Zootaxa 3873 (2): 155–164
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3873.2.3
http://zoobank.org/urn:lsid:zoobank.org:pub:D78B845A-99D8-423E-B520-C3DD83E3C87F

Two new species of *Paraphilopterus* Mey, 2004 (Phthiraptera: Ischnocera: Philopteridae) from New Guinean bowerbirds (Passeriformes: Ptilonorhynchidae) and satinbirds (Passeriformes: Cnemophilidae)

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Abstract

Two new species of *Paraphilopterus* Mey, 2004 are described and named. *Paraphilopterus knutieae* **n. sp.** is described from two subspecies of Macgregor's bowerbirds: *Amblyornis macgregoriae nubicola* Schodde & McKean, 1973 and *A. m. kombok* Schodde & McKean, 1973, and Sanford's bowerbird: *Archboldia sanfordi* (Mayr & Gilliard, 1950) (Ptilonorhynchidae). *Paraphilopterus meyi* **n. sp.** is described from two subspecies of crested satinbirds: *Cnemophilus macgregorii macgregorii* De Vis, 1890 and *C. m. sanguineus* Iredale, 1948 (Cnemophilidae). These new louse species represent the first records of the genus *Paraphilopterus* outside Australia, as well as from host families other than the Corcoracidae. The description of *Paraphilopterus* is revised and expanded based on the additional new species, including the first description of the male of this genus. Also, we provide a key to the species of *Paraphilopterus*.

Key words: Phthiraptera, Ischnocera, Philopteridae, *Paraphilopterus*, chewing lice, new species, Ptilonorhynchidae, Cnemophilidae, New Guinea

Introduction

Mey (2004: 188) described the new genus *Paraphilopterus* based on a single female louse from the Australian host *Corcorax melanoramphos* (Vieillot, 1817) (Corcoracidae). He named the type species *Paraphilopterus styloideus*, and the genus has since remained monotypic. We have examined lice from two species of Ptilonorhynchidae and one species of Cnemophilidae, all from Papua New Guinea. These specimens key out to *Paraphilopterus* in Mey's (2004: 195) key, and fit the description of this genus. This material represents two new species of *Paraphilopterus,* which are described herein. The description of the genus by Mey (2004) is expanded to include morphological features of the new species and those of the male. The male genitalia of this genus were unknown to Mey (2004), and males of *P. styloideus* remain unknown. We provide a tentative generic-level description of male genitalia based on two of the three species in this genus. A male *P. styloideus* is needed for a definitive description of the genitalia of this genus.

Material and methods

Material used for this paper included specimens on microscope slides deposited in the Price Institute of Parasite Research, Department of Biology, University of Utah (PIPeR), the Natural History Museum, London (NHML), and the U.S. National Museum of Natural History, Washington (USNM). Dimensions taken and their abbreviations are: TL = total length along midline; HL = head length (measured along the midline, including hyaline margin); HW = head width at temples; *AS3:* length of anterior seta 3; *ADS* = length of anterior dorsal seta; DAPL = dorsal anterior plate length (at midline); DAPW = dorsal anterior plate width (at widest point); DAPLL = dorsal anterior plate lateral length (from base of *ADS* to antero-lateral corner); PRW = prothorax width; PTW = pterothorax width; AW

Accepted by R. Palma: 1 Oct. 2014; published: 15 Oct. 2014

Key to species of *Paraphilopterus* Mey, 2004
(male of *Paraphilopterus styloideus* unknown)

1. Female Pseudostyli each with one pair of setae distally (see Mey 2004: fig. 33b). Vulval margin with two pairs of setae distally. PSMS reach to or beyond posterior margin of pteronotum. Pterothorax with 52 or more setae on the posterior margin. On Corcoracidae . . . . . *Paraphilopterus styloideus* Mey, 2004
- Female pseudostyli each with two pairs of setae distally (Figs 9–10). Vulval margin with more than two pairs of setae distally (Figs 9–10). PSMS absent or, when present, do not reach posterior margin of pteronotum (Figs 3–4, 7–8). Pterothorax with less than 52 setae on the posterior margin (Figs 3–4, 7–8). On other families 2
2. Pteronotal row of setae interrupted sublaterally (Figs 3–4). Male dorsal anterior plate as in Fig. 11 or 12. PSMS present. On Ptilonorhynchidae . . . . . *Paraphilopterus knutieae* **n. sp.**
- Pteronotal row of setae not interrupted sublaterally (Figs 7–8). Male dorsal anterior plate as in Fig. 13. PSMS generally absent. On Cnemophilidae. . . . . *Paraphilopterus meyi* **n. sp.**

Acknowledgements

This work was supported by NSF grant DEB 1050706. We thank M.A. Aguilar-Mendoza for technical assistance, and D.H. Clayton for helpful comments. We thank the late R.E. Elbel for providing specimens that made the new species descriptions possible. A thorough review of our first draft by an anonymous referee and his useful suggestions are greatly appreciated.

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