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Four new species of *Desmopachria* Babington from Peru (Coleoptera: Dytiscidae)

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Abstract

Four new species in the genus *Desmopachria* Babington are described from Madre de Dios, Peru: *D. pilosa* Miller, **n. sp**. (*D. convexa* species group), *D. balionota* Miller, **n. sp**. (*D. nitida* species group), *D. annae* Miller, **n. sp**. (*D. nitida* species group), and *D. tambopatensis* Miller, **n. sp**. (ungrouped). Diagnostic characters, including habiti and male genitalia, are described and illustrated.

Key words: Neotropical, diving beetle, phylogeny, rain forest

Introduction

The genus *Desmopachria* Babington is one of the largest New World genera of diving beetles with 92 known species known prior to this paper (Nilsson 2001). Because of work by Young and Miller, known species of *Desmopachria* are identifiable and new species can be recognized and described within the context of standardized character systems, illustrations and diagnoses (see Miller (2001) and references therein). The species were historically organized into subgenera, but Miller (2001) revised the group by synonymizing the subgenera and erecting informal species-group names because of evident paraphyly of some of the subgenera and uncertain subgeneric assignment of a large number of species. The species groups are identifiable using a combination of external features and those of male genitalia, but species within each group are identifiable primarily using characters of the male genitalia. Dissections of males of these diminutive organisms are difficult, but necessary for most identifications.

Species of *Desmopachria* are common members of the Neotropical and southern Nearctic faunas, and they occur in a variety of habitats including ponds, streams, forest pools, bromeliads, and tree hole pools. Specimens regularly come to black lights and

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