

# **Article**



# New species of quill mites (Acari, Cheyletoidea, Syringophilidae) and the first record of male for the genus *Stibarokris*

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#### **Abstract**

In this paper we describe a new quill mite species *Stibarokris dastychi* **sp. nov.**, parasitizing Great Cormorant *Phalacrocorax carbo* (Linnaeus) (Pelecaniformes: Phalacrocoracidae) and the male of *S. phoeniconaias* Skoracki et OConnor, 2010 from American Flamingo *Phoenicopterus ruber* Linnaeus (new host). Additionally, the improved (including both female and male) diagnosis of the genus *Stibarokris* Kethley, 1970 and the key to all known species of this genus are given.

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

### Introduction

Quill mites of the family Syringophilidae (Acari: Syringophilidae) are obligatory ectoparasites of birds, inhabiting various types of feathers. Up to now, syringophilids have been represented by more than 240 species grouped in 43 genera (Skoracki & OConnor 2010). The genus *Stibarokris* Kethley, 1970 have included only three species: *S. phalacrus* Kethley, 1970 described from *Phalacrocorax auritus* (Lesson) (Pelecaniformes: Phalacrocoracidae) from USA, *S. langei* Bochkov et Mironov, 1999 described from *Ciconia ciconia* (Linnaeus) (Ciconiiformes: Ciconiidae) from Russia and Poland, and *S. phoeniconaias* Skoracki et OConnor, 2010 described from *Phoeniconaias minor* (Geoffroy Saint-Hilaire) (Phoenicopteriformes: Phoenicopteridae) from Botswana (Kethley 1970; Bochkov & Mironov 1999; Skoracki & OConnor 2010; Skoracki 2011). In this paper, we give the description of a new species of the genus *Stibarokris* associated with a pelecaniform bird, *S. dastychi* sp. nov. from Great Cormorant *Phalacrocorax carbo* (Linnaeus) (Pelecaniformes: Phalacrocoracidae). Additionally, we supplement the generic diagnosis with the male features (recovered for the first record for this genus), give male description of *S. phoeniconaias* collected from a new host, *Phoenicopterus ruber* Linnaeus (Phoenicopteriformes: Phoenicopteridae), and provide a key to all known species of *Stibarokris*.

## Material and methods

The quill mites material used in this study was obtained from frozen birds housed in Biozentrum

Grindel und Zoologisches Museum Hamburg at the University of Hamburg. The type material is deposited in the collection of the Department of Animal Morphology, A. Mickiewicz University (AMU), Poznan, Poland. Drawings were made with an Olympus BH2 microscope with DIC optics and camera lucida. All measurements, including scale bars in figures are given in micrometers (µm). The idiosomal setation follows Grandjean (1939) as adapted for Prostigmata by Kethley (1990). The nomenclature for leg chaetotaxy follows that proposed by Grandjean (1944). The application of these chaetotactic schemes to Syringophilidae was recently provided by Bochkov *et al.* (2008). Latin names of birds follow Clements (2007).