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Four new species of *Brueelia* Kéler, 1936 (Phthiraptera: Ischnocera: Philopteridae) from African songbirds (Passeriformes: Sturnidae and Laniidae)

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Abstract

Four new species in the louse genus *Brueelia* Kéler, 1936 are described from African hosts of the families Sturnidae and Laniidae. They are: *Brueelia rigbyi* n. sp. ex *Corvinella melanoleuca* (Jardine, 1831), *B. clara* n. sp. ex *Lamprotornis australis* (A. Smith, 1836), *B. tkachi* n. sp. ex *Spreo albicapillus albicapillus* Blyth, 1856, and *B. coryliventer* n. sp. ex *Creatophora cinerea* (Meuschen, 1787). These four species are characterized by a unique abdominal chaetotaxy and a sinuous thickening of the distal margin of the male mesosome. These four species are very similar, and we consider them to form one species group. A key to the species of the group is provided.

Key words: Phthiraptera, Ischnocera, Philopteridae, Sturnidae, Laniidae, *Brueelia*, new species, Africa

Introduction

The genus *Brueelia* Kéler, 1936 occurs primarily on songbirds, and is one of the most speciose groups of chewing lice, with over 300 described species (Price *et al.* 2003; Cicchino 2004; Cicchino & González-Acuña 2008, 2009; Mey & Barker 2014; Najer *et al.* 2012a,b,c, 2014; Rékási & Saxena 2005; Sychra *et al.* 2009, 2010a,b; Valim & Palma 2006, 2015; Valim & Weckstein 2011). *Brueelia sensu lato* (as in Price *et al.* 2003) is highly variable and the characters that circumscribe this genus are poorly defined. Mey & Barker (2014) provided a narrower and more explicit morphological circumscription of *Brueelia* and a list of genera they considered to be valid within the *Brueelia*-complex. However, they did not include a checklist that indicated which species they considered to belong to the specified genera. The list of synonyms they provided for *Brueelia sensu stricto* (Mey & Barker 2014, table 2) suggests their circumscription contains several morphologically distinct groups.

Within *Brueelia sensu* Mey & Barker (2014) there is a core group of approximately 145 species that are very similar to the type species, *Brueelia brachythorax* (Giebel, 1874); these are characterised by the lack of a dorsal preantennal suture, sparse abdominal chaetotaxy, female subgenital plate with a cross-piece following the vulval margin, tergite IX in females not fused with tergite IX+X, and characteristic male genitalia. We refer to this group as *Brueelia sensu stricto*, and here we describe four new species belonging to this group. These new species are further characterised by a sinuous distal thickening of the male mesosome and a unique pattern of abdominal chaetotaxy (see below) that are not seen in any previously described species of *Brueelia sensu stricto*. Together, these four species form a distinct morphological group. Three of the four species parasitize starlings (family Sturnidae), while the fourth is from a shrike (family Laniidae). All hosts and new louse species are from sub-Saharan Africa.

Material and methods

Slide-mounted specimens examined during this study are permanently deposited either in the collection of the Natural History Museum, London (NHML) or in the Natural History Museum of Slovenia (PMSL), as indicated below.