

New data for feather mites (Acari: Astigmata) from birds in South Dobrudzha, Bulgaria

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Abstract. The feather mite species on *Certhia familiaris* L., 1758, *Crex crex* (L., 1758), *Jynx torquilla* (L., 1758) and *Turdus pilaris* L., 1758 are studied for the first time in South Dobrudzha Region (Bulgaria). As a result, four feather mite species are reported and two of these species - *Analges certhiae* Haller, 1878 and *Grallobia rallorum* (Robin, 1877) are new for the Bulgarian fauna.

Keywords: feather mites, birds, South Dobrudzha, Bulgaria

Introduction

The region of South Dobrudzha includes ornithologically important sites located on the migration route of the birds. In spite of the fact that several studies were conducted in this region, feather mite fauna has been insufficiently examined.

Currently, 77 feather mite species from the both superfamilies - Analgoidea and Pterolichoidea (respectively 64 and 13 species) are known from 70 bird species in South Dobrudzha (Vassilev 1957, 1958, 1959, 1961, Kolarova 2015). Studies on feather mites in South Dobrudzha have been started by Ivan Vassilev, mainly in District of Silistra and Dobrich. Most of Analgoidea species were collected from passerine birds in the period of 2005–2008 and the results are reported by Kolarova & Mitov (2008) and Kolarova (2015).

In the present study, bird hosts *Certhia familiaris*, *Crex crex*, *Jynx torquilla* and *Turdus pilaris* are examined for the presence of feather mites for the first time in Bulgaria.

Material and Methods

The material of feather mites was collected in 2010. The birds were captured by standard mist-nets in the area of the Biological Experimental Station (BES) “Kalimok”, near the village of Nova Cherna, Silistra District (UTM: MJ57; 44°00'41"N 26°26'10"E). Each bird was identified, ringed and released. The birds were captured on the basis of the permit № 213/26.06.2009 of the Ministry of the Environment and Waters (MOEW).

Feather mites were collected by the method described in Kolarova & Mitov (2008) and later mounted on permanent microscope slides in Euparal. Species identifications are based on Dubinin (1956), Atyeo & Braasch (1966) and Mironov (1985).

The examined mite specimens are deposited in the Zoological Collection of Sofia University “St. Kliment Ohridski”, Faculty of Biology (BFUS).

Results

As a result of this study, four feather mite species were established and two of them - *Analges certhiae* found on *Certhia familiaris* and *Grallobia rallorum* collected from *Crex crex* are new for the Bulgarian acarofauna.

Superfamily Analgoidea**Family Analgidae*****Analges certhiae* Haller, 1878** (Fig. 1A)

Material examined: Bulgaria, BES “Kalimok”, 23 October 2010, 3♂♂ and 3♀♀ on feathers of *Certhia familiaris*, M. Ilieva leg.

Family Proctophyllodidae***Proctophyllodes anthi* (Vitzthum, 1922)**

Material examined: Bulgaria, BES “Kalimok”, 27 April 2010, 3♂♂ and 8♀♀ from wing feathers of *Jynx torquilla*, M. Ilieva leg.

Additional information about *Proctophyllodes anthi* collected from birds *Alauda arvensis* L., 1758, *Anthus pratensis* (L., 1758) *A. trivialis* (L., 1758), and *A. cervinus* (Pallas, 1811) have been published by Vassilev (1960, 1965).

***Proctophyllodes musicus* Vitzthum, 1922**

Material examined: Bulgaria, BES “Kalimok”, 01 April 2010, 8♀♀ and 4♂♂ from *Turdus pilaris*, M. Ilieva leg.

So far, *Proctophyllodes musicus* was found on flight feathers of *Turdus merula* L., 1758, *T. viscivorus* L., 1758 and *T. philomelos* Brehm, 1831 (Vassilev 1960, 1962, 1965 and Kolarova & Mitov 2008).

Superfamily Pterolichoidea**Family Pterolichidae*****Grallobia rallorum* (Robin, 1877)** (Fig. 1B)

Material examined: Bulgaria, BES “Kalimok”, 25 September 2010 (1♂ and 8♀♀) and 27 October 2010 (2♂♂ and 1♀), from flight feathers of *Crex crex*, M. Ilieva leg.

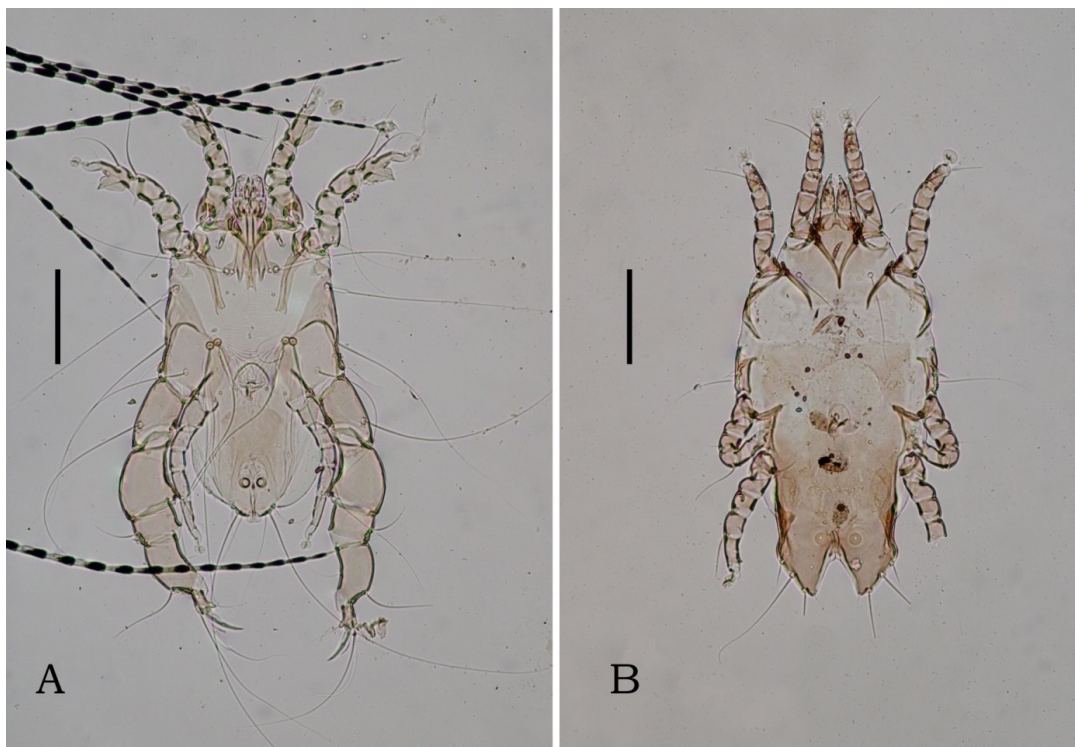


Fig. 1. *Analges certhiae* Haller, 1878, male (A), *Grallobia rallorum* (Robin, 1877), male (B). Scale bars: 100 μ m.

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