A new species of *Sybistroma* Meigen (Diptera: Dolichopodidae) from the Middle East with a key to West-Palaearctic species of the genus

IGOR YA. GRICHANOV & FARZANEH KAZERANI

1All-Russian Institute of Plant Protection, Podbelskogo 3, 196608 St. Petersburg, Pushkin, Russia. E-mail: grichanov@mail.ru

2University of Tabriz, Department of Plant Protection, Faculty of Agriculture, 51664, Tabriz, I.R.Iran.
E-mail: f.kazerani2000@yahoo.com

3Corresponding author

Abstract

A new species, *Sybistroma occidasiatica* sp. nov., from the Middle East is described. It is close to *S. inornata* (Loew, 1857), but is distinguished by its long arista-like antennal stylus (longer than postpedicel) and short apicoventral epandrial lobe of the hypopygium (much shorter than cercus). The new species is peculiar in comprising two phenotypes, which can be distinguished by the length ratio of 1st and 2nd articles of the antennal stylus. The following recombination is also proposed: *Sybistroma caudata* (Loew, 1859), *comb. nov.* (transferred from *Gymnopternus* Loew, 1857). A checklist of the 26 West-Palaearctic species of the genus is compiled, as well as a key based mainly on male secondary sexual characters. The known distribution of *Sybistroma* Meigen, 1824, is discussed.

Key words: Palaearctic Region, Iran, Turkey, Israel, Diptera, Dolichopodidae, *Sybistroma*, new species, key, checklist

Introduction

Up until 2005, the dolichopodine genus *Sybistroma* Meigen, 1824, had long been supposed to be Mediterranean in distribution, with five known species (Negrobov 1991). The genus has been recently expanded to include *Hypophyllus* Haliday, 1832, *Ludovicius* Rondani, 1843, *Nodicornis* Rondani, 1843, and some species of *Hercostomus* Loew, 1857 (Brooks 2005; Grichanov 2012). Naglis (2011) described an additional species from Turkey. Currently, *Sybistroma* contains more than 50 species described mainly from the Palaearctic and Oriental (China) regions. A single Afrotropical species, *S. bogoria* (Grichanov, 2004), has been described from Kenya (Grichanov 2004, as *Ludovicius*).

Most males of *Sybistroma* can be distinguished by their modified antenna (reduced pedicel, postpedicel sometimes enlarged, stylus often with one or more lamellae) and hypopygial morphology (tripticate arrangement of basiventral epandrial lobes and hypandrium in ventral view). Males of species lacking modified antennae are distinguished by the possession of elongate setulose apicoventral epandrial lobes of hypopygium (Brooks 2005, figs 30A–C). Females of *Sybistroma* cannot readily be distinguished from those of *Hercostomus*. A key to the 18 East Mediterranean species was provided by Grichanov (2007). Yang *et al.* (2011) provided a key to Chinese species (Palaearctic and Oriental).

In the present paper, a new species, *Sybistroma occidasiatica* sp. nov., from the Middle East is described and illustrated. In addition, a key to males of West-Palaearctic species of *Sybistroma* is provided. This part of the Palaearctic Region is conditionally confined to the terrestrial ecoregions north and west of the Karakoram mountain range to the Arctic Ocean and to the Atlantic Ocean. With the new species described in this paper, the West-Palaearctic fauna of *Sybistroma* now totals 26 species. All previously described West-Palaearctic species have been diagnosed and/or illustrated by Parent (1938), Stackelberg (1941, 1949), Negrobov (1979), Negrobov & Onishchenko (1991), Grichanov (2000) and Naglis (2011).
Acknowledgments

The authors are sincerely grateful to Drs. Nikita Vikhrev and Andrei Ozerov (Moscow), Dr. Amnon Freidberg (Tel Aviv) for their kindness in providing specimens for study. Bradley Sinclair and Scott Brooks (CNC, Ottawa) kindly commented on earlier drafts of the manuscript. The work of senior author was partly supported by the Russian Foundation for Basic Research grant N 14-04-00264-a.

References

http://dx.doi.org/10.5962/bhl.title.13731