

## Taxonomy of the *Hister criticus* group, with description of a new species (Coleoptera: Histeridae)

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### Abstract

The *Hister criticus* group is created and defined to include 5 species: *Hister criticus* Marseul, *H. laevimargo* Lewis (= *H. planimargo* Lewis, New Synonymy), *H. latimargo* Schmidt, *H. foveipygus* Wenzel and Dybas, and *H. guanacaste* n. sp. These species occur in the Neotropical region, ranging from Panama north to extreme southern Arizona (USA). *Hister latimargo* appears to be an obligate associate of leafcutter ants (*Atta* spp.), while *H. criticus* has been collected in woodrat (*Neotoma* spp.) nests. Ecological associations for the other species are unknown. The existing species are redescribed, diagnostic characters (protibiae, pygidia, male and female genitalia) are illustrated, and habitus photographs of all species are presented. Lectotypes are designated for *H. criticus*, *H. laevimargo*, and *H. planimargo*.

**Key words:** Coleoptera, Histeridae, new species, taxonomy, *Hister criticus* group

### Introduction

The New World fauna of Histerini comprises approximately 120 known species, distributed among 6 genera (*Atholus* Thomson, *Epiglyptus* Lewis, *Hister* Linnaeus [including subg. *Spilodiscus* Lewis], *Merohister* Reitter, *Margarinotus* Marseul, and *Psiloscelis* Marseul). Of the 78 of these included in *Hister*, 61 have so far been treated in a recent series of papers (Caterino 1998, 1999a, 1999b, 2002; Caterino & Arriagada, 2003; Caterino & Kovarik, 2001). The present paper treats a small group of primarily neotropical *Hister* species, which is informally designated the *Hister criticus* group. Four of the five species included here have been previously described. However, no previous authors have recognized a close relationship among them. This is due to relatively varied external morphology in the group, potentially attributable in part to inquilinous habits. *Hister criticus* Marseul itself ranges into southern Arizona, where it has been collected in woodrat