

Feather mites (Acari: Analgoidea) from the Moustached Warbler, *Acrocephalus melanopogon* (Passeriformes: Acrocephalidae) in Bulgaria

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Abstract. For the first time in Bulgaria Moustached Warbler, *Acrocephalus melanopogon* (Temminck, 1823) is studied as a host of feather mites. As a result, three feather mite species - *Trouessartia bifurcata* (Trouessart, 1884), *Trouessartia mironovi* Constantinescu, 2013 and *Proctophyllodes* sp. were identified. One of these species - *T. mironovi* is reported as a new for the Bulgarian fauna.

Keywords: feather mites, *Acrocephalus melanopogon*, Bulgaria

Introduction

So far, five bird species of the family Acrocephalidae (*Acrocephalus arundinaceus* L., 1758, *A. schoenobaenus* (L., 1758), *A. palustris* (Bechstein, 1798), *A. scirpaceus* (Hermann, 1804) and *A. agricola* (Jerdon, 1845)) were reported as hosts of feather mites in Bulgaria. As a result, ten feather mite species (*A. spiniger* Giebel, 1871, *A. acanthitibius* Mironov, 1985, *Analges berlesei* Mironov, 1985, *A. opisthostriatus* Mironov, 1985, *Pteroherpus pallens* (Berlese, 1886), *Trouessartia bifurcata* (Trouessart, 1884), *T. trouessarti* Oudemans, 1904, *Dolichodectes edwardsi* (Trouessart, 1885), *Proctophyllodes clavatus* Fritsch, 1961 and *P. vassilevi* Atyeo & Braasch, 1966) were found from these birds (Vassilev 1957, 1958, Atyeo & Braasch 1966, Kolarova & Mitov 2008) (Table 1).

In the present work, feather mites from another unstudied species of the family Acrocephalidae - *Acrocephalus melanopogon* (Temminck, 1823) are reported.

Material and Methods

Three specimens of *Acrocephalus melanopogon* were examined for feather mites. Two of these birds were captured in the area of the Biological Experimental Station (BES) "Kalimok" in August and October 2010. The station is located near the village of Nova Cherna, Silistra District (UTM: MJ57; 44°00'41"N 26°26'10"E). The third bird was collected in June 2012 in the region of the Durankulak Lake (UTM: PJ23; 43°40'00"N 28°32'00"E). The birds were captured using mist-nets. Each bird was identified, ringed and released. The birds were captured on the basis of the permits № 213/26.06.2009 and № 427/11.11.2011 of the Ministry of the Environment and Waters (MOEW).

Mite specimens were collected by the method described in Kolarova & Mitov (2008) and later mounted on permanent microscope slides in Euparal. Species identifications are based on Santana (1976), Gaud & Atyeo (1996) and Constantinescu *et al.* (2013).

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

Results and Discussion

The studies on feather mites from birds of the family Acrocephalidae in Bulgaria, reported 10 feather mite species from 5 genera (4 families of the superfamily Analgoidea) (Vassilev 1957, 1958, Atyeo & Braasch 1966, Kolarova & Mitov 2008). The present study adds one more feather mite species - *Trouessartia mironovi*, new for the Bulgarian fauna (Table 1).

List of the feather mite species collected from *Acrocephalus melanopogon*:

Family Trouessartidae

Trouessartia bifurcata (Trouessart, 1884) (Fig. 1A)

Material examined: Bulgaria, BES “Kalimok”, 07 August 2010, 3♂♂, 3♀♀, on the wing feathers of *A. melanopogon*, M. Ilieva leg.; 23 October 2010, 5♂♂, 7♀♀, from feathers of the head, back and the secondaries of *A. melanopogon*, M. Ilieva leg.; Durankulak Lake, 22 June 2012, 4♂♂, 4♀♀, on the wing feathers of *A. melanopogon*, M. Ilieva leg.

In the previous studies in our country, *T. bifurcata* was reported on feathers of the head and the secondaries from *A. agricola* (Kolarova & Mitov 2008).

Trouessartia mironovi Constantinescu, 2013 (Fig. 1B)

Material examined: Bulgaria, BES “Kalimok”, 23 October 2010, 2♂♂, from wing feathers of *A. melanopogon*, M. Ilieva leg.

Family Proctophyllodidae

Proctophyllodes sp.

Material examined: Bulgaria, BES “Kalimok”, 23 October 2010, 7♀♀, on the wing feathers of *A. melanopogon*, M. Ilieva leg.

Only female specimens were collected which did not allow species identification.

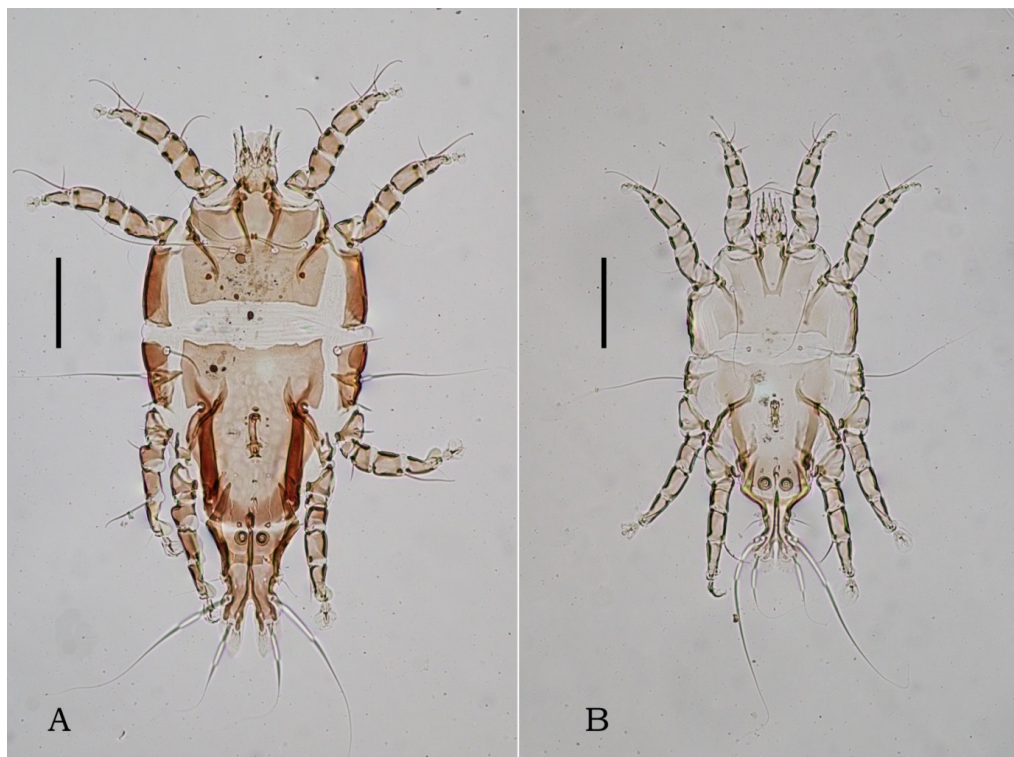


Fig. 1. *Trouessartia bifurcata* (Trouessart, 1884), male (A), *Trouessartia mironovi* Constantinescu, 2013, male (B). Scale bars: 100 μm.

bird species	feather mite species	Analgoidea									
		Analgidae				Pteronyssidae	Trouessartiidae			Proctophyllodidae	
		<i>Analges spiniger</i>	<i>Analges acanthitibius</i>	<i>Analges berlessei</i>	<i>Analges opisthostriatus</i>	<i>Pteroherpus pallens</i>	<i>Trouessartia bifurcata</i>	<i>Trouessartia trouessarti</i>	<i>Trouessartia mironovi</i>	<i>Dolichodectes edwardsi</i>	<i>Proctophyllodes clavatus</i>
<i>Acrocephalus arundinaceus</i>			•		•		•		•		
<i>Acrocephalus schoenobaenus</i>		•							•	•	
<i>Acrocephalus palustris</i>				•			•				•
<i>Acrocephalus scirpaceus</i>	•										•
<i>Acrocephalus agricola</i>						•	•				
<i>Acrocephalus melanopogon</i>						••		••/ n			

Table 1. Feather mite species from birds of family Acrocephalidae in the territory of Bulgaria. • = literature records; •• = present data; n = taxon new to the Bulgarian fauna.

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