



## The larva of the genus *Paracordulia* Martin, 1907 (Odonata: Corduliidae s.s.) and a generic key to the larvae of Corduliidae s.l. occurring in South America

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### Abstract

The ultimate stadium of a larva of the genus *Paracordulia* Martin, 1907 is described and illustrated for the first time. It represents the last New World corduliid larva unknown at the generic level. The reared female differs slightly from other known female specimens, and thus no species name can be assigned to it. A key to the South American genera of corduliid larvae is given.

**Key words:** Anisoptera, Amazonia, Brazil, Corduliidae, *Paracordulia*, *Aeschnosoma*, *Schizocordulia*, larva, taxonomy

### Introduction

A curious and unknown Corduliidae larva was collected in a typical black-water stream, a tributary of the Rio Negro, in the Amazon lowland forest. The larva was collected among roots and leaves at the stream margin, at the end of wet season, with a channel width varying from 4 to 6 m and depth from 0.5 to 1.5 m, and with canopy hardly closed. Its successful rearing in laboratory led to a perfect adult female of the genus *Paracordulia* Martin 1907. The Amazonian genus *Paracordulia* is rare in collections, poorly known and currently considered monotypic (Garrison *et al.* 2006) with *P. sericea* (Selys 1871) for which the original description is based on three males from Northern Brazil (Geijskes 1970).

One female attributed to *P. sericea* from Surinam was described by Geijskes (1970). De Marmels (1983) also described a female of the genus from South Venezuela (*Paracordulia* sp. 2), but sufficiently different from that described by Geijskes to be considered as not conspecific. The reared female studied in the present paper also differs slightly from other specimens by the following features: synthorax and abdomen without conspicuous green metallic reflections; amber spot of the hind wing distinct and very large, extending to Ax3, distal angle of the discoidal triangle, and three cells proximal to anal loop midrib apical fork; ventrolateral margins of the S9 tergite distinctly more elongated; vulvar lamina with distinct longitudinal median groove; vulvar lamina distinctly more tapered than that of Geijskes's specimen; vulvar lamina distinctly wider, and S9 tergite distinctly longer than those of De Marmels's specimen.

The New World currently contains 15 genera of corduliids in a broad sense, including *Gomphomacromia* Brauer, 1864, considered by several authors as the sister group of the MCL-complex (*sensu* Carle 1995). Until now only the larva of *Paracordulia* remained undescribed, as *Schizocordulia* Machado, 2005, is not recognized as a valid genus (see below). This gap is now filled, and a complete generic key of corduliid larvae occurring in South America is given in addition to the larval description of *Paracordulia*.

The mandible terminology follows that of Watson (1956). Abbreviations: S1-S10, abdominal segments 1 to 10; F-0, ultimate stadium larva/exuvia.

The studied material is deposited in the Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil.