

SPIXIANA	40	1	68	München, August 2017	ISSN 0341-8391
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Scientific note

First record of a phoresy between a scorpionfly and a pseudoscorpion

(Mecoptera, Panorpidae and Arachnida, Pseudoscorpiones)

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Phoresy represents a non-parasitic association between animals of different taxa due to transportation, and may or may not be associated with the predatory behaviour of pseudoscorpions (Weygoldt 1969, Legg & Jones 1988). Pseudoscorpions could be found actually holding the appendages of carriers or riding on the bodies of arthropods (Beier 1948). The benefit for pseudoscorpions is to reach a new habitat with a potential food supply (Poinar et al. 1998). Poinar et al. (1998) summarized records of phoretic associations between pseudoscorpions and at least 44 insect families and three arachnid families. In Europe, phoresy is typical mainly for the families of Chernetidae and Cheliferidae (Beier 1948, Poinar et al. 1998).

On 15th May 2016 a female of common scorpionfly (*Panorpa communis* Linnaeus, 1758) was observed and collected. The observation was recorded at the locality Cahnov-Soutok National Nature Reserve (48.65503611, 16.94216389, 160 m a.s.l.). The locality lies on the alluvial plain of the Dyje and Morava rivers, 8 km south of the municipality of Lanžhot in the southern tip of the South Moravian region. On the second leg of the common scorpionfly one pseudoscorpion was attached (Fig. 1). Both species were deposited in 70 % ethanol and the pseudoscorpion was studied as temporary slide mount using lactic acid.

The recorded pseudoscorpion was a female of *Dinocheirus panzeri* (C. L. Koch, 1837) from the family of Chernetidae. The most common situation in which pseudoscorpions can make contact with its carrier is when the pseudoscorpion lives in the same habitat as the carrier (Poinar et al. 1998). The species *Dinocheirus panzeri* has been collected in the Lower Morava Biosphere Reserve and adjacent localities mainly from tree hollows, rarely from leaf litter (Štáhlavský & Chytil 2013).

To the best of our knowledge, the recorded phoresy represents the first one known of *D. panzeri* in the Czech Republic and, more importantly, the first one known between pseudoscorpion and scorpionfly.

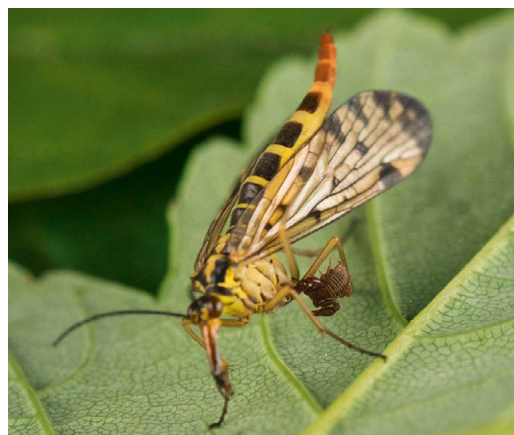


Fig. 1. Phoretic association between common scorpionfly and pseudoscorpion *Dinocheirus panzeri*.

Acknowledgements. The study was financially supported by the project VEGA 1/0191/15.

References

- Beier, M. 1948. Phoresie und Phagophilie bei Pseudoscorpionen. Österreichische Zoologische Zeitschrift 1: 441–497.
- Legg, G. & Jones, R. E. 1988. Pseudoscorpions (Arthropoda; Arachnida). Keys and notes for the identification of the species. In: Kermac, D. M. & Barnes, R. S. K. (eds). Synopses of the British Fauna, N.S., 40. 159 pp., Leiden (Linnean Society of London and Estuarine and Brackish-Water Sciences Association).
- Poinar, G. O. Jr., Čurčić, B. P. M. & Cokendolpher, J. C. 1998. Arthropod phoresy involving pseudoscorpions in the past and present. Acta Arachnologica 47: 79–96.
- Štáhlavský, F. & Chytil, J. 2013. Štírci (Arachnida: Pseudoscorpiones) Biosférické rezervace Dolní Morava a okolí (Česká republika). Klapalekiana 49: 73–88.
- Weygoldt, P. 1969. The biology of pseudoscorpions. 145 pp., Cambridge (Harvard University Press).

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Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 2017

Band/Volume: [040](#)

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Artikel/Article: [First record of a phoresy between a scorpionfly and a pseudoscorpion \(Mecoptera, Panorpidae and Arachnida, Pseudoscorpiones\)](#) First record of a phoresy between a scorpionfly and a pseudoscorpion (Mecoptera, Panorpidae and Arachnida, Pseudoscorpiones) 68