# First record of the spongilla fly *Sisyra terminalis* Curtis, 1854 (Neuroptera, Sisyridae) on the Khoper river in Voronezhskaya Oblast of Russia

## Первая находка Sisyra terminalis Curtis, 1854 (Neuroptera, Sisyridae) на реке Хопёр в Воронежской области

### I.N. Kostin И.Н. Костин

Udmurt State University, Universitetskaya Str. 1, Izhevsk 426034 Russia. E-mail: kostin@udsu.ru. Удмуртский государственный университет, ул. Университетская 1, Ижевск 426034 Россия.

*Key words:* Sisyridae, Neuroptera, *Sisyra terminalis*, spongillaflies, Voronezhskaya Oblast, new record. *Ключевые слова:* Sisyridae, Neuroptera, *Sisyra terminalis*, Воронежская область, первая находка.

**Abstract.** A spongilla fly species, *Sisyra terminalis* Curtis, 1854, is firstly registered in Voronezhskaya Oblast of Russia on the Khoper River the border of the Khopersky State Nature Reserve.

**Резюме.** Приводятся данные о первой находке *Sisyra terminalis* Curtis, 1854 для Воронежской области на реке Хопёр на границе Хопёрского государственного природного заповедника.

Sisyra Burmeister, 1839 is the most species-rich genus of spongillaflies, included nearly 50 valid species distributed in all continents excepting Antarctica [Oswald, 2023; Yang, Liu, 2023]. Three species, S. nigra (Retzius, 1783), S. terminalis Curtis, 1854 [Dorokhova, 1987] and S. jutlandica Esben-Petersen, 1915 [Zakharenko, 1988], are known from the European part of Russia. Only one species was previously registered in the Voronezhskaya Oblast [Panteleeva, Novoselov, 2020].

The larvae are aquatic, parasitic on freshwater sponges of the genera *Spongilla* Lamarck, 1816 and *Ephydatis* Lamouroux, 1816. Pupation occurs when the larvae leave the water in the forks of tree branches, on various objects on the shore. Adults are predators, also feed on pollen, inhabit vegetation near water reservoirs, and are attracted to the light [Dorokhova, 1987; Makarkin, 2016].

The material is kept in the personal collection of the author and in the Federal Scientific Centre of the East Asia Terrestrial Biodiversity, Far East Branch of the Russian Academy of Sciences.

The present work is registered in ZooBank (www.zoobank.org) under LSID urn:lsid:zoobank.org:pub:4E0788A4-A616-481A-8323-FC1C50D993FF.

Sisyra terminalis Curtis, 1854

Fig. 1-2.

*Material.* Russia: *Voronezhskaya Oblast,* env. Alferovka vill., 51°11.6′ N, 41°40.3′ E, right bank of the Khoper river, sweeping, 24.VI.2023, I.N. Kostin — 60°0°, 799, 3 specimens; ibidem, sweeping, 26.VI.2023, I.N. Kostin — 110°0°, 799.

**Remarks.** The material was collected by sweeping with an entomological net with a diameter of 40 cm along the coastal vegetation in the bank of the Khoper River (Fig. 1). The collection locality is saved from the wind on two sides by a high steep right bank. Adults of *S. terminalis* Curtis were found on a single elm tree *Ulmus laevis* Pall. growing 5 m from the shore of the Khoper River. The highest density was observed at elevation up to 2 m above the soil surface (up to 5 specimens per 20 strokes of the net). At the higher level the number of captured individuals is strongly decreased. *S. terminalis* Curtis was not found on nearby trees and shrubs, and only one specimen was collected from the grassy vegetation near the water. Colouration of the studied specimens is darker than occurs commonly (Fig. 2).

*Distribution.* The area of the species has not been studied enough. It is known from Europe (including the North Caucasus), the Russian Far East (Khabarovskii Krai and Primorskii Krai) [Ruchin et al., 2023]. The species is considered as rare in the European part of Russia and has been registered in Bryanskaya, Belgorodskaya, and Saratovskaya Oblasts, Republic of Mordovia and Permskii Krai [Ruchin et al., 2023]. Recently this species was recorded for Republic of Belarus [Ostrovsky, 2020] and Northeastern and Southern China [Yang, Liu, 2023]. Thus, the species probably has an amphipalearctic distribution.

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Fig. 1. The habitat of *Sisyra terminalis* Curtis, 1854 in Voronezhskaya Oblast. Рис. 1. Местообитание *Sisyra terminalis* Curtis, 1854 на территории Воронежской области.

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Fig. 2. Sisyra terminalis Curtis, 1854, lateral view. Puc. 2. Sisyra terminalis Curtis, 1854, вид сбоку.

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