



Synopsis of *lobatifrons* species-group (Hymenoptera: Bethyliidae, *Rhabdepyris*) from Neotropical region, with redefinition of the group

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Abstract

The *lobatifrons* species-group of Neotropical region is redefined as to include the *Rhabdepyris* species with appendicular process at cuspis in the male genitalia. *Rhabdepyris latissimus* **sp. nov.**, *R. callosus* **sp. nov.**, *R. concavus* **sp. nov.** and *R. demissus* **sp. nov.** are described and illustrated. New geographical records and taxonomical data on *R. septemlineatus* Kieffer, 1906, *R. quinquilineatus* Kieffer, 1906, *R. luteipennis*, Evans, 1965, *R. atlanticus* Rosmann & Azevedo, 2005 are provided. *R. lobatifrons* Kieffer, 1910 is a junior synonym of *R. septemlineatus*. A key to males are given.

Key words: Hymenoptera, Bethyliidae, *Rhabdepyris*, appendicular process, new species

Introduction

Evans (1965) established three species-groups for the Neotropical species of the subgenus *Chlorepyris* Kieffer, 1913: *lobatifrons*, *muscarius* and *viridissimus* groups. He addressed five species to *lobatifrons* species-group such as *R. lobatifrons*, Kieffer, 1910, *R. septemlineatus*, Kieffer, 1906, *R. quinquilineatus*, Kieffer, 1906, *R. luteipennis*, Evans, 1965 and *R. nigerrimus* Evans, 1965. Recently *R. atlanticus* Rosmann & Azevedo, 2005 was included in this species-group. Here we described and illustrated four new species and proposed *R. lobatifrons* Kieffer, 1910 is a junior synonym of *R. septemlineatus* Kieffer, 1906.

Materials and methods

The material examined was provided by CNCI — Canadian National Collection of Insects, Canada (J. T. Huber), FIOC — Fundação Instituto Oswaldo Cruz, Brazil (S. J. Oliveira), INPA — Instituto Nacional de Pesquisas da Amazônia, Brazil (J. C. Rafael), MPEG — Museu Paraense Emílio Goeldi, Brazil (A. Harada), SEAN — Servicio Entomológico Autónomo, Museo Entomológico, Nicaragua (J. M. Maes), UCDC — University of California, Davis, U.S.A. (S. L. Heydon), UFAC — Universidade Federal do Acre, Brazil (E. F. Morato).

The descriptions were compiled with DELTA editor and confor (Descriptive Language for Taxonomy) by Dallwitz (1980) and Dallwitz *et al.* (1993, 1999). Terms of body structures generally follows Evans (1964), but those related to the integument follow Harris (1979). The abbreviations used in this study are as follows: LH, length of head measured dorsally; WH, width of head measured dorsally; WF, width of frons measured dorsally; HE, height of eye measured laterally; OOL, ocello-ocular distance; WOT, width of the ocellar triangle; DAO, diameter of anterior ocellus; VOL, vertex-ocular line measured dorsally; and LFW, length of forewing.