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First Iranian species of *Neosilphitrombium* (Acari: Prostigmata: Neothrombiidae) with a key to world species

ALIREZA SABOORI[1], HAMIDREZA HAJIQANBAR[2] & MASOUD HAKIMITABAR[1]

[1]*Department of Plant Protection, College of Agriculture, University of Tehran, Karaj, Iran.*
E-mails: saboori@ut.ac.ir, hakimitabar@yahoo.com
[2]*Department of Entomology, Faculty of Agriculture, Tarbiat Modares University, 14115-336, Tehran, Iran.*
E-mail: hajiqanbar@modares.ac.ir

Abstract

Neosilphitrombium tenebrionidum **sp. nov.** (Acari: Neothrombiidae) is described and illustrated from larvae ectoparasitic on *Opatroides punctatus* Brullé, 1832 (Coleoptera: Tenebrionidae) from Mashhad and Gonabad, Razavi Khorasan Province, Iran. It is the first report of the representatives of the genus *Neosilphitrombium* from Iran and the first record of the family Tenebrionidae as a host for the genus *Neosilphitrombium*. A key to world larval species of *Neosilphitrombium* is presented.

Key words: *Neosilphitrombium tenebrionidum* **sp. nov.**, Tenebrionidae, new host, larva, ectoparasite, Parasitengona

Introduction

Fain (1992) described the genus *Neosilphitrombium* based on larvae and placed it in the tribe Silphitrombiini in the subfamily Trombidiinae (Trombidiidae). Zhang & Fan (2005) transferred the tribe Silphitrombiini (including *Neosilphitrombium*) from Trombidiidae to Neothrombiidae. Both species of this genus, namely *N. gratum* Fain, 1992 collected in Tervuren, Belgium and *N. annabellae* Haitlinger, 2001 collected in Sri Lanka and India, are ectoparasites of undetermined carrion beetles (Coleoptera: Silphidae) (Fain 1992; Haitlinger 2001).

In this paper, we describe the larva of *Neosilphitrombium tenebrionidum* **sp. nov.** ectoparasitic on a new host, *Opatroides punctatus* Brullé, 1832 (Coleoptera: Tenebrionidae) from Iran. The discovery of this species as an ectoparasite of a tenebrionid beetle extends the host range beyond the Silphidae and suggests that this genus has a wider geographical range.

Material and methods

The mites (comprising 2–8 individuals) were attached on the abdominal tergites beneath the elytra of some *O. punctatus* (Coleoptera: Tenebrionidae). They were detached with an entomological pin and preserved in 75% ethanol, cleared in lactophenol solution and mounted on microscopic slides using Hoyer's medium (Walter & Krantz 2009). Eight specimens were considered for description. Figures were drawn and measurements (given in micrometers) made using a BX51 phase contrast Olympus microscope equipped with a drawing tube. The terminology and abbreviations are adapted from Robaux (1974) and Saboori *et al*. (2009).

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