

**First records of two spongillafly species from Hungary  
(Neuroptera: Sisyridae)**

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**Abstract** – *Sisyra bureschi* Rausch et Weißmair, 2007 and *Sisyra iridipennis* Costa, 1884 (Neuroptera: Sisyridae) are reported from Hungary for the first time.

**Key words** – *Sisyra*, aquatic insects, faunistics, distribution, Palaearctic Region, Danube

INTRODUCTION

*Sisyra* Burmeister, 1839 (Neuroptera: Sisyridae) is the only genus of spongillaflies in the Western Palaearctic region; seven species are known to occur in Europe: *Sisyra bureschi* Rausch et Weißmair, 2007, *Sisyra corona* Rausch et Weißmair, 2007, *Sisyra dalii* McLachlan, 1866, *Sisyra iridipennis* Costa, 1884, *Sisyra jutlandica* Esben-Petersen, 1915, *Sisyra nigra* (Retzius, 1783), and *Sisyra terminalis* Curtis, 1854 (ASPÖCK *et al.* 1980, 2001, RAUSCH & WEIßMAIR 2007).

Prior to this paper, the genus was represented by three species in Hungary (SZIRÁKI 2007): *Sisyra nigra*, *Sisyra terminalis*, and *Sisyra jutlandica*. Although STEINMANN (1967) reported a fourth species, *Sisyra dalii*, from Hungary, and this record was accepted by SZIRÁKI *et al.* (1992) and ÁBRAHÁM & PAPP (1994), it was demonstrated to be based on a misidentification (ÁBRAHÁM 1998).

This paper presents the first records of two additional spongillafly species, *Sisyra bureschi* and *Sisyra iridipennis*, from Hungary. The voucher specimens are preserved in 70% ethanol, and are deposited in the Hungarian Natural History Museum, Budapest (HNHM). Label data of the voucher specimens are given verbatim, with explanatory information in square brackets. Identifications were based on ASPÖCK *et al.* (1980), RAUSCH & WEIßMAIR (2007), CANARD *et al.* (2015a), TILLIER & COPPA (2019), THIERRY *et al.* (2020), SZÖKE (2022, 2023), and on comparative examination with specimens in the HNHM.

## RESULTS

A specimen of *Sisyrha bureschi* was captured by an agricultural light trap in Békés County, Szabadkígyós; another specimen of this species and a specimen of *Sisyrha iridipennis* were caught in the southern part of Budapest, in a suburban area, very close (ca. 70 m) to the Ráckeve-Soroksár branch of the Danube, in the collector's own garden (Fig. 1). It is worth noting specimens of *Sisyrha nigra* and *Sisyrha terminalis* were also collected in the latter locality, in the same period. The occurrence of the numerous spongillafly species may indicate a good water quality in the Ráckeve-Soroksár branch of the Danube, despite the surrounding urbanised area.



**Fig. 1.** The collecting site in Budapest, District XXI, ca. 70 m W from Ráckeve-Soroksár branch of Danube (photo by Balázs Tóth)

*Sisyra bureschi* Rausch et Weißmair, 2007  
(Fig. 2)

*Material examined* – One female, “Hungary, Budapest, Csepel-Királyerdő [= District XXI], corner of Hollandi and Matróz streets, at light, 15–18.IX.2023, leg. Balázs Tóth”; one male, “Hungary, Békés County, Szabadkígyós, 46.601°N 21.090°E, 21.VIII.2023, agricultural light trap”.

*Remark* – First records from Hungary.

*Distribution* – *Sisyra bureschi* was previously known from Bulgaria, Croatia, Turkey (RAUSCH & WEIßMAIR 2007), Germany (WEIßMAIR 2010), France (CANARD *et al.* 2015b), Bosnia and Herzegovina (SZŐKE 2022), and Sweden (SZŐKE 2023). Based on the consecutive reports of its occurrence in several European countries, *Sisyra bureschi* is considered as a widespread species in Europe.

*Bionomics* – The flight period (based on the collecting date) of *Sisyra bureschi* in Hungary corresponds to that of the previous literature (V–IX. (KLEINSTEUBER 2021)). It is attracted by light.

*Proposed Hungarian name* – “Csillagos szivacsfátyolka”, in allusion to the extensive dark brown spot on the vertex.



Fig. 2. *Sisyra bureschi* Rausch et Weißmair, 2007, voucher specimen from Budapest (photo by Viktória Szőke)

*Sisyra iridipennis* Costa, 1884  
(Fig. 3)

*Material examined* – One male; “Hungary, Budapest, Csepel-Királyerdő [= District XXI], corner of Hollandi and Matróz streets, at light, 2.X.2023, leg. Balázs Tóth”.

*Remark* – First record from Hungary.

*Distribution* – *Sisyra iridipennis* was previously known from Algeria, Morocco, Portugal, Sardinia, and Spain (ASPÖCK *et al.* 2001), Tunisia (GÜSTEN 2003), and France (from Corsica (LETARDI *et al.* 2008) and from the mainland (CANARD & THIERRY 2015, LERAUT 2022)). MONSERRAT (2014) considered the distribution of this species as Western Mediterranean; however, the latest record by LERAUT (2022) from Île-de-France represented its first known locality outside of the Mediterranean area. The Hungarian record represents the easternmost known occurrence of this species, and is situated considerably eastwards from the previously known distribution. Hence, further records of the species are expected from other European countries, especially westwards from Hungary.

*Bionomics* – The flight period (based on the collecting date) of *Sisyra iridipennis* in Hungary corresponds to that of the previous literature (IV–X. (MONSERRAT 2014)). It is attracted by light.

*Proposed Hungarian name* – “Aranylő szivacsfátyolka”, in allusion to its golden yellow wings and tanned-like colouration of the head, pro- and mesonotum of the species.



Fig 3. *Sisyra iridipennis* Costa, 1884, voucher specimen from Budapest (photo by Viktória Szőke)

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