

**A TAXONOMIC NOTE ON THE FEATHER MITE
PTEROLICHUS TYRRELLI TROUESSART, 1899
(ACARIFORMES: PTEROLICHIDAE)**

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ABSTRACT: Based on the study of type specimens of *Pterolichus tyrrelli* Trouessart, 1899—originally described from the Semipalmated Sandpiper, *Calidris pusilla* (Linnaeus, 1766) (Charadriiformes: Scolopacidae), collected in Canada—this species has been transferred to the genus *Montchadskiana* Dubinin, 1951 and provided with a valid name *Montchadskiana (Aphylochaeta) tyrrelli* Trouessart, 1899 comb. n. (Pterolichidae: Magimeliinae). Additionally, *Montchadskiana (Aphylochaeta) dubinini* Dabert and Ehrnsberger 1999 syn. n., described from the same host, is declared a junior synonym of *M. (A.) tyrrelli*.

KEY WORDS: feather mites, Pterolichidae, *Pterolichus*, *Montchadskiana*, taxonomy, synonymy

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INTRODUCTION

The pterolichid feather mite *Pterolichus tyrrelli* Trouessart, 1899 was described by E.L. Trouessart based on the specimens from the Semipalmated Sandpiper, *Calidris pusilla*, collected in Canada by J.B. Tyrrell. For unclear reasons, this mite species has been largely forgotten by the feather mite experts of the 20th century. It was mentioned neither in the taxonomic works on pterolichid feather mites associated with charadriiform birds (Dubinin 1956; Gaud, 1972; Dabert and Ehrnsberger 1999), nor in the world checklists and databases of feather mites (Canestrini and Kramer 1899; Radford 1953, 1958; Proctor 2020). Type specimens of *P. tyrrelli* have been accidentally found in the material granted by J. Gaud to the feather mite collection of the Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia) (Figs. 1–3). In the present work, based on the study of the aforementioned type specimens, this mite species is placed in the genus *Montchadskiana* Dubinin, 1951 (Pterolichidae: Magimeliinae) and provided with a valid name. Additionally, *Montchadskiana (Aphylochaeta) dubinini*, described by Dabert and Ehrnsberger (1999) from the same host, is declared as a junior synonym of *M. (A.) tyrrelli*.

SYSTEMATICS

Family **Pterolichidae Trouessart and Megnin, 1884**

Subfamily **Magimeliinae Gaud, 1972**

Genus ***Montchadskiana* Dubinin, 1951**

Type species: *Dermaleichus buchholzi* Canestrini, 1878, by original designation.

The genus *Montchadskiana* was established by Dubinin (1951) in the subfamily Pterolichinae. At the time, this genus incorporated all long-bodied pterolichines associated with waders (Scolopacidae). Later on, Dubinin (1956) divided the genus into 4 subgenera: *Montchadskiana* s.str., *Aphylochaeta* Dubinin, 1956, *Pilochaeta* Dubinin, 1956 and *Triphylochaeta* Dubinin, 1956. Gaud (1972) transferred the genus *Montchadskiana* to the newly established subfamily Magimeliinae and elevated its two subgenera—*Triphylochaeta* and *Pilochaeta*—to the full generic rank. According to the latest revision by Dabert and Ehrnsberger (1999), the genus *Montchadskiana* currently includes 17 species.

The subgenera *Montchadskiana* s.str. (15 species) and *Aphylochaeta* (2 species) most clearly differ from each other in the structure of setae *h3* in males. In *Montchadskiana* s.str., setae *h3* are simply lanceolate, while in *Aphylochaeta*, these setae are lanceolate with a very long filiform apex (Fig. 1). In the diagnosis of these subgenera by Dabert and Ehrnsberger (1999: 221, 246), these setae were erroneously named “*h2*”, while in the key to species they are named correctly.

***Montchadskiana (Aphylochaeta) tyrrelli*
(Trouessart, 1899) comb. n.
(Figs. 1–3)**

Pterolichus tyrrelli Trouessart, 1899: 53.

Montchadskiana (Aphylochaeta) dubinini Dabert and Ehrnsberger, 1999: 221, Figs. 1–4, syn. n.

Material examined. Male lectotype, 2 female and 2 tritonymph paralectotypes (Trouessart collection 35H10) from *Calidris pusilla* (Linnaeus,



Fig. 1. *Montchadskiana (Aphyllochaeta) tyrrelli*, male lectotype. A—dorsal view, B—ventral view.

1766) (Charadriiformes: Scolopacidae), Canada, no date, coll. J.B. Tyrrell; 3 female and 2 tritonymph paralectotypes (Trouessart collection, 35H11), same collection data. Lectotype and paralectotypes are designated here.

Depository. All type specimens will be deposited in Muséum national d'Histoire naturelle, (Paris, France).

Trouessart (1899) described *Pterolichus tyrrelli* without illustrations based on the specimens

from the Semipalmated Sandpiper, *Calidris pusilla*, collected in Canada by J.B. Tyrrell. The present study of the type specimens (2 slides) has clearly shown that this species actually belongs to the genus *Montchadskiana*. Therefore, in the present work, this mite is given a valid name *Montchadskiana (Aphyllochaeta) tyrrelli* (Trouessart, 1899). Given that this species' original description was relatively clear for that time and the affinity of *P. tyrrelli* to *Pterolichus buchhlzi*—which was later designated



Fig. 2. *Montchadskiana (Aphyllochaeta) tyrrelli*, female paralectotype. A—dorsal view, B—ventral view.

as the type species of *Montchadskiana*—was definitely indicated, it is surprising why *M. (A.) tyrrelli* has been forgotten by the experts.

One hundred years later, *Montchadskiana (Aphyllochaeta) dubinini* Dabert and Ehrnsberger, 1999 was described from the same host in the USA and from two more North American sandpipers, *Calidris minutilla* (Vieillot) in the USA and *Calidris himantopus* (Bonaparte) in Canada (Dabert and

Ehrnsberger 1999). *Montchadskiana (A.) dubinini* fits well with the specimens of *M. (A.) tyrrelli* (Fig. 1A, B) and is declared here as its junior synonym.

Remarks. Each of the type slides (№ 35H10, 35H11) also contained one female of *Avenzoaria calidridis* (Oudemans, 1904) (Avenzoariidae) that was not indicated in the label (Fig. 3C). Additionally, the slide № 35H11 contained one female

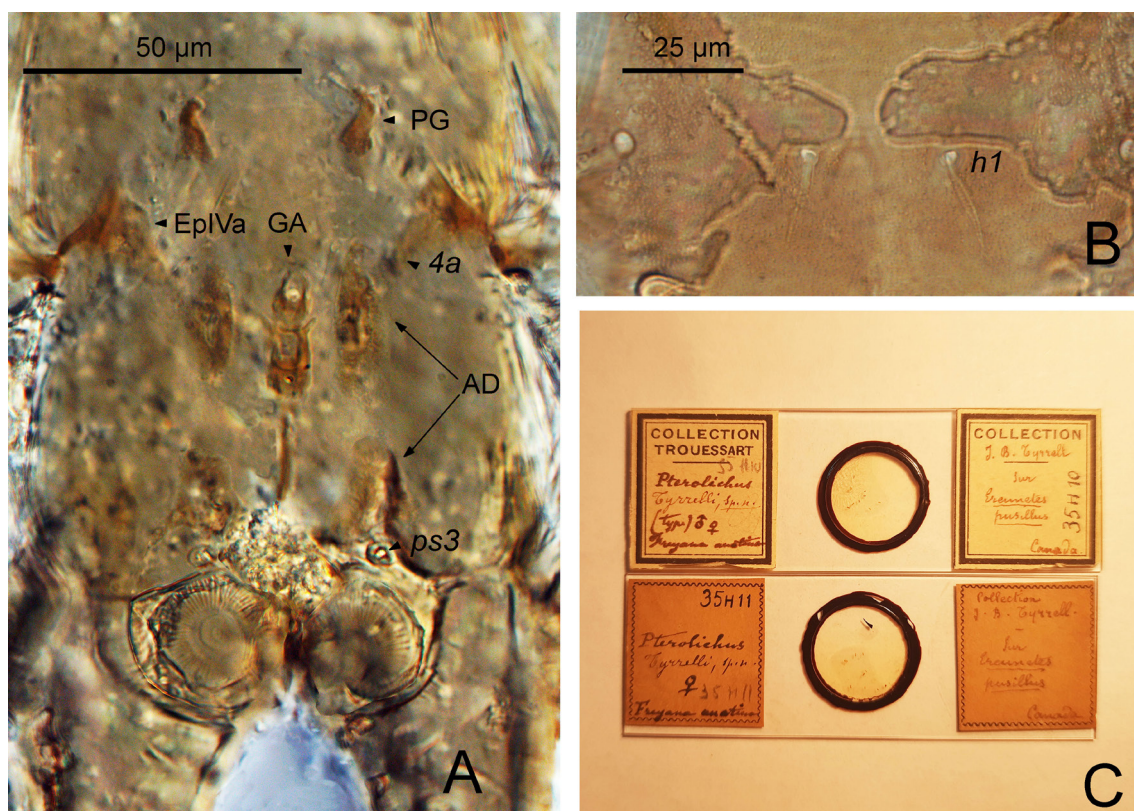


Fig. 3. *Montchadskiana (Aphyllochaeta) tyrrelli*, details and type slides. A—genital area of male, B—setae *h1* of female, C—type slides. Abbreviations: AD—adanal shields, EpIVa—epimerite IVa, GA—genital apparatus, PG—pregenital sclerite.

identified by E.L. Trouessart as *Freyana anatina* (Koch, 1844) (Freyanidae). The presence of *Freyana* mite on this slide is obviously an accidental contamination.

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