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New species of *Omalodes* and redefinition of the tribe Omalodini (Coleoptera: Histeridae: Histerinae)

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Abstract

A new species of Omalodini, *Omalodes atacamanus* **sp. nov.**, is described from Chile. A redefinition of Omalodini is proposed and an identification key to the genera is provided. The new species can be distinguished from other species of *Omalodes* mainly by all tibiae having a row of setae on outer submarginal region. Omalodini **sensu nov.** is herein restricted to a lineage of *Ebonius* Lewis, 1885 and *Omalodes* Dejean, 1833. The tribe has known distribution across Latin America with some species reaching the southern USA.

Key words: Atacaman biogeographic province, biodiversity, classification, Histeroidea, taxonomy

Resumo

A nova espécie *Omalodes atacamanus* **sp. nov.** de Omalodini é descrita do Chile. Uma nova classificação para Omalodini é proposta e uma chave de identificação para os gêneros é fornecida. A nova espécie pode ser diferenciada das demais espécies de *Omalodes* principalmente por todas as tíbias apresentarem uma série de cerdas na região submarginal externa. Omalodini **sensu nov.** é aqui reconhecida pelas linhagens de *Ebonius* Lewis, 1885 e *Omalodes* Dejean, 1833. A tribo possui distribuição conhecida para a América Latina com algumas espécies alcançando o sul dos EUA.

Palavras-chave: Biodiversidade, classificação, Histeroidea, província biogeográfica do Atacama, taxonomia

Introduction

Histerinae is composed of five tribes: Exosternini Bickhardt, Histerini Gyllenhal, Hololeptini Hope, Platysomatini Bickhardt and Omalodini Kryzhanovskij. The last, most recently established, tribe of the subfamily was formally proposed by Kryzhanovskij (1972) to accommodate the genera *Cornillus* Lewis, *Diplogrammicus* Lewis, *Ebonius* Lewis and *Omalodes* Dejean (type genus), all formerly classified in Platysomatini. Kryzhanovskij used the affinities between the genera such as habit, morphological similarity and geographic distribution to propose the tribe.

However, the systematic status of Omalodini has been modified over time (Kryzhanovskij 1972; Mazur 1984; 1989; 1997; Kovarik & Caterino 2005; Mazur 2011). According to the current Histeridae classification (Mazur 2011), the tribe is composed of 100 species in 12 genera, with distribution in the Neotropical, Afrotropical, Afrotemperate and Oriental regions: *Asolenus* Lewis; *Atribalus* Bickhardt; *Blypotehus* Vienna, *Ebonius* Lewis; *Lewisister* Bickhardt; *Notolister* Lewis; *Omalodes* Erichson (which now contains *Cornillus* and *Diplogrammicus* as subgenera); *Perfidolenus* Vienna; *Rhypochares* Marseul; *Scapomegas* Lacordaire; *Sphyracus* Marseul; and *Theropatina* Mazur.

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Key to identification of the genera of Omalodini Kryzhanovskij, 1972

1 Pronotum with lateral posterior extremity rounded (Fig. 5 B); prosternum with carinal stria "U"-shaped (Fig. 6 A); stria of the first abdominal sternite present anteriorly and laterally (Fig. 6 D). . . . . *Ebonius* Lewis, 1885

- Pronotum with lateral posterior extremity in angle, not rounded (Fig. 5 A); prosternum with carinal striae, if present, represented by two parallel/subparallel striae (Fig. 6 B–C); stria of the first abdominal sternite present only laterally, sometimes rudimentary (Fig. 6 E). . . . . *Omalodes* Dejean, 1833

Discussion

Omalodes atacamanus **sp. nov.** represents a lineage somewhat distinct from all other known species of the genus, showing the following possible autapomorphies: lateral metaventral stria oblique and pro-meso and metatibiae with a row of setae on outer submarginal region (Leivas *et al.* 2014). On the other hand, it shares several characters of the genus, such as: apical region of the scape with a subrectangular projection; antennal club with pseudosutures inwardly arcuate; carinal striae of prosternal keel subparallel; marginal mesoventral stria interrupted at the middle (in most species); anterior tibiae with a differentiated sulcus with setae adjacent to the tarsal cavity; and pygidium longer than the half of propygidium length (Leivas *et al.* 2014). *Omalodes atacamanus* **sp. nov.** also shares with *Ebonius* the 9th tergite without lateral projections, unlike all species of *Omalodes*.

Thus, according to the study of Leivas *et al.* (2014), the new taxon appears to represent sister species of all other *Omalodes*, and as such be placed in a new subgenus. In the present study, we however have kept a conservative position because a comprehensive phylogenetic analysis of *Omalodes* has not yet been provided, and the monophyly of the subgenera of *Omalodes* have not yet been rigorously tested.

The classification of Omalodini herein established is generally the same proposed by Kryzhanovskij (1972), with the addition of new characters to more clearly define the tribe. In order to better know the position of all genera of Histerinae herein placed as *incertae sedis* within the subfamily, a comprehensive phylogenetic analysis of Histerinae should be performed.

The Omalodini are distributed in Neotropical Region (*Omalodes* and *Ebonius*) and South American Transition Zone (*Omalodes* (*Omalodes*) *atacamanus* **sp.nov.**) with few species of *Omalodes* (*Omalodes*) likewise present in the Nearctic Region.

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