



<http://dx.doi.org/10.11646/zootaxa.3721.1.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:4D8F7F4A-B6AF-4E72-B0A8-DC88C3E14AF0>

## Description of the larva of *Neuraeschna claviforcipata* Martin, 1909 (Insecta: Odonata: Aeshnidae)

JÜRIG DE MARMELS<sup>1</sup> & ULISSES GASPARE NEISS<sup>2</sup>

<sup>1</sup>Museo del Instituto de Zoología Agrícola “Francisco Fernández Yépez” (MIZA), Facultad de Agronomía, Universidad Central de Venezuela, Apartado 4579, Maracay 2101-A, Venezuela. E-mail: demarmjc@gmail.com

<sup>2</sup>Coordenação de Pesquisas em Entomologia, Instituto Nacional de Pesquisas da Amazônia (INPA), Caixa Postal 478, CEP 69011-970, Manaus, AM, Brazil. E-mail: ulisses.neiss@gmail.com

### Abstract

The ultimate stadium larva of *Neuraeschna claviforcipata* is described and illustrated based on an F-0 exuvia of a reared female from northern Amazonas State, Brazil. This larva differs from the other two known larvae of the genus in lacking the spiny lateral prominence of the mandible, and in having only a short spine each side of the median cleft of the prementum; labium is shorter and cercus longer. Noteworthy is the presence of a hair brush on each occipital lobe behind mesal angle of compound eye. The larva was found in a small blackwater pool with abundant leaf litter in an open, “campina”-type habitat, with sandy soil and low, bushy vegetation.

**Key words:** Amazon, Anisoptera, aquatic insect, dragonfly, taxonomy

### Introduction

The Neotropical genus *Neuraeschna* Hagen, 1867, includes by now fifteen species, mainly with occurrence in the north of South America (Garrison et al. 2006). Belle (1989) presented the first revision, including a description of the larva of *N. harpya* Martin, 1909. With the same date, Carvalho (1989) published a thorough description and detailed figures of the larva of *N. costalis* (Burmeister, 1839). Here we present an illustrated description of the larva of *N. claviforcipata*. Coincidentally, all three larvae are known only by the F-0 exuviae of single reared females.

### Methods

The full-grown larva (F-0) was reared to emergence of the adult. The exuvia was preserved in 75% ethanol. The emerged female was kept dry in a cellophane envelope. Both will be deposited at the Coleção de Invertebrados do Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil. The adult (Figs. 12–14) was identified by direct comparison with a female from Ecuador identified by J. Belle in 1988 and included in his revision (Belle 1989); that female specimen is now deposited in the Florida State Collection of Arthropods (FSCA) in Gainesville, Florida, U.S.A. All drawings were made with the help of a camera lucida coupled to a Wild-8 stereomicroscope. Abdominal segments 1–10 are abbreviated as S1–10. All dimensions are given in millimeters.

**Material examined.** One female exuvia of the ultimate stadium (F-0). Brazil, Amazonas State: Barcelos, Parque Estadual Serra do Aracá, 109 m.a.s.l. (00°51'57,82"N, 63°28'01,99"W), 23.VII.2009, U. Neiss leg. (adult emerged 14.VIII.2009).

### Description of the exuvia (Figures 1–11)

The larva was almost black when alive; the exuvia shows the abdominal color pattern as illustrated in Fig. 9.