NOTES ON GEOGRAPHIC DISTRIBUTION

Check List 12(3): 1894, 7 June 2016 doi: http://dx.doi.org/10.15560/12.3.1894 ISSN 1809-127X $\hfill \$ 2016 Check List and Authors

Check List the journal of biodiversity data

First record of the rare aquatic dance fly *Chelifera aperticauda* Collin, 1927 (Diptera: Empididae: Hemerodromiinae) from Slovakia

Jozef Oboňa^{1*}, Beáta Baranová¹, Ľuboš Hrivniak², Katarína Kisková³, Peter Manko¹ and Iwona Słowińska⁴

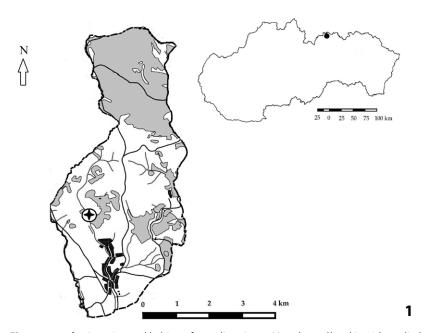
- 1 Department of Ecology, Faculty of Humanities and Natural Sciences, University of Prešov, 17. novembra 1, SK 081 16 Prešov, Slovakia
- 2 Biology Centre CAS, Institute of Entomology, and Faculty of Sciences, University of South Bohemia, Branišovská 31, CZ 370 05 České Budějovice, Czech Republic
- 3 The administration of The National Park of Pieniny, ulica SNP č. 57, SK 061 01 Spišská Stará Ves, Slovakia
- 4 Department of Invertebrate Zoology and Hydrobiology, University of Łódź, Banacha 12/16, PL 90 237 Łódź, Poland
- * Corresponding author. E-mail: obonaj@centrum.sk

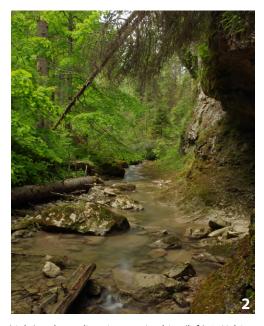
Abstract: The scarce European dance fly *Chelifera aperticauda* Collin, 1927 (Diptera: Empididae: Hemerodromiinae) is recorded for the first time from Slovakia. One male was found in the Pieniny Mts. The distribution and habitats of this species are reviewed and briefly discussed.

Key words: Diptera; Empididae; Hemerodromiinae; rare species; first report; Slovakia

The study of dance flies (Diptera: Empididae) and especially their aquatic forms (Clinocerinae and Hemerodromiinae) is still far from finished in Slovakia. A recent Slovakian checklist of the family Empididae includes 276 species (Chvála 2009). Later, this number increased to 281 species following papers by Oboňa et al. (2014), who published the first record of *Wiedemannia* (*Chamaedipsia*) *mikiana* (Bezzi, 1899), and van der Weele et al. (2015) who provided new records for *Hilara lugubris* (Zetterstedt, 1819), *H. sturmii* Wiedemann in Meigen, 1822 and *Rhamphomyia* (*Holoclera*) *caliginosa* Collin, 1926.

Material was collected using sweep netting method in the Pieniny Mountains, the Jarabinské Gorges (tiesňavy in Slovakian), Pieninské Cliffs (bradlá) (Site of Community Importance – SKUEV0339), near Jarabina (49°20′53.9088″ N, 020°38′52.6776″ E, 630 m above sea level) (see Figures 1 and 2) within the riverbank





Figures 1 and 2. Location and habitat of sampling site. 1: Map shows Slovakia with studied area (right) and sampling site near Jarabina (left). 2: Habitat of *Chelifera aperticauda* Collin, 1927, Jarabinské Gorges, near Jarabina, Malý Lipník brook.

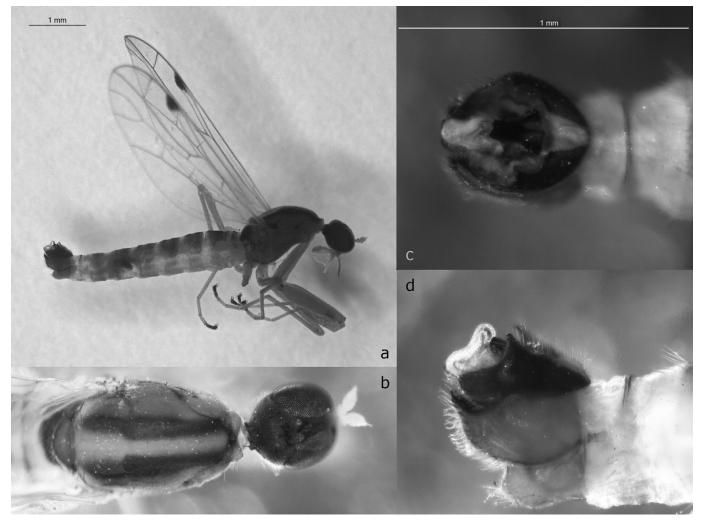


Figure 3. Chelifera aperticauda Collin, 1927. a: male habitus, b: thorax (in dorsal view), c: male hypopygium (dorsal view), d: male hypopygium (lateral view).

zone of Malý Lipník brook on 3 June 2015. The single specimen was sorted from the collected material and preserved in 75% ethanol in the field. In laboratory, the specimen was identified using keys by Collin (1927, 1961). The material is deposited in the Laboratory and Museum of Evolutionary Ecology, Department of Ecology, University of Prešov (LMEE/E/1).

Family Empididae Subfamily Hemerodromiinae

Chelifera aperticauda Collin, 1927 (det. I. Słowińska)

This species is characterized by two dark stripes on the thorax and with the upper lamellae having a large circular apical opening (Figure 3).

Chelifera aperticauda is a rare European species recorded from Austria, Belgium, British Isles, Germany, Montenegro, Poland and Slovenia (Chvála 2011; Słowińska-Krysiak 2014). The new record reported here is the first from Slovakia (Figure 4). In the Slovakian Pieniny Mountains, this species has been collected at the beginning of June. In the Polish part of the Pieniny Mountains, there is one record from later June (23 June; Słowińska-Krysiak 2014). Thus, the species appears to be rarely encountered and flies only in June. These observations are similar to those from Slovenia, where *C. aperticauda* was also found only in June (Horvat 2002). In contrast, in Montenegro it was collected in September only (Horvat 1990). It is worth noting that in the British Isles *C. aperticauda* was found from May to July (Collin 1961).

ACKNOWLEDGEMENTS

The work was supported by the Slovak Research and Development Agency under the contract No. APVV-0059-11.

LITERATURE CITED

- Chvála, M. 2011. Fauna Europaea: Empididae, in: T. Pape and P. Beuk (eds): Fauna Europaea: Diptera Brachycera. Fauna Europaea, version 2.4. Accessed at http://www.faunaeur.org, 1 October 2015.
- Chvála, M. 2009. Empididae Latreille, 1804, in: L. Jedlička, M. Kúdela and V. Stloukalová (eds.). Checklist of Diptera of the Czech Republic and Slovakia. Electronic version 2. Accessed at http://www.edvis.sk/diptera2009/families/empididae.htm, 1 October 2015.



Figure 4. Recent distribution of *Chelifera aperticauda* Collin, 1927. Slovakia (new national record presented here) is highlighted black.

Collin, J.E. 1927. Notes on the Empididae (Diptera), with additions and corrections to the British list. The Entomologist's Monthly Magazine 63: 93–98.

- Collin, J.E. 1961. British flies VI. Empididae. Cambridge: Cambridge University Press. 782 pp.
- Horvat, B. 1990. Aquatic dance flies of the subfamily Hemerodromiinae (Diptera: Empididae) in Yugoslavia. Scopolia 20:1–27.
- Horvat, B. 2002. Taxonomical notes and descriptions of the new *Chelifera* Macquart species (Diptera: Empididae). Scopolia 48: 1–28.
- Oboňa, J., B. Horvat. and M. Novikmec. 2014. First record of *Wiedemannia (Chamaedipsia) mikiana* (Bezzi, 1899) (Diptera: Empididae) from Slovakia. Klapalekiana 50: 235–236.
- Słowińska-Krysiak, I. 2014. New distributional data for the rare Polish empidid flies (Empididae: Hemerodromiinae, Clinocerinae) in the Pieniny Mountains with notes on ecology and phenology. Journal of the Entomological Research Society 16(2): 127–140.
- http://www.entomol.org/journal/index.php?journal=JERS&page=a rticle&op=viewArticle&path[]=681
- van der Weele, R., B. Baranová, P. Manko and J. Oboňa. 2015. Checklist of Empididae and Hybotidae (Diptera) flies from selected sites in Slovakia (Central Europe), with new records of five species for Slovakia. Check List 11(5): 1766. doi: http:// dx.doi.org/10.15560/11.5.1766

Author contributions: JO, PM, BB, KK and LH collected the material, IS identified the material, and JO wrote the text.

Received: 21 October 2015 Accepted: 9 May 2016 Academic editor: Fabio Silva