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## Two new quill mites of the family Syringophilidae (Acari: Prostigmata) parasitising the tapaculos (Passeriformes: Rhinocryptidae) in South America

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### Abstract

Two new species of syringophilid mites (Acari: Prostigmata: Syringophilidae) associated with passeriform birds of the family Rhinocryptidae in South America are described: *Syringophiloidus teledromas* **sp. nov.** from *Teledromas fuscus* (Sclater and Salvin) in Argentina and *Aulonastus pteroptochos* **sp. nov.** from *Pteroptochos tarnii* (King) in Chile. The genus *Aulonastus* Kethley, 1970 is recorded from the tapaculos for the first time, and the new species of *Syringophiloidus* Kethley, 1970 described here is the second record of this genus on rhinocryptid birds.

**Key words:** Acari, ectoparasites, Rhinocryptidae, Syringophilidae, quill mites

### Introduction

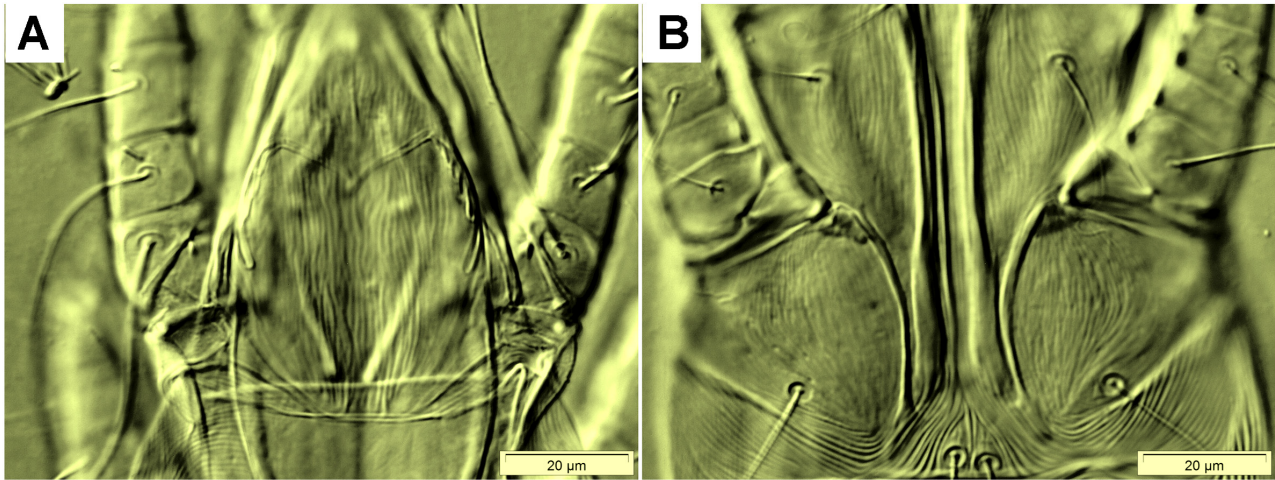
Mites of the family Syringophilidae Lavoipierre (Acari: Prostigmata: Cheyletoidea) are highly specialized ectoparasites of birds, inhabiting feather quills. Presently, the family includes about 335 species grouped in 60 genera and described from more than 470 bird species belonging to 24 orders (Skoracki 2011; Skoracki *et al.* 2012, 2013, 2014; Glowska 2014; Glowska & Schmidt 2014).

The tapaculos (Passeriformes: Rhinocryptidae) are a small monophyletic group of suboscine passeriform birds (57 species in 12 genera) distributed in the South and Central America (Ericson *et al.* 2010; Clements *et al.* 2014). The fauna of quill mites associated with this group of the hosts is extremely poorly known, with only one previously described species, *Syringophiloidus tarnii* Skoracki *et al.* 2002, collected from *Pteroptochos tarnii* (King) in Argentina (Skoracki & Sikora 2002).

In this paper, we describe two new syringophilid species parasitising rhinocryptids in Argentina and Chile and belonging to the genera *Syringophiloidus* Kethley, 1970 and *Aulonastus* Kethley, 1970.

### Material and methods

The mite material used in the present study was collected from dry bird skins housed in the ornithological collection of the Bavarian State Collection of Zoology, Munich, Germany (ZSM). Before mounting, mites were softened and cleared in the Nesbitt's solution at 60°C for 12 hours. Mites were mounted on slides in Faure's medium and examined under a light microscope Olympus BH-2 with differential interference contrast illumination. Drawings were made using a *camera lucida* drawing attachment. All measurements are in micrometres. Dimension ranges of paratypes are given in parentheses following the data for a holotype. The idiosomal setation follows Grandjean (1939) as adapted for Prostigmata by Kethley (1990). Morphological terminology follows Skoracki (2011). Scientific names of the birds follow Clements *et al.* (2014). Specimen depositories are cited using the following abbreviations: AMU, A. Mickiewicz University, Department of Animal Morphology, Poznan, Poland; ZSM, Bavarian State Collection of Zoology, Munich, Germany.



**FIGURE 5.** *Aulonastus pteroptochos* sp. nov., female. **A**, striated stylophore and peritremes; **B**, apodemes I, II and weakly sclerotised and striated coxal fields I and II.

MALE. Unknown.

**Type material.** Female holotype, 6 female and 1 male paratypes from the Black-throated Huet-huet *Pteroptochos tarnii* (King) (Passeriformes: Rhinocryptidae); **CHILE:** Valdivia, 3949'S 7314'W, 28 November 1924, coll. Ohde.

**Type material deposition.** All type material is deposited in the AMU, except 1 female paratype in the ZSM.

**Differential diagnosis.** *Aulonastus pteroptochos* sp. nov. is morphologically close to *A. euphagus* Skoracki, Hendricks and Spicer, 2010 described from *Euphagus cyanocephalus* (Wagler) (Passeriformes: Icteridae) in the United States (Skoracki *et al.* 2010). In females of both species, the stylophore is striated; each medial branch of the peritremes has one chamber; the propodonotal shield is punctate; the hysteronotal shield is well developed and fused to the pygidial shield; setae *h2* are distinctly longer than *f2*, and setae *c1* are slightly longer than *se*. The new species differs from *A. euphagus* by the following features: in females of *A. pteroptochos*, the infracapitulum is sparsely punctate; each lateral branch of the peritremes has six chambers; the hysteronotal shield is punctate in the posterior part; the length ratio of setae *ag1:ag2* is 2:1, and length of setae *se* is 120–125. In females of *A. euphagus*, the infracapitulum is apunctate; each lateral branch of the peritremes has 4–5 chambers; the hysteronotal shield is apunctate in the posterior part; the length ratio of setae *ag1:ag2* is 1.2–1.4:1, and length of setae *se* is 140–145.

**Etymology.** The species name is derived from the generic name of the host and is a noun in apposition.

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