



First record of spear-winged fly *Lonchoptera vaillanti* Zwick, 2004 (Diptera: Lonchopteridae) from Slovakia

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Abstract

The spear-winged fly species *Lonchoptera vaillanti* Zwick, 2004, previously considered doubtful, is recorded here for the first time in Slovakia. The males were examined and the unique characters of *L. vaillanti* were recorded and documented.

Keywords: spear-winged flies, pointed-wing flies, faunistics, interesting finding, first record

Introduction

Lonchopteridae are rather small (body length 2.0 – 5.0 mm), strongly bristled flies, yellow to brownish-black, often yellowish-brown with a darker pattern (Barták 2009). There are 33 known Palaearctic species (Whittington & Beuk 2022). *Lonchoptera vaillanti* Zwick, 2004 is known only from the original description. However, according to Barták (2009), the validity of this species was doubtful, but without expressing any reason.

For the purpose of this paper, new material from Slovakia was examined.

Material and methods

Diptera were collected by J. Oboňa in the area of the village Stratená, along the stream Tiesňavy, Slovakia, its tributaries and nearby springs, on 18.ix.2023, by sweep-netting the vegetation. In the laboratory, the samples were identified according to Zwick (2004), taking into account also Barták (1986), Stuke (2007), Vaillant (1989), and Beuk (2023).

The material preserved in alcohol is deposited in the collection of the Laboratory and Museum of Evolutionary Ecology, Department of Ecology, University of Prešov, Slovakia (LMEE PO).

Results and Discussion

Lonchoptera vaillanti Zwick, 2004

(Figures 1–3)

Material examined: 2 males, Stratená, near a spring next to the Tiesňavy stream, Slovakia, 48°51'19.1"N 20°18'34.7"E, 18.ix.2023, by sweep-netting. J. Oboňa, det. et coll. LMEE



Figure 1. *Lonchoptera vaillanti* Zwick, 2004, male. A: wing, B: antenna.

PO. First record for Slovakia.

This record increases the number of Slovak Lonchopteridae from 9 species (Barták 2009) to 10 species.

According to our results and the keys of Beuk (2023) and Whittington & Beuk (2022), *L. vaillanti* is similar to the *Lonchoptera nerana* Vaillant, 1989. The most important recognition characters are as follows: the basal and the apical antennal segments are yellowish, the central antennae are completely dark (Figure 1B). Anterior gonapophysis (of Vaillant) with a single very strong, flattened and sinuously curved and broadened seta and a second, very small seta near its base (Figure 3D). Posterior gonapophysis (of Vaillant) with small secondary branch at the base (Figure 3C). The material examined here corresponds well to the illustrations by Zwick (2004) and in our opinion, validates the species.

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Figure 2. *Lonchoptera vaillanti* Zwick, 2004; male legs, dorsal view. A: fore leg, B: mid leg, C: hind leg.

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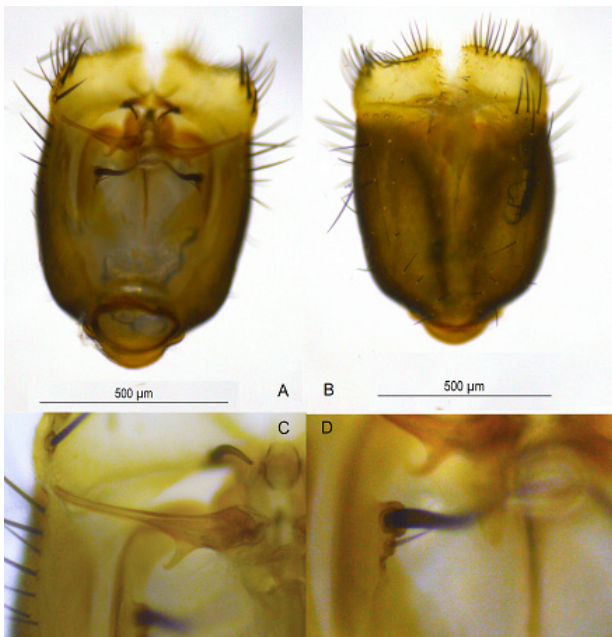


Figure 3. *Lonchoptera vaillantii* Zwick, 2004. A: male genitalia, dorsal view, B: same, ventral view, C: detail of posterior gonapophysis, D: detail of anterior gonapophysis.

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