



## *Anaticola crassicornis* (Phthiraptera: Ischnocera: Philopteridae) on wild geese from Pakistan

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### Abstract

Twenty-eight geese (*Anser anser*, *A. albifrons* and *A. indicus*) from different localities around Karachi, Pakistan, were examined for lice. One species of chewing louse, *Anaticola crassicornis* (Scopoli), was found on every bird examined. This is the first record of this louse species from members of *Anser*. In the light of past confusion, the authors redescribe *A. crassicornis* in detail, with special reference to its genitalia, and compare it with *A. anseris*. Despite the louse not appearing on ducks sampled at the same time as the geese, we hypothesize that *A. crassicornis* is likely to have passed to the geese as a result of recent host switching from an unidentified anatid host.

**Key words:** chewing louse, Mallophaga, *Anaticola crassicornis*, *Anser anser*, *Anser albifrons*, *Anser indicus*, taxonomy

### Introduction

The genus *Anaticola* Clay is one of seven ischnoceran genera of chewing lice found on members of the avian order Anseriformes (Price *et al.* 2003). It is found on ducks, geese (Anatidae) and flamingos (Phoenicopteriformes). Eichler & Vasjukova (1980) summarised the species of *Anaticola*, recognising 38 valid species and regarding five other species as *species inquirendae*. Since these authors provided neither the main diagnostic characteristics of particular species nor a key for the species, Ledger (1980) wrote: “The genus is badly in need of a rigorous revision and very few of the described species are recognisable.” At present, this genus contains 33 confirmed species (Price *et al.*, 2003) known from 80 species of anatids and 4 species of flamingos.

Most species of *Anaticola* are examples of host-specific lice, being found on single hosts only (26 of 33 species). Three exceptions are *Anaticola anseris* (Linnaeus), *Anaticola mergiserrati* (De Geer) and *Anaticola crassicornis* (Scopoli), which are found on a broad range of closely related hosts. *Anaticola anseris* is known from 10 species of the subfamily Anserinae; *A. mergiserrati* is known from 16 species, mainly from the tribes Aythini and Mergini; and *A. crassicornis* is known from 26 species, mainly in the genus *Anas* (Price *et al.* 2003).

This paper provides a redescription of *A. crassicornis* from non-typical hosts, with emphasis on the morphological characters of taxonomic importance, especially the head and male and female genitalia.

### Material and methods

Specimens of *A. crassicornis* were collected from various parts of Karachi, Pakistan and adjacent areas. During the period between August 2005 and August 2007, a total of 28 individuals among three species of *Anser* were examined for lice: *Anser anser* (14 individuals), *Anser albifrons* (6) and *Anser indicus* (8).