



## A review of the Neotropical dung beetle genera *Deltorhinum* Harold, 1869, and *Lobidion* gen. nov. (Coleoptera: Scarabaeidae: Scarabaeinae)

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### Abstract

The taxonomy of the genera *Deltorhinum* Bates and *Lobidion* gen. nov. is reviewed. A genus and seven species are described as new (*Lobidion* gen. nov., *Deltorhinum armatum* sp. nov., *D. bilobatum* sp. nov., *D. guyanensis* sp. nov., *D. kempffmercadoi* sp. nov., *D. robustum* sp. nov., *D. vazdemelloi* sp. nov., *Lobidion punctatissimum* sp. nov.). Illustrations of diagnostic characters and an identification key are provided.

**Key words:** *Deltorhinum*, *Lobidion*, Ateuchini, myrmecophily, new genus, new species, Scarabaeinae

### Résumé

On revoit la taxonomie des genres *Deltorhinum* Bates et *Lobidion* gen. nov. Un genre nouveaux et sept espèces sont décrits (*Lobidion* gen. nov., *Deltorhinum armatum* sp. nov., *D. bilobatum* sp. nov., *D. guyanensis* sp. nov., *D. kempffmercadoi* sp. nov., *D. robustum* sp. nov., *D. vazdemelloi* sp. nov., *Lobidion punctatissimum* sp. nov.). On présente des illustrations pour les caractères morphologiques diagnostiques et une clé de détermination.

### Introduction

The somewhat enigmatic genus *Deltorhinum* Harold was created in 1869 for a species represented by a single specimen collected by Henry W. Bates at Ega (now Tefé) in the Amazon. Despite several years of searching in various collections, I could only locate 29 additional specimens belonging to this genus. Interestingly, these 29 specimens include seven new species and a single specimen tentatively attributed to the nominal taxon in addition to a new genus with one species represented by one specimen. This scarcity in collections might be a collecting artifact or the results of its peculiar habits. All specimens with natural history data were collected using flight interception traps and a single specimen was collected in a pitfall trap with no or unspecified bait suggesting that dung or carrion are not used by these beetles.

All of the species in *Deltorhinum* and *Lobidion* gen. nov. are well characterized and hopefully additional specimens will be discovered with the descriptions herein of these new taxa. The genus *Lobidion* is here described to accommodate a specimen that, despite being closely related to species of *Deltorhinum*, substantially differs from this genus and all other Ateuchina genera. These genera are currently included in the subtribe Ateuchina, tribe Ateuchini as defined by Vaz-de-Mello (2008).

Over 65 species currently included in the genus *Ateuchus* Weber were examined in order to find a likely candidate for the closest relationships. Some of the main characteristics of the genus, its modified anterior pronotal portion and the presence of a well-defined clypeofrontal carina were only found in *A. mutilatus* Harold, *A. rispolii* Martínez and *A. hypocrita* (Balthasar). However, other characteristics such as the configuration of the clypeal edge, suggests that this might be convergence. The anterior portion of the pronotum of *A. mutilatus* and *A. rispolii* have two weakly indicated but distinct concavities on each side of the midline, which is somewhat similar to the females of *D. robustum* sp. nov. *Ateuchus hypocrita* has a median