



<http://dx.doi.org/10.11646/zootaxa.4052.5.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:9228718C-910A-4449-B31F-ACD12DE771BF>

Two new species of the syringophilid quill mites (Acari: Prostigmata: Syringophilidae) parasitizing apodiform birds (Aves: Apodiformes)

MACIEJ SKORACKI^{1,3}, KATARZYNA KASZEWSKA¹ & KATARZYNA KAVETSKA²

¹Department of Animal Morphology, Faculty of Biology, Adam Mickiewicz University, Umultowska 89, 61–614 Poznan, Poland

²Laboratory of Biology and Ecology of Parasites, West Pomeranian University of Technology, Doktora Judyma 20, 71–466 Szczecin, Poland

³Corresponding autho. E-mail: skoracki@amu.edu.pl

Abstract

Two new syringophilid species (Acariformes: Syringophilidae) are described, *Apodisyringiana hirundapi* **sp. nov.** from *Hirundapus caudacutus* (Latham) from Japan and *Syringophiloidus apus* **sp. nov.** from *Apus melba* (Linnaeus) from Chile.

Key words: Acari, Apodiformes, ectoparasites, Syringophilidae, quill mites

Introduction

Quill mites of the family Syringophilidae Lavoipierre (Acari: Prostigmata: Cheyletoidea) are highly specialized mono- or stenoxenous ectoparasites of birds. These mites live, feed and reproduce inside the quills of feathers. Currently, syringophilid mites are represented by about 340 species grouped in 60 genera and described from more than 470 bird species belonging to 24 orders (Skoracki *et al.* 2012; Glowska *et al.* 2015).

Syringophilids associated with apodiform birds are poorly investigated. Up to now, only four monoxenic species grouped in three genera have been described (Fain *et al.* 2000; Skoracki 2005; Skoracki & OConnor 2010). Apodiformes is one of the most diverse orders of migratory birds with about 440 species (Clements *et al.* 2014) which can be considered as potential hosts for syringophilids.

In this paper we describe two new species found on the swifts (Apodidae): *Apodisyringiana hirundapi* **sp. nov.** collected from *Hirundapus caudacutus* (Latham) from Japan and *Syringophiloidus apus* **sp. nov.** from *Apus melba* (Linnaeus) from Chile.

Material and methods

Mites used in the present study were collected from dry bird skins housing in the ornithological collection of the Bavarian State Collection of Zoology, Munich, Germany. Before mounting, mites were softened and cleared in Nesbitt's solution at 40°C for c.a. 10 hours. For light microscope study mites were mounted on slides in Faure's medium and investigated under the light microscope Olympus BH-2 with differential interference contrast (DIC) illumination. Drawings were made using a drawing attachment. All measurements are given in micrometres. The idiosomal setation follows Grandjean (1939) as adapted for Prostigmata by Kethley (1990). Morphological terminology follows Skoracki (2011). The scientific names of the birds follow Clements *et al.* (2014). Specimen depositories and reference numbers are cited using the following abbreviations: AMU—A. Mickiewicz University, Department of Animal Morphology, Poznan, Poland; ZSM—Bavarian State Collection of Zoology, Munich, Germany; ZISP—Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.