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The Middle American species of *Embates* Chevrolat (Coleoptera: Curculionidae: Baridinae)

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Abstract

The neotropical weevil genus *Embates* Chevrolat is revised. New synonyms of *Embates* are *Drep-anambates* Jekel, *Batames* Casey, *Macrambates* Casey and *Cholinambates* Casey. Information is provided about the morphology of the immature stages, life history, sexual dimorphism and morphological variability. A total of 69 species is recognized in Middle America, 38 of which are newly described here: *E. aequiperabilis*, *E. aliquantulus*, *E. bicoctura*, *E. burgeri*, *E. callifer*, *E. chelys*, *E.*

clandestinus, *E. consimilis*, *E. cordiger*, *E. crinipes*, *E. discissus*, *E. discordabilis*, *E. euchasma*, *E. euscheme*, *E. flavoplagiatus*, *E. galbinus*, *E. gilvopictus*, *E. gracilis*, *E. intermedius*, *E. kunicus*, *E. maculifer*, *E. marchionis*, *E. mendax*, *E. oculifer*, *E. paludicola*, *E. paucilimbatus*, *E. pauhans*, *E. peperomiae*, *E. politus*, *E. pseudobumbraticus*, *E. pullus*, *E. rutilus*, *E. sagittifolicus*, *E. scambus*, *E. subulirostris*, *E. terrabanicus*, *E. todillofasciatus* and *E. uniformis*. Six new subspecies are described: *E. polymorphus altrimsecus*, *E. polymorphus dotensis*, *E. polymorphus fortunensis*, *E. polymorphus tabulensis*, *E. polymorphus zeledonensis* and *E. leucopleura discolor*. New combinations are *E. belti* (Champion), *E. leucopleura* (Champion) and *E. flavolimbatus* (Voss) [all from *Drepanambates*]. New synonyms are *E. belti* [= *E. triangularis* (Champion)], *E. fasciolatus* (Chevrolat) [= *E. sexpunctatus* (Champion)] and *E. solani* (Champion) [= *E. divisus* (Casey)]. *Embates rugosus* (Hustache) is distinguished from *E. solani* and resurrected as a valid species. New records for Middle America are *E. flavolimbatus* (Voss), *E. justini* (Chevrolat) and *E. rugosus*. Descriptions, line drawings of habitus and male genitalia, geographic distributions, plant associations and keys for identification are provided.

Key words: Revision, Coleoptera, weevils, Piperaceae, Neotropics

Introduction

This taxonomic revision forms part of an ongoing study of weevils associated with neotropical Piperaceae (Prena 2001, 2003a). The investigation commenced originally as a contribution to the Costa Rican National Inventory of Biodiversity carried out by the Instituto Nacional de Biodiversidad (INBio). The scope was extended later to cover the relevant taxa of all Middle America, because the regional restriction stood in obvious conflict with the natural distribution of the species and their tendency to form poorly differentiated morphological complexes over broad spatial scales. Although substantial material was available in the initial phase of the study, numerous species turned out to be inadequately represented in the collections. This dearth was overcome by additional field surveys, in particular in collaboration with the ALAS (Arthropods of La Selva) project. Results of previous and simultaneous botanical investigations (Burger 1971, Marquis 1991, National Inventory, Plant Manual Project) were crucial on this occasion.

In a previous paper (Prena 2003a), I distinguished *Embates* Chevrolat (type species *E. caecus* Chevrolat) from *Ambates* Schönherr (type species *A. pictus* Gyllenhal) based on morphological and genital character states and resurrected *Ambates* as a valid genus. The latter comprises 32 described species, while *Embates* is much more diverse and includes more than 150 species throughout the neotropical region (unpublished personal data). A synopsis of the currently known 69 Middle American species of *Embates* is presented here and concludes the Costa Rican National Inventory of the Ambatini. *Embates simulans* (Chevrolat), described from “Amérique méridionale” and listed in O’Brien & Wibmer (1982), occurs in French Guiana and is not treated here.