

Xylota caeruleiventris Zetterstedt (Diptera, Syrphidae) is present in central Europe

Zdeněk Doležal and Thomas Romig

Doležal, Z.; Romig, T. (2004): *Xylota caeruleiventris* Zetterstedt (Diptera, Syrphidae) is present in central Europe. – Volucella 7, 201-203. Stuttgart.

We report on a population of *Xylota caeruleiventris* Zetterstedt in the vicinity of Pilsen (Czech Republic). In June 1997 and 1998, 11 males were caught. All the flies were found on the trunks of recently fallen pines (*Pinus sylvestris*). The locality is at the immediate edge of a degraded peat bog.

Key words: *Xylota caeruleiventris*, relic population, Czech Republic, Syrphidae.

Zusammenfassung

Wir berichten über den Nachweis einer Population von *Xylota caeruleiventris* Zetterstedt in der Umgebung von Pilsen (Tschechische Republik). Jeweils im Juni der Jahre 1997 und 1998 wurden insgesamt 11 Männchen gefangen, die auf frisch umgestürzten *Pinus sylvestris*-Stämmen saßen. Der Fundort liegt unmittelbar am Rand eines weitgehend zerstörten Hochmoors.

The recognition of *Xylota caeruleiventris* Zetterstedt and *X. jakutorum* Bagatshanova as separate species is of very recent origin (Mutin & Gilbert 1999), and previous records of "*X. caeruleiventris/caeruleiventris*" without voucher specimens can therefore not be interpreted. Until very recently (Doczkal 2004), specimens from central Europe invariably turned out to belong to *X. jakutorum*. The "true" *X. caeruleiventris* was in Europe recorded only from very few locations in the boreal zone of Norway, Sweden, Finland and Russia (Bartsch et al. 2002), although it appears to be a common species in temperate regions of the eastern Palearctic (Mutin, pers. comm.). Where details are available, most records are from pine forests in the vicinity of bogs. The scarcity of this species in Europe was tentatively explained by a hypothetical association with the frequent occurrence of forest fires, the species being somehow dependant on burnt wood as larval habitat (Bartsch et al. 2002).

It is therefore of interest to report the occurrence of this species in western Bohemia, Czech Republic. The following specimens were caught (by netting) at the location Kamenný Rybník at the northern border of the city of Pilsen: 9.VI.1997, 1 male (leg. Z. Doležal); 30.VI.1998, 10 males (leg. Z. Doležal).

The habitat, at an elevation of 340 m, is a peat bog bordered by a pine-oak forest, including an artificial pond system dating back to the 15th century. Although being protected since 1953 to conserve the subboreal flora and fauna, the bog was severely degraded at the end of the 20th century by the construction of buildings in the outskirts of Pilsen, and by use of the ponds for recreational purposes. Most of the forest dates back to the beginning of the 20th century, when large parts of the formerly extensive bog were drained and turned into plantations of pine, oak and spruce. There is no evidence of recent forest fires.

X. caeruleiventris was found in moist stretches of the forest, on the trunks of recently fallen pines (*Pinus sylvestris*). The fall of pines and other trees is a regular occurrence due to the instability of the sandy, permanently wet soil. The males were invariably found sitting on the upper side of very fresh logs (branches still with needles), while, at the same location, males of *X. jakutorum* and *X. florum* were usually found on older, decayed wood or on other objects. In addition, the surroundings of this location support a number of other infrequent syrphid species which are associated with dead wood, e.g. *X. meigeniana*, *X. tarda*, *X. xanthocnema*, *X. ignava*, *Brachypalpus laphriformis* and *Chalcosyrphus eunotus*.

We do not want to speculate on the larval habitat of this species, but the circumstances of the collection – males patrolling freshly fallen pines in a peat bog – indicate very specific requirements which are different from those of closely related species. The habitat seems to agree with published records from Fennoscandia, but the association with a burnt-forest fauna is not supported by our observations. Rather, the apparent scarcity of the species could be the result of the extensive destruction of peat bogs in Europe. More relic populations of the species may be found by focussed search of similar habitats in other parts of Europe, as is demonstrated by the most recent records of the species in similar situations in southwestern Germany (Doczkal 2004).

Differentiation of the males of *X. caeruleiventris* from *X. jakutorum* does not present a problem using the published characters (Bartsch et al. 2002; Mutin & Barkalov 1999), although the long apical seta on the front basitarsus is not present on all our specimens. However, since a number of 'eastern palaearctic' species have recently turned out to be present also in Europe, the question of the recognition of *X. pseudoignava* Mutin arises. This species, according to the description, is extremely similar to *C. caeruleiventris*, basically differing by the presence of some black hairs on the posterior half of the mesonotum and the posterior callus, and the presence ('usually') of more than one apical seta on the front basitarsus of the male (Mutin and Gilbert 1999; Mutin & Barkalov 1999), characters which are likely to be subject to infraspecific variation.

Acknowledgements

We thank Tore R. Nielsen, Sandnes, for examining three specimens of the series and for his comments, helpful as always!

References

- Bartsch, H.D.; Nielsen, T.R.; Speight, M.C.D. (2002): Reappraisal of *Xylota caeruleiventris* Zetterstedt, 1838, with remarks on the distribution of this species and *X. jakutorum* Bagatshanova, 1980 in Europe. – Volucella 6, 69-79. Stuttgart.
- Doczkal, D. (2004): *Xylota caeruleiventris* Zetterstedt, 1838 (Diptera, Syrphidae) found in central Europe, with remarks on identification of the female. – Volucella 7, 193-200. Stuttgart.
- Mutin, V.A.; Barkalov, A.V. (1999): 62. Syrphidae. In: Key to the insects of Russian Far East. Vol. VI. Diptera and Siphonaptera. Pt. 1, pp. 342-500. – Vladivostok (Dal'nauka).
- Mutin, V.; Gilbert, F. (1999): Phylogeny of the genus *Xylota* Meigen, 1822 (Diptera, Syrphidae), with descriptions of new taxa. – Dipteron 2, 45-68. Kiel.

Addresses of authors:

Zdeněk Doležal, Pod Záhorskem 23, 30166 Pilsen, Czech Republic
Dr. Thomas Romig, Universität Hohenheim, Fachgebiet Parasitologie, 70599 Stuttgart, Germany. E-mail: romig@uni-hohenheim.de

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Volucella - Die Schwebfliegen-Zeitschrift](#)

Jahr/Year: 2004

Band/Volume: [7](#)

Autor(en)/Author(s): Dolezal Zdenek, Romig Thomas

Artikel/Article: [Xylota caeruleiventris Zetterstedt \(Diptera, Syrphidae\) is present in central Europe 201-203](#)