

Five first records of long-legged flies (Diptera: Dolichopodidae) from Slovakia

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Abstract

This paper, based on older unpublished data, reports first records of five dolichopodid species (Diptera: Dolichopodidae) for the Slovakian fauna: *Asyndetus latifrons* (Loew, 1857), *Melanostolus melancholicus* (Loew, 1869), *Medetera belgica* Parent, 1936, *Syntormon macula* Oldenberg, 1927, and *Syntormon submonilis* Negrobov, 1975. The current national list of Slovakia herewith includes 252 species.

Keywords: first record, *Asyndetus*, *Melanostolus*, *Medetera*, *Syntormon*

Introduction

As compared to other central European countries (Pollet & Pape 2002; Pollet 2011), the species richness of long-legged flies (Diptera: Dolichopodidae) in Slovakia is relatively well known. The most recent Slovak checklist (Pollet & Suvák 2009) includes 238 species. Since then, the following nine species were added to the Slovak dolichopodid checklist: *Systemus pallipes* (von Roser, 1840), *S. leucurus* Loew, 1859 and *S. scholtzii* (Loew, 1850) (Oboňa et al. 2012), *Medetera longisurstyla* Maslova, Negrobov et Oboňa, 2018 (Maslova et al. 2018), *Systemus slovakensis* Negrobov, Manko & Oboňa 2020 (Negrobov et al. 2020), *Medetera meridionalis* Negrobov, 1967, *Sympycnus simplicipes* (Becker, 1908), *Teuchophorus simplex* Mik, 1880 (Negrobov et al. 2019), and *Systemus tener* Loew, 1859 (Oboňa et al. 2021). The current national list thus encompasses 247 species. Further sampling actions produced yet other new species for the country, which are presented here.

Materials and methods

All samples were collected by sweep netting by the first author in 2012–2013, primarily around his home village Diviacka Nová Ves. This locality is situated in Western Slovakia (Prievidza district), at the border of the Hornonitrianska kotlina basin and Rokoš hill, 48°44′58.8″N 18°29′45.5″E, 250–350 m a.s.l. The geology of this area is quite diverse, mainly made up of carbonates and dolomites. Mixed oak-beech forests are present near the village, and especially in the locality Trstenec (spring area).

Samples were stored in 75% alcohol and identified by second author. The following literature was used for

identification: Assis Fonseca (1978), Parent (1938), Negrobov & Naglis (2016), and Parvu (1989, 2009). The large collection of European dolichopodids managed by the second author (MAPC) was used to verify the identity of several specimens. Specimens were incorporated in the MAPC collection.



Figure 1. Spring area (Trstenec) nr. Diviacka Nová Ves (Slovakia) (13.05.2014), the site where four dolichopodid species were discovered for the first time in the country (photo: Jozef Oboňa).

Results and Discussion

A total of 104 specimens were collected, 92 of which could be identified to species level. The samples comprised 38 different species, including 5 species that proved not yet to be recorded for the country. Information on their detailed capture locations, distribution range (mainly according to Pollet 2011; Pape et al. 2015) and ecology is presented below.

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List of species
Family Dolichopodidae

***Asyndetus latifrons* (Loew, 1857)**

Material examined: Slovakia, Hornonitrianska kotlina basin, Trstenec (spring area nr. Diviacka Nová Ves, Figure 1), brook, 48°44'20.34"N 18°29'4.81"E, 285 m a.s.l., 2 ♂, 1 ♀, 22.05.2013.

Ecology: This species is confined to open, bare to sparsely vegetated humid sandy habitats, mostly adjacent to open water (e.g. Roháček et al. 2021).

Distribution: Widespread in Europe. Previously recorded from Bohemia and Moravia (Czechia). **New to Slovakia.**

Remark. This species was recorded from Slovakia in Pollet (2011: Fauna Europaea) but was omitted erroneously in the Slovak checklist of Dolichopodidae (Pollet & Suvák 2009).

***Medetera belgica* Parent, 1936**

Material examined: Slovakia, Hornonitrianska kotlina basin, Diviacka Nová Ves village, 48°45'22.08"N 18°30'50.33"E, 250-260 m a.s.l., 1 ♂, 16.05.2012.

Ecology: Like many of its congeners, this species is mainly found on vertical surfaces like tree trunks and walls (Pollet et al. 2011). *M. belgica* has been encountered in largest abundances in open forest types in Corsica but also occurs on single trees outside forests (Pollet, unpubl. data).

Distribution: Thus far recorded from Belgium, Germany, Romania, North European Russia, and Norway (Negrobov & Naglis 2016), but it has most likely a wider European distribution range. Not yet recorded from Czechia. **New to Slovakia.**

***Melanostolus melancholicus* (Loew, 1869)**

Material examined: Slovakia, Hornonitrianska kotlina basin, Trstenec (spring area nr. Diviacka Nová Ves, Figure 1), brook, 48°44'20.34"N 18°29'4.81"E, 285 m a.s.l., 2 ♂, 1 ♀, 01.07.2013.

Ecology: *M. melancholicus* shares the same ecoprofile as *A. latifrons* with a preference for open, bare to sparsely vegetated, humid sandy riparian habitats.

Distribution: Scattered distribution in Europe from Finland in the northeast to France in the west and Romania and South European Russia in the southeast. Has also been recorded from the Near East. Previously recorded from Bohemia. **New to Slovakia.**

***Syntormon macula* Oldenberg, 1927**

Material examined: Slovakia, Hornonitrianska kotlina basin, Trstenec (spring area nr. Diviacka Nová Ves, Figure 1), brook, 48°44'20.34"N 18°29'4.81"E, 285 m a.s.l., 1 ♀, 22.05.2013.

Ecology: Mainly encountered in marshlands and swamps, always early or late in the season.

Distribution: Belgium (Pollet 2012), Germany, Hungary, Italy, Switzerland, Romania, and Great Britain. The record of this species of Iran is erroneously based on another species (Kazerani et al. 2014). Not yet recorded from Czechia. **New to Slovakia.**

***Syntormon submonilis* Negrobov, 1975**

Synonymum: *Syntormon silvianum* Parvu, 1989 (Drake 2021)

Material examined: Slovakia, Hornonitrianska kotlina basin, Trstenec (spring area nr. Diviacka Nová Ves, Figure 1), brook, 48°44'20.34"N 18°29'4.81"E, 285 m a.s.l., 1 ♂, 22.05.2013.

Ecology: This species exhibits a distinct preference for swamps with sparse vegetation on muddy limestone soils.

Distribution: Species known from Belgium (Pollet, unpubl. data), Great Britain, Romania, and former Yugoslavia. Not yet recorded from Czechia. **New to Slovakia.**

With these 5 first records the national checklist of Dolichopodidae of Slovakia has been raised to 252 species. We expect several other dolichopodid species to be discovered in Slovakia in the future, if sampling efforts continue or intensify, certainly in habitat types that might not yet have received sufficient attention.

Acknowledgements

We thank the editor and all anonymous reviewers for their valuable and constructive comments on the first version of the manuscript. The work of J. Oboňa was supported by the Slovak Research and Development Agency under the contract No. APVV-16-0236, and by the Slovak Scientific Grant Agency, contract No. VEGA-1/0012/20.

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