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Revision of the *Lachnaia tristigma* (Lacordaire, 1848) species-group (Coleoptera: Chrysomelidae) and description of a new species

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Abstract

The group of species of *Lachnaia tristigma* (Lacordaire, 1848) is revised. Previously known taxa and diagnostic characters are reassessed, yielding clear limits for species based on male and female genitalia and not on variable and overlapping external characters. A diagnosis along with figures of the median lobe of aedeagus, endophallus and spermatheca are presented for the previously known species, *L. pseudobarathraea* Daniel & Daniel, 1898 and *L. tristigma*, as well as the newly described *L. gallaeca* **n. sp.**

Key words: Chrysomelidae, *Lachnaia*, new species, Iberian peninsula, identification key

Introduction

The genus *Lachnaia* Dejean, 1836 is consisted of two species from the Afrotropical region (Medveded, 1993), and 20 species from the western Palaearctic region (Warchalowski, 2003) which are mostly distributed in the western Mediterranean region. The genus is well characterized by the following combination of characters: pronotum covered with conspicuous setae (excepting *L. puncticollis* Chevrolat), posterior angles of pronotum not elevated and anterior coxae contiguous. The Iberian species were revised by Codina Padilla (1958) and more recently by Petitpierre (2000). Eight Iberian species are currently recognized, including two close taxa, *Lachnaia tristigma* (Lacordaire) and *L. pseudobarathraea* Daniel & Daniel, which we consider here to compose the *L. tristigma* species-group. This group can be distinguished from all other species of *Lachnaia* by the following combination of characters: antennae toothed from the fourth joint to the apex; pronotum covered with sparse leaning setae; first tarsomere of anterior legs similar or slightly longer than second tarsomere; anterior margin of elytra keeled; anterior black dot of elytra located over the humeral callus.

Among the beetles collected during the samplings carried out for the study of the Chrysomelidae from Galicia (NW Spain) (Baselga & Novoa, 2006) were some specimens attributed to *L. tristigma* but with several differences in male and female genitalia, similar in magnitude to those between *L. tristigma* and *L. pseudobarathraea*. However, the lack of external diagnostic characters and the doubts expressed by several authors (Warchalowski, 2003) about the status of the two species already described prevented the description of a new taxon without a comprehensive study of the variability of the species group throughout the Iberian peninsula. For this reason, a detailed revision of the collection of the Museo Nacional de Ciencias Naturales (Madrid, Spain) was accomplished, testing if the observed differences in genital characters are consistent and robust for delimiting taxa or, on the contrary, if these differences are continuous morphological clines or intraspecific variation without geographic pattern. Our search has yielded three discrete taxonomic entities clearly delimited by male and female genital characters, which are consistent between each other and stable within their

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