



New quill mites (Cheyletoidea: Syringophilidae) parasitizing tyrannid birds (Passeriformes: Tyrannidae) in Peru

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Abstract

Two new quill mite species (Cheyletoidea: Syringophilidae) are described from tyrannid birds (Passeriformes: Tyrannidae) in Peru: *Picobia sayornis* **sp. nov.** from the black phoebe *Sayornis nigricans* (Swainson) (first record of *Picobia* Haller species on tyrannid host) and *Syringophilopsis szeffleri* **sp. nov.** from the scale-crested pygmy-tyrant *Lophotriccus pileatus* (Tschudi). The Pacific elaenia *Myiopagis subplacens* (Sclater) is recorded as a new host for *Syringophilopsis tyranni* Bochkov and Galloway.

Key words: Quill mites, Syringophilidae, *Picobia*, *Syringophilopsis*, tyrannid birds, systematics

Introduction

Quill mites (Cheyletoidea: Syringophilidae) are a group of bird ectoparasites including 316 species of 60 genera. The genus *Syringophilopsis* Kethley is represented by 45 species associated with birds of three orders: Passeriformes (42 species), Coraciiformes (2) and Trogoniformes (1) (Skoracki 2011, Skoracki and Dabert 2000, Skoracki *et al.* 2013). The genus *Picobia* Haller includes 27 species (with 3 species as *inquirrenda*) recorded from birds of five orders: Passeriformes (22 species), Piciformes (2), Psittaciformes (1), Charadriiformes (1), and Coraciiformes (1) (Skoracki and Hromada 2013).

Until now, tyrannid birds (Passeriformes: Tyrannidae) have been extremely poorly explored for the presence of syringophilids. Only two species of the genus *Syringophilopsis* were described from these hosts so far: *S. empidonax* Skoracki, Flannery and Spicer from *Empidonax hammondii* (Xantus de Vesey) and *E. wrightii* Baird from USA and *Syringophilopsis tyranni* Bochkov and Galloway from *Tyrannus tyrannus* (L.) from Canada and from *Tyrannus verticalis* Say, *Myiarchus cinerascens* (Lawrence), and *M. crinitus* (L.) from USA (Bochkov and Galloway 2004, Skoracki *et al.* 2008). In Peru, quill mite fauna is almost unknown with just one species reported from this area *Neopicobia ea* Skoracki and Unsoeld from *Celeus torquatus* (L.) (Piciformes: Picidae) (Skoracki *et al.* 2014).

In this paper, two new syringophilid species are described from tyrannid birds in Peru: *Picobia sayornis* **sp. nov.** from *Sayornis nigricans* (Swainson) (first record of *Picobia* on tyrannid host) and *Syringophilopsis szeffleri* **sp. nov.** from *Lophotriccus pileatus* (Tschudi). Additionally, *Syringophilopsis tyranni* Bochkov and Galloway was recorded on *Myiopagis subplacens* (Sclater) for the first time.

Material and methods

Material used in the study was acquired by Eliza Glowska from the collection of feathers deposited in Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology, Division of Birds, Washington, DC, US (USNM) (September 2013). Bird specimens were trapped by B. K. Schmidt during the expedition to Peru, El Caicho Biological Station (June 2009). Drawings were made with an Olympus BH2

Syringophilopsis tyranni Bochkov and Galloway, 2004

This species was described from *Tyrannus tyrannus* (L.) from Canada and additionally recorded from *T. verticalis* Say, *Myiarchus cinerascens* (Lawrence), and *M. crinitus* (L.) from USA (Bochkov and Galloway 2004, Skoracki *et al.* 2008). I recorded this species from *Myiopagis subplacens* (Sclater) from Peru.

Material examined. 2 females and 2 males from *Myiopagis subplacens* (Sclater) **PERU**; Tumbes, El Caucho Biological Station, 10 June 2009 (USNM: 643882).

Material deposition. 1 female and 1 male are deposited in the USNM, 1 female and 1 male in the AMU.

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