

Neuraeschna tapajonica sp. n. from the Amazonian region of Brazil (Odonata: Aeshnidae)

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Abstract

Neuraeschna tapajonica sp. n. is described and illustrated from a single male (holotype: Itaituba, Pará, Brazil). It is close to *N. dentigera* Martin, 1909 from which it is distinguished mainly by the structure of the superior appendages.

Key words: Odonata, Aeshnidae, *Neuraeschna*, new species, Amazonian region, Brazil.

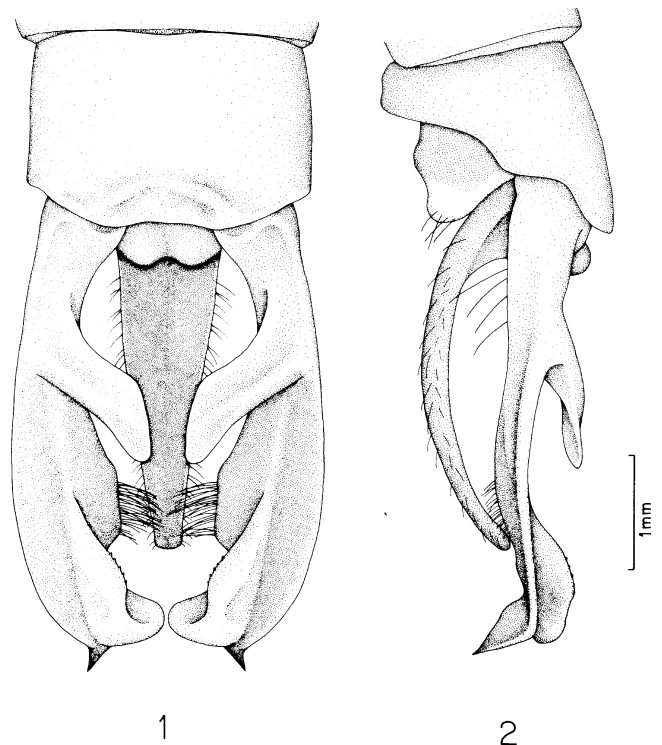
Introduction

The Neotropical genus *Neuraeschna* Hagen, 1867 includes small to very large size Aeshnidae that occur mainly in forested regions. They are usually seen hunting along the edges of the woods or along river banks near the bush at dusk (Belle, 1989). Owing to their crepuscular habits and to the fact that their flight is very erratic and swift, these dragonflies are difficult to catch and poorly represented in collections. Indeed, out of the fourteen recognized species (Bridges, 1994) six are known only by 1-3 specimens. Nine species of *Neuraeschna* have been recorded from Brazil by Burmeister (1839), Martin (1909), Williamson & Williamson (1930), Belle (1989) and Machet (1990). We describe now another Brazilian species, *N. tapajonica* sp.n. from the State of Pará.

Neuraeschna tapajonica sp. n.

Figs. 1-2

Male (holotype). - Head: labium, labrum, anteclypeus, postclypeus and anterior part of frons brownish orange. Upper part of frons uniformly light brown with no T-spot. Vertex and occiput black. Antennae brown. Rear of the head black except for a lateral yellow area near the eye. Pterothorax: mesepisternum dark brown with a well-defined antehumeral pale stripe not reaching the antealar sinus, with its upper end slightly widened, its lower end directed laterally, tapering into an acute inferior extremity that terminates at the mesepisternal ridge. Mesepimeron and metapleuron brownish yellow with a dark brown line along the 2nd and 3rd lateral sutures. Legs reddish brown with distal parts of femorae and proximal parts of tibiae dark brown. Wings hyaline, pterostigma light brown; membranule gray extending to the level of the anal triangle. Venation brown. Antenodals in fore wings 24-25, in hind wings 17. No costal and one subcostal basal crossvein. Abdomen:



Figs. 1-2- *Neuraeschna tapajonica* sp. n. male holotype. Anal appendages in dorsal (1) and lateral (2) views.

slightly constricted on segment 3, black with pale spots disposed as follows (nomenclature after Walker, 1912): AD present as a very small elongate spot only on segment 1. MD and PD present on 2-4, reduced to dots on 5-6 and absent on 8-10. On 7, MD reduced to a dot, PD absent. Lateral spots united to form a stripe on segments 2-3; separated into AL, ML, PL on 4-8, absent on

9-10. Anal appendages brown, with a complex structure shown in Figs, 1-2.

Measurements (mm). - Total length 64. Abdomen (with appendages) 49. Appendages 3.9. Length of fore and hind wings 40.5. Width of hind wings at nodus 11.5. Costal edge of pterostigma in fore wings 3.4; in hind wings 2.4.

Female. - Unknown.

Material examined. - Male holotype. Brazil, Pará, Itaituba, X-1977, J. B. Ferreira leg., deposited in collection A.B.M. Machado, Belo Horizonte, MG, Brazil.

Etymology. - *tapajonica* refers to the Tapajó, an extinct Indian tribe that inhabited the region of the Tapajós River, where the species was collected.

Discussion

Neuraeschna tapajonica belongs to the *N. dentigera* species group (Belle, 1989) by the following characters: a) small size; b) presence of a stout dentiform dorsal process on the male superior appendages; c) no costal and one subcostal basal crossveins; d) upper part of frons without T-spot; e) pale antehumeral stripe tapering to a point inferiorly. Within this group, *N. tapajonica* is closer to *N. dentigera* Martin, 1909 a species which lectotype has been recently redescribed and illustrated by Belle (1989). *N. tapajonica* can be distinguished from *N. dentigera* by the following differences in the structure of their superior anal appendages (contrasting characters of *N. dentigera* in parenthesis): a) subapical tubercle on the inner margin of the appendages rectangular and provided with a tuft of hairs (Fig. 1) (triangular and without hairs); b) apex of the dentiform process overpassing medially the tubercle of the inner margin of the appendages (Fig. 1) (not overpassing); c) in lateral view, dentiform process totally visible (Fig. 2) (only the uppermost part visible); d) distal third of the dentiform process directed posteriorly (Fig. 1) (directed medially). Another character that separates *N. tapajonica* from the other three species of the *N. dentigera* group (*N. dentigera* Martin, 1909; *N. mina* Williamson & Williamson, 1930 and *N. cornuta* Belle, 1989) is the absence of the mesepimeral and metepimeral pale stripes.

This character should be used with care in view of the well-known fact that in the Aeshnidae the pale areas often disappear through postmortem discoloration. It seems however, that this did not happen with the holotype of *N. tapajonica* as it shows well-preserved pale antehumeral stripes and abdominal spots.

Acknowledgements

We are indebted to the biologist Myrian Morato Duarte for the illustrations of this paper.

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