



<http://dx.doi.org/10.11646/zootaxa.3889.4.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:58C52330-89A6-4715-95B8-1B9CE7515C39>

Two new species of the feather mite genus *Analloptes* (Trouessart, 1885) (Acariformes: Astigmata: Xolalgidae) from passerines (Aves: Passeriformes) in Brazil

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Abstract

Two new feather mite species of the genus *Analloptes* Trouessart, 1885 (Acariformes: Xolalgidae) are described from suboscine passerines (Passeriformes) in Brazil: *Analloptes giganteus* sp. n. from *Conopophaga lineata* (Wied) (Conopophagidae) and *A. cnemotricci* sp. n. from *Cnemotriccus fuscatus* (Wied) (Tyrannidae). These are the first *Analloptes* species described from passerine hosts. Within the genus *Analloptes*, the two described species constitute a distinct species group characterized by the presence of setae *ve* and *c1* in both sexes and by having the paragenital apodeme free from coxal structures in males.

Key words: Acari, feather mites, Xolalgidae, *Analloptes*, systematics, Passeriformes, Brazil

Introduction

The feather mite genus *Analloptes* Trouessart, 1885 (Xolalgidae: Ingrassiinae) currently includes nine species (Trouessart 1885; Berlese 1886; Canestrini & Kramer 1899; Gaud 1980, 1982; Gaud & Atyeo 1981; Atyeo & Gaud 1984; Mironov 1997). Although the number of described species is low, mites of this genus are scattered among hosts from phylogenetically distant bird orders. Five of known species are associated with hornbills (Coraciiformes: Bucerotidae), two species are known from rails and trumpeters (Gruiformes: Rallidae and Psophidae), and two remaining species are from ibises (Pelecaniformes: Threskiornithidae) and from the Osprey *Pandion haliaetus* (Linnaeus) (Accipitriformes: Pandionidae), respectively.

In their generic revision of the family Xolalgidae, Gaud & Atyeo (1981) noted that they had in their collections one undescribed species from the Limpkin *Aramus guarauna* (Linnaeus) (Gruiformes: Aramidae) and several species from storks (Ciconiiformes: Ciconiidae), woodpeckers (Piciformes: Picidae) and passerines of the family Tyrannidae (Passeriformes). The authors of the revision did not indicate exactly the host species, except for the Limpkin, and their material remained undescribed. Recently, Barreto *et al.* (2012) reported six unidentified and supposedly new species of the genus *Analloptes* from six passerine species of the families Cotingidae, Furnariidae and Grallariidae in Colombia. Simultaneously, Enout *et al.* (2012) reported one unidentified *Analloptes* species also from a furnariid host and one more species from a jacamar (Galbuliformes: Galbulidae) in Brazil.

Thus, the genus *Analloptes* is apparently much more specious than it is currently known and its host range is much wider. Scanty records of these relatively large and well sclerotized feather mites (adults 350–450 µm long) could probably be explained by their hidden location in the plumage of their hosts. Mites of the genus *Analloptes* preferably occupy the downy parts of the body and wing covert feathers (Mironov, pers. observation of *Analloptes buettikeri* Mironov, 1997 on *P. haliaetus*). Therefore it is quite difficult to collect mites located in these microhabitats from dry bird skins by the standard scrapping technique (Gaud & Atyeo 1996), which is most useful and effective for mites located on the primaries and secondaries of the wings.

In the present paper, we describe two new *Analloptes* species from two passerine hosts of the families Conopophagidae and Tyrannidae in Brazil.

of epigynum; setae *g* and genital papillae on tips of epigynum, posterior to level of coxal setae *3a*. Setae *4a* short, situated slightly posterior to level of epimetites IIIa. Distances between ventral setae: *4b:3a* 26, *4b:g* 32, *4b:4a* 57.

Legs I, II as in male. Solenidion *ω1* of tarsus II slightly longer than this segment (Figs. 6F, G). Tarsi III, IV 42 and 48 long, respectively, without apical spine (Figs. 6H, I). Trochanteral setae *sRIII* shorter than corresponding femoragenu. Setae *w* of tarsi III, IV slightly thickened basally.

Type material. Male holotype (DZUNESP-RC #1803), 3 male and 1 female paratypes from *Cnemotriccus fuscatus* (Wied) (Tyrannidae), **BRAZIL**: Rio Grande do Norte, Macaíba, Mata da Escola Agrícola de Jundiá-UFRN, 5°53'S, 35°23'W, 19 April 2012, coll. H.M. Silva.

Type depository. Holotype, 2 male and 1 female paratypes—DZUNESP-RC, 1 male paratype—ZISP.

Etymology. The specific epithet is derived from the generic name of the type host and is a noun in the genitive case.

Differential diagnosis. *Analloptes cnemotricci* sp. n. is close to *A. giganteus* described above and differs from that species as follows. In both sexes of *Analloptes cnemotricci*, the prodorsal shield has a transverse lacuna in the anterior part and a straight posterior margin, the anterior margin of hysteronotal shield is strongly convex, the suprategumental extensions of the scapular shields are present only in their anterior one-third; in males, tarsi III have a claw-shaped apical extension, the paragenital apodeme is bow-shaped, the opisthogastric shields are connected at their anterior ends, setae *g* are situated on the anterior ends of opisthogastric shields; in females, the width of idiosoma is about 145 μm, the hysteronotal shield extends to the level of setae *c1*, and tarsi III, IV are without apical extensions. In both sexes of *A. giganteus*, the prodorsal shield is devoid of lacunae, the posterior margin of this shield is deeply concave, the anterior margin of the hysteronotal shield is straight, the suprategumental extensions of the scapular shields occupy their entire inner margins; in males, tarsus III has a bidentate apical extension, the paragenital apodeme is shaped as an inverted V, the opisthogastric shields are not connected to each other, setae *g* are situated on the striated tegument at the base of genital apparatus; in females, the width of idiosoma is 195–205 μm, the hysteronotal shield does not extend to the level of setae *c1*, and tarsi III, IV have acute apical extensions.

Acknowledgements

The authors thank Fabio A.F. Jacomassa and Honara M. Silva for collecting the mites from *Conopophaga lineata* and *Cnemotriccus fuscatus*, respectively. The study was supported for FAH by the FAPESP – São Paulo Research Foundation (2011/50145-0) and for SM by the Russian Science Foundation (RSF grant No 14-14-00621).

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