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Two new feather mite species of the family Pteronyssidae (Acarina: Analgoidea) from Meghalaya (Northeast India)

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Abstract

Two new species of the feather mite family Pteronyssidae (Acariformes: Analgoidea) from passerines of the families Leiothrichidae and Pycnonotidae in India (Meghalaya, East Jaintia Hills District) are described: *Timalinyssus actinodurae* Constantinescu **sp. nov**. from *Actinodura cyanouroptera* (Hodgson) (Leiothrichidae) and *Pteroherpus meghalayensis* Constantinescu **sp. nov.** from *Hemixos flavala* Blyth (Pycnonotidae). *Timalinyssus actinodurae* differs from all of the other species of the genus due to a particular shape of the opisthosomal lobes in both sexes and having a strong sclerotised band in postero-median area of the hysteronotal shield in male. The male of *Pteroherpus meghalayensis* differs due to a very long genital apparatus and unusual length of the tips of epiandrum that extend the level of the genital apparatus.

Key words: Acari, Analgoidea, *Timalinyssus actinodurae*, *Pteroherpus meghalayensis,* systematics

Introduction

Feather mites (Acariformes: Analgoidea and Pterolichoidea) are commensals or ectoparasites that can be commonly found on birds. So far, over 2400 species of feather mites have been described, and experts believe that the currently known number of species represents less than 20% of the extant species (Mironov 2003).

In India, the diversity of feather mites has hardly been researched and only 24 species have been mentioned so far in several articles (Oudemans 1904; Bonnet 1924; Gaud & Mouchet 1963; Atyeo *et al*. 1972; Gaud 1972; McClure & Ratanaworabhan 1973; Gaud & Atyeo 1976, 1987; Santana 1976; Peterson *et al*. 1980; D'Souza & Jagannath 1982; Atyeo 1984; Gaud *et al.* 1985, 1988; Dabert & Ehrnsberger 1998, 2003; Mironov *et al.* 2002; Putatunda *et al*. 2004). Considering that the avian fauna of India includes over 1300 species of which 644 are present in Meghalaya (Lepage 2013), and each of them is a potential host for several feather mite species, it is evident that the investigation of feather mites in this country is in a very early stage.

Materials and methods

The material used in the present paper was collected from Meghalaya (India) in February 2013. The birds were captured, identified and visually checked for the presence of mites and, after mites were collected, they were released back into the wild. Mite specimens were placed in tubes with 95% ethanol, and were later cleared in lactic acid and mounted on microscope slides in Hoyer's medium in the laboratory. Drawings were made using an Olympus CX21 microscope, using a camera lucida drawing device.

The body setation follows that of Griffiths *et al*. (1990) with the coxal setae modifications made by Norton (1998), and that of the legs follows Gaud & Atyeo (1996). Description of new species is given according to current

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