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First record of chewing lice (Phthiraptera) of the Red-backed Shrike *Lanius collurio* (Aves, Passeriformes, Laniidae) in the Iberian Peninsula

Primer registro de piojos masticadores (Phthiraptera) del alaudón dorsirrojo *Lanius collurio* (Aves, Passeriformes, Laniidae) en la península ibérica

The Red-backed Shrike *Lanius collurio* Linnaeus, 1758 is a long distance migratory passerine bird. Its breeding range stretches from Western Europe to west of Siberia. It winters in the eastern areas of tropical and southern Africa (BRUDERER & BRUDERER, 1993; SHIRIHAI & SVENSSON, 2018; NIJSSEN, 2020). In the Iberian Peninsula it is distributed from the Eastern Pyrenees to the Cantabrian Mountains, Galicia, North Portugal, and furthermore, the Iberian and the Central systems (HIDALGO *et al.*, 2020; TELLERÍA *et al.*, 2020; INFANTE, 2022).

In Europe some chewing lice from suborder Ischnocera, *Brueelia cruciata* (Burmeister, 1838) and *Philopterus coarctatus* (Scopoli, 1763) and from Amblycera, the genus *Myrsidea* (Waterston, 1915), *Menacanthus eurysternus* (Burmeister, 1838) and *M. camelinus* (Nitzsch, 1874) have been cited (HELLENTHAL *et al.*, 2004; COSTICĂ, 2007; ILIEVA, 2009; VAS *et al.*, 2012; DIAKOU *et al.*, 2017; DIK *et al.*, 2017; GUSTAFSSON *et al.*, 2018) and in Africa was cited *B. cruciata* (GUSTAFSSON & BUSH, 2017). In the Iberian Peninsula, no species of chewing lice have been reported that parasitize the Red-backed Shrike. The only order of ectoparasitic insects cited until now are two species of louse flies (Diptera: Hippoboscidae) in the Madrid region, *Ornithopila metallica* (Schiner, 1864) and *Ornithomya fringillina* (Curtis, 1836) (BERNAL *et al.*, 2022). Therefore, the aim of our scientific note is to present the first record of chewing lice on the Red-backed Shrike in the Iberian Peninsula.

Lice were collected directly from the Red-backed Shrike during a scientific bird ringing session. Lice were preserved in 70% Ethanol, cleaned with 10% KOH and fixed with DMHF on the slide (MARTÍN-MATEO, 1994) and determined through

an optical microscope following the nomenclature of MARTÍN-MATEO (2002). Three specimens of lice were identified as *Menacanthus camelinus*.

Suborder **Amblycera** Kellogg, 1896

Genus ***Menacanthus*** Neumann, 1912

Menacanthus camelinus Nitzsch, 1874

Material examined: Madrid, Arroyo de La Laguna. 1♂ and 2♀, May 29th, 2022. Host: Red-backed Shrike *Lanius collurio* (Fig. 1).

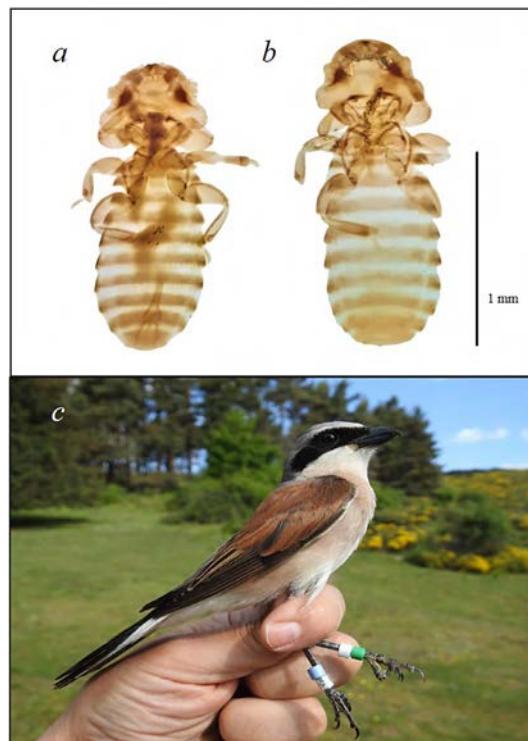


Fig. 1. *Menacanthus camelinus*: a) adult male, b) adult female. c) *Lanius collurio*, adult male.

Fig. 1. *Menacanthus camelinus*: a) macho adulto, b) hembra adulta. c) *Lanius collurio*, macho adulto.

M. camelinus is a louse specific to shrikes (Laniidae) around the world (PRICE *et al.*, 2003). In the Palearctic region *M. camelinus* has been cited on *L. collurio* in much of Europe (HELLENTHAL *et al.*, 2004; COSTICĂ, 2007; ILIEVA, 2009; VAS *et al.*, 2012; DIAKOU *et al.*, 2017; DIK *et al.*, 2017; GUSTAFSSON *et al.*, 2018). In the Iberian Peninsula only has been detected on *Lanius meridionalis* in the province of A Coruña (Spain) to date (named

as *Lanius excubitor*; MARTÍN-MATEO, 2002). Therefore, our results provided in this study show the first record of *M. camelinus* in Red-backed shrike in the Iberian Peninsula and southwest of Europe. The study of chewing lice during scientific ringing sessions helps to improve knowledge of parasite-host relationships in poorly studied bird species, as well as detecting new records of lice in certain regions.

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IVÁN BERNAL^{1*}, JUAN CARLOS HIDALGO¹ & CARLOS TALABANTE^{1,2}

1. Álula Ringing Group, Madrid, Spain.

2. Department of Life Sciences, Faculty of Sciences, University of Alcalá, Madrid, Spain.

* corresponding author e-mail: bernalsoса.ivan@gmail.com