

# First data concerning gamasid mites phoresia upon beetles of *Dermestes* (Acari: Mesostigmata; Coleoptera: Dermestidae) from Bohemia, Czech Republic

## Первые данные о форезии гамазовых на жуках кожеедах (Acari: Mesostigmata; жуков: Dermestidae) в Богемии, Чешская республика

J. Háva  
И. Гава

Department of Forest Protection and Entomology, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences, Kamýcká 1176, Prague 6 – Suchbátka CZ-165 21 Czech Republic. E-mail: jh.dermestidae@volny.cz.

Отдел защиты леса, факультет лесного хозяйства и лесоведения, Чешский университет наук о жизни, Прага, Чехия.

**Key words:** Acari, Coleoptera, Dermestidae, Parasitidae, Macrochelidae, Czech Republic.

**Ключевые слова:** Acari, Coleoptera, Dermestidae, Parasitidae, Macrochelidae, Чешская республика.

**Abstract.** Phoretic mites on *Dermestes* spp. are newly reported from Bohemia. *Poecilochirus necrophori* Vitzthum, 1930 and *Macrocheles glaber* (Muller, 1860) were found on *Dermestes* (*Dermestinus*) *undulatus* Brahm, 1790, *D. (D.) lanianarius* Illiger, 1802 and *D. (D.) frischii* Kugelann, 1792.

**Резюме.** В статье впервые приведены данные о форезии клещей на кожеедах рода *Dermestes* в Богемии. *Poecilochirus necrophori* Vitzthum, 1930 и *Macrocheles glaber* (Muller, 1860) были найдены на *Dermestes* (*Dermestinus*) *undulatus* Brahm, 1790, *D. (D.) lanianarius* Illiger, 1802 и *D. (D.) frischii* Kugelann, 1792.

### Introduction

The gamasid mites (Acari: Mesostigmata) are carried from one food source to another by beetles of multiple genera in the beetle families Silphidae, Staphilinidae, Histeridae, Trogidae, Leiodidae (Catopinae), Cerambycidae, Erotylidae, Bostrichidae, Lucanidae, Cleridae, Chrysomelidae, Carabidae, Tenebrionidae, Geotrupidae and Scarabaeidae [Haitlinger, 2004; Salmane, Brumelis, 2010; Pushkin, 2011] with they often have a symbiotic relationship in protecting the beetle's larva or its food supply from fly larva.

The data of gamasid mites (Acari: Mesostigmata) on Dermestidae (Coleoptera) upon genus *Dermestes* Linnaeus, 1758 species from Bohemia (Czech Republic) is unknown. This article presents the data of two species gamasid mites upon three *Dermestes* species in Central Bohemia, Czech Republic.

### Material and methods

All *Dermestes* specimens collected individually on small dead mammals. Species are arranged alphabetically, the nomenclature and zoogeography of Dermestidae (Coleoptera) follow Háva [2007], the nomenclature and zoogeography of mites follow Haitlinger [2004] and Pushkin [2011].

Following abbreviations refer to the collections, in which the examined material is deposited: JHAC — Jiří Háva,

Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic.

### Results

Acari

Mesostigmata

Parasitidae Oudemans, 1901

*Poecilochirus necrophori* Vitzthum, 1930

**Material. Czech Republic:** *Bohemia centralis*, Únětice u Prahy, 20.V.2008, numerous specimens on *Dermestes undulatus* (with *Hister* sp., *Nicrophorus vespilloides*), J. Háva (JHAC); Roztoky u Prahy, 6.VII.2014, numerous specimens on *Dermestes lanianarius* (with *Nicrophorus vespilloides*), J. Háva (JHAC); Mělník env., 12.VIII.2010, numerous specimens on *Dermestes frischii* and *D. murinus* (JHAC); Hvozdnice, 21.VI.2014, numerous specimens on *Dermestes frischii* (JHAC).

**Remarks.** The mite species *Poecilochirus necrophori* Vitzthum, 1930 were stated for the first time in Bohemia on *Dermestes* (*Dermestinus*) *undulatus* Brahm, 1790, *D. (D.) lanianarius* Illiger, 1802 and *D. (D.) frischii* Kugelann, 1792. The mite species *Poecilochirus necrophori* Vitzthum, 1930 is known from Europe, Asia Minor and USA [Mašán, 1994; Salmane, Brumelis, 2010].

Macrochelidae Vitzthum, 1930

*Macrocheles glaber* (Muller, 1860)

**Material. Czech Republic:** *Bohemia centralis*, Mělník env., 12.VIII.2010, numerous specimens on *Dermestes frischii* (JHAC); Dobříš — osada Vlaška, 21.VI.2014, numerous specimens on *Dermestes frischii* (JHAC).

**Remarks.** The mite species *Macrocheles glaber* (Muller, 1860) were stated for the first time in Bohemia on *Dermestes* (*Dermestinus*) *frischii* Kugelann, 1792. The mite species *Macrocheles glaber* (Muller, 1860) is known from Palaearctic Region [Mašán, 1994; Salmane, Brumelis, 2010].

### Acknowledgements

I am obliged very much to R. Haitlinger (Wrocław, Poland) for help with determination of mites, to due M. Ber-

trand (Montpellier, France) and D. Král (Prague, Czech Republic) for valuable comments and to M. Rakovič (Prague, Czech Republic) for revision of the English manuscript. The research was supported by the Internal Grant Agency (IGA n.20124364), Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague.

## References

- Haitlinger R. 2004. Mites (Acari) occurring on some Coleoptera (Insecta) in Poland // *Polskie Pismo Entomologiczne*. Vol.73. P.3–24.
- Háva J. 2007. Dermestidae // Löbl I., Smetana A. (eds.): *Catalogue of Palaearctic Coleoptera*. Vol.4. Elateroidea, Derodontoidea, Bostrichoidea, Lymexyloidea, Cleroidea and Cucujoidea. Stenstrup: Apollo Books. P.57, 299–320.
- Mašán P. 1994. The Eviphid mites (Acarina: Mesostigmata: Eviphidae) associated with Scarabaeid and carrion beetles (Coleoptera: Scarabaeidae, Silphidae) in Central Europe // *Acarologia*. Vol.35. No.1. P.3–19.
- Pushkin S.V. 2011. [New data concerning mites phoresia upon necrophag bugs] // *Nauka. Innovatsyi. Tekhnologii*. Vol.3. P.92–96. [In Russian]
- Salmane I., Brumelis G. 2010. Species list and habitat preference of *Mesostigmata* mites (Acari, Parasitiformes) in Latvia // *Acarologia*. Vol.50. No.3. P.373–394.

*Поступила в редакцию 2.2.2015*