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A synopsis of the Neotropical genus *Nephepeltia* (Odonata: Libellulidae), including description of a new species, synonymies, and a key to males

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Abstract

Nephepeltia flavipennis (Holotype: Brazil, Rondônia, Governador Jorge Teixeira Municipality, Fazenda Rancho Grande, 10°31'48"S, 62°48'0"W, 165 m, J. Wiseman leg., in MNRJ) is described from the Amazon region of W Brazil, Ecuador, and N Peru. A lectotype is designated for *N. aequisetis* Calvert, 1909. *Nephepeltia chalconota* is considered to be a junior subjective synonym of *N. flavifrons* Karsch, 1889, and the subdivision of *N. phryne* into two subspecies is found to be unjustifiable. Diagnoses, illustrations, a key to males, and an updated map for all known members of the genus are provided.

Key words: Dragonfly, *Nephepeltia*, *N. aequisetis*, *N. berlai*, *N. leonardina*, *N. phryne tupiensis*, diagnoses, maps

Resumen

Nephepeltia flavipennis (Holotipo: Brasil, Rondônia, Municipalidad Governador Jorge Teixeira, Fazenda Rancho Grande, 10°31'48"S, 62°48'0"O, 165 m, J. Wiseman leg., en MNRJ) se describe de la región Amazónica del O de Brasil, Ecuador y N de Perú. Se designa un lectotipo para *N. aequisetis* Calvert, 1909. Se encuentra que *Nephepeltia chalconota* es un sinónimo junior subjetivo de *N. flavifrons* Karsch, 1889, y que la subdivisión de *N. phryne* en dos subspecies no puede ser justificada. Se proveen diagnosis, ilustraciones, una clave para machos, y un mapa actualizado para todos los miembros conocidos del género.

Palabras clave: Libélulas, *Nephepeltia*, *N. aequisetis*, *N. berlai*, *N. leonardina*, *N. phryne tupiensis*, diagnosis, mapas de distribución

Introduction

The genus *Nephepeltia* Kirby, 1889 comprises small pale-faced libellulids with postfrons and vertex with metallic reflections and turquoise eyes, distributed in the Neotropical region from southern Mexico south to northern Argentina. Adults perch in sunshine with wings set on tips of stems at lakes, ponds, canals, and marshes where males often assume the obelisk position (Garrison *et al.*, 2006).

Adults of *Nephepeltia* resemble those of *Micrathyria*, from which they differ by Fw last antenodal complete (incomplete in *Micrathyria*), and *Oligoclada*, differing by the presence of two bridge crossveins (one in *Oligoclada*). They are also similar to those of the monotypic genus *Edonis* Needham, 1905, from which they can be diagnosed by base of Hw triangle opposite to arculus and base of Hw not broadly widened and with a maximum of three rows of cells in the anal field (slightly proximal to arculus and broadly widened in *Edonis* with more than four cell rows between margin and anal loop; Garrison *et al.*, 2006). Males of most the species of *Nephepeltia* have a tubercle or spine on thoracic venter, which is lacking only in *N. leonardina* Rácenis.

Six species have been described thus far in this genus: *N. aequisetis* Calvert, 1909, *N. berlai* Santos, 1950, *N. chalconota* Ris, 1919, *N. flavifrons* (Karsch, 1889), *N. leonardina* Rácenis, 1953, and *N. phryne* (Perty, 1833) with

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