera: Syrphidae) of Serbia. *Journal of Natural History* 47(1-2): 87-127.

Reemer, M., Renema, W., van Steenis, W., Zeegers, Th., Barendregt, A., Smit, J.T., van Veen, M.P., van Steenis, J. and van der Leij, L.J.J.M. (2009). *De Nederlandse Zweefvliegen (Diptera: Syrphidae)*. Nationaal Natuurhistorisch Museum Naturalis, KNNV Uitgeverij & EIS - Nederland.

Rotheray, G.E. (1994). Colour guide to hoverfly larvae (Diptera, Syrphidae) in Britain and Europe. *Dipterists Digest* 9: 1-156.

Speight, M.C.D. (2020). Species accounts of European Syrphidae, (2020). Syrph the Net, the database of European Syrphidae (Diptera). *Syrph the Net publications*, Dublin 104: 1-314.

Speight, M.C.D. & Sarthou, J.-P. (2017). StN keys for the identification of the European species of various genera of Syrphidae, 2017. *Syrph the Net publications*, Dublin 99: 139.

Stubbs, A.E. & Falk, S.J. (1983). *British hoverflies: an illustrated identification guide*. Br.Ent.Nat.Hist.Soc., London, 253pp.

Torp, E. (1984). *De danske svirrefleur (Diptera: Syrphidae), kendetegn, levevis og udbredelse*. Danmarks Dyreliv: 1-300.

Torp, E. (1994). *Denmark's Hoverflies*. Apollo Books, Stenstrup, Denmark.

Van der Goot, V.S. (1986). *Zweefvliegen in kleur*. KNNV, Uitgave.

Attributions

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